

## Renewable Resources & Alternative Energy Sector Standards

**RECORD OF PUBLIC COMMENT** 

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## Introduction

The following table outlines all comments received during the 90-day public comment period for the draft Renewable Resources & Alternative Energy Sector standards, which officially concluded on October 5, 2015. The table includes the name of the commenter, the relevant section of the exposure draft, the relevant comment excerpts, and how SASB addressed the comment. Please note that the "Issue (Metric Code)" refers to the section(s) in the draft Renewable Resources & Alternative Energy Sector standards issued for public comment, which may be different from the sections presented in the final provisional standards issued on December 16, 2015.

## Forestry & Logging

Industry SICS number	Name and/or Affiliation of Respondent	Topic (Metric Code)	Comment Excerpts	SASB Response
RR0201	National Council for Air and Stream Improvement, Inc. (NCASI)	General Comment	The National Council for Air and Stream Improvement, Inc. (NCASI) is pleased to provide the following comments on the Public Exposure Draft Standard for Public Comment: Forestry & Logging Sustainability Accounting Standard. NCASI is a non-profit environmental research institute that seeks to create credible scientific information required to address the environmental information needs of the forest products industry in North America. NCASI conducts surveys, provides advice regarding technically appropriate methods of conducting environmental field measurements, undertakes technical studies such as scientific literature reviews and research compilations, and sponsors scientific research by universities and others to document the environmental performance of industry facility operations and forest management practices, and to gain insight into opportunities for further improvement in meeting sustainability goals. The nature of NCASI's research provides us with a unique lens on the development of metrics related to documenting the performance of forest products industry operations, given our research into the development and field application of sampling and analytical test methods, along with over 70 years of experience in reviewing and treating data that characterize environmental releases from the sector. With this background in mind, we offer the following comments on the Draft Standard:	SASB appreciates the time and effort that the National Council for Air and Stream Improvement, Inc. (NCASI) has invested in preparing a comment letter for the Forestry & Logging industry. SASB thanks NCASI for its continued participation in the standards development process, and hopes to deepen our engagement with NCASI as we continue to review and refine our standards.
RR0201	National Council for Air and Stream Improvement, Inc. (NCASI)	Ecosystem Services & Impacts (RR0201-01) Line .01	Many companies that would be reporting to this standard undertake forest management in Canada. Therefore, it is suggested that the third Canadian forest management certification scheme, Canada's National Sustainable Forest Management Standard (CSA), be added to this list of relevant standards. CSA should also be added to metric .04.	Because Canada's National Sustainable Forest Management Standard (CSA) is endorsed by the Programme for the Endorsement of Forest Certification (PEFC), SASB has updated the list under .01 to include: <i>Forest certification systems</i> <i>endorsed by the PEFC</i> . The revised standard states: • Third-party forest management certifications include, but are not limited to, those promulgated by the following organizations (or the equivalent): • American Tree Farm System (ATFS)

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				<ul> <li>Forest Stewardship Council (FSC)</li> <li>Programme for the Endorsement of Forest Certification (PEFC)</li> <li>Forest certification systems endorsed by the PEFC</li> <li>Sustainable Forest Initiative (SFI)</li> </ul>
RR0201	National Council for Air and Stream Improvement, Inc. (NCASI)	Ecosystem Services & Impacts (RR0201-01) Line .02	Strictly speaking, various permutations and combinations of ownership and management occur within the forest industry. Thus, the phrase "and managed" should be replaced with "and/or managed". This revision should also be made elsewhere in the standard where this phrase occurs (e.g., RR0201-01 0.8, etc.).	In response to this comment, SASB has revised the phrase "owned, leased, and managed" to "owned, lease, and/or managed by the registrant" throughout the standard.
RR0201	National Council for Air and Stream Improvement, Inc. (NCASI)	Ecosystem Services & Impacts (RR0201-01) Line .06	There may be any number of reasons why a certification may have been revoked, some outside the control of the registrant (e.g., government jurisdiction over aspects of forest management, including those related to aboriginal title). In this vein, the registrant may be able to provide additional perspective to clarify the nature of the revocation and the actions that are being put in place to address it. Therefore, this metric should be expanded to include ", along with commentary to clarify the nature of the revocation and actions that are being put in place to address the revocation."	In response to this comment and other comments, SASB has revised the note to RR0201-01-A to: .05 The registrant shall disclose whether any forest management certifications were involuntarily suspended or terminated during the fiscal year (i.e., for failure to meet the standard or resolve major non-conformities). .06 The registrant shall disclose which certification(s) was suspended or terminated, the total acreage of land for which certification was suspended or terminated, the reason stated by the certification body or bodies for why the certification was suspended or terminated, and any other explanatory information about the suspension or termination. .07 The registrant should discuss any relevant corrective actions that it has put in place in response to a certification being suspended or terminated.
RR0201	National Council for Air and Stream Improvement, Inc. (NCASI)	Ecosystem Services & Impacts (RR0201-04) Line .21 & .22	NCASI: The degree of analysis and discussion required to address these metrics is substantial and, with no response framework provided for these metrics, could lead to responses that vary widely in terms of depth of analysis and comprehensiveness. In addition, there may be no underlying data, or highly variable underlying data, available for assessing some of these ecosystem services in a meaningful way. Depending on the jurisdiction in which legal commercial forest harvesting is jurisdictions such as Canada, where a comprehensive legal framework underpins all commercial forestry, a company would typically spend many person- months of time compiling 5- and 25- year forest management	In response to this comment and other comments SASB received on this metric, SASB has revised the disclosure guidance to focus on limiting ecosystem services to those that are tangible, i.e. ecosystem services that the registrant currently receives revenue for. Additionally, for the ecosystem services that the registrant does not receive revenue for (i.e. those less tangible and comparable across companies), the revised disclosure guidance provides a platform for the registrant to differentiate between the types of ecosystem services it manages and describe its actions to manage them.

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			plans encompassing multiple volumes of written information to address questions such as these. While one might argue that some of this information is therefore readily available, the issues listed above are so complex and interwoven that it would be extremely difficult for a registrant to prepare a response to the above questions in a succinct, yet comprehensive manner that would be consistent across registrants to the standard. In addition, the standard references the use of methods and models to develop scenarios for ecosystem services; however, not only are modeling results highly dependent on assumptions made by the individual user, but it is unclear as to the extent of modeling required and the depth of quantitative output being requested. Given that most forest management companies operate within a comprehensive regulatory framework (see NCASI 2014 for Canadian context) and/or apply a vast array of best management practices to manage the risks and opportunities identified by this metric (NCASI 2009), typically accompanied by third-party audited sustainable forest management certification systems, this metric would likely require substantial additional analysis and its value is unclear. The metric itself, in fact, virtually addresses itself (see 0.22 "Risks from ineffective ecosystem services management can include" and "Opportunities from effective ecosystem services management can include"). It is suggested that the open-ended nature of this metric be modified to become a small set of targeted questions that can be answered consistently across the sector, through reasonable effort by the	
RR0201	National Council for Air and Stream Improvement, Inc. (NCASI)	Community Relations & Rights of Indigenous Peoples (RR0201-06)	registrant. A similar discussion to that above for the metrics associated with RR0201-04 applies to the metrics associated with RR0201-06. The degree of analysis and discussion required to address these metrics is substantial and, with no response framework provided for these metrics, could lead to responses that vary widely in terms of depth of analysis and comprehensiveness.	Disclosure on SASB metrics by companies may vary in depth of analysis and comprehensiveness, however, SASB aims to create disclosure guidance for its metrics that guides a concise, comprehensive, comparable response among all users of the standard.
RR0201	National Council for Air and Stream	Community Relations & Rights of	Depending on the jurisdiction in which legal commercial forest harvesting is undertaken, information incorporating that requested above may be	SASB acknowledges that the US and Canada have robust political systems to address indigenous rights. In the disclosure guidance for this metric SASB references

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	Improvement, Inc. (NCASI)	Indigenous Peoples (RR0201-06)	required by law. In jurisdictions such as Canada, where a comprehensive legal framework underpins all commercial forestry as it relates to indigenous rights, a company is legally obligated to undertake aboriginal consultation and their forest management plans incorporate written information to address questions such as these. Both Canada and the US have robust political systems where issues in these areas are fully debated and land tenures are for the most part well established and understood. Disputes may arise, but the court systems are more than capable of reaching resolutions. Local community interactions depend on the location of the forest land and the proximity to a recognizable community. To request each company synthesize this information to prepare a site-specific analysis to address these open-ended questions would be an extraordinarily time- consuming effort. It is suggested that the open-ended nature of this metric be modified to become a small set of targeted questions that can be answered consistently across the sector, through reasonable effort by the registrant.	frameworks published by the International Labour Organization (ILO), the United Nations, Forestry Stewardship Council (FSC), Sustainable Forestry Initiative (SFI), and PEFC as normative references against which a company may choose to discuss their legal obligation. The universal principles in these frameworks are used globally within the industry. Additionally, SASB research indicates that operating in areas of indigenous land could present a unique risk to Forestry & Logging companies, regardless of whether that company has achieved certification in those areas and/or is in compliance with legal requirements. For further evidence on this topic, please see the Forestry & Logging Industry Research Brief.
RR0201	National Council for Air and Stream Improvement, Inc. (NCASI)	Climate Change Adaptation of Forestlands (RR0201-08)	A similar discussion to that above for the metrics associated with RR0201-04 and RR0201-06 applies to the metrics associated with RR0201-08. The degree of analysis and discussion required to address these metrics is substantial and, with no response framework provided for these metrics, could lead to responses that vary widely in terms of depth of analysis and comprehensiveness. The issues listed above are so complex that it would be extremely difficult for a registrant to prepare a response to the above questions in a succinct, yet comprehensive manner that would be consistent across registrants to the standard. In addition, changes in forest ecosystems occur slowly and adaptation is, in fact, possible by incorporating it into normal management. U.S. and Canadian governments currently have extensive research programs exploring aspects related to climate change adaptation of forestlands. To request each company synthesize research being undertaken at the international, national, and state/provincial level in a manner	<ul> <li>SASB acknowledges that current state of climate change models may not produce specific information regarding the timeline, acreage, and volume of tree species that could be affected by climate change.</li> <li>Therefore, SASB has revised the disclosure guidance to encourage a discussion of the registrant's current knowledge about climate change effects from the scenario analyses it conducts, including potential benefits and risks from climate change, and the risk management procedures it has in place, in order to generate a cost-effective, reasonable, and comparable disclosure.</li> <li>SASB aligned the revised disclosure guidance with the CDSB Climate Change Reporting Framework and the CDP Climate Change Questionnaire. Additionally, in order to avoid duplication and enhance the usefulness of this disclosure, SASB notes that the disclosure for RR0201-07 should be additional but complimentary to the SEC's Commission Guidance Regarding Disclosure Related to Climate Change.</li> </ul>

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			that would allow them to prepare a site-specific analysis to address these open-ended questions would be an extraordinarily time-consuming and redundant effort. It is suggested that the open-ended nature of this metric be modified to become a small set of targeted questions that can be answered consistently across the sector, through reasonable effort by the registrant.	
RR0201	Sustainable Forestry Initiative (SFI)	General Comment	Thank you for the opportunity to comment on the Sustainability Accounting Standards Board's (SASB) Forestry and Logging Standard. The Sustainable Forestry Initiative® Inc. (SFI) is an independent, nonprofit organization that is solely responsible for maintaining, overseeing and improving the internationally recognized SFI® program. Across the United States and Canada, over 250 million acres are certified to the SFI forest management standard. In addition, SFI's Fiber Sourcing Standard sets mandatory practice requirements for the responsible procurement of all fiber procured directly from the forest, whether the forest is certified or not.	SASB appreciates the time and effort that the Sustainable Forestry Initiative (SFI) has invested in preparing comment letters for industries in the Renewable Resources & Alternative Energy sector. SASB thanks SFI for its participation in the standards development process, and hopes to deepen our engagement with SFI as we continue to review and refine our standards.
RR0201	Sustainable Forestry Initiative (SFI)	General Comment	<ol> <li>SASB Should Rely on Forest Certification Standards and Not Create New Performance Requirements.</li> <li>SFI has engaged and provided feedback on previous SASB standards that are product specific (packaging, pulp/paper, household and personal products, wood products via green building). Each of the SASB standards uses forest certification (SFI, PEFC and FSC) as a proof point to ensure the forest based products come from responsibly managed forests. SASB relies on these forest certification standards because they require third-party certification to their own performance requirements, and these forest certification standards are credible standards that other organizations such as brandowners and governments have trusted for their own assurances.</li> <li>SASB's Forestry and Logging Standard is not a product standard, but instead sets requirements for land managers to practice forestry in a responsible way. The SASB standard includes metrics such as the area of forestland that is third party certified, area of forestland with protected conservation</li> </ol>	SASB acknowledges the large amount of work and collaboration that has been done in the Forestry & Logging industry on sustainability issues to date, and where possible, SASB seeks to harmonize with established standards. SASB acknowledges that there may be certain additional costs associated with collecting data in the format specified by its standards. It has aimed to develop metrics that harmonize with existing reporting frameworks (regulatory and otherwise) where possible, and hopes to be creating additional benefit in instances where SASB's metrics may diverge from a current approach. SASB anticipates these benefits to be realized through enhanced comparability, relevance, and decision- usefulness. In the provisional Forestry & Logging standard, SASB has indicated where there is alignment of SFI's certifications with SASB's criteria. SASB references SFI certifications in the provisional standard in RR0201-01 and RR0201-05.

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SICS	Affiliation of	Code)	·	
number	Respondent			
			status, area of forestland in or near endangered species habitat, ecosystem services provided by forestlands, indigenous	
			peoples' rights, worker health & safety and managing forest	
			land for climate change. All of these metrics are covered by	
			forest certification standards.	
			The SFI 2015-2019 Forest Management Standard promotes	
			sustainable forestry practices based on 13 Principles, 15	
			Objectives, 37 Performance Measures and 101 Indicators. These requirements include measures to protect water quality,	
			biodiversity, wildlife habitat, species at risk, special sites and	
			Forests with Exceptional Conservation Value. The SFI 2015-	
			2019 Forest Management Standard also has indicators on	
			community involvement and social responsibility specific to indigenous peoples'. The SFI 2015-2019 Forest Management	
			Standard is used by privately held organizations, publically held	
			organizations, conservation organizations, indigenous and	
			tribal land managers, as well as governments.	
			It's also important to note that forest certification is built on 20	
			years' worth of continual improvement, with requirements	
			during the standard development process that follow such protocol like ISO's Guide 59 Code of Good Practice for	
			Standardization. This is important because the development of	
			these standards take place in an open and transparent forum.	
			SFI Standards are revised and updated every five years to	
			incorporate the latest scientific information and to respond to	
			emerging issues. As part of the development for the latest SFI 2015-2019 Standard and Rules, comments were received	
			during two 60-day public comment periods, and input was	
			received from 12 public workshops across the United States	
			and Canada. About 10,000 stakeholders were invited to submit	
			comments. Comments came from stakeholders that included	
			public and private landowners, forest sector representatives, indigenous communities, conservation groups, industry,	
			academia, brandowners and government officials.	
			Independent oversight was provided at each stage of the	
			revision process by an External Review Panel, a distinguished	

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			group of independent experts representing conservation, professional, academic and public organizations, operating at arm's length from SFI. The External Review Panel reviewed every public comment submitted to ensure that all comments were considered, and to guarantee the Standard revision process was transparent, objective and credible. The responses to all comments are posted on the SFI website.	
RR0201	Sustainable Forestry Initiative (SFI)	General Comment	<ul> <li>2. Specific Comments on the Metrics</li> <li>Overall comment - Rename the "Forestry and Logging" Standard to the "Forest Management Practices" Standard. This is a better reflection of the requirements outlined in the Standard.</li> </ul>	SASB has considered the suggestion by SFI and others to change the name of the Forestry & Logging industry. SASB has proposed changing the name of the industry to "Forestry Management". This proposal, along with other changes to SASB's SICS classification system, will undergo a 90-day public comment period beginning at the end of January 2016.
RR0201	Sustainable Forestry Initiative (SFI)	Activity Metric	Activity Metric "Percentage of forestland are that is (a) plantation forest and (b) natural forest" - It's not clear how disclosing "natural" vs. "plantation" forest is relevant to any of the proposed "Sustainability Topics." If the counter- argument is that plantation forests have some different (presumably lesser) benefit to either ecosystem services or climate adaptability, then where is the proof of that differential?	SASB has withdrawn the activity metric on the percentage of forestland area that is (a) plantation forest and (b) natural forest from the provisional standard.
RR0201	Sustainable Forestry Initiative (SFI)	Ecosystem Services & Impacts (RR0201-01)	Overall comment on accounting metrics - Revise the Standard with two accounting metrics. 1. Area of forestland that is third-party certified to a forest management standard, percentage certified to each standard. 2. Area of forestland that is not certified to a third-party forest management standard. Relying on existing forest certification standards, which has 20 years' worth of development processes and continual improvement behind the systems, should be the first accounting metric. Indicators .01 through .06 should fall under this accounting metric. If the organization does not have lands third-party certified to a forest management standard, then they should demonstrate conformance to the accounting metrics for forestland that is not certified to a third-party forest management standard	<ul> <li>SASB acknowledges the large amount of work and collaboration that has been done in the Forestry &amp; Logging industry on sustainability issues to date and, where possible, SASB seeks to harmonize with established standards.</li> <li>SASB intends that the metrics under each disclosure topic together provide a set of relevant, decision-useful, and comparable disclosure for the topic. Each metric alone is not intended address all aspects of the topic. In the provisional standard, SASB has retained all four metrics (RR0201-01 through RR0201-04) in the Ecosystem Services &amp; Impacts topic. SASB's research process found that each of these metrics presents a unique risk or opportunity that should be highlighted in addition to whether a registrant has achieved forest certification.</li> <li>For further evidence on why disclosure on each metric in this topic may constitute material information, please refer to the SASB Forestry &amp; Logging industry research brief available on</li> </ul>

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				the Renewable Resources & Alternative Energy sector webpage.
RR0201	Sustainable Forestry Initiative (SFI)	Ecosystem Services & Impacts (RR0201-01)	• .01 – alphabetize the certification standards in order.	<ul> <li>SASB has alphabetized the list of third-party forest management certifications. The revised standard now reads:</li> <li>Third-party forest management certifications include, but are not limited to, those promulgated by the following organizations (or the equivalent):</li> <li>-American Tree Farm System (ATFS)</li> <li>- Forest Stewardship Council (FSC)</li> <li>- Programme for the Endorsement of Forest Certification (PEFC)</li> <li>- Forest certification systems endorsed by the PEFC</li> <li>- Sustainable Forest Initiative (SFI)</li> </ul>
RR0201	Sustainable Forestry Initiative (SFI)	Ecosystem Services & Impacts (RR0201-01)	• .03 - allow a company to report if they have lands certified to multiple standards. SASB shouldn't discourage an organization from reporting their commitment to both standards, and instead should reward those organizations that have put time and resources to certify their operations to multiple Standards.	<ul> <li>SASB has revised the standard to include guidance for reporting on multiple certifications:</li> <li>.02 If a forestland area is certified to multiple certification standards, the registrant shall not account for the acreage more than once when calculating the total forestland area certified to a third-party forest management standard.</li> <li>.03 The registrant shall disclose the percentage of the total certified forestland that is certified to each forest management standard (e.g., FSC, SFI, PEFC, and ATFS) and indicate the associated certification(s) (e.g., FSC Forest Management Certification, SFI Forest Management Standard, PEFC Sustainable Forest Management certification, or ATFS Individual Third-Party certification).</li> <li>The registrant shall calculate the percentage of forestland certified to each forest management standard as the number of acres that are third-party certified to the respective standard divided by the total number of certified acres owned, leased, and/or managed by the registrant.</li> <li>.04 The registrant shall disclose the percentage of acres that are certification schemes.</li> </ul>
RR0201	Sustainable Forestry Initiative (SFI)	Ecosystem Services & Impacts (RR0201-01)	• .07 – .43 SFI recommends revising all the other indicators to apply only if the landowner is not certified to a third-party forest management standard.	In the provisional standard, SASB has retained all four metrics (RR0201-01 through RR0201-04) in the Ecosystem Services & Impacts topic. SASB's research process found that each of these metrics presents a unique risk or opportunity that should be highlighted in addition to whether a registrant has

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RR0201	Sustainable	Ecosystem	• .07 - Revise the following accounting metrics as follows:	achieved forest certification. For further evidence on why disclosure on each metric in this topic may constitute material information, please refer to the SASB Forestry & Logging industry research brief available on the Renewable Resources & Alternative Energy sector webpage. In the Note to RR0201-01-B, the registrant has the
	Forestry Initiative (SFI)	Services & Impacts (RR0201-01)	<ul> <li>RR0201-02 - Area of forestland that is not certified to a third-party forest management standard.</li> <li>New .07 - The registrant shall disclose its forestland area, in acres, that is not certified to a third party forest management standard.</li> <li>Third-party forest management certifications include those promulgated by the following organizations:</li> <li>o American Tree Farm System (ATFS)</li> <li>o Forest Stewardship Council (FSC)</li> <li>o Programme for the Endorsement of Forest Certification (PEFC)</li> <li>o Sustainable Forestry Initiative (SFI)</li> <li>New .08 - The registrant shall provide a brief description of its environmental management plan(s) implemented on the noncertified forestland. The indicators shall cover the following environmental, social and economic issues:</li> <li>Forest Productivity and Health – reforestation after harvests, soil productivity, management for wildfire, pests, disease, invasive exotics or other damaging agents.</li> <li>Protection of biodiversity – manage forests to protect and promote biodiversity, including animal and plant species, wildlife habitats and ecological or natural community types.</li> <li>Aesthetics and recreation – manage the visual impacts of forest operations and provide for recreational opportunities.</li> <li>Protection of special sites – manage lands that are ecologically, geologically or culturally important.</li> <li>Legal compliance – comply with all applicable forestry and related environmental laws, statutes and regulations.</li> <li>Community involvement and social responsibility – encourage community involvement, promote socially</li> </ul>	<ul> <li>opportunity to discuss the underlying references for its forestry management practices, and the topics and criteria covered in them.</li> <li><i>Note to RR0201-01-B</i>.</li> <li><i>.08 The registrant shall provide a brief description of its forestry management practices implemented for non-certified forestlands owned, leased, and/or managed by the registrant.</i></li> <li><i>.09 The registrant should discuss:</i></li> <li><i>The topics and criteria addressed by the practices(s), such as forest productivity and health, protection from ecological and biodiversity impacts, protection of water resources, noise impacts, discharges to water, protection of special sites, plantation farming, harvesting techniques, use of monocultures, use of genetically modified organisms (GMO), chemical usage, community involvement, indigenous communities, and aesthetics and recreation, among others.</i></li> <li><i>The underlying references for its forestry management plan(s) for non-certified forestlands, including the degree to which its forest management practices are aligned with criteria outlined in third-party sustainable forestry management standards and ASTM D7480, Guide for Evaluating the Attributes of a Forest Management Plan; whether these references are codes, guidelines, standards, or regulations; and whether they were developed by the registrant, an industry organization, a third-party organization (e.g., a non-governmental organization), a governmental agency, or some combination of these groups.</i></li> <li><i>How the registrant enforces the sustainable forestry management plans in its non-certified forestlands, including the type and frequency of inspections.</i></li> <li><i>10 Where policies and practices to ensure sustainable forestry management plans in tes non-certified forestlands, including the type and frequency of inspections.</i></li> </ul>

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			responsible practices and recognize and respect indigenous peoples' rights and traditional forest related knowledge.	management differ significantly by forestland, the registrant shall describe differences for each non-certified forestland and indicate the percentage of acres to which they were applied.
RR0201	Sustainable Forestry Initiative (SFI)	Ecosystem Services & Impacts (RR0201-01)	.10 & .11 – SFI is unfamiliar with who the International Finance Corporation (IFC) is and why they are the experts SASB relied on for protected status and critical habitat metrics. There are many experts that are more credible in the U.S. such as NatureServe and State Natural Resource Agencies, and agencies associated with the Natural Heritage, or natural inventory system. SFI recommends deleting .10 and .11 since the new proposed accounting metric (.08), "area of forestland that is not certified to a third-party forest management standard" will cover biodiversity issues. Furthermore, these additional requirements should only apply to non-certified forest area since forest certification standards (.01) address biodiversity issues in their respective standards.	SASB has withdrawn the reference to the International Finance Corporation Performance Standards on Environmental and Social Sustainability in its provisional standard for Forestry & Logging.
RR0201	Sustainable Forestry Initiative (SFI)	Ecosystem Services & Impacts (RR0201-02)	.13 – Since forest certification standards addresses protected conservation areas, and forest certification is a requirement under .01, this requirement should only apply to non-certified forest area.	SASB has identified that operating in areas of protected conservation status can present a unique risk to Forestry & Logging companies, even if the protected land is certified to a third-party forest management standard (for further information, see page 7-12 of the Forestry & Logging industry Research Brief). Although certification may decrease that risk. In the provisional standard, SASB has included the following: .13 The registrant may choose to disclose the percentage of the area of forestland with protected conservation status that is certified to a third-party forest management standard.
RR0201	Sustainable Forestry Initiative (SFI)	Ecosystem Services & Impacts (RR0201-02)	SFI also advises SASB not to rely on international programs such as UNESCO and Natura as indicators for protected conservation areas specific to non-certified forestland. SASB should rely on the U.S. law for protected conservation areas and not programs that do not apply to U.S. based forest landowners. SFI recommends deleting .13 and replace with the new proposed accounting metric suggested above (.08), "area of forestland that is not certified to a third-party forest management standard."	In response to this comment and other comments received on this metric, SASB has revised the definition of protected conservation status to firstly include areas legally designated by government. For areas that are not legally protected by government agencies, SASB research indicates that areas protected by other means, such as by international bodies or through treaties, may also present similar operational risks to companies, in terms of indicating a company's exposure to legislation that could restrict forestry operations in those lands. Therefore, SASB also includes areas protected by international bodies and/or treaties in the scope of

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PP0201		Ecosystem	16 the indicator related to the UICN Ped List of Threatened	<ul> <li>"conservation status" in this metric because of the heightened risks of operating in those areas.</li> <li>The revised disclosure guidance now states: <ul> <li>.11 The registrant shall disclose the area of its owned, leased, and/or managed forestland (by acreage) that has protected conservation status, where an area is considered to have protected conservation status if it is located within any of the following:</li> <li>Areas legally designated as protected by government regulation, including national parks, national wildlife refuge sites, wilderness areas, state forests, state parks, and Natura 2000 sites.</li> <li>Areas protected by international bodies and/or treaties, including Ramsar Wetlands of International Importance, International Union for Conservation of Nature (IUCN) Protected Areas (categories I-VI), UNESCO World Heritage sites, and Biosphere Reserves recognized within the framework of UNESCO's Man and the Biosphere (MAB) Programme.</li> <li>Sites that meet the IUCN's definition of a protected area: "A protected area is a clearly defined geographical space, recognized, dedicated, and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values."</li> <li>§ These sites may be listed in the World Database of Protected Areas (WDPA) and mapped on ProtectedPlanet.net.</li> </ul> </li> </ul>
RR0201	Sustainable Forestry Initiative (SFI)	Ecosystem Services & Impacts (RR0201-03)	.16 – the indicator related to the IUCN Red List of Threatened Species should be removed. IUCN lists Longleaf Pine on the Red List of Threatened Species, despite the fact that the southern United States hosts nearly 5 million acres of longleaf pine dominated forestlands, and tens of millions of additional acres where longleaf is present. Forest Inventory Analysis (FIA) data indicate that there are likely to be hundreds of millions of longleaf individual trees, including some 90 million mature or growing stock individuals, and perhaps 800 million seedlings. The inclusion of longleaf pine on the red list has created an unintended consequence of dampening potential markets for longleaf pine in Europe, and therefore discouraging the	SASB has eliminated the reference to IUCN Red List of Threatened Species from RR0201-03. The revised disclosure guidance now states: .19 An endangered species is defined in the U.S. Endangered Species Act as any species that is in danger of extinction throughout all or a significant portion of its range. .20 A threatened species is defined in the U.S. Endangered Species Act as any species that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range. .21 Endangered species habitat includes critical habitat areas

SASB Response to Public Comments on Renewable Resources & Alternative Energy Standards

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			management and growth of Longleaf Pine. Diminishing the economic incentive for longleaf restoration is just one example of an unintended consequence presented by the IUCN list. SASB should rely on U.S. law when it comes to both the identification and protection of endangered species habitat. SFI recommends deleting .16 since the new proposed accounting metric (.08), "area of forestland that is not certified to a third-party forest management standard" will cover compliance with all applicable forestry and related environmental laws, Furthermore, these additional requirements should only apply to non-certified forest area since forest certification standards (.01) protect threatened and endangered species in their respective standards.	<ul> <li>where the registrant owns, leases, and/or manages forestlands that are officially designated by applicable state and/or federal regulations including:</li> <li>The U.S. Endangered Species Act;</li> <li>The Canada Species at Risk Act; and</li> <li>Applicable regulatory endangered species lists in the regions where the registrant owns, leases, and/or manages forestlands.</li> </ul>
RR0201	Sustainable Forestry Initiative (SFI)	Ecosystem Services & Impacts (RR0201-04)	.21 – the indicators related to ecosystem services are covered under the new proposed accounting metric (.08) "area of forestland that is not certified to a third-party forest management standard." There is an indicator specific for community involvement, recreation and social responsibility that encompass ecosystem services. Furthermore, these additional requirements should only apply to non-certified forest area since forest certification standards (.01) address ecosystem services in their respective standards.	SASB's revised guidance (RR0201-04 .27) is intended to encourage registrants to disclose opportunities from ecosystem services in addition to information disclosed in forest certification standards. Forest management standards establish minimum performance criteria that registrants must meet in order to receive certification, but do not necessarily include requirements to disclose information about financial or other opportunities from ecosystem services. The revised disclosure is therefore relevant for both certified and uncertified lands.
RR0201	Sustainable Forestry Initiative (SFI)	Community Relations & Rights of Indigenous Peoples (RR0201-05)	.26 & .27 – Since forest certification addresses Indigenous Peoples' rights, and forest certification is a requirement under .01, this requirement should only apply to non-certified forest area. The proposed new accounting metric (.08) "area of forestland that is not certified to a third-party forest management standard" addresses Indigenous Peoples' rights under the indicator specific for community involvement and social responsibility that recognizes and respects indigenous peoples' rights and traditional forest related knowledge. SASB should rely on existing laws, as well as the United Nations Declaration for the Rights of Indigenous Peoples (UNDRIP). The Declaration says that consideration should be given for Indigenous Peoples' rights to maintain and strengthen their distinct spiritual relationship with their traditionally owned or otherwise used lands and territories.	<ul> <li>SASB has identified that operating in areas of indigenous land can present a unique risk to Forestry &amp; Logging companies, even if the indigenous land is certified to a third-party forest management standard and meets legal requirements.</li> <li>Additionally, SASB references UNDRIP and third-party forest management certifications in its disclosure guidance: .35 The registrant shall describe its due diligence practices and procedures with respect to upholding the principles covered in human rights frameworks, such as:</li> <li>International Labour Organization (ILO) Declaration on Fundamental Principles and Rights at Work and the fundamental ILO conventions on freedom of association (No. 87), collective bargaining (No. 98), forced labor (No. 29 and No. 105), child labor (No. 138 and No. 182), fair wages (No. 100), and discrimination (No. 111)</li> </ul>

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				<ul> <li>United Nations Guiding Principles on Business and Human Rights, specifically Human Rights Due Diligence (Principle 17a-c)</li> <li>United Nations Declaration on the Rights of Indigenous Peoples</li> <li>Voluntary Principles on Security and Human Rights</li> <li>FSC International Standard Principle 4: Community</li> <li>SFI Forest Management Standard Objective 12: Community Involvement and Landowner Outreach</li> <li>PEFC International Forestry Management Standard Criterion 6: Maintenance of other socioeconomic functions and conditions</li> <li>For further evidence on this topic please refer to the SASB</li> </ul>
RR0201	Sustainable Forestry Initiative (SFI)	Community Relations & Rights of Indigenous Peoples (RR0201-06)	.2931 – the indicators related to social issues are covered under the new proposed accounting metric (.08) "area of forestland that is not certified to a third-party forest management standard." There is an indicator specific for social responsibility as well as legal compliance with all applicable forestry and related environmental laws, statutes and regulations. SASB should also reference the ILO Declaration on Fundamental Principles and Rights at Work, 1998 and not the ILO Core Conventions since the Core Conventions have not been ratified by the U.S. Government. Furthermore, these additional requirements should only apply to non-certified forest area since forest certification standards (.01) address social issues in their respective standards.	Forestry & Logging industry research brief available on the Renewable Resources & Alternative Energy sector webpage. SASB acknowledges that legal compliance and criteria related to indigenous communities are included in third-party forest management certifications. However, SASB research indicates that operating in areas of indigenous land could present a unique risk to Forestry & Logging companies, regardless of whether that company has achieved certification in those areas and/or is in compliance with legal requirements. For further evidence on this topic, please see the Forestry & Logging industry research brief on the Renewable Resources & Alternative Energy sector webpage. SASB has made the suggested revision to include the ILO Declaration on Fundamental Principles and Rights at Work, 1998.
				<ul> <li>SASB includes reference to third-party forest management certifications in the disclosure guidance for RR0201-06:</li> <li>.35 The registrant shall describe its due diligence practices and procedures with respect to upholding the principles covered in human rights frameworks, such as:</li> <li>International Labour Organization (ILO) Declaration on Fundamental Principles and Rights at Work and the fundamental ILO conventions on freedom of association (No. 87), collective bargaining (No. 98), forced labor (No. 29 and</li> </ul>

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				<ul> <li>No. 105), child labor (No. 138 and No. 182), fair wages (No. 100), and discrimination (No. 111)</li> <li>United Nations Guiding Principles on Business and Human Rights, specifically Human Rights Due Diligence (Principle 17a-c)</li> <li>United Nations Declaration on the Rights of Indigenous Peoples</li> <li>Voluntary Principles on Security and Human Rights</li> <li>FSC International Standard Principle 4: Community</li> <li>SFI Forest Management Standard Objective 12: Community Involvement and Landowner Outreach</li> <li>PEFC International Forestry Management Standard Criterion 6: Maintenance of other socioeconomic functions and conditions</li> </ul>
				<ul> <li>.36 The registrant shall describe its due diligence practices and procedures with respect to indigenous rights of communities in which it operates or intends to operate, including:</li> <li>Upholding ILO Convention No. 169</li> <li>Use of free, prior, and informed consent (or consultation) processes</li> <li>FSC International Standard Principle 3: Indigenous Rights</li> <li>SFI Forest Management Standard Objective 8: Recognize and Respect Indigenous Peoples' Rights</li> </ul>
RR0201	Weyerhaeuser	Ecosystem Services & Impacts	Thank you for the opportunity to submit comments on the exposure draft standards for the Renewable Resources and Alternative Energy Sector – "Forest and Logging Sustainability Accounting Standard." As one of the largest timberland operators in the world and a publicly owned company, we have been meeting SEC requirements for more than 50 years and reporting material of the type that SASB proposes. We support SASB's stated goal of creating metrics that meet "objectivity", "measurability", "completeness", and "relevance" criteria. However, in reviewing the Exposure Draft Forestry and Logging Standards, we find many instances where the proposed metrics do not meet SASB's own stated criteria. Our summary recommendations include:	SASB acknowledges the large amount of work and collaboration that has been done in the Forestry & Logging industry on sustainability issues to date, and where possible, SASB seeks to harmonize with established standards. SASB intends that the metrics under each disclosure topic together provide a set of relevant, decision-useful, and comparable disclosure for the topic. Each metric alone is not intended address all aspects of the topic. In the provisional standard, SASB has retained all four metrics (RR0201-01 through RR0201-04) in the Ecosystem Services & Impacts topic. SASB's research process found that each of these metrics presents a unique risk or opportunity that should be highlighted in addition to whether a registrant has achieved

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			<ul> <li>Revise the metrics and draw from existing forest management and finance standards developed through previous consultative processes</li> <li>For disclosure topic Ecosystem Services &amp; Impacts – SASB should rely on existing forest certification systems, already referenced in the SASB standards, which have developed comprehensive measures to protect water quality, biodiversity, species at risk, special sites and forests with high conservation value. Another resource that could contribute to the revision and standardization process is the PwC-WBCSD Forest Finance Toolkit.</li> </ul>	forest certification. For further evidence on why disclosure on each metric in this topic may constitute material information, please refer to the SASB Forestry & Logging industry research brief available on the Renewable Resources & Alternative Energy sector webpage.
RR0201	Weyerhaeuser	General Comment/ Community Relations & Indigenous Rights and Workforce Health & Safety	<ul> <li>Consolidate and create stand alone disclosure topics</li> <li>The Community Relations &amp; Indigenous Rights and Workforce Health &amp; Safety disclosure topics are cross-sectoral and should stand alone, so that one standard (per disclosure topic) applies to all industries. There is no material need to have forestry- specific standards for these disclosure topics.</li> </ul>	SASB's approach is to create industry-specific standards that consider unique operational attributes of an industry. While Community Relations & Rights of Indigenous Peoples and Workforce Health & Safety are topics that appear in multiple industries across sectors, the manifestations of social and human impacts from these topics, and corresponding potential financial impacts on companies, are not necessarily equivalent between industries. SASB standards for the same disclosure topic may therefore differ between industries. In this instance, SASB has withdrawn the Workforce Health & Safety disclosure topic after determining it was not likely to have material financial impacts on companies in the industry.
RR0201	Weyerhaeuser	General Comment	Sector Title: Forestry and Logging As an initial matter, we find that the title of the sector does not reflect the intended target participants. We recommend changing the name of the sector from "Forestry and Logging" to "Timberland Operations." The term "logging" does not belong in the industry title, as logging is a derived activity, secondary to the management of timberland and sale of related products. The core of the standards focuses on timberland management, not logging operations.	SASB has considered the suggestion by Weyerhaeuser and others to change the name of the Forestry & Logging industry. SASB has proposed changing the name of the industry to "Forestry Management". This proposal, along with other changes to SASB's SICS classification system, will undergo a 90-day public comment period beginning at the end of January 2016.
RR0201	Weyerhaeuser	Activity Metric (RR0201-B)	RR0201-B: Percentage of forestland area that is (a) plantation forest and (b) natural forest Comment: Categorization of forest management types is	SASB has withdrawn the activity metric on the percentage of forestland area that is (a) plantation forest and (b) natural forest from the provisional standard.

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			complex and requires more objective definitions. Moreover, distinguishing between forest management types is not demonstrated as material in the current standards.	
RR0201	Weyerhaeuser	Ecosystem Services & Impacts (RR0201-01 - RR0201-04)	Comment: These metrics do not meet the "objectivity", "measurability", "completeness", and "relevance" criteria. We recommend that SASB reorganize the metrics under this topic to follow those of existing forest certification systems, already referenced in the SASB standards, which have developed comprehensive measures to protect water quality, biodiversity, species at risk, special sites and forests with high conservation	SASB acknowledges the large amount of work and collaboration that has been done in the Forestry & Logging industry on sustainability issues to date. SASB intends that the metrics under each disclosure topic together provide a set of relevant, decision-useful, and comparable disclosure for the topic. Each metric alone is not intended address all aspects of the topic. In the provisional standard, SASB has retained all four metrics (RR0201-01 through RR0201-04) in the Ecosystem Services & Impacts topic. SASB's research process found that each of these metrics presents a unique risk or opportunity that should be highlighted in addition to whether a registrant has achieved forest certification. For further evidence on why disclosure on each metric in this topic may constitute material information, please refer to the SASB Forestry & Logging industry research brief available on the Renewable Resources & Alternative Energy sector webpage.
RR0201	Weyerhaeuser	Ecosystem Services & Impacts (Industry Description)	Industry Description: "Timber extraction currently has a well- established market, but it has the potential to degrade ecosystems or endanger species in the absence of action to mitigate such impacts." Comment: Should be changed to "Timber extraction currently has a well-established market" Extraction is a term used for non-renewable resources. Harvesting is used for renewable resources. Comment: Overall, this description does not meet the "objectivity" criteria. Its negative approach implies that timberland owners do not currently manage their forests to sustainability standards. In fact, companies with operations in North America have many reasons to – and do – sustainably manage their forests, including one that is not really addressed here: financial. Without sustainable forest management, companies will not be financially sustainable.	SASB has withdrawn the relevant sentence from the provisional standard issue description.

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RR0201	Weyerhaeuser	Ecosystem Services & Impacts (RR0201-01) Line .04	The registrant shall disclose separately the percentage of acres that is certified to each relevant forest management standard (e.g., FSC, SFI, PEFC, and ATFS) and the relevant certifications (e.g., FSC Forest Management Certification, SFI Forest Management Standard, PEFC Sustainable Forest Management certification, ATFS Individual Third-Party certification). Comment: What purpose does differentiating "separately the percentage of acres that is certified to each relevant forest management standard" serve? Distinguishing between certification standards is not material.	SASB received feedback during the industry working group (IWG) period that companies should disclose the third-party certifications that they are certified to because every third- party forest management standard may include different criteria and may be perceived by different stakeholders as having been developed with different levels of rigor. Therefore, SASB has included "by standard" in RR0201-01 to provide users of the standard with the information to make those decisions.
RR0201	Weyerhaeuser	Ecosystem Services & Impacts (RR0201-01) Line .10	<ul> <li>Where applicable and relevant, the registrant shall describe specific policies and practices that apply to areas with protected conservation status and/or areas of critical habitat, which are defined by the International Finance Corporation (IFC).</li> <li>Comment: Rather than relying first on international standards, we suggest creating a hierarchy of standards, whereby definitions provided by relevant U.S. laws are listed first, followed by definitions by international organizations (including certification systems). This will better ensure both relevancy and completeness in the metric.</li> </ul>	<ul> <li>SASB has withdrawn reference to the International Finance Corporation (IFC). The revised disclosure guidance states:</li> <li>Note to RR0201-01-B .08 The registrant shall provide a brief description of its forestry management practices implemented for non-certified forestlands owned, leased, and/or managed by the registrant.</li> <li>.09 The registrant should discuss:</li> <li>The topics and criteria addressed by the practices(s), such as forest productivity and health, protection from ecological and biodiversity impacts, protection of water resources, noise impacts, discharges to water, protection of special sites, plantation farming, harvesting techniques, use of monocultures, use of genetically modified organisms (GMO), chemical usage, community involvement, indigenous communities, and aesthetics and recreation, among others.</li> <li>The underlying references for its forestry management plan(s) for non-certified forestlands, including the degree to which its forest management practices are aligned with criteria outlined in third-party sustainable forestry management standards and ASTM D7480, Guide for Evaluating the Attributes of a Forest Management Plan; whether these references are codes, guidelines, standards, or regulations; and whether they were developed by the registrant, an industry organization, a third-party organization (e.g., a non-governmental organization), a governmental agency, or some combination of these groups.</li> <li>How the registrant enforces the sustainable forestry management plans in its non-certified forestlands, including</li> </ul>

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				<i>the type and frequency of inspections.</i> <i>.10 Where policies and practices to ensure sustainable forest management differ significantly by forestland, the registrant shall describe differences for each non-certified forestland and indicate the percentage of acres to which they were applied.</i>
RR0201	Weyerhaeuser	Ecosystem Services & Impacts (RR0201-01) Line .11	RR0201-01.11 The registrant shall disclose the degree to which its policies and practices are aligned with the International Finance Corporation's (IFC) Performance Standards on Environmental and Social Sustainability, January 1, 2012. Comment: Rather than relying first on international standards, we suggest creating a hierarchy of standards, whereby definitions provided by relevant U.S. laws are listed first, followed by definitions by international organizations (including certification systems). This will better ensure both relevancy and completeness in the metric.	In response to this comment and other comments, SASB has withdrawn reference to the International Finance Corporation's (IFC) Performance Standards on Environmental and Social Sustainability.
RR0201	Weyerhaeuser	Ecosystem Services & Impacts (RR0201-02) Line .13	<ul> <li><i>RR0201-02.13</i> An area is considered to be of protected conservation status if it is located within:</li> <li>National parks</li> <li>International Union for Conservation of Nature (IUCN) Protected Areas (categories I-VI)</li> <li>Ramsar Wetlands of International Importance</li> <li>UNESCO World Heritage sites</li> <li>Biosphere Reserves recognized within the framework of UNESCO's Man and the Biosphere (MAB) Programme</li> <li>Natura 2000 sites</li> <li>Other areas where discharges are restricted or subject to local agreements</li> <li>Sites that meet the IUCN's definition of a protected area: "A protected area is a clearly defined geographical space, recognized, dedicated, and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values" § These sites may be listed in the World Database of Protected Areas (WDPA) and mapped on ProtectedPlanet.net</li> <li>Comment: The "definition" of conservation here does not meet the relevancy, completeness or materiality criteria. The definition of conservation should first reference relevant U.S. laws (see comments on .10 and .11) before referring to a group</li> </ul>	<ul> <li>SASB's revised disclosure guidance defines areas of protected conservation status as:</li> <li>.11 The registrant shall disclose the area of its owned, leased, and/or managed forestland (by acreage) that has protected conservation status, where an area is considered to have protected conservation status if it is located within any of the following:</li> <li>Areas legally designated as protected by government regulation, including national parks, national wildlife refuge sites, wilderness areas, state forests, state parks, and Natura 2000 sites.</li> <li>Areas protected by international bodies and/or treaties, including Ramsar Wetlands of International Importance, International Union for Conservation of Nature (IUCN) Protected Areas (categories I-VI), UNESCO World Heritage sites, and Biosphere Reserves recognized within the framework of UNESCO's Man and the Biosphere (MAB) Programme.</li> <li>Sites that meet the IUCN's definition of a protected area: "A protected area is a clearly defined geographical space, recognized, dedicated, and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural</li> </ul>

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			of international definitions with unclear relevance to U.S. operations. Additionally, certification systems already address biodiversity issues.	values." § These sites may be listed in the World Database of Protected Areas (WDPA) and mapped on ProtectedPlanet.net.
RR0201	Weyerhaeuser	Ecosystem Services & Impacts (RR0201-02) Line .13	Comment: What is the purpose of including "Other areas where discharges are restricted or subject to local agreements"? An area where discharges are restricted or subject to local agreements does not necessarily mean that the area has conservation status. This does not meet the relevancy or materiality criteria.	SASB has withdrawn reference to "Other areas where discharges are restricted or subject to local agreements" from its provisional standard.
RR0201	Weyerhaeuser	Ecosystem Services & Impacts (RR0201-02) Line .15	RR0201-02.15 The scope includes protected lands that are set aside for conservation and not actively logged as well as protected lands that are actively logged by the registrant. Comment: There appears to be some confusion between "protection" and "conservation." SASB should distinguish between permanently protected, and lands that may be temporarily set aside.	The revised disclosure guidance reads: .12 The scope includes areas of conservation status that are actively logged by or for the registrant and excludes areas of conservation status that are exclusively set aside for conservation and are not actively logged.
RR0201	Weyerhaeuser	Ecosystem Services & Impacts (RR0201-03) Line .16	<ul> <li><i>RR0201-03.16</i> Forestlands are considered to be in endangered species habitat if they are in or near:</li> <li>Areas where IUCN Red List of Threatened Species that are classified as Critically Endangered (CR) or Endangered (EN) are extant;</li> <li>A species is considered extant in an area if it is a resident, present during breeding or non-breeding season, or if it makes use of the area for passage.</li> <li>Critical habitat areas of species listed on the U.S. Endangered Species Act are threatened or endangered;</li> <li>Critical habitat areas of species listed on the Canada Species at Risk Act;</li> <li>Critical habitat areas of species that meet any other relevant endangered species lists.</li> <li>Comment: See comments on .10 and .11 on creating hierarchy. Any definition of threatened and endangered species should be tied directly to legal requirements. Otherwise it will not meet the completeness, relevancy and materiality criteria.</li> <li>Additionally, certification systems already address threatened and endangered species that meet and endangered species and endangered species habitat.</li> </ul>	<ul> <li>SASB definition of endangered species is tied directly to legal requirements.</li> <li>The revised disclosure guidance states: <ul> <li>.17 Forestlands are considered to be in endangered species habitat if a species that is classified by local, state, or federal law as endangered or threatened inhabits the registrant's forestlands.</li> <li>21 Endangered species habitat includes critical habitat areas where the registrant owns, leases, and/or manages forestlands that are officially designated by applicable state and/or federal regulations including:</li> <li>The U.S. Endangered Species Act;</li> <li>The Canada Species at Risk Act; and</li> <li>Applicable regulatory endangered species lists in the regions where the registrant owns, leases, and/or manages forestlands.</li> </ul> </li> </ul>
RR0201	Weyerhaeuser	Ecosystem Services &	Comment: It is unclear what is intended by "other relevant endangered species lists." How is the registrant to determine	SASB disclosure guidance states:

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		Impacts (RR0201-03) Line .16	what constitutes a "relevant" list? Also, see comments above on tying directly to legal requirements.	<ul> <li>.17 Forestlands are considered to be in endangered species habitat if a species that is classified by local, state, or federal law as endangered or threatened inhabits the registrant's forestlands.</li> <li>21 Endangered species habitat includes critical habitat areas where the registrant owns, leases, and/or manages forestlands that are officially designated by applicable state and/or federal regulations including:</li> <li>The U.S. Endangered Species Act;</li> <li>The Canada Species at Risk Act; and</li> <li>Applicable regulatory endangered species lists in the regions where the registrant owns, leases, and/or manages forestlands.</li> </ul>
RR0201	Weyerhaeuser	Ecosystem Services & Impacts (RR0201-03) Line .17	RR0201-03.17 For the purposes of this disclosure, "near" is defined as within five kilometers (km) of the boundary of an area of endangered species habitat. Comment: "Near" should be stricken. Critical habitat is already defined broadly. Adding a five kilometer buffer is not in itself material.	SASB has withdrawn "near" from the metric. The revised metric now reads: RR0201-03. Area of forestland in endangered species habitat
RR0201	Weyerhaeuser	Ecosystem Services & Impacts (RR0201-04) Line .21	<ul> <li><i>RR0201-04.21</i> The registrant shall discuss its approach to managing the risks and opportunities created by the ecosystem services that its forestlands provide, where:</li> <li><i>Ecosystem services are defined by the United Nations Environment Program as the benefits obtained from ecosystems, which include provisioning services such as food and water; regulating services such as flood and disease control; cultural services such as spiritual, recreational, and cultural benefits; and supporting services, such as nutrient cycling, that maintain the conditions for life on Earth. Ecosystem services provided by forestlands can include monetary benefits derived from the actual use of a good or service as well as passive/non-use values, including:</i></li> <li><i>Watershed services (such as water quantity and quality)</i></li> <li><i>Soil stabilization and erosion control</i></li> <li><i>Air quality</i></li> <li><i>Climate regulation</i></li> <li><i>Carbon sequestration</i></li> <li><i>Biodiversity</i></li> <li><i>Recreation and tourism (such as fishing, hunting, and hiking)</i></li> </ul>	<ul> <li>SASB has included timber in the definition of ecosystem services. The revised standard now reads:</li> <li>.26 The registrant shall discuss its strategy to optimize the opportunities created by the ecosystem services that its forestlands provide, where:</li> <li>Ecosystem services are defined by the Millennium Ecosystem Assessment as the benefits obtained from ecosystems, which include provisioning services (i.e., goods or products obtained from ecosystem's control of natural processes) such as climate, erosion, and pollination; cultural services (i.e., nonmaterial benefits obtained from an ecosystem from an ecosystem services is and supporting services (i.e., services that maintain the other ecosystem services) such as nutrient cycling, primary production, and water cycling.</li> </ul>

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			<ul> <li>Non-timber commercial forest products</li> <li>Cultural values (including aesthetic value, passive use, and cultural heritage)</li> <li>Comment: Timber is a "provisioning" ecosystem service, similar to food and water. You should include it in the full definition, otherwise this metric does not fulfill the completeness criterion. In addition, some of the ecosystem services included in the list are either too costly to measure to satisfy both measurability and completeness, or are not measured.</li> </ul>	
RR0201	Weyerhaeuser	Ecosystem Services & Impacts (RR0201-04) Line .22	<ul> <li>material.</li> <li><i>RR0201-04.22 The discussion shall include:</i> <ul> <li>The type(s) of ecosystem service(s) it currently benefits from, and how the registrant's operations optimize the benefits received.</li> <li>How the registrant manages risks associated with ecosystem services in its forestlands, where management actions can include decisions about harvesting, management of conservation areas or areas of high biodiversity, or conserving forested watershed.</li> <li>§ Risks from ineffective ecosystem services management can include decreased forest productivity and timber yields, reputational concerns (e.g., those from local communities, non-governmental organizations, and regulatory agencies), permitting or harvesting restrictions, inability to capture revenues from timber and non-timber forest products, and loss of forestry management certifications.</li> <li>§ Opportunities from effective ecosystem services management can include higher land value, increased productivity and timber yield, direct payments for timber and non-timber forest products, and loss of scientific research provided by governmental and non-governmental organizations.</li> <li>Comment: Unless timber is included as an ecosystem service, the discussion on "optimizing" benefits would be misrepresentative and not meet the completeness criterion.</li> </ul></li></ul>	In the provisional standard, SASB has revised the definition of ecosystem services, and uses the definition from the Millennium Ecosystem Assessment: • Ecosystem services are defined by the Millennium Ecosystem Assessment as the benefits obtained from ecosystems, which include provisioning services (i.e., goods or products obtained from ecosystems) such as food, fresh water, timber, and fiber; regulating services (i.e., benefits obtained from an ecosystem's control of natural processes) such as climate, erosion, and pollination; cultural services (i.e., nonmaterial benefits obtained from an ecosystem such as recreational and spiritual benefits; and supporting services (i.e., services that maintain the other ecosystem services) such as nutrient cycling, primary production, and water cycling.

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RR0201	Weyerhaeuser	Ecosystem Services & Impacts (RR0201-04) Line .22	Comment: It is not evident that providing the names of the methods or models used to develop scenarios for ecosystem services would be material or create comparable metrics.	SASB has withdrawn this line of disclosure guidance from its provisional standard.
RR0201	Weyerhaeuser	Ecosystem Services & Impacts (RR0201-04) Line .25	<ul> <li><i>RR0201-04.25</i> If revenue or other payments are currently not being received or valued by the registrant, the registrant should disclose the specific areas within its forestlands that have the most potential to capture current or future revenue from ecosystem goods or services, including the projected potential revenues (in U.S. dollars) or value and when the registrant expects to realize these revenues.</li> <li>Comment: Such information may be proprietary or purely conjectural. Asking for "projected potential revenues (in U.S. dollars) or value" without specifying an accounting system would lead to estimates that would not be comparable. Requiring the disclosure of such information could be misleading or create risk.</li> </ul>	<ul> <li>SASB has withdrawn this line of guidance from its provisional standard. The revised disclosure guidance is limited to those ecosystem services that the registrant receives payments for, and states:</li> <li>.28 For the ecosystem services that the registrant does receive direct payments for, the registrant should disclose the amount (in U.S. dollars) the registrant receives for non-timber ecosystem goods and services and the type of compensation it receives, which can include:</li> <li>Public payments to landowners (from the government);</li> <li>Voluntary payments to landowners (from businesses, individuals, and non-governmental organizations); and</li> <li>Compliance-driven payments (payments made to comply with government regulations).</li> <li>.29 The registrant should disclose whether it expects the revenues received from these non-timber or timber ecosystem services to change in the future and the methods or models used to develop these scenarios, including the use of global models or scientific research provided by governmental and non-governmental organizations.</li> <li>.30 The registrant should discuss how management of non-timber ecosystem services is expected to affect tree growth and timber yield.</li> </ul>
RR0201	Weyerhaeuser	Community Relations & Rights of Indigenous Peoples (RR0201-05 - RR0201-06)	General comment: This disclosure topic is cross-sectoral and should stand alone, so that one standard applies to all industries. There is no material need to have forestry-specific standards for this disclosure topic.	SASB's approach is to create industry-specific standards that consider unique operational attributes of an industry. While the Community Relations & Rights of Indigenous Peoples topics appear in several industries across sectors, the manifestations of social and human impacts from these topics, and corresponding potential financial impacts on companies, are not necessarily equivalent between industries. SASB standards for the same disclosure topic may therefore differ between industries.

Industry SICS number	Name and/or Affiliation of Respondent	Topic (Metric Code)	Comment Excerpts	SASB Response
RR0201	Weyerhaeuser	Community Relations & Rights of Indigenous Peoples (Industry Description)	Industry Description: "[] Concerns over indigenous peoples' rights arise in both developed countries such as Canada and emerging markets such as Brazil—both key forestry regions." Comment: Should be rephrased to "Concerns over indigenous peoples' rights arise in both developed countries such as Canada and emerging markets such as Brazil—both key timber producing regions."	SASB has withdrawn the sentence from the issue description in the provisional standard.
RR0201	Weyerhaeuser	Community Relations & Rights of Indigenous Peoples (Industry Description)	Comment: This entire disclosure topic is not unique this sector. We recommend that SASB remove disclosure topics with consistent crossover between sectors and allow them to stand alone. This will create consistency across standards, which in turn will enable them to be more complete and comparable.	SASB believes that there are unique aspects of this topic within the Forestry & Logging industry that warrant specific accounting metrics (for further evidence on this topic, see page 12 of the industry research brief). The topic can therefore not stand alone.
RR0201	Weyerhaeuser	Workforce Health & Safety (RR0201-07)	General comment: This disclosure topic is cross-sectoral and should stand alone, so that one standard applies to all industries. There is no material need to have forestry-specific standards for this disclosure topic.	SASB has withdrawn the Workforce Health & Safety topic from the provisional standard.
RR0201	Weyerhaeuser	Workforce Health & Safety (Industry Description)	Description: "Forestry and logging workers are exposed to physical risks such as the use of cutting tools, falling timber, heavy machinery and moving parts, excessive noise, working at heights, unstable and rough terrain, and exposure to the elements." Comment: Should be rephrased to "Forestry and logging workers are exposed to risks such as the use of harvesting tools and heavy equipment, falling trees, unstable and rough terrain, and inclement weather."	SASB has withdrawn the Workforce Health & Safety topic from the provisional standard.
RR0201	Weyerhaeuser	Workforce Health & Safety (Industry Description)	Description: "These acute safety risks can lead to fatalities or serious injuries; the industry has one of the highest fatality rates among all U.S. industries." Comment: This statement is misleading. Logging has one of the highest fatality rates among all U.S. industries – not timberland operations per se.	SASB has withdrawn the Workforce Health & Safety topic from the provisional standard.
RR0201	Weyerhaeuser	Workforce Health & Safety (Industry Description)	Comment: This entire disclosure topic is not unique this sector. We recommend that SASB remove disclosure topics with consistent crossover between sectors and allow them to stand	SASB has withdrawn the Workforce Health & Safety topic from the provisional standard.

Industry SICS number	Name and/or Affiliation of Respondent	Topic (Metric Code)	Comment Excerpts	SASB Response
			alone. This will create consistency across standards, which in turn will enable them to be more complete and comparable.	
RR0201	Weyerhaeuser	Climate Change and Adaptation of Forestlands (RR0201-08)	Comment: The SEC already has existing requirements for reporting on impacts of climate change (see http://web.law.columbia.edu/climate-change/resources/climate- change-securities-disclosures-resource-center). If SASB finds a material reason to require further disclosure, it should draw from existing reporting standards that comprehensively address climate change. These include the Global Reporting Initiative (GRI) and the CDP.	In response to this comment and other comments SASB received on this metric, SASB has revised the disclosure guidance to reduce the amount of specific "shall" requirements, where some information about geography and timeline are unknown, and SASB aligned the revised disclosure guidance with the CDSB Climate Change Reporting Framework and the CDP Climate Change Questionnaire. Additionally, in order to avoid duplication and enhance the usefulness of this disclosure, SASB notes that the disclosure for RR0201-07 should be additional but complimentary to the SEC's Commission Guidance Regarding Disclosure Related to Climate Change.
RR0201	Weyerhaeuser	Climate Change and Adaptation of Forestlands (Industry Description)	Description: "Global climate change creates a known long-term business uncertainty for forestry and logging companies" Comment: Should be rephrased as "Global climate change may create long-term business uncertainties for some timberland owners."	SASB has revised the language in the industry description to "Global climate change may create long-term business uncertainty for some forestry companies."
RR0201	Weyerhaeuser	Climate Change and Adaptation of Forestlands (Industry Description)	Comment: This section is predicated on the idea that location specific climate change science can provide precise information for specific locations and specific time periods. Unfortunately, existing climate change science does not provide such discrete results. A discussion of the physical risks of climate change and potential benefits is reasonable and would not be costly, but there is little ability at this time to predict specific impacts of climate change on forestlands and expected impacts to growth and yield, and in turn, revenues. Therefore, it does not meet the measurability criteria.	SASB has amended the industry description and metric to encourage a more general consideration of and discussion of the potential benefits and physical risks of climate change in order to enhance measurability and generate a cost-effective, reasonable, and comparable disclosure.
RR0201	Weyerhaeuser	Climate Change and Adaptation of Forestlands (RR0201-08) Line .39	<ul> <li><i>RR0201-08.39</i> The registrant shall provide:</li> <li>A breakdown, by acreage, of the geographic location of the registrant's forestlands, identification of the potential climate change risks or opportunities that may manifest within each of these regions, and the percentage of the registrant's forestlands that could be affected by these risks or opportunities.</li> <li>A breakdown, by volume, of the types of tree species harvested for timber in the registrant's forestlands, identification of the potential risks or opportunities resented</li> </ul>	SASB acknowledges that existing models or methods may not be able to currently provide such detailed and accurate information on climate change impacts on specific areas and regions. In response to this comment and other comments received on this metric, SASB has withdrawn the "by acreage" aspect of this guidance.

Industry SICS number	Name and/or Affiliation of Respondent	Topic (Metric Code)	Comment Excerpts	SASB Response
			<ul> <li>by climate change that may manifest among these different species, and the percentage of the registrant's timber yield that could be affected by these risks or opportunities.</li> <li>§ Where relevant, the registrant shall discuss how risks and opportunities may vary between the registrant's plantation forestlands and its natural forestlands.</li> <li>Comment: Identification of the "potential" climate change risks to specific acreages in specific regions, based on best available science, would not meet the measurability criteria as specified by SASB. There are no existing models or methods that can possibly provide such detailed and accurate information. Any attempts to present such information will peritable accurate by a contraction will</li> </ul>	
RR0201	Weyerhaeuser	Climate Change and Adaptation of Forestlands (RR0201-08) Line .41	neither be comparable nor auditable. <i>RR0201-08.41 The timeline over which such risks and opportunities are expected to manifest.</i> Comment: Climate change is a non-linear process. Providing a timeline of risks and opportunities would not meet the measurability criterion. There are no existing models or methods that can provide such detailed and accurate information. Any attempts to present such information will neither be comparable nor auditable.	<ul> <li>SASB acknowledges that current climate change models may not produce specific and detailed information regarding the timeline of climate change impacts, but SASB has retained the criteria under line .41 of the standard that states:</li> <li>.41 For each of the risks and/or opportunities identified, the registrant shall provide the following:</li> <li> • The timeframe in which the risk or opportunity is expected to manifest.</li> <li>- Disclosure corresponds to CDSB Climate Change reporting framework 4.11.</li> <li>Therefore, SASB has revised the disclosure guidance to encourage a discussion of the registrant's current knowledge about climate change effects from the scenario analyses it conducts, including potential benefits and risks from climate change, and the risk management procedures it has in place, in order to generate a cost-effective, reasonable, and comparable disclosure.</li> </ul>
				SASB aligned the revised disclosure guidance with the CDSB Climate Change Reporting Framework and the CDP Climate Change Questionnaire. Additionally, in order to avoid duplication and enhance the usefulness of this disclosure, SASB notes that the disclosure for RR0201-07 should be additional but complimentary to the SEC's Commission Guidance Regarding Disclosure Related to Climate Change.

Name and/or Affiliation of	Topic (Metric	Comment Excerpts	SASB Response
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Plum Creek	General Comment	Plum Creek is among the largest and most geographically diverse private landowners in the nation with more than 6 million acres of timberlands in forest ecosystems across the northern and southeastern United States. A publicly traded company, all of our forest ownership is certified to a third-party sustainable forest management standard	SASB appreciates the time and effort that Plum Creek has invested in preparing a comment letter for the Forestry & Logging industry. SASB thanks Plum Creek for its participation in the standards development process, and hopes to deepen our engagement with Plum Creek as we continue to review and refine our standards.
	General Comment	Exposure Draft Standard for the Renewable Resources & Alternative Energy Sector: Forestry & Logging Sustainability Accounting Standard. While we generally support the intention behind standard reporting and metrics, we are concerned that the exposure draft is flawed in multiple instances where it calls for information that is either not relevant, impossible to collect, or redundant or inconsistent with laws and practices followed by companies in the United States. We strongly recommend revisions consistent with our detailed comments to ensure the standard is objective, measurable and complete, and thereby useful to US companies and their shareholders.	SASB's mission is accomplished through a rigorous process that includes evidence-based research and broad, balanced stakeholder participation. Further information on SASB's Conceptual Framework can be found here: http://www.sasb.org/approach/conceptualframework/ SASB appreciates Plum Creek's involvement in the standards development process. Feedback from the corporate perspective is invaluable to create accurate disclosure guidance. SASB will continue outreach to stakeholders and continue to improve its standards as necessary during its consultation process when it revisits the provisional standards beginning in Q2 of 2016.
Plum Creek	General Comment (Industry Title)	Sector Title: Forestry & Logging Comment: We recommend changing the sector title from "Forestry & Logging" to "'Forestry Management'" as the draft guidelines focus on proposed disclosure pertaining to timberland management, not logging operations.	SASB has considered the suggestion by Plum Creek and others to change the name of the Forestry & Logging industry. SASB has proposed changing the name of the industry to "Forestry Management". This proposal, along with other changes to SASB's SICS classification system, will undergo a 90-day public comment period beginning in January 2016.
Plum Creek	General Comment	Company-Level Determination and Disclosure of Material Sustainability Topics SASB has attempted to identify those sustainability topics that are reasonably likely to have a material effect on the financial condition or operating performance of companies within each SICS industry. Comment: We recommend changing the text to read, '"SASB has attempted to identify those sustainability topics that may have a material effect on the financial condition or operating performance of companies within each SICS industry." Comment: In general, we recommend using the term	<ul> <li>SASB has retained the language under the "Company-Level Determination and Disclosure of Material Sustainability Topics" section in the introduction to the standard.</li> <li>When SASB revisits its provisional standards during its codification period beginning in Q2 of 2016, SASB will consider Plum Creek's suggestion to use the term "company" in replace of "registrant." SASB did not incorporate this suggestion into the provisional standards for the Renewable Resources &amp; Alternative Energy sector because this change would affect the entire SASB Code.</li> </ul>
	Affiliation of         Respondent         Plum Creek         Plum Creek         Plum Creek         Plum Creek	Affiliation of RespondentCode)Plum CreekGeneral CommentPlum CreekGeneral CommentPlum CreekGeneral CommentPlum CreekGeneral CommentPlum CreekGeneral CommentPlum CreekGeneral CommentPlum CreekGeneral CommentPlum CreekGeneral CommentPlum CreekGeneral CommentPlum CreekGeneral	Affiliation of RespondentCode)Plum CreekGeneral CommentPlum Creek is among the largest and most geographically diverse private landowners in the nation with more than 6 million acres of timberlands in forest ecosystems across the northern and southeastern United States. A publicly traded company, all of our forest ownership is certified to a third-party sustainable forest management standardPlum CreekGeneral CommentWe appreciate the opportunity to provide comments on the Exposure Draft Standard for the Renewable Resources & Alternative Energy Sector: Forestry & Logging Sustainability Accounting Standard. While we generally support the intention behind standard reporting and metrics, we are concerned that the exposure draft is flawed in multiple instances where it calls for information that is either not relevant, impossible to collect, or redundant or inconsistent with laws and practices followed by companies in the United States. We strongly recommend revisions consistent with our detailed comments to ensure the standard is objective, measurable and complete, and thereby useful to US companies and their shareholders.Plum CreekGeneral Comment (Industry Title)Sector Title: Forestry & Logging Comment: We recommend changing the sector title from "Forestry & Logging to "Forestry Management" as the draft guidelines focus on proposed disclosure pertaining to timberland management, not logging operations.Plum CreekGeneral CommentCompany-Level Determination and Disclosure of Material Sustainability TopicsPlum CreekGeneral CommentCompany-Level Determination and Disclosure of Material Sustainability TopicsPlum CreekGeneral CommentCompany-Level Determination and Discl

Industry SICS number	Name and/or Affiliation of Respondent	Topic (Metric Code)	Comment Excerpts	SASB Response
			"registrants" as participating companies will likely include those who are not an SEC registrant.	
RR0201	Plum Creek	General Comment	<ul> <li>a. Management's Discussion and Analysis</li> <li>Comment: We recommend the standard state that disclosures on sustainability topics can be made under one of several sections of Form 10-K, rather than under, "Management's Discussion and Analysis" and then "Other Relevant Sections of Form 10-K" as currently drafted. We believe companies can determine the appropriate Form 10-K section based on the importance of the information being disclosed. We suggest this section of the draft be revised as follows:</li> <li>a. Relevant Sections of Form 10-K It may be relevant for companies to disclose sustainability in a section of Form 10-K, in a sub-section title, "Sustainability Accounting Standards Disclosures," including, but not limited to: -Management's Discussion and Analysis - For purposes of -Description of the Business - Item 101 -Legal Proceedings - Item 103 -Risk Factors- Item 503(c)</li> <li>b. Rule 12b-20 Securities Act Rule 408</li> </ul>	The Form 10-K sections suggested by Plum Creek are the same sections that SASB suggests for disclosure in its guidance in the introduction to the standard. SASB recognizes that registrants make their own determination on what Form 10-K sections to disclose on sustainability topics, however SASB suggests that for the purposes of comparability and usability, companies should consider making disclosure on sustainability topics in the MD&A. SASB guidance states: 3. Sustainability Accounting Standard Disclosures in Form 10-K a. Management's Discussion and Analysis For purposes of comparability and usability, companies should consider making disclosure on sustainability topics." b. Other Relevant Sections of Form 10-K In addition to the MD&A section, it may be relevant for companies to disclose sustainability information in other sections of Form 10-K is a company to provide a description of its business and its subsidiaries. Item 101(c)(1)(xii) expressly requires disclosure also shall be made as to the material effects that compliance with Federal, State and local provisions which have been enacted or adopted regulating the discharge of materials into the environment, may have upon the capital expenditures, earnings and competitive position of the registrant and its subsidiaries. • Legal proceedings—Item 103 of Regulation S-K requires to describe briefly any material pending or contemplated legal proceedings. Instructions to Item 103 provide specific disclosure requires for administrative or judicial proceedings arising from laws and regulation scurption of the subsidiaries.

Industry SICS number	Name and/or Affiliation of Respondent	Topic (Metric Code)	Comment Excerpts	SASB Response
				target discharge of materials into the environment or that are primarily for the purpose of protecting the environment. • Risk factors—Item 503(c) of Regulation S-K requires filing companies to provide a discussion of the most significant factors that make an investment in the registrant speculative or risky, clearly stating the risk and specifying how a particular risk affects the particular filing company. c. Rule 12b-20 Securities Act Rule 408 and Exchange Act Rule 12b-20 require a registrant to disclose, in addition to the information expressly required by law or regulation, "such further material information, if any, as may be necessary to make the required statements, in light of the circumstances under which they are made, not misleading." More detailed guidance on disclosure of material sustainability topics can be found in the SASB Conceptual Framework, available for download via http://www.sasb.org/approach/conceptual-framework/.
RR0201	Plum Creek	General Comment	<ul> <li>Guidance on Accounting for Sustainability Topics</li> <li>Where not addressed by the specific accounting metrics, but relevant, the registrant should discuss the following, related to the topic: <ul> <li>The registrant's strategic approach to managing performance on material sustainability issues;</li> <li>The registrant's relative performance with respect to its peers:</li> <li>The degree of control the registrant has;</li> <li>Any measures the registrant has undertaken or plans to undertake to improve performance; and</li> <li>Data for the registrant's last three completed fiscal years (when available).</li> </ul> </li> <li>Comment: We recommend removing "The registrant's relative performance with respect to its peers" as it is difficult to substantiate and ensure comparability across all industry participants. Comparisons to peers would therefore be meaningless and misleading.</li> </ul>	SASB notes that this section of the introduction is a "should" requirement (not a "shall", or mandatory, requirement). It may be relevant for a company to discuss its competitive sustainability position on SASB metrics, just as "competitive position" is an element for the MD&A recommended by Regulation S-K Item 101.

Industry SICS number	Name and/or Affiliation of Respondent	Topic (Metric Code)	Comment Excerpts	SASB Response
RR0201	Plum Creek	Activity Metrics	Comment: We recommend changing the title of this section from "Activity Metrics and Normalization" to ·'Activity Metrics." We also recommend the deletion of the following, as it is not clear what is meant. SASB recognizes' that normalizing accounting metrics is important for the analysis of SASB disclosures.	When SASB revisits the provisional standards during its codification period beginning in Q2 2016 it will evaluate how to clarify this language.
RR0201	Plum Creek	Activity Metrics	Where relevant, SASB recommends specific activity metrics that - at a minimum –should accompany SASB accounting metric disclosures. Comment: It is not clear what constitutes a "plantation forest" nor is it evident or substantiated as to why the disclosure of plantation forest versus natural forest is materially relevant.	SASB has withdrawn the activity metric on the percentage of forestland area that is (a) plantation forest and (b) natural forest from the provisional standard.
RR0201	Plum Creek	Activity Metrics	Comment: We recommend the use of "Standard Tons'' in place of '"Cubic Meters" regarding "Aggregate standing timber inventory" and "Timber harvest volume" activity metrics.	SASB has retained "Cubic meters (m <sup>3</sup> )" as the unit of measure for RR0201-B " <i>Aggregate standing timber inventory</i> " and RR0201-C " <i>Timber harvest volume</i> " because a review of existing disclosure on timber inventory and harvest shows that it is typically reported in cubic meters. SASB does include a "Note" to RR0201-B and RR0201-C that states: The registrant may additionally note if it uses other units of measure to define its standing timber inventory, and it shall disclose any conversion factors used.
RR0201	Plum Creek	Ecosystem Services & Impacts (RR0201-01) Line .03	.03 If forestlands are certified to multiple schemes, the registrant shall not account for the acreage more than once when calculating the total percentage of forestland area certified to a third-pay forest management standard. Comment: We recommend that the standard allow companies to report certification to multiple standards. Disclosure of certification to any/all of the third-party forest management certifications referenced in ".01" supports greater transparency.	<ul> <li>SASB has included guidance for disclosure on forestland that is certified to multiple third-party certifications.</li> <li>The revised disclosure guidance states: <ul> <li>.02 If a forestland area is certified to multiple certification standards, the registrant shall not account for the acreage more than once when calculating the total forestland area certified to a third-party forest management standard.</li> <li>.03 The registrant shall disclose the percentage of the total certified forestland that is certified to each forest management standard (e.g., FSC, SFI, PEFC, and ATFS) and indicate the associated certification(s) (e.g., FSC Forest Management Standard, PEFC Sustainable Forest Management certification, or ATFS</li> </ul> </li> </ul>

Industry SICS number	Name and/or Affiliation of Respondent	Topic (Metric Code)	Comment Excerpts	SASB Response
				Individual Third-Party certification). • The registrant shall calculate the percentage of forestland certified to each forest management standard as the number of acres that are third-party certified to the respective standard divided by the total number of certified acres owned, leased, and/or managed by the registrant. .04 The registrant shall disclose the percentage of acres that are certified to multiple certification schemes.
RR0201	Plum Creek	Ecosystem Services & Impacts (RR0201-01) Line .10	.10 Where applicable and relevant, the registrant shall describe specific policies and practices that apply to areas with protected conservation status and/or areas of critical habitat, which are defined by the International Finance Corporation (JFC) as:	SASB has withdrawn the reference to the International Finance Corporation Performance Standards on Environmental and Social Sustainability in its provisional standard for Forestry & Logging.
			Comment: We recommend that the standard reference definitions provided by relevant U.S. laws, which will support disclosure that is relevant and complete. As a U.Sbased company, publicly traded in the U.S., IFC definitions do not offer the greatest relevance.	
RR0201	Plum Creek	Ecosystem Services & Impacts (RR0201-02) Line .12 and	.12 The registrant shall disclose the area of its forestland (by acreage) that has protected conservation status, where protected conservation status includes lands protected by international bodies, third-party organizations, or federal, regional, and local government.	In response to this comment and other comments received on this metric, SASB has revised the definition of protected conservation status to firstly include areas legally designated by government.
		.13	<ul> <li>.13 An area is considered to be of protected conservation status if it is located within:</li> <li>National parks</li> <li>International Union for Conservation of Nature (/UCN) Protected Areas (categories 1-VI)</li> <li>Ramsar Wetlands of International Importance</li> <li>UNESCO World Heritage sites</li> <li>Biosphere Reserves recognized within the framework of UNESCO's Man and the Biosphere (MAB) Programme</li> <li>Natura 2000 sites</li> </ul>	For areas that are not legally protected by government agencies, SASB research indicates that areas protected by other means, such as by international bodies or through treaties, may also present similar operational risks to companies, in terms of indicating a company's exposure to legislation that could restrict forestry operations in those lands. Therefore, SASB also includes areas protected by international bodies and/or treaties in the scope of "conservation status" in this metric because of the heightened risks of operating in those areas.
			<ul> <li>Other areas where discharges are restricted or subject to local agreements</li> <li>Sites that meet the IUCN's definition of a protected area: "A protected area Is a clearly defined geographical space, recognized, dedicated, and managed, through legal or other effective means, to achieve the long-term conservation of</li> </ul>	The revised disclosure guidance now states: .11 The registrant shall disclose the area of its owned, leased, and/or managed forestland (by acreage) that has protected conservation status, where an area is considered to have protected conservation status if it is located within any of the

Industry SICS number	Name and/or Affiliation of Respondent	Topic (Metric Code)	Comment Excerpts	SASB Response
			nature with associated ecosystem services and cultural values" • These sites may be listed in the World Database of Protected Areas (WDPA) and mapped on ProtectedPianet.net Comment: We recommend that the standard reference definition of conservation consistent with U.S.laws in place of a list of international programs. Habitat Conservation Plans (HCPs), conservation easements, and mitigation banks as per U.S. law, are relevant to U.S. listed companies, whereas international programs may not be relevant to U.Sbased timberland owners.	<ul> <li>following:</li> <li>Areas legally designated as protected by government regulation, including national parks, national wildlife refuge sites, wilderness areas, state forests, state parks, and Natura 2000 sites.</li> <li>Areas protected by international bodies and/or treaties, including Ramsar Wetlands of International Importance, International Union for Conservation of Nature (IUCN) Protected Areas (categories I-VI), UNESCO World Heritage sites, and Biosphere Reserves recognized within the framework of UNESCO's Man and the Biosphere (MAB) Programme.</li> <li>Sites that meet the IUCN's definition of a protected area: "A protected area is a clearly defined geographical space, recognized, dedicated, and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values."</li> <li>These sites may be listed in the World Database of Protected Areas (WDPA) and mapped on ProtectedPlanet.net.</li> </ul>
RR0201	Plum Creek	Ecosystem Services & Impacts (RR0201-02) Line .12 and .13	Comment: We recommend deletion of, "Other areas where discharges are restricted or subject to local agreements," as it is neither material nor relevant to conservation status.	SASB has withdrawn the line from the provisional standard.
RR0201	Plum Creek	Ecosystem Services & Impacts (RR0201-03)	"Area of forestland in or near endangered species habitat." Comment: We recommend deleting the word "near" from the title of this section.	SASB has withdrawn the term "near" from the metric. The revised metric now reads: RR0201-03: <i>Area of forestland in endangered species habitat</i>
RR0201	Plum Creek	Ecosystem Services & Impacts (RR0201-03)	.17 For the purposes of this disclosure, "near" is defined as within five kilometers (km of the boundary of an area of endangered species habitat.	SASB has withdrawn the term "near" from the metric. The revised metric now reads: RR0201-03: <i>Area of forestland in endangered species habitat.</i>
			Comment: .17 should be deleted in its entirety as critical habitat is already legally protected in accordance with U.S. law and "five kilometers" is neither legally or scientifically material. "Area of endangered species habitat'" is not clearly defined, and both U.S. law and third-party forest management standards address threatened and endangered species habitat.	SASB defines endangered species habitat consistent with local, state, and federal law. The disclosure guidance states: .21 Endangered species habitat includes critical habitat areas where the registrant owns, leases, and/or manages forestlands that are officially designated by applicable state and/or federal regulations including:

Industry SICS number	Name and/or Affiliation of Respondent	Topic (Metric Code)	Comment Excerpts	SASB Response
				<ul> <li>The U.S. Endangered Species Act;</li> <li>The Canada Species at Risk Act; and</li> <li>Applicable regulatory endangered species lists in the regions where the registrant owns, leases, and/or manages forestlands.</li> </ul>
RR0201	Plum Creek	Ecosystem Services & Impacts (RR0201-04) Line .21	<ul> <li>.21 The registrant shall discuss its approach to managing the risks and opportunities created by the ecosystem services that its forestlands provide, where:</li> <li>Ecosystem services are defined by the United Nations Environment Program as the benefits obtained from ecosystems, which include provisioning services such as food and disease control; cultural set Vices such as spiritual, recreational, and cultural benefits; and supporting services, such as nutrient cycling, that maintain the conditions for life on Earth. Ecosystem services provided by forestlands can include monetary benefits derived from the actual use of a good or set Vice as well as passive/non-use values, including:</li> <li>Watershed services (such as water quantity and quality)</li> <li>Soil stabilization and erosion control</li> <li>Air quality</li> <li>Climate regulation</li> <li>Carbon sequestration</li> <li>Biodiversity</li> <li>Recreation and tourism (such as fishing, hunting, and hiking)</li> <li>Non-timber commercial forest products</li> <li>Cultural heritage)</li> <li>Comment: The indicators related to ecosystem services are addressed by existing third-party forest management standards and state Best Management Practices (BMPs).</li> <li>Comment: Comprehensive measurement of the indicators for which information is required by law would be prohibitively costly to disclose in a way that is both measurable and complete.</li> </ul>	<ul> <li>SASB has amended this metric to: ".26 The registrant shall discuss its strategy to optimize the opportunities created by the ecosystem services that its forestlands provide, where:</li> <li>Ecosystem services are defined by the Millennium Ecosystem Assessment as the benefits obtained from ecosystems, which include provisioning services (i.e., goods or products obtained from ecosystems) such as food, fresh water, timber, and fiber; regulating services (i.e., benefits obtained from an ecosystem's control of natural processes) such as climate, erosion, and pollination; cultural services (i.e., nonmaterial benefits obtained from an ecosystem) such as recreational and spiritual benefits; and supporting services (i.e., services that maintain the other ecosystem services) such as nutrient cycling, primary production, and water cycling.</li> <li>Opportunities from effective ecosystem services management can include higher land value, increased productivity and timber yield, direct payments for timber and non-timber forest products, and improved relationships with stakeholders."</li> <li>This discussion can provide information about how the registrant could garner additional financial or other (e.g. reputational) value from ecosystem services. A company that achieves third-party certification has met the minimum performance requirements in order to receive certification. The discussion is intended to provide additional information that can be used to assess the quality of the registrant's approach to managing ecosystem services and maximizing the financial value that they can provide. This information is not readily obtained from existing third-party certification programs.</li> </ul>

has amended the metric to: ".27 For ecosystems es that the registrant currently does not receive direct ents for, the registrant shall describe its approach to ging these ecosystem services. The discussion shall e: type(s) of ecosystem service(s) the registrant currently ges, where types of ecosystem services include, but are nited to: air quality, soil stabilization and erosion l, and cultural value. registrant's management actions, including decisions harvesting, management of conservation areas or areas n biodiversity, or conserving forested watershed." etric is intended to disclose the registrants approach to ging ecosystem services that are not directly insated in order to garner additional financial or other eputational) value from ecosystem services. With a on the upside potential, this metric allows for disclosure rmation not readily obtained through existing third- nanagement standards, BMPs, or regulatory standards.
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Industry SICS number	Name and/or Affiliation of Respondent	Topic (Metric Code)	Comment Excerpts	SASB Response
			ecosystem services would offer material, comparable information.	
RR0201	Plum Creek	Ecosystem Services & Impacts (RR0201-04) Line .23	<ul> <li>.23 The registrant may choose to disclose the amount (in U.S. dollars) it receives for non-timber ecosystem goods and services from its forestlands, by category and type of compensation.</li> <li>Comment: It is not clear why this information is materially relevant.</li> </ul>	<ul> <li>SASB has amended this metric to: ".28 For the ecosystem services that the registrant does receive direct payments for, the registrant should disclose the amount (in U.S. dollars) the registrant receives for non-timber ecosystem goods and services and the type of compensation it receives, which can include:</li> <li>Public payments to landowners (from the government);</li> <li>Voluntary payments to landowners (from businesses, individuals, and non-governmental organizations); and</li> <li>Compliance-driven payments (payments made to comply with government regulations)."</li> <li>Dollar amounts received from non-timber ecosystem services can indicate whether the registrant receives material financial compensation from such services and which types of ecosystem services are likely to offer significant opportunity for future compensation.</li> </ul>
RR0201	Plum Creek	Ecosystem Services & Impacts (RR0201-04) Line .25	<ul> <li>.25 If revenue or other payments are currently not being received or valued by the registrant, the registrant should disclose the specific areas within its forestlands that have the most potential to capture current or future revenue from ecosystem goods or services, including the projected potential revenues (in U.S. dollars) or value and when the registrant expects to realize these revenues.</li> <li>Comment: It is not clear as to the reasoning for suggesting the inclusion of this information as part of the standard. Even in the event that the proposed disclosure does include proprietary information, at best the information would be conjecture and therefore not complete in its relevance.</li> </ul>	<ul> <li>SASB has withdrawn this line of guidance from the provisional standard. In the revised standard, SASB guides the registrant to disclose the amount (in U.S. dollars) it receives for non-timber ecosystem goods and services and the type of compensation it receives. Additionally, the updated guidance states:</li> <li>.27 For ecosystems services that the registrant currently does not receive direct payments for, the registrant shall describe its approach to managing these ecosystem services. The discussion shall include:</li> <li>The type(s) of ecosystem service(s) the registrant currently manages, where types of ecosystem services include, but are not limited to: air quality, soil stabilization and erosion control, and cultural value.</li> <li>The registrant's management actions, including decisions about harvesting, management of conservation areas or areas of high biodiversity, or conserving forested watershed.</li> </ul>

Industry SICS number	Name and/or Affiliation of Respondent	Topic (Metric Code)	Comment Excerpts	SASB Response
				Line .27 of the standard is included to give a platform for the registrant to discuss how it manages the ecosystem services that may be less tangible because the registrant does not receive direct payments for them. However, there is still potential benefits received from these ecosystem services, and this section gives the registrant an opportunity to discuss how it is garnering additional financial or other (e.g. reputational) value from ecosystem services.
RR0201	Plum Creek	Community Relations & Rights of Indigenous Peoples (RR0201-05)	RR0201-05. Acres of forestland in or near indigenous land. Comment: Third-party forest management standards like the one to which all of Plum Creek's timberlands are certified, address ensuring respect for indigenous peoples' rights. Furthermore, as the topic of indigenous rights are not unique to our sector, it would be better addressed by cross-sector approach.	While the topic of indigenous peoples' rights is not unique to the Forestry & Logging industry, SASB's industry-specific approach is intended to account for unique attributes of an industry that can improve the relevance and accuracy of accounting standards for that industry. SASB acknowledges that third-party forest management standards include provisions for protection indigenous peoples' rights. This revised metric is intended to provide information that could be used as a proxy indicator of a registrant's exposure to potential operating risk due to land claim disputes or other formal disagreements with indigenous peoples. SASB has withdrawn the word "near" in response to stakeholder suggestions that "near" is an arbitrary designation and not necessary indicative of risk.
RR0201	Plum Creek	Community Relations & Rights of Indigenous Peoples (RR0201-05)	Comment: The material relevance of defining "near" as within five kilometers of a recognized boundary is not clear.	SASB has withdrawn the word "near" from this metric. The revised metric now reads: <i>RR0201-05: Area of forestland in indigenous land</i>
RR0201	Plum Creek	Community Relations & Rights of Indigenous Peoples (RR0201-06)	RR0201-06. Discussion of engagement processes and due diligence practices with respect to human rights, indigenous rights, and the local community. Comment: We recommend deleting the word " "procedures" from .29 to .31 as a discussion of practices is materially adequate.	SASB has retained the word "procedures" in the disclosure guidance. SASB has attempted to identify those sustainability topics that are reasonably likely to have a material effect on the financial condition or operating performance of companies within each SICS industry. SASB recognizes, however, that each company is ultimately responsible for determining what information should be disclosed within the context of Regulation S-K and other guidance.
RR0201	Plum Creek	Community Relations &	<i>.31 The registrant shall describe its processes and practices with respect to the communities in areas where it conducts</i>	SASB recognizes that in some locations where Forestry & Logging companies operate, compliance with local regulation

Industry SICS number	Name and/or Affiliation of Respondent	Topic (Metric Code)	Comment Excerpts	SASB Response
		Rights of Indigenous Peoples (RR0201-06) Line .31	<ul> <li>business. Including practices to protect:</li> <li>Economic rights and interests, including the right to employment, fair wages, payment transparency, and respect of infrastructure and agricultural/and.</li> <li>Environmental rights and interests, including the right to clean local air and water, as well as safe discharge and disposal of waste.</li> <li>Social rights and interests, including the right to adequate health care, education, and housing.</li> <li>Cultural rights and interests, including the right to protection of places of cultural significance (e.g., sacred sites or burial sites).</li> <li>Comment: We recommend amending .31 to reflect applicability only to communities located in states where the proposed criteria pertaining to economic, environmental, social, and cultural rights are not already covered by law.</li> </ul>	may be sufficient to protect against risk of operating in areas of indigenous land. However, local laws governing indigenous rights may vary and SASB's disclosure guidance offers a comparable guidance for companies to disclose on due diligence practices that the registrant conducts with the local communities in areas where it conducts business. In the disclosure guidance for this metric SASB references frameworks published by the International Labour Organization (ILO), the United Nations, Forestry Stewardship Council (FSC), Sustainable Forestry Initiative (SFI), and PEFC as normative references against which a company may choose to discuss their legal obligation. The universal principles in these frameworks are used globally within the industry.
RR0201	Plum Creek	Community Relations & Rights of Indigenous Peoples (RR0201-06) Line .32	.32 The discussion shall include how practices apply to business partners, such as contractors, sub-contractors, suppliers, and joint venture partners. Comment: In the context of the American and Canadian legal frameworks, which include human rights and indigenous rights, the value of requiring potentially open-ended discussion is not evident.	The registrant should assess whether the practices of business partners pertaining to indigenous people's rights is relevant to the completeness of the disclosure for this metric, and should include or omit this information as long as the omitted fact does not alter the total mix of information made available to the reasonable investor. SASB has retained this reference to business partners because SASB's research and stakeholder engagement has shown that companies in the Forestry & Logging industry commonly utilize the services of contractors and subcontractors to perform tasks including logging.
RR0201	Plum Creek	Workforce Health & Safety	Comment: Workplace safety must be a priority for all companies. Therefore, it is not materially relevant to have guidelines unique to our sector.	SASB appreciates the input and has withdrawn the Workforce Health & Safety topic from its provisional standard.
RR0201	Plum Creek	Workforce Health & Safety (RR0201-07) Line .36	<ul> <li>.36 The scope of disclosure includes direct employees and contract employees, where:</li> <li>Direct employees are all those employees on the registrant's payroll, whether they are labor, executive, hourly, salary, parttime, seasonal, or migrant workers.</li> <li>Contract employees are those who are not on the registrant's payroll, but who are supervised by the registrant on a day-to-day basis, including independent contractors and those employed by third parties (e.g. temp agencies, labor brokers, etc.).</li> </ul>	SASB appreciates the input and has withdrawn the Workforce Health & Safety topic from its provisional standard.

Industry SICS number	Name and/or Affiliation of Respondent	Topic (Metric Code)	Comment Excerpts	SASB Response
			Comment: While we currently track incidents and hours for any contract employees under our direct supervision (e.g., temp agencies) it would be extremely laborious to monitor the thousands of logging contractors and subcontractors not under our direct supervision.	
RR0201	Plum Creek	Workforce Health & Safety (RR0201-07) Line .37	.37 Rates shall be calculated a ·: (statistic count/total hours worked) * 200,000 Comment: We recommend that the standard focus on TRIR and OSHA rates and delete .37.	SASB has withdrawn this metric from its provisional standard.
RR0201	Plum Creek	Climate Change Adaptation of Forestlands	Comment: The SEC already requires disclosure regarding the financial impacts of climate change. We recommend that any further disclosure align with existing standards, such as the Carbon Disclosure Project (COP), to which companies have been reporting for more than a decade.	<ul> <li>When formulating accounting metrics for its disclosure topics, SASB considers the existing body of reporting standards and uses existing metrics whenever possible.</li> <li>SASB has aligned its disclosure guidance, where relevant, with CDP's Climate Change Questionnaire and CDSB's Climate Change Reporting Framework.</li> <li>SASB references CDSB Climate Change Reporting Framework 4.6, 4.7, 4.9, 4.10, and 4.11, and 4.12 and CDP Climate Change Questionnaire CC5.1 and CC6.1, CC2.1, and CC2.1c in the disclosure guidance for RR0201-07: <i>Discussion of strategy to manage opportunities for and risks to forest management and timber production presented by climate change</i>.</li> </ul>
RR0202	Plum Creek	Climate Change Adaptation of Forestlands	Comment: The indicators that comprise this section presume a level of precision regarding location-specific climate change science that is not currently available. Furthermore, the prediction of specific potential climate change impacts falls short of the SASB measurability criteria.	SASB acknowledges that current state of climate change. models may not produce specific information regarding the timeline, acreage, and volume of tree species that could be affected by climate change. Therefore, SASB has revised the disclosure guidance to encourage a discussion of the registrant's current knowledge of climate change effects from the scenario analyses it conducts, including potential benefits and risks from climate change, and the risk management procedures it has in place, in order to generate a cost-effective, reasonable, and comparable disclosure. SASB aligned the revised disclosure guidance with the CDSB Climate Change Reporting Framework and the CDP Climate

Industry SICS number	Name and/or Affiliation of Respondent	Topic (Metric Code)	Comment Excerpts	SASB Response
				Change Questionnaire. Additionally, in order to avoid duplication and enhance the usefulness of this disclosure, SASB notes that the disclosure for RR0201-07 should be additional but complimentary to the SEC's Commission Guidance Regarding Disclosure Related to Climate Change.
RR0201	Plum Creek	Climate Change Adaptation of Forestlands (RR0201-08) Line .39	<ul> <li>.39 The registrant shall provide:</li> <li>A breakdown, by acreage, of the geographic location of the registrant's forestlands, Identification of the potential climate change risks or opportunities that may manifest within each of these regions, and the percentage of the registrant's forestlands that could be affected by these risks or opportunities.</li> <li>A breakdown, by volume, of the types of tree species harvested for timber in the registrant's forestlands, identification of the potential risks or opportunities presented by climate change that may manifest among these different species, and the percentage of the registrant's timber yield that could be affected by these risks or opportunities.</li> <li>Where relevant, the registrant shall discuss how risks and opportunities may vary between the registrant's plantation forestlands and its natural forestlands.</li> <li>Comment: In light of the fact that there are ongoing international, national, and state efforts pertaining to the assessment of climate change risks, the detailed nature of the proposed metrics constitute an unrealistic expectation. It is also not evident how the proposed criteria could be accurately and comparably measured.</li> <li>Comment: "A breakdown, by volume, of the types of tree species harvested for timber in the registrant's forestlands" would not only be onerous, but would constitute conjecture and therefore neither accurate nor relevant.</li> </ul>	In response to this comment and other comments SASB received on this metric, SASB has revised the disclosure guidance to reduce the amount of specific "shall" requirements, where some information about geography and timeline are unknown, and SASB aligned the revised disclosure guidance with the CDSB Climate Change Reporting Framework and the CDP Climate Change Questionnaire. Additionally, in order to avoid duplication and enhance the usefulness of this disclosure, SASB notes that the disclosure for RR0201-07 should be additional but complimentary to the SEC's Commission Guidance Regarding Disclosure Related to Climate Change.
RR0202	Plum Creek	Climate Change Adaptation of Forestlands (RR0201-08) Line .42	<ul> <li>.42 The registrant shall provide a discussion of the scenarios used to determine the risks and opportunities presented by climate change, including:</li> <li>How such scenarios will manifest and the potential implications that this would have on its forestlands (e.g. how the area, health, vitality, and biodiversity of its forestlands may</li> </ul>	<ul> <li>SASB has revised the guidance to the following, but has retained the "shall" requirement:</li> <li>.43 The registrant shall provide a discussion of the scenarios it uses to determine the risks and opportunities presented by climate change, including:</li> <li>The methods or models used to develop these scenarios,</li> </ul>

Industry SICS number	Name and/or Affiliation of Respondent	Topic (Metric Code)	Comment Excerpts	SASB Response
			<ul> <li>be affected).</li> <li>The methods or models used to develop these scenarios, including the use of global models or scientific research provided by governmental and non-governmental organizations (e.g. Intergovernmental Panel on Climate Change Climate Scenario Process).</li> <li>Comment: We recommend replacing '"shall'' with "'may" as specific models may not be materially relevant.</li> </ul>	including the use of global models or scientific research provided by governmental and non-governmental organizations (e.g., Intergovernmental Panel on Climate Change Climate Scenario Process). SASB has decided to retain the shall requirement in this line of the guidance because without the information on the underlying methods and scenarios the registrant uses to determine the risks and opportunities identified in RR0201-07 the disclosure would be incomplete.
RR0202	Agnes de Jesus (Energy Development Corporation)	General Comment	Dear Sir: I am pleased to submit my following comments on the SASB Performance Standards. My comments are based on my experience in Energy Development in developing 1,641 megawatts of renewable energy projects (geothermal, hydro .and solar) as well as our management of 226,625 hectares of watershed reservations for the government for the past three (3) decades.	SASB appreciates the time and effort that Energy Development Corporation has invested in preparing a comment letter for industries in the Renewable Resources & Alternative Energy sector.
RR0202	Agnes de Jesus (Energy Development Corporation)	Ecosystem Services & Impacts	<ol> <li>On ecosystem services impacts:         <ul> <li>On ecosystem services impacts:</li> <li>Can we ask any reforestation initiative to replace lost ecosystem services? As a best practice called "mitigation hierarchy", impacts that cannot be prevented (as the business is on logging) can be minimized by rehabilitation or offset to bring back the lost ecosystem services due to the cutting of trees. This is standard in EDC and our country in the Philippines to help mitigate climate change hazards.</li> </ul> </li> </ol>	The registrant can discuss restoration initiatives in its disclosure of RR0201-04 " <i>Discussion of approach to optimizing opportunities from ecosystem services provided by forestlands</i> " if it identifies the practice as relevant to the reasonable investor.
RR0202	Agnes de Jesus (Energy Development Corporation)	Ecosystem Services & Impacts	b) May we can ask the registrant for an inventory or matrix of the history of certifications for cutting that have been issued to them and the corresponding cutting with time? This is to have a running total and the status of the allowable cut at any reporting time.	SASB research and stakeholder consultation process did not reveal that disclosure of the history of certifications for cutting was likely to constitute material information for investors. However, in RR0201-01 SASB asks for the " <i>Area of forestland</i> <i>certified to a third-party forest management standard</i> , <i>percentage certified to each standard</i> ", and registrants are encouraged to report data for the registrant's last three completed fiscal years (when available).
RR0202	Agnes de Jesus (Energy Development Corporation)	Ecosystem Services & Impacts	c) On item 15 of page 15 of the document, there is a query on protected areas that may be actively logged. I believe that certain protected areas like natural parks and strict nature reserves are in the first place, restricted from any man-made	SASB's research process identified that logging is prohibited in some areas of conservation status (such as wilderness areas), however logging is permitted in other areas of conservation status.

SASB Response to Public Comments on Renewable Resources & Alternative Energy Standards

Industry SICS number	Name and/or Affiliation of Respondent	Topic (Metric Code)	Comment Excerpts	SASB Response
			activity. Please recheck the US laws. Forest concessions must be restricted from some types of protected areas and some mature forest zones within some parks. This is a general protocol in the International Union for Conservation of Nature (IUCN), which is complied with by most countries.	
RR0202	Agnes de Jesus (Energy Development Corporation)	Ecosystem Services & Impacts	d) On item 17, page 15 of the document, the impact of logging is not a matter of distance from the logging area. It has its own-influence area downstream. Maybe the question should be if the nearby habitat of endangered species is within its "environmental influence area". This is the case in Bangkok several years ago when massive forest cutting in the headwaters of other countries affected Bangkok which is downstream resulting in floods that destroyed many storage areas of multi-national companies like Levis, Nestle, etc.	<ul> <li>SASB has withdrawn "near" from the metric. The revised metric now reads: RR0201-03: Area of forestland in endangered species habitat.</li> <li>Additionally, SASB has included the following guidance in its provisional standard:</li> <li>.24 The registrant may choose to provide discussion around forestlands that are located in endangered species habitat, but present low risk to biodiversity or ecosystem services.</li> <li>.25 The registrant should discuss the likelihood of a change to the area of its owned, leased, and/or managed forestland that is considered to be endangered species habitat, including if:</li> <li>There are endangered or threatened species habitat(s) near, but not currently in, the registrant's forestlands, and the likelihood that the habitat(s) could overlap with the registrant's forestlands.</li> <li>There are species in or near the registrant's forestlands that are classified as endangered or threatened in non-regulatory lists, but not currently by regulatory lists, and the likelihood that these species may be classified as endangered or threatened in the likelihood that these species may be classified as endangered or threatened in non-regulatory lists, but not currently by regulatory lists, and the likelihood that these species may be classified as endangered or threatened in the likelihood that these species may be classified as endangered or threatened by a regulatory endangered species list.</li> <li>Examples of non-regulatory endangered species lists include the IUCN Red List of Threatened Species.</li> <li>The current endangered or threatened species habitat in the registrant's forestlands is expected to change and/or expand in the future.</li> <li>The registrant should disclose the likelihood of these scenarios occurring and the area of its forestlands that could be affected.</li> </ul>
RR0202	Agnes de Jesus (Energy Development Corporation)	Community Relations & Rights of Indigenous	<ul><li>2. On community relations and rights of Indigenous Peoples (IP):</li><li>a) Can we seek the submission or confirmation by the</li></ul>	Free, Prior, and Informed Consent is included under line .36 of SASB's disclosure guidance: .36 The registrant shall describe its due diligence practices
		Peoples	registrant that they have secured the "Free and Prior Informed Consent" or FPIC from the affected IPs if the forest concession	and procedures with respect to indigenous rights of communities in which it operates or intends to operate,

Industry SICS number	Name and/or Affiliation of Respondent	Topic (Metric Code)	Comment Excerpts	SASB Response
RR0202	Agnes de Jesus (Energy	Community Relations &	<ul> <li>falls within the IP's ancestral domain? The registrant must show proof of consultation. It is usually a Memo of Agreement on the terms of the use signed by the IP Council or tribal elders.</li> <li>FPIC is now an international protocol for 'IP lands. It ensures IP.s has been given the decision on the disposition of their lands and that this was an informed one due to the consultation conducted.</li> <li>b) On page 13 as a note to RR0201-01 on the environmental management plans that are being asked, can we include as</li> </ul>	<ul> <li>including:</li> <li>Upholding ILO Convention No. 169</li> <li>Use of free, prior, and informed consent (or consultation) processes</li> <li>FSC International Standard Principle 3: Indigenous Rights</li> <li>SFI Forest Management Standard Objective 8: Recognize and Respect Indigenous Peoples' Rights</li> <li>RR0201-06 covers consultation with local communities. The disclosure guidance pertaining to communities states:</li> </ul>
	Development Corporation)	Rights of Indigenous Peoples	part of the items the consultation with the communities if there are people living in the forest area and using the same public land?	<ul> <li>.37 The registrant shall describe its processes and practices with respect to the communities in areas where it conducts business, including practices to protect the following principles:</li> <li>Economic rights and interests, including the right to employment opportunities, training, fair wages, payment transparency, and respect for infrastructure and agricultural land.</li> <li>Environmental rights and interests, including the right to clean local air and water, as well as safe discharge and disposal of waste.</li> <li>Social rights and interests, including the right to adequate health care, education, and housing.</li> <li>Cultural rights and interests, including the right to protection of places of cultural significance (e.g., sacred sites or burial sites).</li> </ul>
RR0202	Agnes de Jesus (Energy Development Corporation)	Workforce Health & Safety	<ol> <li>On safety:</li> <li>a) Please add the labor cases on safety filed against the company and cost awarded or demanded by complainant.</li> </ol>	In response to other comments SASB received on this topic SASB decided to withdraw the Workforce Health & Safety topic from its provisional standard.

## Pulp & Paper Products

Industry SICS number	Name and/or Affiliation of Respondent	Topic (Metric Code)	Comment Excerpts	SASB Response
RR0202	Sustainable Forestry Initiative (SFI)	General Comment	<ul> <li>Thank you for the opportunity to comment on the Sustainability Accounting Standards Board's (SASB) Pulp and Paper Products Standard.</li> <li>The Sustainable Forestry Initiative® Inc. (SFI) is an independent, nonprofit organization that is solely responsible for maintaining, overseeing and improving the internationally recognized SFI® program. Across the United States and Canada, over 250 million acres are certified to the SFI forest management standard. In addition, SFI's Fiber Sourcing Standard sets mandatory practice requirements for the responsible procurement of all fiber procured directly from the forest, whether the forest is certified or not, and SFI's Chain of Custody standard is an accounting system that tracks certified forest fiber content through production and manufacturing to the end product. These standards apply to the supply chains of more than 740 organizations, representing more than 2,000 sites, in 45 U.S. states, seven Canadian provinces, and 23 countries.</li> <li>We'd like to thank SASB for recognizing the value of all credible forest certification and sourcing standards. This is especially important since only 10% of the world's forests are certified to a credible forest certification standard like SFI.</li> </ul>	SASB appreciates the time and effort that the Sustainable Forestry Initiative (SFI) has invested in preparing comment letters for industries in the Renewable Resources & Alternative Energy sector. SASB thanks SFI for its continued participation in the standards development process, and hopes to deepen our engagement with SFI as we continue to review and refine our standards.
RR0202	Sustainable Forestry Initiative (SFI)	Wood & Fiber Sourcing & Recovery (RR0202-12)	.53 – to be consistent with FSC and PEFC, change SFI Chain of Custody labels to Chain of Custody Certification. PEFC should also read Chain of Custody Certification instead of just PEFC Certified.	<ul> <li>SASB has made the suggested revision to the standard.</li> <li>The revised line of disclosure guidance now reads: <ul> <li>Third-party forest management certifications include, but are not limited to, those promulgated by the following organizations (or the equivalent):</li> <li>American Tree Farm System (ATFS) (i.e., ATFS Certification)</li> <li>Forest Stewardship Council (FSC) (i.e., FSC Forest Management and Chain of Custody certifications)</li> <li>Programme for the Endorsement of Forest Certification (PEFC) (i.e., PEFC Chain of Custody certifications)</li> <li>Forest certification systems endorsed by the PEFC</li> <li>Sustainable Forest Initiative (SFI) (i.e., SFI Forest Management and Chain of Custody certifications)</li> </ul> </li> </ul>

Industry SICS	Name and/or Affiliation of Bosnondont	Topic (Metric Code)	Comment Excerpts	SASB Response
number RR0202	Respondent Sustainable Forestry Initiative (SFI)	Wood & Fiber Sourcing & Recovery (RR0202-12)	.55 - allow a company to report if they have multiple certifications. SASB shouldn't discourage an organization from reporting their commitment to all forest certification standards, and instead should reward those organizations that have put time and resources into multiple Standards.	<ul> <li>In lines .47 and .50 of the standard, the registrant has the opportunity to discuss if it has multiple certifications for its wood fiber.</li> <li>.47 The registrant shall disclose the percentage of the total wood-fiber-based raw materials from third-party certified forestlands that is certified to each standard (e.g., FSC Chain of Custody, SFI Chain of Custody, and PEFC Chain of Custody).</li> <li>The registrant shall calculate the percentage of wood-fiber-based raw materials certified to each standard as the amount of wood-fiber-based raw materials certified to each standard as the amount of wood-fiber-based raw materials that is third-party certified to the respective standard divided by the total amount of wood fiber sourced by the registrant.</li> <li>Where wood-fiber is certified to multiple third-party certifications, the registrant shall include the amount of such fiber in its calculations for each relevant certification.</li> <li>.50 The registrant shall disclose the percentage of wood fiber that meets each sourcing standard, PEFC Controlled Sources, etc.).</li> <li>Where wood-fiber meets multiple sourcing standards, the registrant shall include the amount of such fiber meets multiple sourcing standards, the registrant shall include the amount of such fiber meets multiple sourcing standards, the registrant shall include the amount of such fiber meets multiple sourcing standards for each relevant</li> </ul>
RR0202	Sustainable Forestry Initiative (SFI)	Wood & Fiber Sourcing & Recovery (RR0202-12)	.56 - to be consistent with FSC and PEFC, delete "(certified forest content)" after SFI Chain of Custody. PEFC should also read PEFC Chain of Custody.	sourcing standard. SASB has made the suggested revision to the standard. The revised line of disclosure guidance now reads: .47 The registrant shall disclose the percentage of the total wood-fiber-based raw materials from third-party certified forestlands that is certified to each standard (e.g., FSC Chain of Custody, SFI Chain of Custody, and PEFC Chain of Custody).
RR0202	Sustainable Forestry Initiative (SFI)	Wood & Fiber Sourcing & Recovery (RR0202-12)	.57 – in the first bullet, delete the word "certified" in front of SFI Fiber Sourcing.	SASB has made the suggested revision to the standard. The revised line of disclosure guidance now reads: .48 The registrant shall disclose the percentage of its total wood-fiber-based raw materials that is sourced from non- third-party certified forestlands but meets other fiber sourcing standards, including, but not limited to:

Industry SICS number	Name and/or Affiliation of Respondent	Topic (Metric Code)	Comment Excerpts	SASB Response
				• Responsible fiber sourcing standards (e.g., SFI Fiber Sourcing Standard);
RR0202	Sustainable Forestry Initiative (SFI)	Wood & Fiber Sourcing & Recovery (RR0202-12)	.57 — in the third bullet, add SFI Recycled Label.	<ul> <li>SASB has made the suggested revision to the standard.</li> <li>The revised line of disclosure guidance now reads:</li> <li>Recycled fiber standards that include post- and preconsumer reclaimed material (e.g., PEFC Controlled Sources, FSC Recycled Label, and SFI Recycled Label);</li> </ul>
RR0202	Sustainable Forestry Initiative (SFI)	Wood & Fiber Sourcing & Recovery (RR0202-12)	.58 - allow a company to report if they have multiple certifications. SASB shouldn't discourage an organization from reporting their commitment to all forest certification standards, and instead should reward those organizations that have put time and resources into multiple Standards.	<ul> <li>In lines .47 and .50 of the standard, the registrant has the opportunity to discuss if they have multiple certifications for their wood fiber:</li> <li>.47 The registrant shall disclose the percentage of the total wood-fiber-based raw materials from third-party certified forestlands that is certified to each standard (e.g., FSC Chain of Custody, SFI Chain of Custody, and PEFC Chain of Custody).</li> <li>The registrant shall calculate the percentage of wood-fiber-based raw materials that is third-party certified to each standard as the amount of wood-fiber-based raw materials that is third-party certified to the respective standard divided by the total amount of wood fiber sourced by the registrant.</li> <li>Where wood-fiber in its calculations for each relevant certification.</li> <li>.50 The registrant shall disclose the percentage of wood fiber that meets each sourcing standard, PEFC Controlled Sources, etc.).</li> <li>Where wood-fiber meets multiple sourcing standards, the registrant shall include the amount of such fiber meets multiple sourcing standard.</li> </ul>
RR0202	Sustainable Forestry Initiative (SFI)	Wood & Fiber Sourcing & Recovery (RR0202-12)	.59 – change PEFC Recycled to PEFC Controlled Sources	SASB has made the suggested revision to the standard. The revised line of disclosure guidance now reads: .50 The registrant shall disclose the percentage of wood fiber that meets each sourcing standard (e.g., FSC Controlled

Industry SICS number	Name and/or Affiliation of Respondent	Topic (Metric Code)	Comment Excerpts	SASB Response
				Wood, SFI Fiber Sourcing Standard, PEFC Controlled Sources, etc.).
RR0202	Sustainable Forestry Initiative (SFI)	Wood & Fiber Sourcing & Recovery (RR0202-12)	.59 - allow a company to report if they have multiple certifications. SASB shouldn't discourage an organization from reporting their commitment to all forest certification standards, and instead should reward those organizations that have put time and resources into multiple Standards.	<ul> <li>In lines .47 and .50 of the standard, the registrant has the opportunity to discuss if they have multiple certifications for their wood fiber:</li> <li>.47 The registrant shall disclose the percentage of the total wood-fiber-based raw materials from third-party certified forestlands that is certified to each standard (e.g., FSC Chain of Custody, SFI Chain of Custody, and PEFC Chain of Custody).</li> <li>The registrant shall calculate the percentage of wood-fiber-based raw materials that is third-party certified to each standard as the amount of wood-fiber-based raw materials that is third-party certified to the respective standard divided by the total amount of wood fiber sourced by the registrant.</li> <li>Where wood-fiber in its calculations for each relevant certification.</li> <li>.50 The registrant shall disclose the percentage of wood fiber that meets each sourcing standard (e.g., FSC Controlled Wood, SFI Fiber Sourcing Standard, PEFC Controlled Sources, etc.).</li> <li>Where wood-fiber meets multiple sourcing standards, the registrant shall include the amount of such fiber meets multiple sourcing standard.</li> </ul>
RR0202	Sustainable Forestry Initiative (SFI)	Wood & Fiber Sourcing & Recovery (RR0202-12)	<ul> <li>.60 – delete this list and replace with the following list below.</li> <li>Fiber sourced from illegal logging.</li> <li>Fiber sourced from areas without effective social laws.</li> <li>Fiber sourced from forest activities which are not in compliance with applicable state, provincial or federal laws, particularly as they may relate to:</li> <li>conversion sources,</li> <li>legally required protection of threatened and endangered species,</li> <li>requirements of CITES (The Convention on International Trade in Endangered Species of Wild Fauna and Flora)</li> <li>legally required management of areas with designated high</li> </ul>	SASB notes that SFI's suggested list of criteria is the criteria in SFI's definition of "controversial sources." SASB has updated the disclosure guidance in the "Note to RR0202-07" to include reference to SFI's definition of controlled sources: <i>Note to RR0202-07</i> .51 The registrant shall discuss its due diligence practices for fiber that is not from certified forestlands or certified to other fiber sourcing standards and its policies to verify the forestry management and harvesting practices of suppliers, which may include codes of conduct, audits, and/or contracts, among others.

Industry SICS number	Name and/or Affiliation of Respondent	Topic (Metric Code)	Comment Excerpts	SASB Response
			environmental and cultural values, • labor regulations relating to forest workers, • Indigenous Peoples' property, tenure and use rights.	<ul> <li>.52 The registrant shall disclose how it verifies that its non-certified fiber includes criteria for the following:</li> <li>Wood legality and compliance with the Lacey Act of 1990 (16 U.S.C. §§ 3371–3378);</li> <li>Wood sourced from areas of protected conservation status or high biodiversity value;</li> <li>Logging in or near areas of endangered species habitat;</li> <li>Logging in or near areas of environmental impact assessments or forestry management plans;</li> <li>The use of genetically modified organisms (GMOs), pesticides, or other chemicals in forests; and</li> <li>Criteria outlined in the definition of SFI "controversial sources," the definition of FSC "controlled wood," or the equivalent.</li> </ul>
RR0202	Sustainable Forestry Initiative (SFI)	Wood & Fiber Sourcing & Recovery (RR0202-12)	.64 – fifth bullet – add "PEFC definition of recycled content."	SASB revised the definition to include PEFC: • Fiber shall be considered recycled or recovered if it meets the SFI definition of recycled content, the FSC definition of reclaimed material, or the PEFC definition of recycled wood and fibres.
RR0202	SWM-International	Greenhouse Gas Emissions	Disclosure topic not included that is material to a reasonable investor Only Scope 1 emissions are taken into consideration in the standard, exclusion of emissions related to electricity consumption (scope 2) is going to bring confusion about actual performance of industries. Those relying more on fuel than on electricity will be penalized, furthermore, this does not help discriminating between operations using different sources of electricity with different emission factors associated. Scope 2 should be included.	SASB's research and stakeholder consultation did not suggest that separate disclosure of scope 2 emissions is likely to constitute material information for most companies in the Pulp & Paper Products industry. Registrants have the opportunity to discuss their sources of energy in metric RR0202-04: "Total energy consumed, (1) percentage grid electricity, (2) percentage from biomass, and (3) percentage from other renewables" as well as Note to RR0202-04, which states: "The registrant shall discuss risks and uncertainties associated with the use of biomass for energy." For further evidence on why this topic was included in the provisional standard, please see the Pulp & Paper Products industry Research Brief, available on the Renewable Resources & Alternative Energy sector webpage.
RR0202	SWM-International	Incidents of non-compliance (RT0202-05 and RR0202-09)	The reporting on these incidents should be limited to those generating penalties, fines, administrative follow-up, etc. Daily management requires the tracking on any difficulty met in operation, this is part of continuous improvement and	In response to this comment and other comments, SASB has withdrawn metrics RR0202-05 "Number of incidents of non- compliance with air quality permits, standards, and regulations" and RR0202-09 "Number of incidents of non-

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			principle of ISO 14001 certification. Reports may be emitted internally on incidents and immediate remediation taken which do not impact in any way the external stakeholders. Therefore, this is not a good practice to request for the reporting of each and every incident. Furthermore, the application of such a request will result in different interpretation of the definition of an incident, eventually reducing the efficiency of the environmental management system, which would be the opposite result from the one sought.	compliance with water quality permits, standards, and regulations " from its provisional standard.
RR0202	SWM-International	Greenhouse Gas Emissions (RR0202-01)	Additional or alternate accounting metrics should be available Examples: 1) Greenhouse Gas Emissions (RR0202-01): this is not sufficient to report in CO2e, this is necessary to precise the emissions factors used	<ul> <li>When formulating accounting metrics for its disclosure topics, SASB considers the existing body of reporting standards and uses existing metrics whenever possible. Where current disclosure is inconsistent or not established SASB has developed new metrics. SASB has harmonized its disclosure for RR0202-01 with CDP Climate Change Questionnaire, Carbon Disclosure Project (CDP) Questionnaire (2015) and REQ-04 of the Climate Disclosure Standards Board (CDSB) Framework for reporting environmental information &amp; natural capital (2015).</li> <li>To date, the preferred source for GWP factors is the Intergovernmental Panel on Climate Change (IPCC) Fifth Assessment Report (2013).</li> <li>For more information on SASB's alignment with other reporting frameworks please visit: http://www.sasb.org/approach/key-relationships/</li> </ul>
RR0202	SWM-International	Greenhouse Gas Emissions (RR0202-02)	2) Biogenic carbon dioxide emissions (RR0202-02): reference to EPA is provided, alternate references should be possible to use.	SASB has withdrawn metric RR0202-02 " <i>Biogenic carbon dioxide emissions</i> " from its provisional standard. In the provisional standard the registrant can discuss biogenic carbon dioxide emissions in Note to RR0202-04: " <i>The registrant shall discuss risks and uncertainties associated with the use of biomass for energy.</i> "
RR0202	SWM-International	Air Quality (RR0202-03)	3) Air quality (RR0202-04): other emissions such as NOx and SOx may be irrelevant and should remain optional to report on, at the minimum, alternate units such as kgs vs metric tons should be possible to use given the quantities measured.	SASB has retained reporting of NO <sub>x</sub> and SO <sub>x</sub> in RR0202-03. Please refer to the SASB Pulp & Paper Products Industry Research Brief on the Renewable Resources & Alternative Energy webpage for evidence on why disclosure on NO <sub>x</sub> and SO <sub>x</sub> by Pulp & Paper Products companies may constitute

Industry SICS number	Name and/or Affiliation of Respondent	Topic (Metric Code)	Comment Excerpts	SASB Response
				material information. SASB uses metric tons as the unit of measure for air emissions because it is the common unit used to report on air emissions by publicly-traded companies.
RR0202	SWM-International	Activity Metric (RR02020-A and RR0202-B)	4) Air-dried metric tons (RR02020-A and RR0202-B) may not be the most usual metric used for measuring paper production. Another usual metric is to consider balanced humidity paper (which incorporates the water content). In addition this should be clarified whether companies should report on gross production or saleable production, or any choice as long as this is clearly stated.	<ul> <li>SASB notes that there are multiple units of measure used for measuring pulp and paper production. SASB chose to retain air-dried metric tons as the unit of measure for RR0202-A and RR0202-B because many companies in the industry report using this unit in their publicly available filings.</li> <li>SASB recommends that a registrant disclose any basic business data that may assist in the accurate evaluation and comparability of disclosure, to the extent that they are not already disclosed in the Form 10-K (e.g., revenue, EBITDA, etc.).</li> <li>SASB thanks SWM International for its suggestion and will revise the activity metrics RR0202-A and RR0202-B when it revisits the standards during its codification period.</li> </ul>
RR0202	Vertaeon LLC	General Comment	Thank you for this opportunity to provide comments for Renewable Resources & Alternative Energy Sector – Pulp & Paper Products Exposure Draft Standards. About Vertaeon LLC: Vertaeon is a boutique advisory firm with 50+ years of combined experience in the manufacturing sector. Vertaeon offers comprehensive program development, strategy frameworks, and, most importantly, implementation support for organization-wide initiatives at industrial companies including Paper & Packaging Sector. Focus areas include enterprise risk assessments, business strategy, and corporate sustainability. Vertaeon assists clients in developing and positioning sustainability programs as key strategic initiatives, with particular emphasis on identifying and focusing on ongoing links to enterprise risk and business growth strategy, our other two focus areas. Our advisory and implementation services are powered by analytical tools that leverage information collected over the years to provide insights back to Business & Functional Units via data aggregation &analytics. Based on these insights, our goal is to identify	SASB appreciates the time and effort that Vertaeon LLC has invested in preparing a comment letter for the Pulp & Paper Products industry. SASB thanks Vertaeon for its participation in the standards development process, and hopes to deepen our engagement with Vertaeon as we continue to review and refine our standards.

Industry SICS number	Name and/or Affiliation of Respondent	Topic (Metric Code)	Comment Excerpts	SASB Response
			opportunities for improving operational excellence, optimizing resource uses, exceeding stakeholder expectations, reducing costs and sustaining market growth.	
RR0202	Vertaeon LLC	General Comment	Vertaeon also participated in the Industry Working Group (IWG) for the Pulp & Paper Sector and has reviewed the Draft Standards from the following point of view: sustainability- related indicators that reflect potential uncertainty and topics that can have a negative impact to company results in terms of revenue or profit. In addition, the review was done based on what can contribute to company's risk profile and potential mitigation via development of appropriate sustainability indicators. Towards the above, we propose adding two indicators – Workplace Health & Safety (employee perspective) and Product Lifecycle (reuse/recycle or disposal). The remainder of our comments focuses on the applicability and appropriateness of proposed indicators on p.8 of the Standard	After conducting internal research and engagement with external stakeholders, SASB determined that a standalone Health & Safety topic was not likely to lead to material disclosure for companies in the industry. While health and safety is an important consideration for investors, SASB does not believe that it is likely to constitute material information.
RR0202	Vertaeon LLC	New Indicators - Workplace Health & Safety	<ul> <li>Pulp &amp; Paper industry is a process industry which uses chemical processes including chemical pulping that requires high temperature and pressure. This exposes employees and contractors to potential unsafe conditions if not monitored and corrected on a continuous basis. The industry has made (and continues to make) significant improvements in workplace health &amp; safety – and these improvements are actively captured and tracked using appropriate metrics. An unexpected safety incident or poor performance can cause recordable injuries, lost time/productivity, occupational health issues, new equipment and in extreme situations fatalities. This in turn can cause operational, financial, legal and more importantly reputational risks for the company.</li> <li>Unlike most of the other sustainability indicators, the safety indicator points to a vital aspect: human health and life. A serious incident can also have a direct impact on investor perception and stock prices as evidenced by many recent examples. Monitoring Safety and reporting on it can also benefit the local communities. In addition, the SASB survey to the Pulp &amp; Paper IWG ranks Workplace Health &amp; Safety as #5, above Air Quality.</li> </ul>	After conducting internal research and engagement with external stakeholders, SASB determined that a standalone Health & Safety topic was not likely to lead to material disclosure for companies in the industry. While health and safety is an important consideration for investors, SASB does not believe that it is likely material. Injury and fatality rates in the industry are low relative to the broader manufacturing sector, and there are relatively few instances of significant fines or penalties levied against industry companies due to violations of safety laws or personal injury litigation.

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			Recommended Indicators: - Recordable injury rate, fatalities, near-miss frequency rate for employees & contractors -Comparison to baseline and targets	
RR0202	Vertaeon LLC	New Indicators - Product Lifecycle	Product Lifecycle: Use of products was not addressed in terms of reuse, disposal or lifecycle management. Paper companies produce wide- ranging products for office and printing applications, construction materials, food manufacturing etc. One metric that could be relevant is percentage recycle and/or reuse of relevant product segment.	After conducting internal research and engagement with external stakeholders, SASB determined that a standalone product lifecycle topic was not likely to lead to material disclosure for companies in the industry. SASB indirectly addressed the product lifecycle of paper products in the existing fiber sourcing & recovery disclosure topic, where metrics on the amount of recycled and recovered fiber are included.
RR0202	Vertaeon LLC	Greenhouse Gas Emissions (RR0202-01)	This is relevant, cost-effective, comparable and auditable. Furthermore, alignment with CDP Guidance and definitions of WRI/WBCSD helps with consistent reporting.	SASB thanks Vertaeon for its comment. SASB aims to develop metrics that harmonize with existing reporting frameworks (regulatory and otherwise) where possible.
RR0202	Vertaeon LLC	Greenhouse Gas Emissions (RR0202-01)	Transportation (Section 02): This is considered as Scope 3 emission (unless otherwise company car use etc.) – therefore, we recommend removing this requirement from Section 02.	Scope 1 emissions are defined by the World Resources Institute and the World Business Council on Sustainable Development (WRI/WBCSD) in The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard, Revised Edition, March 2004. Scope 3 emissions are not covered in the scope of SASB's metrics.
RR0202	Vertaeon LLC	Greenhouse Gas Emissions (RR0202-01)	Calculations (section 07): While methodology is captured via other reporting questionnaires, based on the relevance aspect, this many not be required under the MD&A section of 10K. Propose removing this.	SASB has retained line .07 ("The registrant should discuss the calculation methodology for its emissions disclosure") because understanding the methodology used by the registrant may be necessary context for interpretation of disclosure and for comparability between companies. In addition, disclosing the methodology used is necessary for assurance and attestation of sustainability disclosures in the Form 10-K.
RR0202	Vertaeon LLC	Greenhouse Gas Emissions (RR0202-02)	This topic or metric may be premature since there is significant policy and regulatory uncertainty? Relevance may also depend upon % biomass in the fuel sources used.	SASB has withdrawn metric RR0202-02 "Biogenic carbon dioxide emissions" from its provisional standard. In the provisional standard the registrant can discuss biogenic carbon dioxide emissions in Note to RR0202-04: "The registrant shall discuss risks and uncertainties associated with the use of biomass for energy."
RR0202	Vertaeon LLC	Air Quality (RR0202-04)	This is cost-effective, comparable and auditable. However, reporting of air emissions for pollutants such as NOx, SOx, VOCs, particulate matter (PM), and Hazardous Air Pollutants (HAPs) are already part of comprehensive Federal and State	Please refer to the SASB Pulp & Paper Products Industry Research Brief on the Renewable Resources & Alternative Energy webpage for evidence on why disclosure on this topic may constitute material information. Quantitative air

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			reporting requirements. We propose removal of these metrics, especially the ones already subjected to control requirements as part of existing regulations. From an investor perspective, a much more relevant metric that addresses performance and uncertainty is the adequate reporting of company performance in the above – as discussed in RR0202-05, - for instance, the number of incidents of non-compliance with air quality permits, standards and regulations.	emissions disclosure is intended to provide comparable data that can be used to estimate potential costs and liabilities associated with pollution abatement.
RR0202	Vertaeon LLC	Energy Management (RR0202-06)	This is cost-effective, comparable and auditable. While Sections 27-30 address reporting of the energy purchased from various sources, there is no section reporting targets for energy use reduction or baseline comparison. Recommend adding these metrics in a separate section. (Refer to similar topic under RR0202-03.15, emission reduction targets).	In the introduction to the standard under "Guidance on Accounting for Sustainability Topics" SASB recommends that the registrant discuss: • The registrant's strategic approach to managing performance on material sustainability issues; • The registrant's relative performance with respect to its peers; • The degree of control the registrant has; • Any measures the registrant has undertaken or plans to undertake to improve performance; and • Data for the registrant's last three completed fiscal years (when available).
RR0202	Vertaeon LLC	Water Management (RR0202-07 and RR0202-08)	Several sections correspond to CDP 2015 Water Information Request. Recommend alignment with CDP Guidance and Questionnaire to reduce reporting burden. [Refer to SASB RR0202-01 Sections 01-06 for similar approach.]	<ul> <li>SASB aims to develop metrics that harmonize with existing reporting frameworks (regulatory and otherwise) where possible.</li> <li>In RR0202-05 SASB disclosure guidance aligns CDP Water Questionnaire W1.2a and W1.2c.</li> <li>In RR0202-06, SASB disclosure guidance aligns with to CDP Water Questionnaire W3.1, W3.2c, W8.1, W8.1a, and W8.1b.</li> <li>For more information on SASB's alignment with other reporting frameworks please visit: http://www.sasb.org/approach/keyrelationships/</li> </ul>
RR0202	Vertaeon LLC	Wood & Fiber Supply Management (RR0202-10 and RR0202-11)	Leading companies in the Pulp & Paper sector address this as a key issue and many have goals set towards purchases from certified sources. Propose adding goal, target certified sourcing and baseline comparison.	The registrant may choose to include goals, targets, and baseline comparisons for their performance on SASB metrics. In the introduction to the standard under "Guidance on Accounting for Sustainability Topics" SASB recommends that the registrant discuss: • The registrant's strategic approach to managing performance on material sustainability issues;

Industry SICS number	Name and/or Affiliation of Respondent	Topic (Metric Code)	Comment Excerpts	SASB Response
				<ul> <li>The registrant's relative performance with respect to its peers;</li> <li>The degree of control the registrant has;</li> <li>Any measures the registrant has undertaken or plans to undertake to improve performance; and</li> <li>Data for the registrant's last three completed fiscal years (when available).</li> </ul>
RR0202	Vertaeon LLC	Wood & Fiber Supply Management (RR0202-12)	This may be difficult, to quantify/compare/audit, and remains unsubstantiated. In addition, climate change scenarios and impact timelines are macro, long-term topics. Propose removing this metric.	SASB has withdrawn the metric "Discussion of strategy to manage opportunities and risks to wood and fiber sourcing presented by climate change" from its provisional standard.
RR0202	Weyerhaeuser	General Comment	Thank you for the opportunity to submit comments on the exposure draft standards for the Renewable Resources and Alternative Energy Sector — "Pulp and Paper Products Sustainability Accounting Standard." We support SASB's stated goal of creating metrics that meet "objectivity", "measurability", "completeness", and "relevance" criteria. However, in reviewing the Exposure Draft Pulp and Paper Products Standards, we find many instances where the proposed metrics do not meet SASB's own stated criteria. Detailed comments are enclosed. We would be pleased to work directly with SASB in continuing to refine and develop metrics for this sector. I can be reached by email at ara.erickson@weyerhaeuser.com or on the phone at 253.924.7264.	SASB appreciates the time and effort that Weyerhaeuser has invested in preparing comment letters for the Pulp & Paper Products industry. SASB thanks Weyerhaeuser for its participation in the standards development process, and hopes to deepen our engagement with Weyerhaeuser as we continue to review and refine our standards.
RR0202	Weyerhaeuser	Activity Metric (RR02020-A and RR0202-B)	It is necessary to provide more information about what constitutes "production". Manufacturing facilities measure gross production, saleable production and a number of other "production" metrics. We recommend this metric be volume of saleable product, as reported in annual financial reports.	SASB recommends that a registrant disclose any basic business data that may assist in the accurate evaluation and comparability of disclosure, to the extent that they are not already disclosed in the Form 10-K (e.g., revenue, EBITDA, etc.). SASB thanks Weyerhaeuser for its suggestion and will revise the activity metrics RR0202-A and RR0202-B when it revisits the standards during its codification period.
RR0202	Weyerhaeuser	Greenhouse Gas Emissions	First, in the introduction section of this topic, the statement that "GHG emissions from the use of biomass are generally not covered by regulatory regimes, as biomass is considered carbon neutral" is not entirely true. While the carbon dioxide	SASB has amended the relevant section to read, "Companies in this industry typically use significant amounts of biomass for their energy needs. Carbon dioxide (CO <sub>2</sub> ) emissions from the use of biomass generally are not covered by regulatory regimes."

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			emissions from biomass are considered carbon neutral, the non-carbon GHG emissions are not excluded from regulatory regimes or accounting standards.	
RR0202	Weyerhaeuser	Greenhouse Gas Emissions (RR0202-02)	We recognize that the carbon neutrality of biomass could be a relevant topic to investors. However, the on-going policy debates and uncertainty around how to measure biogenic carbon emissions makes this topic unsuitable for inclusion in these standards. We recommend this metric be removed since it does not meet the "objectivity", "measurability", and "completeness", criteria as defined by SASB. It is particularly concerning that the SASB standards would include reference to a draft, and still much debated, framework. See attached biomass carbon neutrality brief prepared by the American Wood Council for more information.	In response to this comment and other comments, SASB has withdrawn the metric " <i>Biogenic carbon dioxide emissions</i> " from its provisional standard. In the provisional standard, the registrant can discuss risks and opportunities associated with biomass energy in Note to RR0202-04, which states: <i>The registrant shall discuss risks and uncertainties associated with</i> <i>the use of biomass for energy</i> . .29 The registrant shall discuss risks and uncertainties associated with the use of biomass as an energy source, and it shall describe how it manages those risks. .30 Risks and uncertainties associated with the use of biomass as an energy source can include, but are not limited to: • Risks from air emissions (such as oxides from nitrogen and sulfur), including costs to comply with emissions restrictions and reputational impacts from violations. • Regulatory risks, including financial impacts associated with compliance with potential biogenic carbon dioxide regulations or reputational impacts associated with biomass failing to meet the definition of eligible renewable energy in a state Renewable Portfolio Standard • Sourcing risks, including reputational risks associated with a lack of transparency about whether purchased biomass was sustainably harvested.
RR0202	Weyerhaeuser	Air Quality (RR0202-04)	We recommend removing air emissions from the standards. It is nearly impossible to compare this data from one company to another, as most of this data is collected or estimated as part of production estimates and using emission factors that can vary greatly from site to site. Air emissions are already highly regulated by regional and federal agencies. Investors might be interested in whether or not a company is in compliance with these regulations, but the actual emissions will not provide investors with meaningful metrics	Please refer to the SASB Pulp & Paper Products Industry Research Brief on the Renewable Resources & Alternative Energy webpage for evidence on why disclosure on this topic may constitute material information. Through SASB's internal research process and through consultation with stakeholders, SASB determined that companies in the industry are likely to experience significant financial costs associated with air emissions regulations. Quantitative air emissions disclosure is intended to provide comparable data that can be used to estimate potential costs and liabilities associated with pollution abatement.

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			or comparable values across companies.	
RR0202	Weyerhaeuser	Air Quality (RR0202-05)	Question: Should this be RR0202-05? The definition of "non-compliance" is too subjective to be included in these standards. For example, a warning letter does not constitute a company's non-compliance with a regulation, permit or standard. Asking companies to provide a quantitative measure of non-compliance will not be objective or comparable.	In response to this comment and other comments, SASB has withdrawn the metric "Number of incidents of non- compliance with air quality permits, standards, and regulations " from its provisional standard.
RR0202	Weyerhaeuser	Energy Management (RR0202-06) Line .32	There is either a typo in this section or the description of the scope of renewable energy from biomass is inaccurate and in direct violation of ANSI's Commercial Terms. If the "and" in the last sentence is incorrect and is intended to be "or," then the definitions could be sufficient for these standards. If it is intended to be "and," there are a number of concerns. First, third-party certification to sustainable forestry standards is not related to the renewability of a resource. If the intention is to show that the biomass is from sustainably managed forests, using certification as a proxy is not appropriate. It is recommended that the standard refer to fiber from "responsible or certified" wood as defined by ASTM D7612, rather than certification of "eligible renewable" for biomass in the Green-e standard is arbitrarily complex and would require the ability to trace the biomass source not only back to the acre of land but back to the part of the tree from which it came. Furthermore, it would be difficult to show compliance with the eligible renewable criteria without certification to the green-e standard. The result is the equivalent of SASB endorsing a particular proprietary standard, which is a violation of ANSI's Commercial Terms. Any reference to private standards should always include the phrase "or equivalent." In earlier comments, we recommended changing the biomass criteria to be in compliance with State-level biomass energy definitions or renewable portfolio standards. We are pleased to see this option included in this	<ul> <li>SASB has revised the disclosure guidance, and uses "or" to indicate that biomass sources must meet only one of the criteria listed. The revised guidance now states:</li> <li>.22 For the purposes of this disclosure, the scope of renewable energy from biomass sources is limited to the following:</li> <li>Energy from biomass sources that meets at least one of the following criteria:</li> <li>Certification to a third-party standard (e.g., Forest Stewardship Council, Sustainable Forest Initiative, Programme for the Endorsement of Forest Certification, or American Tree Farm System);</li> <li>Classification as an "eligible renewable" according to the Green-e Energy National Standard Version 2.5 (2014); or</li> <li>Eligibility for a state Renewable Portfolio Standard.</li> </ul>

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			description, but it needs to be listed as an option, not as an additional requirement.	
RR0202	Weyerhaeuser	Water Management (RR0202-07) Line .35	We are disappointed that the numerous comments submitted throughout this process regarding the inherent inaccuracies of measuring water withdrawn are not reflected in these draft standards. Companies are most often regulated on water discharge, not water intake, and thus do not have sufficient measurement tools to provide comparable, auditable or cost-effective metrics. It is recommended that water discharge be allowed as a proxy for water intake.	In the provisional standard, SASB has retained RR0202-05. (1) Total water withdrawn and (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress. SASB research indicates that the Pulp & Paper Products industry is among the most water intensive industries, and the (1) total water withdrawn portion of RR0202-05 indicates the magnitude of a company's reliance on water for its operations. In the introduction to the SASB standard, SASB acknowledges that there may be uncertainties and estimates when preparing sustainability disclosures. The introductions states: Uncertainty SASB recognizes that there may be inherent uncertainty when disclosing certain sustainability data and information. This may be related to variables such as the reliance on data from third-party reporting systems and technologies, or the unpredictable nature of climate events. Where uncertainty around a particular disclosure exists, SASB recommends that the registrant should consider discussing its nature and likelihood. Estimates
				SASB recognizes that scientifically based estimates, such as the reliance on certain conversion factors or the exclusion of de minimis values, may occur for certain quantitative disclosures. Where appropriate, SASB does not discourage the use of such estimates. When using an estimate for a particular disclosure, SASB expects that the registrant discuss its nature and substantiate its basis.
RR0202	Weyerhaeuser	Water Management (RR0202-07) Line .37	Additionally, being able to accurately and comparably quantify the amount of water consumed during production is challenging, not cost-effective and based on a multitude of estimates. By requiring this information be included in SEC filings, we risk discouraging companies to continue sharing water efficiency improvements with other stakeholders.	In the provisional standard, SASB has retained RR0202-05: (1) Total water withdrawn and (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress. SASB research indicates that the Pulp & Paper Products industry is among the most water intensive industries, and the (1) total water withdrawn portion of RR0202-05 indicates the magnitude of a company's reliance

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				on water for its operations. In the introduction to the SASB standard, SASB acknowledges that there may be uncertainties and estimates when preparing sustainability disclosures. The introductions states: Uncertainty SASB recognizes that there may be inherent uncertainty when disclosing certain sustainability data and information. This may be related to variables such as the reliance on data from third-party reporting systems and technologies, or the unpredictable nature of climate events. Where uncertainty around a particular disclosure exists, SASB recommends that the registrant should consider discussing its nature and likelihood. Estimates SASB recognizes that scientifically based estimates, such as the reliance on certain conversion factors or the exclusion of de minimis values, may occur for certain quantitative disclosures. Where appropriate, SASB does not discourage the use of such estimates. When using an estimate for a particular disclosure, SASB expects that the registrant discuss its nature
RR0202	Weyerhaeuser	Water Management (RR0202-07) Line .38	The reference to WRI's Water Risk Atlas tool needs to include an "or equivalent" option.	<ul> <li>and substantiate its basis.</li> <li>In the provisional standard, SASB makes direct reference to numerous sustainability, industry, regulatory, and other initiatives, methodologies, standards, and frameworks. Where SASB's criteria are aligned with another organization's SASB does not necessarily endorse the organization or its funder, but it aims to harmonize with established standards where appropriate and were criteria align with those that SASB has specified.</li> <li>SASB will retain reference to the WRI Water Risk Atlas Tool as it has determined this tool to be publicly available, free, widely used, and scientifically robust. Its standardized usage will provide comparability of SASB disclosures.</li> <li>SASB aims to allow for an "or equivalent" approach when disclosing its metrics in certain standards - though it has not</li> </ul>

Industry SICS number	Name and/or Affiliation of Respondent	Topic (Metric Code)	Comment Excerpts	SASB Response
				included this language in the provisional Pulp & Paper Products standard.
RR0202	Weyerhaeuser	Water Management (RR0202-08)	The definition of "non-compliance" is too subjective to be included in these standards. For example, a warning letter does not constitute a company's non-compliance with a regulation, permit or standard. Asking companies to provide a quantitative measure of non-compliance will not be objective or comparable.	SASB has withdrawn metrics RR0202-09 "Number of incidents of non-compliance with water quality permits, standards, and regulations" from its provisional standard.
RR0202	Weyerhaeuser	Wood and Fiber Sourcing and Recovery (RR0202-09) Line .53	The SFI and PEFC chain of custody references should be further clarified to state "chain of custody certifications."	<ul> <li>SASB has made the suggested edit to the provisional standard. The revised line of disclosure guidance now states:</li> <li>Third-party forest management certifications include, but are not limited to, those promulgated by the following organizations (or the equivalent): <ul> <li>American Tree Farm System (ATFS) (i.e., ATFS Certification)</li> <li>Forest Stewardship Council (FSC) (i.e., FSC Forest Management and Chain of Custody certifications)</li> <li>Programme for the Endorsement of Forest Certification (PEFC) (i.e., PEFC Chain of Custody certifications)</li> </ul> </li> </ul>
RR0202	Weyerhaeuser	Wood and Fiber Sourcing and Recovery (RR0202-09) Line .56	The reference to "SFI Chain of Custody (certified forest content)" should be changed to "SFI Chain of Custody".	SASB has made the suggested revision to the standard. The revised line of disclosure guidance now states: .47 The registrant shall disclose the percentage of the total wood-fiber-based raw materials from third-party certified forestlands that is certified to each standard (e.g., FSC Chain of Custody, <b>SFI Chain of Custod</b> y, and PEFC Chain of Custody).
RR0202	Weyerhaeuser	Wood and Fiber Sourcing and Recovery (RR0202-09) Line .57	The reference to "SFI Certified Fiber Sourcing Standard" should be changed to "SFI Fiber Sourcing Standard" and "SFI Recycled Label should be added to the list of recycled fiber standards.	<ul> <li>SASB has made the suggested revision to the standard.</li> <li>The revised line of disclosure guidance now states: <ul> <li>.48 The registrant shall disclose the percentage of its total wood-fiber-based raw materials that is sourced from non-third-party certified forestlands but meets other fiber sourcing standards, including, but not limited to: <ul> <li>Responsible fiber sourcing standards (e.g., SFI Fiber Sourcing Standard);</li> <li>Controlled wood standards (e.g., FSC Controlled Wood Certification, PEFC Controlled Wood);</li> <li>Recycled fiber standards that include post- and pre-</li> </ul> </li> </ul></li></ul>

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				<i>consumer reclaimed material (e.g., PEFC Controlled Sources, FSC Recycled Label, and <b>SFI Recycled Label</b>); and • Any other due diligence standards that cover sourcing requirements for fiber from non-certified forestlands.</i>
RR0202	Weyerhaeuser	Wood and Fiber Sourcing and Recovery (RR0202-09) Line .59	The reference to "PEFC Recycled" should be changed to "PEFC Controlled Sources"	SASB has made the suggested revision to the standard. The revised line of disclosure guidance now states: .50 The registrant shall disclose the percentage of wood fiber that meets each sourcing standard (e.g., FSC Controlled Wood, SFI Fiber Sourcing Standard, <b>PEFC Controlled</b> <b>Sources</b> , etc.).
RR0202	Weyerhaeuser	Wood and Fiber Sourcing and Recovery (RR0202-09) Line .60	<ul> <li>We recommend the criteria be replaced with the following:</li> <li>Fiber sourced from illegal logging.</li> <li>Fiber sourced from areas without effective social laws.</li> <li>Fiber sourced from forest activities which are not in compliance with applicable state, provincial or federal laws, particularly as they may relate to: <ul> <li>conversion sources,</li> <li>legally required protection of threatened and endangered species,</li> <li>requirements of CITES (The Convention on International Trade in Endangered Species of Wild Fauna and Flora)</li> <li>legally required management of areas with designated high environmental and cultural values,</li> <li>labor regulations relating to forest workers,</li> <li>Indigenous Peoples' property, tenure and use rights.</li> </ul> </li> </ul>	<ul> <li>SASB notes that Weyerhaeuser's suggested list of criteria is the criteria in SFI's definition of "controversial sources." SASB has updated the disclosure guidance in the "Note to RR0202-07" to read:</li> <li>Note to RR0202-07</li> <li>.51 The registrant shall discuss its due diligence practices for fiber that is not from certified forestlands or certified to other fiber sourcing standards and its policies to verify the forestry management and harvesting practices of suppliers, which may include codes of conduct, audits, and/or contracts, among others.</li> <li>.52 The registrant shall disclose how it verifies that its noncertified fiber includes criteria for the following:</li> <li>Wood legality and compliance with the Lacey Act of 1990 (16 U.S.C. §§ 3371–3378);</li> <li>Wood sourced from areas of protected conservation status or high biodiversity value;</li> <li>Logging in or near areas of endangered species habitat;</li> <li>Logging in or near areas of environmental impact assessments or forestry management plans;</li> <li>The use of genetically modified organisms (GMOs), pesticides, or other chemicals in forests; and</li> <li>Criteria outlined in the definition of SFI "controversial sources," the definition of FSC "controlled wood," or the requivalent.</li> </ul>

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RR0202	Weyerhaeuser	Wood and Fiber Sourcing and Recovery (RR0202-12) Line .67	The second bullet either needs to be edited to reference "political and social risks presented by climate change" rather than just "political and social risks" or it needs to be deleted. A discussion these risks not associated with climate change is not relevant in this section.	SASB has withdrawn metric RR0202-12: " <i>Discussion of strategy to manage opportunities and risks to wood and fiber sourcing presented by climate change</i> " from its provisional standard.
RR0202	Weyerhaeuser	Wood and Fiber Sourcing and Recovery (RR0202-12) Line .68	This section is predicated on the idea that climate change science can provide precise information for specific locations, time periods or tree species. Current climate change science does not provide such discrete results. While a discussion of the physical risks of climate change and potential benefits is reasonable and would not be costly, there is little ability at this time to predict specific impacts of climate change on forestlands and expected impacts to growth and yield, and in turn, a manufacturer's ability to procure raw material. Therefore, it does not meet the measurability criteria.	In response to this comment and other comments, SASB has withdrawn metric RR0202-12: " <i>Discussion of strategy to</i> <i>manage opportunities and risks to wood and fiber sourcing</i> <i>presented by climate change</i> " from its provisional standard.
RR0202	Weyerhaeuser	Wood and Fiber Sourcing and Recovery (RR0202-12) Line .70	Climate change is a non-linear process. Providing a timeline of risks and opportunities would not meet the measurability criterion. There are no existing models or methods that can provide such detailed and accurate information. Any attempts to present such information will neither be comparable nor auditable.	In response to this comment and other comments, SASB has withdrawn metric RR0202-12: "Discussion of strategy to manage opportunities and risks to wood and fiber sourcing presented by climate change" from its provisional standard.
RR0202	American Forestry & Paper Association (AF&PA)	General Comment	Enclosed you will find comments from the American Forest & Paper Association (AF&PA) on the Sustainability Accounting Standards Board (SASB) Renewable Resources and Alternative Energy Sector/Pulp and Paper Products Exposure Draft for Public Comment (the "Standard"). Our comments below have been informed by our review of the Containers & Packaging and Household and Personal Care Products provisional standards, the Record of Public Comment documents issued for Resource Transformation and Consumption I Sector Standards, which include Containers and Packaging and Household and Personal Care Products (the "RPC Documents"), and the Standards Outcome Report for the Renewable Resources & Alternative Energy Sector. We appreciate SASB providing additional time for us to consider your response to our question about the voluntary nature of the standards and materiality (email from Jerry Schwartz to	SASB appreciates the time and effort that the American Forest & Paper Association (AF&PA) has invested in preparing a comment letter for the Pulp & Paper Products industry. SASB thanks AF&PA for its continued participation in the standards development process for the Renewable Resources & Alternative Energy sector and other sectors, and hopes to deepen our engagement with AF&PA as we continue to review and refine our standards.

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number	Respondent		CACD date d Octoberry C 2015) and to movide these comments	
			SASB dated October 5, 2015) and to provide these comments.	
			The American Forest & Paper Association (AF&PA) serves to	
			advance a sustainable U.S. pulp, paper, packaging, and wood	
			products manufacturing industry through fact-based public policy and marketplace advocacy. AF&PA member companies	
			make products essential for everyday life from renewable and	
			recyclable resources and are committed to continuous	
			improvement through the industry's sustainability initiative -	
			Better Practices, Better Planet 2020. The forest products	
			industry accounts for approximately 4 percent of the total U.S. manufacturing GDP, manufactures approximately \$210 billion	
			in products annually, and employs nearly 900,000 men and	
			women. The industry meets a payroll of approximately \$50	
			billion annually and is among the top 10 manufacturing sector	
			employers in 47 states.	
			AF&PA's sustainability initiative - Better Practices, Better	
			Planet 2020 - is the latest example of our members' proactive	
			commitment to the long-term success of our industry, our communities and our environment. We have long been	
			responsible stewards of our planet's resources. Our member	
			companies have collectively made significant progress in each	
			of the following goals, which comprise one of the most	
			extensive quantifiable sets of sustainability goals for a U.S. manufacturing industry: increasing paper recovery for	
			recycling; improving energy efficiency; reducing greenhouse	
			gas emissions; promoting sustainable forestry practices;	
			improving workplace safety; and reducing water use.	
			AF&PA Perspective on SASB Standards	
			AF&PA's comments should not be construed as endorsing any	
			of the SASB standards, including the Pulp and Paper Products	
			Standard. We also caution SASB that our comments below on the specific proposed metrics do not represent a consensus	
			position of all AF&PA members.	
RR0202	American Forestry &	General	Voluntary Standards and Materiality, Topics, and Metrics	SASB intends that all metrics under each disclosure topic
	Paper Association (AF&PA)	Comment	SASB's October 7th response to AF&PA's inquiry on these	together provide a set of relevant, decision-useful, and comparable disclosure for the topic. Each metric alone is not
L			SASES OCTOBELY THE RESPONSE TO AFOR A SIMULITY OF THESE	comparable disclosure for the topic. Each methy alone is not

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			issues was helpful in that it acknowledged that "using the term 'materiality' to describe information in a voluntary sustainability report may create unnecessary risks that an attorney should review and approve." This warning, combined with SASB's confirmation, in the same letter, that the standards it is proposing are specifically intended to be voluntary and assist companies with identifying and disclosing material information provides an important and appreciated caution to our member companies. We also note SASB's commitment that the standards it is developing not become mandatory, especially since SASB regularly meets with the Securities and Exchange Commission (SEC), and it had been reported that SASB's ultimate objective is to have the SEC mandate the use of its standards.	intended address all aspects of the topic. However, the nature of SASB's standards and any metrics contained in them continues to be voluntary and indicated as such. For more information on implementing sustainability accounting standards, see the SASB Implementation Guide for Companies, available here: http://using.sasb.org/index/for- companies/for-companies-get-started/
			The Supreme Court's definition of "materiality" makes clear that it is up to each company to decide for itself which sustainability topics are material, and SASB states that it is adhering to that definition. There is a lack of clarity, however, around how the Standard is intended to be used once a company determines that a topic is material. SASB representatives have given the impression that once a company has determined a topic is material, it must use the SASB metrics for that topic. The "Guidance on Accounting of Material Sustainability Topics" in the draft Standard, however, states "SASB recommends that each company consider using these accounting metrics when disclosing its performance with respect to each of the sustainability topics it has identified as material." SASB also recommends that "companies should consider including a narrative description of any material factors necessary to ensure completeness, accuracy, and comparability of the data reported." Similarly, SASB's October 7th response states:	
			"Even if a company uses SASB standards to help identify and make materiality assessments, it is not bound to use SASB standards to disclose any sustainability information that it determines to be material. Although the SASB standards can help the company disclose sustainability in a decision-useful, comparable manner to investors, the company's use of SASB	

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			metrics in disclosing material sustainability information is voluntary." (emphasis added)	
RR0202	American Forestry & Paper Association (AF&PA)	General Comment	Our members have serious concerns about the comparability and other aspects of the metrics SASB has chosen for the Standard. We believe making it clear, as does the text above, that companies have the flexibility to use those or other metrics, as well as the ability to explain why particular metrics do or do not "ensure completeness, accuracy, and comparability of the data reported" is very important for ensuring stakeholders using the data understand its potential limitations. Therefore, SASB should retain the "consider" language in the final Standard and explain the apparent inconsistency with its public statements.	SASB has retained the language referenced by AF&PA in the introduction to its provisional standard under the section "Guidance on Accounting for Sustainability Topics": SASB recommends that each company <b>consider</b> using these sustainability accounting metrics when preparing disclosures on the sustainability topics identified herein.
RR0202	American Forestry & Paper Association (AF&PA)	General Comment	Duplication With Existing Reporting Requirements We understand that SASB tried to choose metrics that companies already report (voluntarily or pursuant to government requirement), as a way to minimize reporting burdens and ensure the metric is viable. Choosing these metrics, however, does raise potential concerns for reporting companies. Specifically, inconsistencies are likely to occur between reports using the SASB standard (e.g., SEC reports) and other reports (e.g., a company's own sustainability report), if SASB's metrics and the way in which they are derived and reported are not exactly the same as those used in the other reports. At a minimum, this inconsistency creates confusion among stakeholders; it also creates legal risk for reporting companies. Accordingly, to the extent that a metric is subject to multiple reporting requirements, the Standard should permit the reporting company to choose which requirement it is reporting under and indicate that choice in its reports.	SASB acknowledges that there may be certain additional costs associated with collecting data in the format specified by its standards. It has aimed to develop metrics that harmonize with existing reporting frameworks (regulatory and otherwise) where possible, and hopes to be creating additional benefit in instances where SASB's metrics may diverge from a current approach. SASB anticipates these benefits to be realized through enhanced comparability, relevance, and decision- usefulness. For more information on SASB's alignment with other reporting frameworks please visit: http://www.sasb.org/approach/keyrelationships/ SASB's standards are intended to improve the rigor, accuracy, consistency, and comparability of sustainability disclosures. Users of its standards should consider the legal risks of disclosing information differently in different reports and establish the appropriate internal controls.
RR0202	American Forestry & Paper Association (AF&PA)	General Comment	Assurance SASB indicates in the Pulp and Paper Products Standard that "it is expected that registrants disclose with the same level of rigor, accuracy, and responsibility as they apply to all other information contained in their SEC filings." While AF&PA members have systems in place to ensure high quality data are publicly reported, we do not believe that some of the	<ul> <li>SASB revised the introduction to its standard and has also withdrawn the reference to assurance. The introduction to the standard states:</li> <li>SASB Standards are intended to constitute "suitable criteria" as defined by AT 101.23–.32 and referenced in AT 701, as having the following attributes:</li> <li>Objectivity—Criteria should be free from bias.</li> <li>Measurability—Criteria should permit reasonably consistent</li> </ul>

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			metrics in the Standard lend themselves to the same level of assurance as is provided in financial reporting. Metrics that are reported to government agencies are not a concern because they typically have their own assurance requirements. The methodologies for reporting other metrics, however, may allow for more flexibility in the calculation of the metric, and thus, there may be greater variation in reported information than one might typically encounter in financial documents. In the Containers & Packaging Provisional Standard, the section on assurance was removed. We would encourage SASB to remove this section from the Pulp and Paper Products Standard, as well, to provide consistency in the SASB standards. Further, the RPC Documents implicitly acknowledge that sustainability data are not yet of the same quality as financial data, although SASB believes that sustainability data will achieve that level of quality over time. In the meantime, however, companies could face legal risk if they use the SASB standards for reporting and sustainability data are held to the same quality requirements as financial data. SASB also should make an explicit link between its assurance requirements, and its recognition that estimates may be used, as long as the company explains the basis for the estimate. SASB should revise its statement that "SASB does not discourage the use of such estimates" to make it a more neutral statement acknowledging the reality that estimates will need to be used in reporting sustainability data.	<ul> <li>measurements, qualitative or quantitative, of subject matter.</li> <li>Completeness—Criteria should be sufficiently complete so that those relevant factors that would alter a conclusion about subject matter are not omitted.</li> <li>Relevance—Criteria should be relevant to the subject matter.</li> <li>Furthermore, SASB acknowledges in the introduction under the section "Uncertainty" that:</li> <li>SASB recognizes that there may be inherent uncertainty when disclosing certain sustainability data and information. This may be related to variables such as the reliance on data from third-party reporting systems and technologies, or the unpredictable nature of climate events. Where uncertainty around a particular disclosure exists, SASB recommends that the registrant should consider discussing its nature and likelihood.</li> <li>Estimates</li> <li>SASB recognizes that scientifically based estimates, such as the reliance on certain conversion factors or the exclusion of de minimis values, may occur for certain quantitative disclosures. Where appropriate, SASB does not discourage the use of such estimates. When using an estimate for a particular disclosure sits nature and substantiate its basis.</li> </ul>
RR0202	American Forestry & Paper Association (AF&PA)	General Comment	American National Standards Institute (ANSI) Procedures SASB's Vision and Mission statement online states that "SASB is also an ANSI accredited standards developer. Accreditation by ANSI signifies that SASB's procedures to develop standards meet ANSI's requirements for openness, balance, consensus, and due process." Finally, SASB's "Our Process" webpage states that "[a]s an ANSI-accredited standards-setting organization, SASB follows an open, orderly process that permits timely, thorough, and open study of sustainability accounting issues."	Though SASB is an ANSI-accredited standards development organization, it has not announced its intent to develop and American National Standard via the Project Initiation Notification System (PINS). Therefore, to-date SASB's standards development process has been informed by ANSI best practices, but it does not represent itself as conforming to ANSI Essential Requirements for a voluntary, consensus standard. SASB will continue to consider the most appropriate standards development process as it takes its provisional standards forward.

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			stakeholders with assurances that needed procedural safeguards are present. This is especially important, if, as is the case here, there is the potential for a government agency the Securities and Exchange Commission (SEC)to mandate the use of a standard (although, as discussed above, we strongly believe the standard should be voluntary). Government standards typically are developed through a notice and comment process and are subject to numerous due process protections for stakeholders, including in many cases, judicial review. Private standards adopted for government use should be developed with the same level of due process protection.	
			Office of Management and Budget (OMB) Circular A-119 requires, with limited exception, that federal agencies and departments use "voluntary consensus standards," which are "standards developed or adopted by voluntary consensus standards bodies." The Circular also established guidelines for federal participation in the development and use of voluntary consensus standards. Specifically, the Circular provides the following attributes for a "voluntary consensus standards body": (i) openness; (ii) balance of interest; (iii) due process; (iv) an appeals process; and (v) consensus. Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (Public Law 104-113) basically codified the OMB Circular and requires that "all Federal agencies and departments shall use technical standards that are developed or adopted by voluntary consensus standards bodies," unless use of such a standard is "inconsistent with applicable law or otherwise impractical."	
			By definition, private standards such as SASB's do not include the due process protections found in the development of government standards. ANSI Essential Requirements closely track the procedural safeguards required by the Circular. In its RPC Documents, SASB clarified that, even though it is an ANSI-accredited standards setting organization, it does not intend to use ANSI procedures to finalize its standards, and instead will seek comment on the proprietary procedures it intends to use.	

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			We appreciate SASB's direct acknowledgement that it is not using an ANSI-process, and in the spirit of complete disclosure and transparency, SASB should make clear in its standards and on its website that the standards have not been developed and are not being finalized pursuant to the ANSI procedures. We also look forward to commenting on SASB's proprietary standards and we urge SASB to propose procedures that incorporate as much of the ANSI Essential Requirements as possible.	
RR0202	American Forestry & Paper Association (AF&PA)	General Comment	Private, Non-Consensus Standards Generally, as required by ANSI, the Standard should avoid references to private tools or standards (e.g., Green-e, World Resources Institute (WRI) Water Risk Atlas tool, Aqueduct). Among other concerns, these tools or standards have not been developed in a consensus-based process that provides the procedural safeguards discussed above.	SASB acknowledges that there may be certain additional costs associated with collecting data in the format specified by its standards. It has aimed to develop metrics that harmonize with existing reporting frameworks (regulatory and otherwise) where possible, and hopes to be creating additional benefit in instances where SASB's metrics may diverge from a current approach. SASB anticipates these benefits to be realized through enhanced comparability, relevance, and decision- usefulness.
			In addition, SASB's adoption of a particular private tool or standard has the effect of locking in that standard for the future. Other existing tools or standards may perform similar functions and be more suitable to the Pulp and Paper Products sector, and new, innovative standards may be developed in the future. SASB shouldn't prejudge the suitability of those standards by locking in one particular standard at this time. At a minimum, SASB should describe what the tool provides or the standard is trying to accomplish, and after identifying the tool or standard, add "or equivalent."	Where SASB's criteria are aligned with another organization's SASB does not necessarily endorse the organization or its funder, but it aims to harmonize with established standards where appropriate and were criteria align with those that SASB has specified. SASB aims to allow for an "or equivalent" approach when disclosing its metrics in certain standards - though it has not included this language in the provisional Pulp & Paper Products standard.
RR0202	American Forestry & Paper Association (AF&PA)	General Comment	Usefulness of Metrics as Indicators of Sustainability As discussed in the "Specific Comments" section below, we do not believe that the disclosure of particular metrics provides useful, comparable, sustainability-related information for stakeholders. But, more importantly, we do not believe that a simple comparison of any metrics themselves would provide a complete picture of the sustainability performance of the companies that reported those metrics (or didn't report a particular metric because it is not material). Many companies explain the context for the metrics they include in	SASB intends that the metrics under each disclosure topic together provide a set of relevant, decision-useful, and comparable disclosure for the topic. Each metric alone is not intended address all aspects of the topic. In the introduction to the SASB Pulp & Paper Products standard under the "Guidance on Accounting for Sustainability Topics", SASB writes: As appropriate—and consistent with Rule 12b-20 —when disclosing a sustainability topic identified by this Standard,

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			their sustainability reports. Similarly, SASB should encourage stakeholders to consider the entirety of the information provided by companies that may report based on the Standard, and not to simply compare one company to another based only on the metrics.	<ul> <li>companies should consider including a narrative description of any material factors necessary to ensure completeness, accuracy, and comparability of the data reported. Where not addressed by the specific accounting metrics, but relevant, the registrant should discuss the following, related to the topic:</li> <li>The registrant's strategic approach to managing performance on material sustainability issues;</li> <li>The registrant's relative performance with respect to its peers;</li> <li>The degree of control the registrant has;</li> <li>Any measures the registrant has undertaken or plans to undertake to improve performance; and</li> <li>Data for the registrant's last three completed fiscal years (when available).</li> </ul>
RR0202	American Forestry & Paper Association (AF&PA)	General Comment	Activity Metrics and Normalization Along with the amount of pulp and paper production, the Standard recommends that companies also provide "total wood fiber purchased," including "all inputs that are processed to be sold as a finished good, including recycled raw materials, virgin raw materials, and goods that will be consumed directly in the production process, excluding biomass for energy use." AF&PA recommends that this metric be removed. First, it does not fit with the other activity metrics, which are measures of output; for normalization purposes, output measurements are appropriate. Second, it is duplicative of Note .54 under the RR0202-10 metric in the Wood & Fiber Sourcing & Recovery Topic.	<ul> <li>SASB has revised this activity metric to: "Total wood fiber sourced." SASB believes this activity metric can be used as a normalization factor for the metrics in the provisional standard.</li> <li>As stated in the introduction to the standard, activity metrics disclosed should:</li> <li>Convey contextual information that would not otherwise be apparent from SASB accounting metrics.</li> <li>Be deemed generally useful for an investor relying on SASB accounting metrics in performing their own calculations and creating their own ratios.</li> <li>Be explained and consistently disclosed from period to period to the extent they continue to be relevant. However, a decision to make a voluntary disclosure in one period does not obligate a continuation of that disclosure if it is no longer relevant or if a better metric becomes available.</li> </ul>
RR0202	American Forestry & Paper Association (AF&PA)		SPECIFIC COMMENTS AF&PA has a number of comments on specific metrics included in the Standard as discussed below. We have omitted metrics on which we do not have any comments. We would again caution SASB that our comments below on	SASB intends that the metrics under each disclosure topic together provide a set of relevant, decision-useful, and comparable disclosure for the topic. Each metric alone is not intended address all aspects of the topic. SASB's Guidance for Disclosure, Section 2, Company Level Determination and Disclosure of Material Sustainability Topics
			the specific proposed metrics do not necessarily represent a consensus position of all AF&PA members. Our members	states "SASB has attempted to identify those sustainability topics that are reasonably likely to have a material effect or

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			have serious concerns that not all the metrics in the SASB standards can legitimately be considered "material" for every company subject to the standard.	the financial condition or operating performance of companies within each SICS industry. SASB recognizes, however, that each company is ultimately responsible for determining what information should be disclosed within the context of Regulation S-K and other guidance."
				SASB Standards provide companies with standardized sustainability metrics designed to communicate performance on industry level sustainability topics. When making disclosure on sustainability topics, companies can use SASB Standards to help ensure that disclosure is standardized and therefore decision-useful, relevant, comparable, and complete. Further information can be found in SASB's Conceptual Framework available here: http://www.sasb.org/approach/conceptual-framework/
RR0202	American Forestry & Paper Association (AF&PA)	Greenhouse Gas Emissions (Industry Description)	Greenhouse Gas Emissions Description The description correctly notes that significant amounts of biomass are used for the industry's energy needs. In fact, on average, about two-thirds of AF&PA members' energy needs are met through the use of biomass. The description should be changed to state that "the vast majority of such biomass is sourced from residuals generated during operations" to more accurately reflect our energy profile.	SASB has amended the relevant sentence to read, "Companies in this industry typically use significant amounts of biomass for their energy needs. Carbon dioxide (CO2) emissions from the use of biomass generally are not covered by regulatory regimes."
RR0202	American Forestry & Paper Association (AF&PA)	Greenhouse Gas Emissions (RR0202-01)	Gross global Scope 1 emissions Global Warming Potential Factors (.01): The Standard references the global warming potential factors from the IPCC's Fifth Assessment Report (2013). However, companies should be allowed the flexibility to choose the set of global warming potentials they base their emission estimates on and disclose this as part of their calculation methodologies.	When formulating accounting metrics for its disclosure topics, SASB considers the existing body of reporting standards and uses existing metrics whenever possible. Where current disclosure is inconsistent or not established SASB has developed new metrics. SASB has harmonized its disclosure for RR0202-01 with CDP Climate Change Questionnaire, Carbon Disclosure Project (CDP) Questionnaire (2015) and REQ-04 of the Climate Disclosure Standards Board (CDSB) Framework for reporting environmental information & natural capital (2015).
				To date, the preferred source for GWP factors is the Intergovernmental Panel on Climate Change (IPCC) Fifth Assessment Report (2013).

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				For more information on SASB's alignment with other reporting frameworks please visit: http://www.sasb.org/approach/key-relationships/
RR0202	American Forestry & Paper Association (AF&PA)	Greenhouse Gas Emissions (RR0202-01)	Mobile Sources (.02): The Standard requires the inclusion of mobile source emissions as part of scope 1 emissions reporting, and provides examples of "marine, road, or rail". Typically, our members may quantify emissions from the operation of mobile sources at our facilities, including through the use of emission factors applied to total fuel consumption, but they do not quantify emissions from mobile sources that transport our products, for example marine vessels. Those latter emissions would be considered Scope 3 emissions for our members and considered scope 1 emissions for the transportation entity. The Standard should be revised to better make this distinction, and only require the former category in Scope 1 reporting. Further, the referenced protocols (e.g., CDP) provide some flexibility and allow companies not to report company-owned mobile emission sources in some circumstances (e.g., data are not available) with appropriate disclosure; the Standard should include the same flexibility.	Scope 1 emissions are defined by the World Resources Institute and the World Business Council on Sustainable Development (WRI/WBCSD) in The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard, Revised Edition, March 2004. Scope 3 emissions are not covered in the scope of SASB's metrics.
RR0202	American Forestry & Paper Association (AF&PA)	Greenhouse Gas Emissions (RR0202-02)	Biogenic carbon dioxide emissions We appreciate that SASB has recognized that biomass is considered "carbon neutral" under current regulatory regimes and the Standard seeks to elicit information on the role of biomass energy in the context of the "overall carbon cycle." SASB is correct that there is a discussion underway as to the degree to which those emissions are considered "carbon neutral," and EPA is undertaking an effort to assess biogenic CO2 emissions through development of its EPA draft Framework for Assessing Biogenic CO2 Emissions from Stationary Sources (Framework). As stated earlier, the vast majority of AF&PA members' biomass energy is sourced from residuals generated during operations. In the discussions among stakeholders about the carbon neutrality issue, there is a high degree of agreement around the carbon reduction benefits of using residuals for energy. Indeed, the revised draft EPA Framework has suggested that spent pulping	In response to this comment and other comments, SASB has withdrawn the metric " <i>Biogenic carbon dioxide emissions</i> " from its provisional standard. In the provisional standard, the registrant can discuss risks and opportunities associated with biomass energy in Note to RR0202-04, which states: <i>The registrant shall discuss risks and uncertainties associated with</i> <i>the use of biomass for energy.</i> .29 The registrant shall discuss risks and uncertainties associated with the use of biomass as an energy source, and it shall describe how it manages those risks. .30 Risks and uncertainties associated with the use of biomass as an energy source can include, but are not limited to: • Risks from air emissions (such as oxides from nitrogen and sulfur), including costs to comply with emissions restrictions and reputational impacts from violations. • Regulatory risks, including financial impacts associated with compliance with potential biogenic carbon dioxide regulations

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			liquors, the dominant type of biomass residuals used for energy by AF&PA members, may even be better than "carbon neutral." In its recent final Clean Power Plan regulating GHG emissions from power plants, EPA found that the use of certain forest-derived industrial byproducts are "likely to have minimal or no net atmospheric contributions of biogenic CO2 emissions, or even reduce such impacts, when compared with the alternative fate of disposal." Even the scientists that began the carbon neutrality debate have recognized the carbon reduction benefits of using biomass energy from residuals. Nonetheless, despite the widespread support for the carbon benefits of using biomass residuals for energy, the Standard should not require companies to report and discuss their biogenic CO2 emissions as is required by this metric. As SASB noted there are ongoing discussions in numerous venues	or reputational impacts associated with biomass failing to meet the definition of eligible renewable energy in a state Renewable Portfolio Standard • Sourcing risks, including reputational risks associated with a lack of transparency about whether purchased biomass was sustainably harvested.
			about the "carbon neutrality" of biomass energy. In light of these discussions, this metric should be removed in its entirety and companies would report their emissions using the protocols referenced in metric RR0202-01, which require that biogenic CO2 emissions be reported separately from fossil fuel GHG emissions.	
			We strongly recommend that SASB not use or reference the EPA Framework for several reasons. First, the Framework is not yet complete and EPA may not issue a final Framework for some time; therefore, methods for calculating the biogenic accounting factor (BAF) may change in the final version of the Framework. Second, there is significant stakeholder concern that the draft Framework is overly complex, relies on complicated and uncertain modeling, and may not be workable in practice. Finally, EPA has made clear that it is not committed to using the Framework in any particular policy setting.	
			Sources: EPA, Final Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units (Aug. 3, 2015), at 1161-62, available at	

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			http://www2.epa.gov/cleanpowerplan/clean-power-plan- existing-power-plants. EPA has stated that the biogenic CO2 emissions from the use of some types of biomass feedstocks such as residuals "will not inevitably result in increased levels of CO2 to the atmosphere, unlike CO2 emissions from combustion of fossil fuel. Id. at 1161. See for example, Dr. Timothy Searchinger and Ralph Heimlich "Avoiding Bioenergy Competition for Food Crops and Land." World Resources Institute (2015) (listing "black liquor from paper making" as "advisable" sources of biomass	
RR0202	American Forestry & Paper Association (AF&PA)	Greenhouse Gas Emissions (RR0202-03)	1. General Comments: While the metric that SASB is proposing is qualitative, it is very prescriptive in the requirements for what registrants shall report. AF&PA recommends dropping the word "shall" from the notes under the metric and maintaining the notes as examples of types of qualitative disclosure a company may consider.	When formulating accounting metrics for its disclosure topics, SASB considers the existing body of reporting standards, and it harmonizes and makes reference existing metrics whenever possible. Alignment with existing data collection schemes helps to ensure that the SASB standards are cost-beneficial to use. The metric RR0202-02 "Description of long-term and short- term strategy or plan to manage Scope 1 emissions, including emission-reduction targets and an analysis of performance against those targets" aligns with the CDSB Framework REQ- 01, "Management's environmental policies, strategy and targets" and the CDP Questionnaire (2015) CC3, "Targets and Initiatives."
RR0202	American Forestry & Paper Association (AF&PA)	Air Quality (RR0202-04)	1. Value of Metric: Generally we do not see the value of this air metric, as it does not provide stakeholders with useful information on which to compare the environmental performance of reporting companies. Many permit limits for these pollutants will depend on the location of the facility and whether it is in an attainment or non-attainment area, making them not comparable. Further, air emissions are a lagging indicator and since reporting companies are already highly regulated, there is little relevance to an investor having this information, so long as a company is in compliance. Accordingly, SASB should remove these metrics from the Standard.	SASB believes that disclosure of emissions of certain substances provides relevant information that be used to assess a company's exposure to regulatory risk. Emissions data can be normalized and compared with peers, where emissions intensity can be used to assess a company's exposure to regulations that require capital expenditures or increased pollution abatement operating costs.
RR0202	American Forestry & Paper Association (AF&PA)	Air Quality (RR0202-04)	2. NOx, SOx, VOCs, (PM), and HAPs: AF&PA appreciates that SASB is working though some of the technical issues associated with these metrics. Please see the NCASI comments regarding additional technical points to consider.	SASB thanks AF&PA and NCASI for its participation in the standards development process, and hopes to deepen engagement with your organizations as we continue to review and refine the provisional standards.

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RR0202	American Forestry & Paper Association (AF&PA)	Air Quality (RR0202-04)	3. Mobile Source Emissions (.18): Air emissions from mobile sources should be removed from the definition in Note (.18) as air emissions from mobile sources are not routinely measured and reported. In addition, the magnitude of emissions from mobile sources is negligible relative to air emissions from the industry's stationary combustion sources due to the high degree of outsourced transport by the industry.	<ul> <li>SASB has retained its guidance in line .13 that states that the registrant shall include emissions from both stationary and mobile sources in its air emissions disclosure. This approach to including mobile sources for air emissions and greenhouse gas emissions aligns with the GHG Protocol, which is referenced in line .02 of the standard under 01: Gross global Scope 1 emissions:</li> <li>.02 Scope 1 emissions are defined by the World Resources Institute and the World Business Council on Sustainable Development (WRI/WBCSD) in The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard, Revised Edition, March 2004 (hereafter, the "GHG Protocol").</li> <li>These emissions include direct emissions of GHGs from stationary or mobile sources that include, but are not limited to, equipment, production facilities, office buildings, and transportation (i.e., marine, road, or rail).</li> </ul>
RR0202	American Forestry & Paper Association (AF&PA)	Air Quality (RR0202-05)	<ol> <li>Value of Metric: We recommend SASB remove this metric from its standard due to it being duplicative of current SEC reporting requirements. According to Regulation S-K Item 103 already requires the disclosure of administrative or judicial proceedings arising from environmental laws if deemed to materially impact a company's operations. (See 17CFR § 229.103). SASB's reporting guidance states at note .25, "An incidence of noncompliance shall be disclosed regardless of whether it resulted in an enforcement action (e.g. fine, warning letter, etc.)". This disclosure guidance directly contradicts guidance from the SEC in reporting legal proceedings under Item 103 which states that companies shall disclose when:</li> <li>[A]n administrative or judicial proceedingarising under any Federal, State or local provisions that have been enacted or adopted regulating the discharge of materials into the environment or primary for the purpose of protecting the environment shall not be deemed "ordinary routine litigation incidental to the business" and shall be described if: A. Such proceeding is material to the business or financial condition of the registrant; B. Such proceeding involves primarily a claim</li> </ol>	In response to this comment and other comments, SASB has withdrawn metrics RR0202-05 "Number of incidents of non- compliance with air quality permits, standards, and regulations" from its provisional standard.

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			expenditures, deferred charges or charges to income and the amount involved, exclusive of interest and costs, exceeds 10 percent of the current assets of the registrant and its subsidiaries on a consolidated basis; or C. A governmental authority is a party to such proceeding and such proceeding involves potential monetary sanctions, unless the registrant reasonably believes that such proceeding will result in no monetary sanctions, or in monetary sanctions, exclusive of interest and costs, of less than \$100,000; provided, however, that such proceedings which are similar in nature may be grouped and described generically. (emphasis added) (17CFR § 229.103)	
RR0202	American Forestry & Paper Association (AF&PA)	Energy Management (RR0202-06)	General: As recognized in the description for this topic, the pulp and paper manufacturing industry is energy intensive and "energy can account for a significant share of operating costs." AF&PA members are very focused on reducing those costs and the better metric of financial exposure is one centered on purchased energy—not total energy. That is one of the reasons why AF&PA's Better Practices, Better Planet 2020 energy efficiency goal is based on purchased energy, not total energy. In making this choice, we were consistent with the EPA Energy Star program and the U.S. Department of Energy predecessor program to its current Better Buildings, Better Plants program. SASB should be consistent with these programs as well, to provide the most investment-relevant information for investors. A SASB metric of purchased energy would be consistent with how government agencies and companies within this industry already report energy usage. The description also discusses fossil fuels and states that a company's "ability to access alternative energy sources is likely to significantly impact its financial performance." Financial performance is just one of the reasons investors are interested in accessing information on the degree to which a company's fuel mix is fossil fuel-based or based on renewable or alternative energy; environmental issues are relevant as well. Therefore, AF&PA recommends that, RR0202-06 be broken into two separate metrics: "Total Purchased Energy	Regarding AF&PA's suggestion to have two metrics on: "Total Purchased Energy Consumed" and "Percentage of Total Energy Consumed That is Renewable," the second suggestion is already covered by parts (2) and (3) of RR0202- 04: <i>Total energy consumed, (1) percentage grid electricity, (2)</i> <i>percentage from biomass, and (3) percentage from other</i> <i>renewables.</i> Regarding the first suggestion on a separate metric for "Total Purchased Energy Consumed," SASB has retained the (1) <i>percentage grid electricity</i> portion of RR0202-04. This is meant to provide insight into which companies purchase energy from the grid (and thus could be impacted through increased costs passed on from utility companies or issues with the availability of energy). This metric more directly captures the relevant value impact and aspects of performance over which companies have direct control. For example, a company with significant purchases from the grid would benefit from energy efficiency efforts that help reduce operating costs, but would arguably have no direct control over GHG emissions from the utility that it purchases energy from. Furthermore, to address risks related to reliability or cost of purchased energy, companies may increase energy production on-site. In the provisional standard, SASB does not distinguish between purchased energy and energy produced by the registrant. However, SASB included line .28:

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			Consumed" and "Percentage of Total Energy Consumed That is Renewable." The "percentage of grid electricity" metric should be removed because it does not provide relevant information for investors, as the more critical issue is the amount of exposure to energy costs through purchase of all energy, not just electricity. Under this approach, note .27 would apply only to purchased energy, and note .29 would be removed.	.28 The registrant may choose to disclose the amount of energy that it generates in excess of what it consumes and is net metered through an electric utility.
RR0202	American Forestry & Paper Association (AF&PA)	Energy Management (RR0202-06)	Net Generation (.27) We appreciate the recognition of self- generated energy in the RPC Document for Resource Transformation, but we still maintain that purchased energy should be on a net basis, and that should be made explicit in the Standard. This would be consistent with most reporting protocols.	In response to this comment, SASB has included the following line in its provisional standard: .28 The registrant may choose to disclose the amount of energy that it generates in excess of what it consumes and is net metered through an electric utility.
RR0202	American Forestry & Paper Association (AF&PA)	Energy Management (RR0202-06)	Renewable Energy (.31) We suggest removing the reference to the Green-e standard as a requirement for an energy source to qualify as "renewable." Similarly, for the same reasons, the Low Impact Hydropower Institute standard should not be referenced—Federal Energy Regulatory Commission (FERC) licensing should be sufficient. Many companies already report (voluntarily or as required by governments) their renewable energy usage and do not use those standards in reporting. This could lead to confusion among stakeholders as to the discrepancies between the reports. As a drafting suggestion, we recommend that SASB change "and" to "or" in the second bullet point under note .32 which lists the certifications in order to make clear that there are three independent options for biomass renewable energy and that biomass materials are not required to meet all of the three options to qualify as renewable.	<ul> <li>SASB has retained the reference to Green-e and the Low Impact Hydrocarbon Institute, as these certifications provide a benchmark for high-quality renewable energy. SASB has revised the wording of this disclosure guidance to make it clear that for the purposes of this disclosure, energy from biomass sources needs to meet one of the three listed characteristics to be included in the scope of renewable energy. The revised guidance now states:</li> <li>.22 For the purposes of this disclosure, the scope of renewable energy from biomass sources is limited to the following:</li> <li>Energy from biomass sources that meets at least one of the following criteria:</li> <li>Certification to a third-party standard (e.g., Forest Stewardship Council, Sustainable Forest Initiative, Programme for the Endorsement of Forest Certification, or American Tree Farm System);</li> <li>Classification as an "eligible renewable" according to the Green-e Energy National Standard Version 2.5 (2014); or</li> <li>Eligibility for a state Renewable Portfolio Standard.</li> </ul>
RR0202	American Forestry & Paper Association (AF&PA)	Energy Management (RR0202-06)	SASB should also be aware that a company's energy mix could be considered confidential business information. Given the volatility and current changes of energy markets, businesses may consider detailed disclosure of their energy management practices to be proprietary information.	SASB notes that disclosure to it standards should be approached through the same lens as all corporate disclosure; a company should not disclose sensitive information, competitive information, or information that would otherwise compromise a company.

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RR0202	American Forestry & Paper Association (AF&PA)	Water Management (RR0202-07)	<ul> <li>(1) Total water withdrawn and (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress</li> <li>1. Total Water Withdrawn (.35): AF&amp;PA members are working to reduce water use in their mills by 12 percent an AF&amp;PA Better Practices, Better Planet 2020 sustainability goal and have achieved a 6% reduction in 2012 from the 2005 baseline. This demonstrates significant progress in reducing the water footprint of member mills. In addition, while the pulp and paper industry withdraws a significant amount of water for its manufacturing operations, it returns about 90% of the water withdrawn. The remainder is returned to the atmosphere or is in our products and byproducts. Thus, the industry's consumptive use of water is very low, which may be of more importance especially in water stressed areas, where removals of water from the watershed (i.e., water consumption), rather than merely water use, are of most concern. However, as discussed below, not all facilities have the ability to accurately measure the amount of water withdrawnand it is even more challenging to measure consumptive use.</li> </ul>	SASB believes that measuring water withdrawals can most accurately provide information that can be used to inform analysis of water-related operating risks. While a large portion of withdrawn water is returned to the environment in the industry, withdrawals are indicative of a company's exposure to operating risk from water scarcity, and can nonetheless affect local ecosystems or communities, with potential operational repercussions.
RR0202	American Forestry & Paper Association (AF&PA)	Water Management (RR0202-07)	The industry's water profile and the measurement challenges discussed in the NCASI comments previously filed illustrate some of the complications in choosing a water metric for sustainability reporting. This complexity becomes even more apparent when one considers that companies will be aggregating their individual mill water data and reporting on a global basis, while water sustainability issues clearly are very site-specific. Accordingly, we recommend that the Standard allow companies to choose appropriate water metrics for disclosure and require discussion of why the metric was chosen and other relevant information needed to explain the water sustainability performance of the company. This is another case where simply comparing metrics does not result in increasing an investor's understanding of the performance of different companies, and where the Standard should encourage Standard users to consider all of the information on	In the provisional standard, SASB has retained RR0202-05. (1) Total water withdrawn and (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress. SASB research indicates that the Pulp & Paper Products industry is among the most water intensive industries, and the (1) total water withdrawn portion of RR0202-05 indicates the magnitude of a company's reliance on water for its operations. In the introduction to the SASB standard, SASB acknowledges that there may be uncertainties and estimates when preparing sustainability disclosures. The introductions states: Uncertainty SASB recognizes that there may be inherent uncertainty when disclosing certain sustainability data and information. This may be related to variables such as the reliance on data from third-party reporting systems and technologies, or the

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			an issue provided by a company, as we noted in our General Comments above. However, should SASB not allow companies the freedom to choose the most accurate metric to report on their water use, we recommend that the Standard mandate reporting only of water use, as measured by effluent discharge, which is a good surrogate for a mill's water use. First, measuring and reporting of effluent discharge is standardized and common across the industry; water permits require this information to be reported to government agencies. It is a good surrogate because mills discharge most of what they withdraw. In contrast, there is no standard way to measure consumptive use in the industry (see below and NCASI comments). Second, steps commonly taken in the industry to reduce water use actually could result in greater amounts of water consumption—thereby providing an inaccurate picture of the water profile of a mill. Finally, we do not expect significant differences among mills' consumptive use of water, so there is little value to investors in making companies go through the time and expense of calculating and reporting this metric. These considerations and others led AF&PA to choose water use measured by effluent discharge as the basis for our Better Practices, Better Planet 2020 water goal, after specifically considering and rejecting a consumptive use goal. No matter which metric is chosen, SASB should provide specific information in the Notes acknowledging that not all facilities have the measurement capability to accurately measure the amount of water withdrawn. As discussed above, AF&PA uses effluent discharge volume as a surrogate for water use. In early drafts of standards, SASB included the following language, which supported this approach: "For registrant's operations that are not sub metered in a way that allows direct measurement of water use, estimation is acceptable and shall be disclosed as such." In the RPC document for Consumption I, SASB indicated it had removed that language, but pointed to its general guidanc	unpredictable nature of climate events. Where uncertainty around a particular disclosure exists, SASB recommends that the registrant should consider discussing its nature and likelihood. Estimates SASB recognizes that scientifically based estimates, such as the reliance on certain conversion factors or the exclusion of de minimis values, may occur for certain quantitative disclosures. Where appropriate, SASB does not discourage the use of such estimates. When using an estimate for a particular disclosure, SASB expects that the registrant discuss its nature and substantiate its basis.

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			comparability of the data reported." While that general guidance is helpful, we still believe that the specific text quoted about metering and measurement of water use is helpful as it explicitly acknowledges a specific issue for water measurements, in particular.	
RR0202	American Forestry & Paper Association (AF&PA)	Water Management (RR0202-07)	2. Consumptive Use (.37): As discussed above, we do not support mandatory reporting of consumptive use. If the metric is retained, however, we strongly recommend that the note include the following language: "There is no established methodology for measuring consumptive use in the pulp and paper industry. Accordingly, reporting companies should estimate consumptive use and describe the methodology they used to make the estimate." As discussed above regarding water withdrawals, we do not believe the general guidance on information regarding the "accuracy and comparability of the data reported" is sufficient.	The introduction to the standard under "Uncertainty" and "Estimates" states: SASB recognizes that there may be inherent uncertainty when disclosing certain sustainability data and information. This may be related to variables such as the reliance on data from third-party reporting systems and technologies, or the unpredictable nature of climate events. Where uncertainty around a particular disclosure exists, SASB recommends that the registrant should consider discussing its nature and likelihood. Estimates SASB recognizes that scientifically based estimates, such as the reliance on certain conversion factors or the exclusion of de minimis values, may occur for certain quantitative disclosures. Where appropriate, SASB does not discourage the use of such estimates. When using an estimate for a particular disclosure, SASB expects that the registrant discuss its nature
RR0202	American Forestry & Paper Association (AF&PA)	Water Management (RR0202-07)	3. Water Stressed Areas (.38): For the reasons discussed above, AF&PA does not support the use of private, non- consensus standards such as the World Resources Institute (WRI) Water Risk Atlas tool, Aqueduct. In addition, as discussed in more detail in the NCASI comments, the tool is designed to reflect water stress at a large regional level and it is simply incapable of accurately indicating water stress at a facility level. SASB should allow companies to describe the methods or tools they have used to determine whether their facilities are operating in water stressed areas. We understand SASB's desire to use a single tool to standardize and assist in the comparability of metrics as discussed in the RPC document. However, the limitations of the WRI tool are simply too great for it to be required as the only tool to disclose information on water risk. Further, Note .46 lists several other tools that could be used to assess risk in the	and substantiate its basis. SASB will retain reference to the WRI Water Risk Atlas Tool as it has determined this tool to be publicly available, free, widely used, and scientifically robust. Its standardized usage will provide comparability of SASB disclosures. Where SASB's criteria are aligned with another organization's SASB does not necessarily endorse the organization or its funder, but it aims to harmonize with established standards where appropriate and were criteria align with those that SASB has specified. SASB aims to allow for an "or equivalent" approach when disclosing its metrics in certain standards - though it has not included this language in the provisional Pulp & Paper Products standard. The continued use of alternate tools and inclusion of "private tools" is a topic that SASB will consider as part of the

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			context of the narrative discussion of water risks; those tools should be able to be listed in this Note as well.	"codification" phase of its standards development process in Q1 of 2016 (this phase includes a comprehensive review of all of SASB's provisionally released standards).
RR0202	American Forestry & Paper Association (AF&PA)	Water Management (RR0202-08)	<ul> <li>Discussion of water management risks and description of strategies and practices to mitigate those risks</li> <li>1. General Comments: SASB adopted our earlier suggestion to include a qualitative metric to allow companies the freedom to describe their unique water risks and their approaches for dealing with those risks. However, the metric in the Standard is qualitative yet prescriptive as it mandates a long list of issues companies must address. AF&amp;PA suggests dropping the word "shall" from the notes under the metric and maintaining the notes as examples of types of qualitative disclosure a company may consider.</li> </ul>	In metric RR0202-06 "Discussion of water management risks and description of strategies and practices to mitigate those risks", the registrant should discuss the water-related risks most relevant to its operations, whether those risks are related to water withdrawals, water consumption, and/or discharge of water to the environment. SASB does not intend it's metric to be prescriptive. Rather, SASB Standards provide companies with standardized sustainability metrics designed to communicate performance on industry level sustainability topics. When making disclosure on sustainability topics, companies can use SASB Standards to help ensure that disclosure is standardized and therefore decision-useful, relevant, comparable, and complete. Further information can be found in SASB's Conceptual Framework available here: http://www.sasb.org/approach/conceptual-framework/
RR0202	American Forestry & Paper Association (AF&PA)	Water Management (RR0202-08)	2. Risks Associated with Discharge of Wastewater (.43) The note seeks information on the "ability to eliminate existing and emerging pollutants of concern." We suggest SASB eliminate this note as the term is undefined. In any event, it may not be necessary to "eliminate" the pollutant from the discharge—simply operating in compliance with a permit limit would be adequately protective. At a minimum the term should be "eliminate or reduce as needed."	In metric RR0202-06 "Discussion of water management risks and description of strategies and practices to mitigate those risks", the registrant should discuss the water-related risks most relevant to its operations, whether those risks are related to water withdrawals, water consumption, and/or discharge of water to the environment. If the discharge of wastewater is not relevant to the registrant's operations, it should not discuss them in this discussion and analysis. SASB recognizes that each company is ultimately responsible for determining what information should be disclosed within the context of Regulation S-K and other guidance.
RR0202	American Forestry & Paper Association (AF&PA)	Water Management (RR0202-09)	Number of incidents of non-compliance with water quality permits, standards and regulations Because of the ambiguity and different thresholds for what defines a non-compliance incident in different jurisdictions, reporting a sheer number of non-compliance incidents does not capture the severity or societal, environmental and economic impacts from such incidents. At least in the U.S., and other countries that have a mature and sophisticated	In response to this comment and other comments, SASB has withdrawn metric RR0202-09 " <i>Number of incidents of non- compliance with water quality permits, standards, and</i> <i>regulations</i> " from its provisional standard.

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			regulatory and enforcement system, facilities should only be required to report incidents of non-compliance with their water permit limits that result from the conclusion of formal administrative or judicial enforcement proceedings, and that a company determines is material according to SEC rules (see discussion under Air Quality metric). Warning letters, citizen complaints, etc. are simply allegations that may or may not reflect actual non-compliance. Therefore, note .51 should be removed.	
RR0202	American Forestry & Paper Association (AF&PA)	Water Management (RR0202-09)	TMDLs (.50): Point source dischargers do not comply with a total maximum daily load (TMDL). Instead, TMDL requirements are incorporated into water permits through effluent limitations. Therefore, there is no need to mention TMDLs at the end of note .50.	SASB has withdrawn metric RR0202-09 "Number of incidents of non-compliance with water quality permits, standards, and regulations" from its provisional standard.
RR0202	American Forestry & Paper Association (AF&PA)	Wood & Fiber Sourcing and Recovery (RR0202-10)	Percentage of wood fiber purchased (1) from third-party certified forestlands, by standard, and (2) percentage meeting other fiber sourcing standards, by standard 1. Responsible sourcing standards for wood-based materials include the following, or equivalent (.53): As discussed above, the SASB standards should not be referencing private standards, as it is not up to SASB to determine which standards demonstrate responsible forest management practices. If, however, the Standard does list responsible sourcing standards, the American Tree Farm System (ATFS) also should be included. While the Standard does also include the phrase "or equivalent" which clearly would include ATFS, there is no reason to include the other major certification programs in the U.S. and not to include ATFS, which also is a major U.S. certification program. In addition, SASB has listed the ATFS certification in the Containers and Packaging Provisional Standard.	<ul> <li>SASB recognizes that third-party certifications and standards in the Pulp &amp; Paper Products industry may be created with varying levels of rigor and stakeholder participation. SASB does make reference to multiple standards, frameworks, and industry groups, when the criteria in a standard aligns with the intent of what a SASB metric intends to capture.</li> <li>SASB does not give preference to any third-party standard and does not necessarily endorse the organizations referenced in the provisional standard or their funders, but does aim to harmonize with established standards where appropriate.</li> <li>SASB has made the suggested revision to include the American Tree Farm standard. The revised line of disclosure guidance now reads:</li> <li><i>Third-party forest management certifications include, but are not limited to, those promulgated by the following organizations (or the equivalent):</i></li> <li><i>American Tree Farm System (ATFS) (i.e., ATFS Certification) -Forest Stewardship Council (FSC) (i.e., FSC Forest Management and Chain of Custody certifications)</i></li> <li><i>Programme for the Endorsement of Forest Certification (PEFC) (i.e., PEFC Chain of Custody certifications)</i></li> <li><i>Forest certification systems endorsed by the PEFC</i></li> <li><i>Sustainable Forest Initiative (SFI) (i.e., SFI Forest Management and Chain of Custody certifications)</i></li> </ul>

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RR0202	American Forestry & Paper Association (AF&PA)	Wood & Fiber Sourcing and Recovery (RR0202-10)	2. Certification Systems (.53): To be consistent with FSC and PEFC, change SFI Chain of Custody labels to Chain of Custody Certification. PEFC should also read Chain of Custody Certification instead of just PEFC Certified.	<ul> <li>SASB has made the suggested revision to the standard.</li> <li>The revised line of disclosure guidance now reads: <ul> <li>Third-party forest management certifications include, but are not limited to, those promulgated by the following organizations (or the equivalent):</li> <li>American Tree Farm System (ATFS) (i.e., ATFS Certification)</li> <li>Forest Stewardship Council (FSC) (i.e., FSC Forest Management and Chain of Custody certifications)</li> <li>Programme for the Endorsement of Forest Certification (PEFC) (i.e., PEFC Chain of Custody certifications)</li> <li>Forest certification systems endorsed by the PEFC</li> <li>Sustainable Forest Initiative (SFI) (i.e., SFI Forest Management and Chain of Custody certifications)</li> </ul> </li> </ul>
RR0202	American Forestry & Paper Association (AF&PA)	Wood & Fiber Sourcing and Recovery (RR0202-10)	3. Multiple Systems (.55) and (.58): The Standard should allow a company to report if it has multiple certifications. SASB shouldn't discourage an organization from reporting their commitment to all forest certification standards, and instead should reward those organizations that have put time and resources into achieving certification under multiple Standards.	<ul> <li>In lines .47 and .50 of the standard, the registrant has the opportunity to discuss if they have multiple certifications for their wood fiber:</li> <li>.47 The registrant shall disclose the percentage of the total wood-fiber-based raw materials from third-party certified forestlands that is certified to each standard (e.g., FSC Chain of Custody, SFI Chain of Custody, and PEFC Chain of Custody).</li> <li>The registrant shall calculate the percentage of wood-fiber-based raw materials from third-party certified to each standard as the amount of wood-fiber-based raw materials that is third-party certified to the respective standard divided by the total amount of wood fiber sourced by the registrant.</li> <li>Where wood-fiber is certified to multiple third-party certifications, the registrant shall include the amount of such fiber in its calculations for each relevant certification.</li> </ul>
				<ul> <li>.50 The registrant shall disclose the percentage of wood fiber that meets each sourcing standard (e.g., FSC Controlled Wood, SFI Fiber Sourcing Standard, PEFC Controlled Sources, etc.).</li> <li>Where wood-fiber meets multiple sourcing standards, the registrant shall include the amount of such fiber in its calculations for each relevant sourcing standard.</li> </ul>

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RR0202	American Forestry & Paper Association (AF&PA)	Wood & Fiber Sourcing and Recovery (RR0202-10)	4. Multiple Standards (.56): To be consistent with FSC and PEFC, delete "(certified forest content)" after SFI Chain of Custody. PEFC should also read PEFC Chain of Custody.	SASB has made the suggested revision to the standard. The revised line of disclosure guidance now reads: .47 The registrant shall disclose the percentage of the total wood-fiber-based raw materials from third-party certified forestlands that is certified to each standard (e.g., FSC Chain of Custody, SFI Chain of Custody, and PEFC Chain of Custody).
RR0202	American Forestry & Paper Association (AF&PA)	Wood & Fiber Sourcing and Recovery (RR0202-10)	5. Wood From Non-Certified Forest Lands (.57): We recommend adding "but not limited to" after "including" before listing the different fiber sourcing standards. Also, in the first bullet, delete the word "certified" in front of SFI Fiber Sourcing and in the third bullet, add SFI Recycled Label.	<ul> <li>SASB has made the suggested revision to the standard.</li> <li>The revised line of disclosure guidance now reads: <ul> <li>.48 The registrant shall disclose the percentage of its total wood-fiber-based raw materials that is sourced from non-third-party certified forestlands but meets other fiber sourcing standards, including, but not limited to:</li> <li>Responsible fiber sourcing standards (e.g., SFI Fiber Sourcing Standard);</li> <li>Controlled wood standards (e.g., FSC Controlled Wood Certification, PEFC Controlled Wood);</li> <li>Recycled fiber standards that include post- and preconsumer reclaimed material (e.g., PEFC Controlled Sources, FSC Recycled Label, and SFI Recycled Label); and</li> <li>Any other due diligence standards that cover sourcing requirements for fiber from non-certified forestlands.</li> </ul> </li> </ul>
RR0202	American Forestry & Paper Association (AF&PA)	Wood & Fiber Sourcing and Recovery (RR0202-10)	6. Multiple Certifications (.58): The Standard should allow a company to report if they have multiple certifications. SASB shouldn't discourage an organization from reporting their commitment to all forest certification standards, and instead should reward those organizations that have put time and resources into multiple Standards.	<ul> <li>In lines .47 and .50 of the standard, the registrant has the opportunity to discuss if they have multiple certifications for their wood fiber:</li> <li>.47 The registrant shall disclose the percentage of the total wood-fiber-based raw materials from third-party certified forestlands that is certified to each standard (e.g., FSC Chain of Custody, SFI Chain of Custody, and PEFC Chain of Custody).</li> <li>The registrant shall calculate the percentage of wood-fiber-based raw materials that is third-party certified to the respective standard divided by the total amount of wood fiber sourced by the registrant.</li> <li>Where wood-fiber is certified to multiple third-party certifications, the registrant shall include the amount of such fiber in its calculations for each relevant certification.</li> </ul>

Industry SICS number	Name and/or Affiliation of Respondent	Topic (Metric Code)	Comment Excerpts	SASB Response
				<ul> <li>.50 The registrant shall disclose the percentage of wood fiber that meets each sourcing standard (e.g., FSC Controlled Wood, SFI Fiber Sourcing Standard, PEFC Controlled Sources, etc.).</li> <li>Where wood-fiber meets multiple sourcing standards, the registrant shall include the amount of such fiber in its calculations for each relevant sourcing standard.</li> </ul>
RR0202	American Forestry & Paper Association (AF&PA)	Wood & Fiber Sourcing and Recovery (RR0202-10)	7. Identification of Certifications (.59): The term "PEFC Recycled" should be changed to "PEFC Controlled Sources."	SASB has made the suggested revision to the standard. The revised line of disclosure guidance now reads: .50 The registrant shall disclose the percentage of wood fiber that meets each sourcing standard (e.g., FSC Controlled Wood, SFI Fiber Sourcing Standard, PEFC Controlled Sources, etc.).
RR0202	American Forestry & Paper Association (AF&PA)	Wood & Fiber Sourcing and Recovery (RR0202-10)	8. Criteria for Standards (.60): As a drafting suggestion, change "meets" to "includes". The second and third bullets are ambiguous and should be removed from this list. Further, forest management, including logging, can have a positive impact on a number of threatened and endangered species, which may not be obvious to those interpreting this information. The fourth and fifth bullets underneath this note are also likely to be considered proprietary business information by companies providing fiber and should be removed from the list. GMOs, pesticides, and other chemicals are already addressed in forest certification systems in depth, at this high a level the information provided would be useful for investors.	<ul> <li>SASB has incorporated the suggested revision of the word "includes". The revised line of disclosure guidance states: ".52 The registrant shall disclose how it verifies that its non- certified fiber includes criteria for the following:"</li> <li>SASB research has identified that logging in areas of protected conservation status and endangered species habitat presents a unique risk to forestry and logging operators. Because these areas as well as the forestry management and harvesting practices of suppliers and the use of genetically modified organisms (GMOs), pesticides, or other chemicals in forests are included as criteria in third-party forest management standards, SASB has retained these criteria in the disclosure guidance.</li> <li>SASB notes that disclosure should be approached through the same lens as all corporate disclosure; a company should not disclose sensitive information, competitive information, or</li> </ul>
RR0202	American Forestry & Paper Association (AF&PA)	Wood & Fiber Sourcing and Recovery (RR0202-11)	Amount of recycled and recovered fiber procured General: We appreciate SASB's recognition in the "Description" and elsewhere of the various attributes of virgin fiber and recovered fiber and that there are tradeoffs in using	information that would otherwise compromise a company. SASB recognizes there may be many tradeoffs considered by Pulp & Paper Products companies when choosing whether to source virgin fiber versus recovered fiber. SASB revised the Note to RR0202-08 to:

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			one type of fiber or another. However, there seems to be a faulty assumption underlying the Description and the metric on "amount of recycled and recovered fiber procured." Specifically, the discussion seems to assume that companies start with a blank slate when making fiber purchasing decisions and weigh a whole host of factors when deciding to manufacture their products using virgin or recovered fiber or when deciding the percentage of each fiber to be used. In reality, while it is true numerous factors are involved in the decision, mill capabilities and customer requirements will always be the most important factors. Further, the World Business Council for Sustainable Development's Forest Solutions Group recently released a report "Facts & Trends: Fresh & Recycled Fiber Complementarity" which examines the trends in the use of virgin and recycled fiber and the various factors affecting the decision to use one or the other or both. The report recommends taking a holistic view of the wood fiber system and states that "Comparing the environmental attributes of fresh and recycled fibers requires artificially separating the integrated wood fiber system into two parts – a fresh fiber system and a recovered fiber system. Estimating the environmental attributes of each system requires that the environmental attributes of each system. Therefore the two systems (virgin and recycled) really should be viewed holistically together as they actually are components of one overall wood fiber system. Source: World Business Council for Sustainable Development. "Facts & Trends: Fresh & Recovered Fiber Complementarity" http://www.wbcsd.org/Pages/EDocument/EDocumentDetails.a spx?ID=16502&NoSearchContextKey=true In light of the above discussion, we recommend the metric be removed and that the Standard simply require a qualitative discussion of steps companies are taking to ensure the sustainability of their fiber supply-both virgin and recovered fiber. That discussion could cover topics such as efforts to	Note to RR0202-08—The registrant shall discuss its strategy to incorporate environmental lifecycle analyses into decisions to source recycled and recovered fiber versus virgin fiber. SASB only includes environmental lifecycle tradeoffs in the scope of RR0202-08 because other sourcing factors that Pulp & Paper Products companies may take into consideration may be important factors in business decision making, but they are not related to the sustainability factors that are within the scope of topics that the SASB addresses in its standard-setting activities. Further information on SASB's standard-setting process can be found in SASB's Conceptual Framework available here: http://www.sasb.org/approach/conceptual- framework/ The registrant may choose to provide further context into its sourcing decisions if it feels that exclusion of the information would alter the total mix of information made available to the reasonable investor. However, these considerations are outside the scope of this note. The actions companies are taking to ensure the sustainability of their fiber supply, as suggested, is covered under the Note to RR0202-07, which states: .51 The registrant shall discuss its due diligence practices for fiber that is not from certified forestlands or certified to other fiber sourcing standards and its policies to verify the forestry management and harvesting practices of suppliers, which may include codes of conduct, audits, and/or contracts, among others.

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			combat illegal logging, steps taken to comply with the Lacey Act, etc. as discussed in our comments on Note (.60), above.	
RR0202	American Forestry & Paper Association (AF&PA)	Wood & Fiber Sourcing and Recovery (RR0202-12)	Discussion of strategy to manage opportunities and risks to wood and fiber sourcing presented by climate change We recommended deleting this metric from this Standard. While some of the information sought may have been appropriate for the Standard when it covered both forestry/logging and pulp and paper products, we do not believe that the information sought is readily available to pulp and paper companies. Indeed Section II.3.d, of the Standards Outcome Report (pages 22-24) recognizes that it would be challenging for pulp and paper companies to report on a similar metric. For this and a number of other reasons discussed in the Report, SASB concluded that this kind of information relating to climate change and forestlands should only be retained as a disclosure requirement in the Forestry & Logging Standard. Therefore, this metric should be removed from the Pulp and Paper Products Standard.	In response to this comment and other comments, SASB has withdrawn metric RR0202-12: "Discussion of strategy to manage opportunities and risks to wood and fiber sourcing presented by climate change" from its provisional standard.

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RR0202	National Council for Air and Stream Improvement, Inc. (NCASI)	Air Quality (RR0202-04)	.19 The registrant shall disclose emissions released to the atmosphere by emissions type. Substances include: -Oxides of sulfur (SO2 and SO3) reported as SOX The proposed standard requires the reporting of SOX emissions. SOX is defined as the sum of SO2, SO3 and H2SO4. Except for plants that manufacture sulfuric acid, most source emissions of SOx are the result of combustion of fuels which contain sulfur. It is well documented that no more than 2-3% of SO2 converts to SO3/H2SO4 in combustion sources. In general, most pulp and paper facilities (and indeed, most sectors with combustion units) do not conduct tests for SO3/H2SO4 emissions from their sources. Thus, if facilities are required to report SOx emissions for SASB purposes, they either would need to use emission factors or to conduct expensive source tests. However, the uncertainty in any stack measurement is greater than 2-3%; therefore, the reporting of SO3/H2SO4 as part of SOx emissions would not add to the understanding of total SOx reporting to SO2 to make the process of reporting much simpler without affecting the overall significance of the data. -Particulate matter (PM); reported as the sum of PM10 and PM2.5, or all particulates less than 10 micrometers in diameter Currently, pulp and paper facilities are required to report their filterable PM emissions in three different forms – total particulate matter (PM), particulate matter with aerodynamic diameter equal to or less than 10 micrometers (PM10) and particulate matter with aerodynamic diameter equal to or less than 2.5 micrometers (PM2.5). In addition, under certain regulations, material in	SASB thanks NCASI for the extensive technical feedback on emissions factors. SASB will consider this important feedback during the consultation phase during 2016.

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number	Respondent		the stack gas which may condense at ambient conditions is included in the definition of PM. There are significant differences and limitations to the methods that are used to measure these forms of PM. These differences result in facilities obtaining and providing different information regarding source PM emissions. Thus, it is important to understand these differences before choosing the PM parameter required to be reported under the Pulp & Paper Standard for SASB purposes. The most widely used form of PM which is tested and reported by pulp and paper sources is total filterable particulate matter. Total filterable PM is almost universally measured using EPA Method 5, although outside of the US some jurisdictions have given their own number to this method. Method 5 measures the PM that is captured on a filter maintained at a defined temperature outside the stack. Total filterable PM is also referred to as "front-half catch" or just "total PM." Some jurisdictions require facilities to also measure the material that during sampling collects in the impingers that are located downstream from the filter in the PM sampling train and include that in the definition of total PM. Thus, depending upon jurisdiction, facilities may report different information when reporting total PM. However, if "total filterable PM" reporting is required, all facilities will report data which can be compared to each other. In addition to total filterable PM or total PM, some jurisdictions require facilities to report their PM10 emissions. In the US, the current definition of PM10 includes both filterable and condensable components. This is, however, not the case in all countries. For example, Canada does not require condensable PM to be included when reporting PM10. Thus, unless PM10	
			reporting specifies filterable PM10 only, different data are	

Industry SICS	Name and/or Affiliation of	Topic (Metric Code)	Comment Excerpts	SASB Response
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			likely to be reported by facilities in	
			different countries.	
			The current method for measuring filterable PM10 is EPA	
			Method 201A. Method 201A is,	
			however, not applicable to sources with wet control devices such as scrubbers. For such sources,	
			US EPA recommends that facilities report their total filterable	
			PM measured with Method 5 as	
			filterable PM10. This results in overstating the filterable PM10	
			emissions from most sources with wet control devices and will	
			not allow one to compare filterable PM10 emissions from a	
			dry	
			source to PM10 emissions from a wet source. In addition to	
			the challenges associated with	
			interpreting and comparing source filterable PM10 emissions	
			data, the current EPA method for	
			measuring condensable PM, Method 202, is subject to	
			interferences which cause a positive bias	
			to the reported results. To reduce the bias, US EPA revised	
			Method 202 in December 2010.	
			Since the method bias has not totally been eliminated, it is highly likely that Method 202 will	
			undergo changes in the future to address its limitations. These	
			method-related issues will make it	
			difficult to interpret the differences in PM10 emissions	
			between sources or for a particular source	
			over a period of time.	
			The discussion above for PM10 also applies to PM2.5. Method	
			201A, which is also used to	
			measure PM2.5, is not applicable to wet sources. In the US,	
			facilities with wet control devices are	
			required to also report their total filterable PM emissions	
			measured with Method 5 as their	
			filterable PM2.5 emissions. Thus, under the current conditions,	
			no meaningful comparison can be	
			made between filterable PM2.5 emissions from dry- and wet- controlled sources due to the	
			inherent differences between the methods of measuring such	
			emissions. Comparison between	
			sources located in different countries would similarly be	
			Sources located in different countries would similarly be	

Industry SICS number	Name and/or Affiliation of Respondent	Topic (Metric Code)	Comment Excerpts	SASB Response
number	Respondent		challenging due to differences in the definition on PM2.5. Given the uncertainties associated with the measuring and reporting of PM10, PM2.5 and condensable PM, it seems logical to require only the reporting of "total filterable PM" to SASB. This would put all source reporting on a common basis and allow for a comparison of PM emissions between sources equipped with different types of control devices or for a given source over a period of time.	

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RR0202	National Council for Air and Stream Improvement, Inc. (NCASI)	Energy Management (RR0202-06)	.03 The registrant shall disclose purchased grid electricity consumption as a percentage of its total energy consumption The US pulp and paper industry generates substantial amounts of electricity for sale through the efficient use of onsite combined heat and power systems. Total sales of electricity from the US paper industry were 8,152 million kWh in 2010.1 The ability to credit sold electricity in .03 should be considered.	In the provisional standard, SASB does not distinguish between purchased energy and energy produced by the registrant. However, SASB included line .28: .28 The registrant may choose to disclose the amount of energy that it generates in excess of what it consumes and is net metered through an electric utility.

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nal Council for nd Stream ovement, Inc. (SI)	Water Management (RR0202-07)	.35 The registrant shall disclose the amount of water (in thousands of cubic meters) that was withdrawn from all sources, where: - Water sources include surface water (including water from wetlands, rivers, lakes, and oceans), groundwater, rainwater collected directly and stored by the organization, wastewater obtained from other entities, municipal water supplies, or other water utilities. Water withdrawals at pulp and paper facilities are sometimes not measured or are not measured with the same degree of accuracy as water discharges, which are required to be measured with calibrated meters and reported pursuant to an NPDES water discharge permit. For the US pulp and paper industry it is estimated that 90% of total water inputs to a mill are returned to surface waters (NCASI 2009) meaning that, for the US pulp and paper industry, water withdrawals and water discharges closely correspond. The same principal is true for pulp and paper mills in Canada and Europe, given their highly similar manufacturing processes. The standard should explicitly allow for estimated water discharge values to be used to satisfy this reporting requirement. .37 The registrant shall disclose the amount of water (in thousands of cubic meters) that was consumed in its operations, where water consumption is defined as: - Water that evaporates during withdrawal, usage, and discharge; - Water that does not otherwise return to the same catchment area from which it was withdrawn, such as water returned to another catchment area or the sea.	SASB believes that measuring water withdrawals can most accurately provide information that can be used to inform analysis of water-related operating risks. While a large portion of withdrawn water is returned to the environment in the industry, withdrawals are indicative of a company's exposure to operating risk from water scarcity, and can nonetheless affect local ecosystems or communities, with potential operational repercussions. In the provisional standard, SASB has retained RR0202-05. (1) Total water withdrawn and (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress. SASB research indicates that the Pulp & Paper Products industry is among the most water intensive industries, and the (1) total water withdrawn portion of RR0202-05 indicates the extent of a company's reliance on water for its operations. Water consumption is similarly an important indicator of a company's impact on water resources that are an essential input during value creation. In the introduction to the SASB standard, SASB acknowledges that there may be uncertainties and estimates when preparing sustainability disclosures, including for water management topics. The introductions states: Uncertainty SASB recognizes that there may be inherent uncertainty when disclosing certain sustainability data and information. This may be related to variables such as the reliance on data from third-party reporting systems and technologies, or the unpredictable nature of climate events. Where uncertainty around a particular disclosure exists, SASB recommends that the registrant should consider discussing its nature and likelihood. Estimates SASB recognizes that scientifically based estimates, such as the reliance on certain conversion factors or the exclusion of
i or n or	ation of ondent nal Council for nd Stream ovement, Inc.	ation of Code) ondent nal Council for Water nd Stream Management vement, Inc. (RR0202-07)	ation of ondentCode)al Council for d Stream wement, Inc.Water Management (RR0202-07).35 The registrant shall disclose the amount of water (in thousands of cubic meters) that was withdrawn from all sources, where: - Water sources include surface water (including water from wetlands, rivers, lakes, and oceans), groundwater, rainwater collected directly and stored by the organization, wastewater obtained from other entities, municipal water supplies, or other water utilities. Water withdrawals at pulp and paper facilities are sometimes not measured or are not measured with the same degree of accuracy as water discharges, which are required to be measured or user on the US pulp and paper industry it is estimated that 90% of total water inputs to a mill are returned to surface water (inclustry water withdrawals and water discharge closely correspond. The same principal is true for pulp and paper mills in Canada and Europe, given their highly similar manufacturing processes. The standard should explicitly allow for estimated water discharge values to be used to satisfy this reporting requirement. .37 The registrant shall disclose the amount of water (in thousands of cubic meters) that was consumed in its operations, where water consumption is defined as: - Water that evaporates during withdrawal, usage, and discharge; - Water that is directly or indirectly incorporated into the product or service; - Water that is directly or indirectly incorporated into the product or service; - Water that does not otherwise return to the same catchment area for which it was withdrawn, such as water returned to another catchment area withdrawn, such as water returned to another catchment area withdrawn, such as water returned to another catchment area withdrawn, such as water returned to another catchment are

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			around 90% of consumptive water losses at pulp and paper facilities are typically not measured. NCASI has developed the NCASI Water Consumption Tool to facilitate mill specific estimates of water consumption at pulp and paper facilities. The NCASI Water Consumption Tool calculates mill-specific estimates of water consumption based upon measured or estimable department level mill process information. Requiring the reporting of a quantitative estimate of water consumption will add a substantial reporting burden to the pulp and paper industry that is currently not required within any other disclosure program. For complex, integrated pulp and paper facilities the time requirements to develop a detailed estimate of water consumption, even with the NCASI Water Consumption Tool to facilitate calculations, can be in the 20 to 40 person hour range. The standard should therefore make reference to published estimates of water consumption (e.g., NCASI 2009) rather than requiring site-specific water consumption values to be used to satisfy this reporting requirement.	use of such estimates. When using an estimate for a particular disclosure, SASB expects that the registrant discuss its nature and substantiate its basis. In light of extensive comments on the topic, SASB will re- examine the cost-benefit and comparability of the water withdrawal and water consumption metrics during the consultation phase in 2016.

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Respondent			
Respondent National Council for Air and Stream Improvement, Inc. (NCASI)	Wood & Fiber Sourcing & Recovery (RR0202-11)	<ul> <li>0.65 The registrant shall discuss any environmental lifecycle tradeoffs between use of recycled and recovered fiber versus virgin fiber in its products, where:</li> <li>An environmental lifecycle tradeoff is defined as an environmental benefit or consequence of sourcing one type of fiber over another.</li> <li>Environmental lifecycle benefits from using recycled and recovered fiber can include, but are not limited to, reducing the need for deforestation, lower</li> <li>GHG emissions from paper in landfills and reducing landfill waste.</li> <li>Environmental lifecycle consequences of using recycled and recovered fiber canse of using recycled and recovered fiber can include increased resource consumption and air emissions during the transportation and processing of fiber.</li> <li>NCASI recently compiled available scientific and technical literature into a report related to environmental lifecycle tradeoffs between recovered and virgin (or "fresh") fiber. This material has been published by the World Business Council for Sustainable Development (WBCSD 2015)</li> <li>(see attached document). The report notes that some of the environmental and resource implications of increased paper recovery and utilization seem relatively clear on the surface. Increasing paper recovery, for instance, reduces the amounts of used paper requiring disposal. Increasing recovered fiber utilization reduces demand for fresh fiber. When examined carefully, however, it becomes clear that the effects of paper recovery and utilization on environmental quality and resource depletion are complex. Many studies have been undertaken over the last</li> </ul>	<ul> <li>SASB recognizes there may be many tradeoffs considered by Pulp &amp; Paper Products companies when choosing whether to source virgin fiber versus recovered fiber.</li> <li>SASB revised the Note to RR0202-08 to: Note to RR0202-08—The registrant shall discuss its strategy to incorporate environmental lifecycle analyses into decisions to source recycled and recovered fiber versus virgin fiber.</li> <li>SASB includes environmental lifecycle tradeoffs in the scope of RR0202-08 because other sourcing factors that Pulp &amp; Paper Products companies may take into consideration may be important factors in business decision making, but they are not related to the sustainability factors that are within the scope of topics that the SASB addresses in its standard-setting activities. Further information on SASB's standard-setting process can be found in SASB's Conceptual Framework available here: http://www.sasb.org/approach/conceptual-framework/</li> <li>The registrant may choose to provide further context into its sourcing decisions if it feels that exclusion of the information would alter the total mix of information made available to the reasonable investor. However, these considerations are outside the scope of this note.</li> <li>SASB will revisit the inclusion of this metric during the consultation phase in 2016, and appreciate NCASI's provision of additional research resources.</li> </ul>
	Affiliation of Respondent National Council for Air and Stream Improvement, Inc.	Affiliation of RespondentCode)National Council for Air and StreamWood & Fiber Sourcing & Recovery	Affiliation of RespondentCode)National Council for Air and Stream Improvement, Inc. (NCASI)Wood & Fiber Sourcing & Recovery (RR0202-11)0.65 The registrant shall discuss any environmental lifecycle tradeoffs between use of recycled and recovered fiber versus virgin fiber in its products, where: - An environmental lifecycle tradeoff is defined as an environmental benefit or consequence of sourcing one type of fiber over another Environmental lifecycle benefits from using recycled and recovered fiber can include, but are not limited to, reducing the need for deforestation, lower GHG emissions from paper in landfills and reducing landfill waste. - Environmental lifecycle consequences of using recycled and recovered fiber can include increased resource consumption and air emissions during the transportation and processing of fiber.NCASI recently compiled available scientific and technical literature into a report related to environmental lifecycle tradeoffs between recovered and virgin (or "fresh") fiber. This material has been published by the World Business Council for Sustainable Development (WBCSD 2015) (see attached document). The report notes that some of the environmental and resource implications of increased paper recovery, and utilization seem 

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			many environmental trade-offs and well as a variety of co-benefits (see, for instance, EEA 2005, Finnveden and Ekvall 1998, NCASI 2011, NCASI 2013, Villanueva and Wenzel 2007, Wenzel and Villanueva 2006). In many studies, recycling is assumed to displace fresh fiber and it is often assumed that the reduced demand for fresh fiber allows forest carbon stocks to increase as harvesting is reduced. In reality, the effects of increased use of recovered fiber on forest carbon stocks are unclear. In some locations, especially where wood-producing land is privately owned, a reduction in demand for wood increases the likelihood that the land will be converted from forest to other more profitable uses (Hardie et al. 2000, Lubowski et al. 2008). While it is possible to draw several general conclusions about the effects of recycling as an alternative to other end-of-life options, it is more difficult to compare the environmental attributes of fresh and recycled fiber and to understand the effects of increased use of recycled fiber in specific products. Comparing the environmental attributes of fresh and recycled fibers requires artificially separating the integrated wood fiber system into two parts – a fresh fiber system and a recovered fiber system. Estimating the environmental attributes of each system requires that the environmental releases from the wood fiber material life cycle be divided between the fresh and recycled fiber systems. In life cycle assessment, this is usually done using decision rules called allocation methods. There is no single correct allocation approach for studies of systems involving paper recycling, though they frequently reflect value judgments made by the analyst, and yet allocation decisions can significantly affect the results of such studies (Finnveden 2000, NCASI 2012, Cederstrand et al.	

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			2014).	
			Due to all the factors discussed above, although the environmental benefits of recycling are generally recognized, it is very difficult to determine whether the use of recycled fiber within a specific product will lead to measurable environmental benefits. Therefore, we suggest that this metric (RR0202-11. 0.65) be deleted from the Pulp & Paper Standard.	

## Biofuels

Industry SICS number	Name and/or Affiliation of Respondent	Topic (Metric Code)	Comment Excerpts	SASB Response
RR0101	Agnes de Jesus (Energy Development Corporation)	Air Quality	<ol> <li>On air quality         <ol> <li>Since the global concern is climate change, I suggest we include the measurement of CO2 and methane in this scope.</li> </ol> </li> </ol>	SASB's evidence-based research process and stakeholder consultation did not determine that disclosure of greenhouse gas emissions is likely to constitute material information for most companies within the Biofuels industry.
RR0101	Agnes de Jesus (Energy Development Corporation)	Air Quality	b) On the disclosure on non-compliance, can we ask the enforcement action of the authorities? It will be an indicator to the investor of the gravity of the violation.	Enforcement actions are included in the scope of SASB's definition of a non-compliance: .07 The scope of disclosure includes incidents governed by federal, state, and local statutory permits and regulations including, but not limited to, the Clean Air Act and other state or local air quality legislation. .08 An incident of non-compliance shall be disclosed regardless of whether it resulted in an enforcement action (e.g., fine, warning letter, etc.).
RR0101	Agnes de Jesus (Energy Development Corporation)	Air Quality	c) Please add cases filed for the violation and cost awarded or demanded by the complainant.	SASB's evidence-based research process and stakeholder engagement efforts to-date did not indicate that disclosure of cases filed for the violation and cost awarded in the Biofuels industry would likely constitute material information.
RR0101	Agnes de Jesus (Energy Development Corporation)	Air Quality	d) Can we give the registrant a chance to explain their actions to mitigate or minimize the impacts?	<ul> <li>SASB directs the respondent to guidance contained in the introduction to its standards on Guidance on Accounting for Sustainability Topics, which states:</li> <li>As appropriate—and consistent with Rule 12b-20—when disclosing a sustainability topic identified by this Standard, companies should consider including a narrative description of any material factors necessary to ensure completeness, accuracy, and comparability of the data reported. Where not addressed by the specific accounting metrics, but relevant, the registrant should discuss the following, related to the topic:</li> <li>The registrant's strategic approach to managing performance on material sustainability issues;</li> <li>The registrant's relative performance with respect to its peers;</li> <li>The degree of control the registrant has;</li> <li>Any measures the registrant has undertaken or plans to undertake to improve performance; and</li> <li>Data for the registrant's last three completed fiscal years (when available).</li> </ul>

Industry SICS number	Name and/or Affiliation of Respondent	Topic (Metric Code)	Comment Excerpts	SASB Response
RR0101	Agnes de Jesus (Energy Development Corporation)	Waste Management	<ul><li>2. On waste management and compliance to environmental sustainability</li><li>a) Can we ask the volume of alcohol or biofuel produced vs. the slops or waste produced? Some plants are inefficient. They produce liter of alcohol and generate 10 to 15 liters of slops or liquid wastes.</li></ul>	SASB research process did not identify that disclosure of waste management was likely to constitute material information for companies in the Biofuels industry.
RR0101	Agnes de Jesus (Energy Development Corporation)	Water Management	3. On water management a) Please include if there is an artesian or water well as water source. These are often unregulated resulting in the wrong accounting of water use.	Disclosure guidance specifies the following: Water sources include surface water (including water from wetlands, rivers, lakes, and oceans), groundwater, rainwater collected directly and stored by the registrant, wastewater obtained from other entities, municipal water supplies, or other water utilities SASB's research indicates that both artesian wells and water wells are adequately addressed by the current scope of water sources, as both are viewed as groundwater. Water rights are highly variable in nature, including being dependent on the region's legislative and regulatory frameworks. SASB's research indicates that a quantitative disclosure on "water rights" may significantly lack comparability and decision-usefulness. In addition, a discussion and analysis metric (RR0101-04) in this disclosure topic provides the following relevant disclosure guidance: The registrant shall discuss, where applicable, risks to the availability of adequate, clean water resources. • Relevant information to provide includes, but is not limited to: § Environmental constraints, such as operating in water- stressed regions, drought, internal or seasonal variability, and risks due to the impact of climate change. § External constraints, such as volatility in water costs, stakeholder perceptions and concerns related to water withdrawals (e.g., those from local communities, non- governmental organizations, and regulatory agencies), direct competition with and impact from the actions of other users (commercial and municipal), restrictions to withdrawals due to

Industry SICS number	Name and/or Affiliation of Respondent	Topic (Metric Code)	Comment Excerpts	SASB Response
				regulations, and constraints on the registrant's ability to obtain and retain water rights or permits. § How risks may vary by withdrawal source, including wetlands, rivers, lakes, oceans, groundwater, rainwater, municipal water supplies, or supply from other water utilities.
RR0101	Agnes de Jesus (Energy Development Corporation)	Water Management	b) The registrant must disclose the water rights secured and corresponding volume. While we request the operator to disclose the volume used, we must also ensure the extraction is permitted, hence the suggestion to also ask the water rights secured. This is for water accounting and governance.	In metric RR0101-04 "Discussion of water management risks and description of strategies and practices to mitigate those risks", the registrant should discuss the water-related risks most relevant to its operations, whether those risks are related to water withdrawals, water consumption, and/or discharge of water to the environment. SASB recognizes that each company is ultimately responsible for determining what information should be disclosed within the context of Regulation S-K and other guidance.
RR0101	Agnes de Jesus (Energy Development Corporation)	Water Management	c) On disclosure on non-compliance, can we ask the enforcement action of the authorities? It will be an indicator to the investor of the gravity of the violation.	<ul> <li>Enforcement actions are included in the scope of SASB's definition of a non-compliance:</li> <li>.26 An incident of non-compliance shall be disclosed regardless of whether it resulted in an enforcement action (e.g., fine, warning letter, etc.).</li> <li>.27 An incident of non-compliance shall be disclosed regardless of its measurement methodology or frequency. These include violations:</li> <li>For continuous discharges, limitations, standards, and prohibitions that are generally expressed as maximum daily, weekly, and monthly averages.</li> <li>For non-continuous discharges, limitations that are generally expressed in terms of frequency, total mass, maximum rate of discharge, frequency, and mass or concentration of specified pollutants.</li> </ul>
RR0101	Agnes de Jesus (Energy Development Corporation)	Sourcing & Environmental Impacts of Feedstock Production	<ul> <li>4. On sourcing of feedstocks:</li> <li>a) On renewable biomass feedstocks, is there a regulation relative to certification of the feedstock source?</li> <li>This is a big issue in some countries like in Asia and may .be .in Latin America where actual trees are logged and passed on as tree residues and trimmings as well as yard wastes. I do not know it there is such certification in the US. We have no big biofuel plants in our country.</li> </ul>	In Europe, the European Renewable Energy Directive (RED) does have sustainability criteria for biomass feedstocks. In the U.S., the Energy Information and Security Act of 2007 stipulated that biofuel producers may not utilize feedstocks grown on virgin agricultural land first cleared or cultivated after December 19, 2007.

Industry SICS number	Name and/or Affiliation of Respondent	Topic (Metric Code)	Comment Excerpts	SASB Response
RR0101	Agnes de Jesus (Energy Development Corporation)	Management of the Legal & Regulatory Environment	5. On regulatory a) Can we ask the registrant from among the lobbied rules, which will help the industry and which will only affect their business?	In response to this comment, SASB revised the disclosure guidance to: .49 With respect to the emerging or potential future regulatory and political environment, the registrant shall discuss its view of: • Which outcome is most likely to come to fruition; • Whether the outcome would impact the registrant and/or the industry as a whole; • The likelihood the outcome will occur (i.e., a qualitative assessment of certainty or uncertainty); • The time horizon over which it expects the outcome to occur; and • The expected magnitude of the impact (e.g., a one-time, acute impact on costs, an ongoing moderate impact on ability to retain employees, etc.)
RR0101	Agnes de Jesus (Energy Development Corporation)	Operational Safety, Emergency Preparedness, and Response	6. Safety of operation a) Can we request information of the presence of an Emergency Response Plan in their company to address environmental and safety incidents?	In its provisional standard, SASB retained the metric " <i>Process</i> Safety Incidents Count (PSIC), Process Safety Total Incident Rate (PSTIR), and Process Safety Incident Severity Rate (PSISR)." However, the registrant has the opportunity to further discuss its approach to managing safety, where they can mention Emergency Response Plans. In the introduction to the standard under "Guidance on Accounting for Sustainability Topics" SASB recommends that the registrant discuss: • The registrant's strategic approach to managing performance on material sustainability issues; • The registrant's relative performance with respect to its peers; • The degree of control the registrant has; • Any measures the registrant has undertaken or plans to undertake to improve performance; and • Data for the registrant's last three completed fiscal years (when available).
RR0101	Sue Briggum	General Comment	Guidance (p. 4): SEC financial filings have been the subject of extensive, substantive guidance and formal legal clarification for decades. The concept of "materiality" has clear financial benchmarks in this context, and the same definition should apply to these proposed metrics. To the extent that SASB	SASB's standards setting process has two central objectives: (1) to identify the sustainability issues that are likely to constitute material information for a company in a given industry and (2) to determine the best metrics that allow investors to assess a company's performance concerning that

Industry SICS number	Name and/or Affiliation of Respondent	Topic (Metric Code)	Comment Excerpts	SASB Response
			hopes for voluntary participation by companies even where the information would not rise to the level of "material," it will be especially important to make the proposed metrics easy to compile and demonstrably informative.	issue. SASB standards follow the U.S. Supreme Court's definition of material information, defined as presenting "a substantial likelihood that the disclosure of the omitted fact would have been viewed by the reasonable investor as having significantly altered the 'total mix' of the information made available." This definition of materiality has a singular and unwavering focus on the reasonable investor's decision to buy, sell, or hold a security. However, SASB acknowledges that only companies can make the determination as to what constitutes material information for the company at a given point of time; SASB standards can provide guidance for that process.
				It is with this focus on materiality that we assess issues based on evidence of financial impact; selecting only issues that have the potential to significantly impact the financial performance of a company. To this end, we solicit input through our Industry Working Group process on the likelihood of proposed topics containing material information.
RR0101	Sue Briggum	General Comment	Scope (p. 5): Many companies invest – a lot or a little – in dozens of ventures designed to advance knowledge about the production and commercialization of biofuels. To expect that metrics will cover all investments regardless of size will discourage participation. At least majority interest should be required for reporting.	SASB develops sustainability accounting standards specific to each industry as categorized by the Sustainable Industry Classification System (SICS). However, in certain sectors, including in the Renewable Resources & Alternative Energy sector, many firms have some degree of vertical or horizontal integration, and are therefore exposed to sustainability risks and opportunities associated with multiple industries. SASB recommends that integrated companies use the following framework in determining SASB topics and metrics for disclosure.
				Revenue or Market Share Threshold: For companies who conduct operations in multiple SICS industries, a revenue or market share threshold should be used to determine disclosure requirements, as follows: -A company should disclose on material sustainability topics for each industry from which it generates 15% or more of its revenue. -A company should disclose on material sustainability topics for each industry where it is among the top five companies in

Industry SICS number	Name and/or Affiliation of Respondent	Topic (Metric Code)	Comment Excerpts	SASB Response
				terms of market share (by revenue), even if the industry represents less than 15% of its revenue.
RR0101	Sue Briggum	Activity Level Metrics	Activity metrics (p. 6): Particularly for diversified companies, attempts at normalization are likely to be meaningless. For a division that contributes 0.1 percent of revenues to a corporation that supports an innovative biofuels technology, how would normalization work? Normalization to total number of employees in the diversified entity, or its revenues or number of plants, tells you nothing other than the fact that some biofuels are produced by boutique firms and others by large diversified corporations. Simple totals (revenue from biofuels, total entity-wide revenue, number of employees spending over 50% of their time on biofuel production, total number of employees) would be clearer and more informative. In the alternative, all reporting on biofuels might be based upon biofuel production personnel, operations and revenue only. The latter would make "apples to apples" comparison easier.	SASB's standards typically include metrics that request disclosure of values on an absolute basis to foster comparability of data. SASB anticipates that companies may choose to additionally present data on a normalized (or efficiency, or intensity) basis, just as users of the disclosure (e.g. investors) may choose to normalize data using a variety of factors. Additionally, SASB directs the respondent to guidance contained in the introduction to its standards on Activity Metrics and Normalization, which states, "SASB recommends that a registrant disclose any basic business data that may assist in the accurate evaluation and comparability of disclosure, to the extent that they are not already disclosed in the Form 10-K" and that, "Where relevant, SASB recommends specific activity metrics that—at a minimum—should accompany SASB accounting metric disclosures".
RR0101	Sue Briggum	General Comment	Timing (p. 7): Because reporting on sustainability issues tends to lag a year (as opposed to quarterly financial reporting), SASB should make clear that reporting for the current fiscal year is not anticipated. Most fiscal years begin in January. US EPA requires its carbon footprint reporting in late Spring. Then CDP and SASB reports can be compiled, but they will lag six months or more behind the fiscal year.	SASB's goal is comparable, consistent data that is aligned with fiscal year data in the Form 10-K. SASB will consider this recommendation when it reviews the provisional standards during its standards codification review later in 2016.
RR0101	Sue Briggum	General Comment	Limitations (p. 7): For large diversified companies, the SEC materiality threshold is high. If "materiality' is required to report on biofuels projects, many large biofuels investors will have nothing to say because combined biofuels investments do not meet that threshold.	For companies who conduct operations in multiple SICS industries, a revenue or market share threshold should be used to determine disclosure requirements, as follows: -A company should disclose on material sustainability topics for each industry from which it generates 15% or more of its revenue. -A company should disclose on material sustainability topics for each industry where it is among the top five companies in terms of market share (by revenue), even if the industry represents less than 15% of its revenue. To the extent that a Biofuels company is integrated with

Industry SICS number	Name and/or Affiliation of Respondent	Topic (Metric Code)	Comment Excerpts	SASB Response
				another SICS industry, it should disclose on sustainability topics presented in the relevant SICS industry standard if it identifies them as material. Similarly, activity metrics across the industries should be used to provide context behind performance on sustainability topics.
RR0101	Sue Briggum	Air Quality (RR0101-01)	Air quality (p. 10): CDP already requires air emissions reporting in quite specific categories. Why not simply incorporate the CDP data by reference, saving many companies time and effort?	SASB works alongside and with multiple organizations seeking to advance corporate disclosure on sustainability issues. SASB complements global initiatives including the Global Reporting Initiative (GRI), the International Integrated Reporting Committee (IIRC), CDP, and others. When formulating accounting metrics for its disclosure topics, SASB considers the existing body of reporting standards and uses existing metrics whenever possible. Where current disclosure is inconsistent or not established SASB has developed new metrics. SASB notes that CDP does not include provisions for air emissions reporting beyond the reporting of greenhouse gas emissions. Therefore SASB has not included reference to CDP in this metric. For more information on SASB's alignment with other reporting frameworks please visit: http://www.sasb.org/approach/key-relationships/
RR0102	Sue Briggum	Air Quality (RR0101-02)	With regard to "incidents of non-compliance," the proposed metric is unworkably broad. Any large facility required to have environmental permits/controls will have instances in which "non-compliance" might be alleged – an odor complaint, a statistically insignificant variation in sampling data. Relatively few warning letters or threats of fines result in actual penalties because of the ambiguities in regulation and the high incidence of "reasonable disagreement" about implementation of a particular technical standard. SEC Regulation S-K 103 already has a low threshold for disclosure and should simply be cross-referenced in order to make SASB consistent with FASB. Moreover, SASB should consider whether cross-referencing this disclosure in fact provides value. It makes more sense to ask for a qualitative description of a company's Environmental Management System.	SASB notes that studies show that environmental fines in Item 103 are inconsistently followed and often unenforced. Furthermore, SASB uses incidents of non-compliance as a way to measure performance and governance of this topic. The monetary value of fines is less emphasized in SASB's metric under the Air Quality topic because, for example, many small fines could differentiate performance between two entities and provide some forward looking insight into future risk of high profile fines.

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RR0101	Sue Briggum	Water Management	Water management (p. 12): The proposed water withdrawal metric is extraordinarily broad. Although many companies report on metered water withdrawal, there is no standard means or database to estimate unmetered water use. It makes more sense to ask for metered water withdrawal (which is specific and auditable) and a characterization of the company's footprint in water withdrawal in areas of high or extremely high water risk. Moreover, only water withdrawal pursuant to biofuel production should be included. As noted above, integrating SASB with CDP Water reporting is important to standardize reporting and reduce duplication. Also as noted above, the water-related non-compliance metric is overbroad. In contrast to the data challenges regarding water withdrawal and compliance, the programmatic discussion required by section .21 is concrete, important to investors and likely to steer reporting companies to best practices.	<ul> <li>SASB aims to develop metrics that harmonize with existing reporting frameworks (regulatory and otherwise) where possible.</li> <li>In RR0202-05 SASB disclosure guidance aligns CDP Water Questionnaire W1.2a and W1.2c.</li> <li>In RR0202-06, SASB disclosure guidance aligns with to CDP Water Questionnaire W3.1, W3.2c, W8.1, W8.1a, and W8.1b.</li> <li>For more information on SASB's alignment with other reporting frameworks please visit: http://www.sasb.org/approach/keyrelationships/</li> </ul>
RR0101	Sue Briggum	Lifecycle Emissions Balance	Lifecycle emissions balance (p. 19): Where a registrant complies with the terms of EPA's Renewable Fuel Standard, it is unclear what would be gained by requiring disclosure of additional conflicting standards from other venues. There is no reason to believe that the federal RFS by itself would not provide the kind of information that would be useful to an investor.	The disclosure guidance calls for the results of additional lifecycle emissions calculations only if the results are materially different than the results from the RFS2 calculation. The disclosure guidance states: .38 The registrant should disclose all applicable lifecycle GHG emissions results, including those calculated for the California Air Resources Board Low Carbon Fuel Standard Program, the European Union Renewable Energy Directive, and the Roundtable on Sustainable Biomaterials (RSB) certification, if results from any of these calculations are materially different than the results from the EPA RFS2 calculation. Biofuels with lower lifecycle GHG emissions could result in cost savings through tax credits or increased revenue. These benefits may be achieved only under certain carbon regulatory programs. For example, under California's Low Carbon Fuel Standard, there is a direct financial incentive for every gram of CO2e per mega joule reduced. For further evidence on this topic, please see the Lifecycle Emissions Balance topic in the Biofuels industry Research Brief, available on the Renewable Resources & Alternative Energy sector webpage.

Industry SICS number	Name and/or Affiliation of Respondent	Topic (Metric Code)	Comment Excerpts	SASB Response
RR0101	Sue Briggum	Management of the Legal & Regulatory Environment	With regard to risk and opportunities for legislation and regulation, the standard is burdensome and of little practical use. In any given year, there will be dozens of federal and state bills and regulatory proposals involving "environmental and social factors" potentially impacting biofuel production and sale. A company's position is often nuanced on any bill, e.g., "we support this disclosure bill but only if confidential business information is protected." Characterization of "support" or "oppose" is complicated. Moreover, with regard to forecasting the prospects for legislation, anyone following the US Congress will know that putting odds on legislation passing in any given timeframe is at best idle speculation. The incorporation of extensive political/advocacy disclosure within the biofuels standard (and not within other sector standards) is an odd choice. Its one thing for SASB to advocate for more disclosure of political contributions generally, but it makes no sense to append this topic to only some of the industry sectors SASB plans to cover.	SASB has retained this disclosure topic and metric in the provisional standard. The registrant should not include an extensive political/advocacy disclosure on every piece of legislation or lobbying it is involved in. Rather they should focus on the environmental and social factors most relevant to the registrant's business and its efforts to manage risks and opportunities presented by those factors. SASB has aimed to create disclosure that is comparable and succinct by including specific guidance in the technical protocol on what should be discussed by registrants. The topic of lobbying is particularly relevant to the Biofuels industry, which is heavily reliant on government policy, specifically, its substantial support through subsidies and renewable fuel mandates. Depending on the type of feedstock they rely on, individual companies could be impacted differently, based on how government support for specific types of biofuels evolves. For further evidence on why this topic was included in the provisional standard, please see the Management of the Legal & Regulatory Environment topic in the Biofuels industry Research Brief, available on the Renewable Resources & Alternative Energy sector webpage.
RR0101	Sue Briggum	Operational Safety, Emergency Preparedness, and Response	Occupational safety (p. 24): It makes sense to ask members of the American Chemistry Council to use that association's safety metrics – but not for non-ACC members. There are standard OSHA standards; they should be the basis for disclosure. More importantly, rather than asking for root cause analyses for individual incidents, it would be more telling to ask registrants to disclose their safety programs and best practices.	SASB research revealed that most companies in the Biofuels industry are classified under the "Industrial Organic Chemicals" classification by OSHA. The process safety metrics in the SASB standard would to companies in this classification.

## Solar Energy

SICS	Name and/or Affiliation of Respondent	Topic (Metric Code)	Comment Excerpts	SASB Response
RR0102	Respondent Agnes de Jesus (Energy Development Corporation)	Water Management in Manufacturing	<ol> <li>On water management         <ul> <li>Please include artesian or water wells as water source. These are often unregulated that result in the wrong accounting of water use</li> <li>The registrant must disclose the water rights secured and corresponding volume. While we request the operator to disclose the volume used, we must also ensure the extraction is permitted, hence the suggestion to also ask the water rights secured. This is for water accounting and governance.</li> </ul> </li> </ol>	<ul> <li>SASB's research indicates that both artesian wells and water wells are adequately addressed by the current scope of water sources, as defined in RR0102-02. Both of these sources of water can be viewed as groundwater, which is included in the disclosure guidance:</li> <li>Water sources include surface water (including water from wetlands, rivers, lakes, and oceans), groundwater, rainwater collected directly and stored by the registrant, wastewater obtained from other entities, municipal water supplies, or other water utilities</li> <li>SASB's research indicates that water rights, including their form and structure, are highly dependent on the region's legislative and regulatory frameworks. Therefore, a quantitative disclosure on "water rights in certain regions and to certain registrants. We therefore include disclosure guidance for a discussion and analysis metric (RR0102-03) that states the following:</li> <li><i>17 The registrant shall discuss, where applicable, risks to the availability of adequate, clean water resources.</i></li> <li><i>Relevant information to provide includes, but is not limited to:</i> § Environmental constraints, such as operating in water-stressed regions, drought, internal or seasonal variability, and risks due to the impact of climate change.</li> <li>§ External constraints, such as volatility in water costs, stakeholder perceptions and concerns related to water withdrawals (e.g., those from local communities, non-governmental organizations, and regulatory agencies), direct competition with and impact from the actions of other users (commercial and municipal), restrictions to withdrawals due to regulations, and constraints on the registrant's ability to obtain and retain water rights or permits.</li> </ul>

Industry SICS number	Name and/or Affiliation of Respondent	Topic (Metric Code)	Comment Excerpts	SASB Response
				<ul> <li>§ How risks may vary by withdrawal source, including wetlands, rivers, lakes, oceans, groundwater, rainwater, municipal water supplies, or supply from other water utilities.</li> <li>For further evidence on why disclosure on each metric in this topic may constitute material information, please refer to the SASB Solar Energy industry research brief available on the Renewable Resources &amp; Alternative Energy sector webpage.</li> </ul>
RR0102	Agnes de Jesus (Energy Development Corporation)	Hazardous Materials Management	<ul> <li>2. On hazard management</li> <li>a) May we ask the .permits for the use of the hazardous chemicals? There is usually a requirement for the registration of all hazardous chemicals used under hazardous waste management laws. This is to assist government monitor its use.</li> <li>b) Cases filed for violation of water quality standards (Number and cost awarded to or demanded by complainants as metrics)</li> <li>c) On RR0102-05 , indicate the presence of Emergency Response Plans for spills and its approval by relevant authority.</li> <li>d) On the spills, we may include action taken to address spill and the details of their compliance with the reporting requirements of the law.</li> </ul>	<ul> <li>SASB's research indicates that permits relative to "hazardous chemicals" are highly dependent on the region's legislative and regulatory frameworks. Therefore, a quantitative disclosure on permits relative to "hazardous chemicals" significantly lack comparability and decision-usefulness. Metrics applicable to the disclosure topic, Hazardous Materials Management, focus on absolute performance in terms of the amount of hazardous waste and percentage recycled (RR0102-04), and reportable spills (RR0102-05). These metrics may be viewed as more representative of company performance on this disclosure topic, while being more comparable and decision-useful.</li> <li>Water quality standards (including discharges) falls within the scope of the disclosure topic, Water Management in Manufacturing. Disclosure guidance applicable to RR0102-03 includes the following:</li> <li>.18 The registrant shall discuss, where applicable, risks associated with its discharge of wastewater.</li> <li>Relevant information to provide includes, but is not limited to:</li> <li>§ Environmental constraints, such as the ability to maintain compliance with regulations focused on the quality of effluent discharged to the environment, the ability to eliminate existing and emerging pollutants of concern, and the ability to maintain control over runoff and storm water discharges.</li> <li>§ External constraints, such as increased liability and/or reputational risks, restrictions to discharges and/or increased operating costs due to regulation, stakeholder perceptions and</li> </ul>

Industry SICS number	Name and/or Affiliation of Respondent	Topic (Metric Code)	Comment Excerpts	SASB Response
				concerns related to water discharges (e.g., those from local communities, non-governmental organizations, and regulatory agencies), and the ability to obtain discharge rights or permits. § How risks may vary by discharges to different sources, including wetlands, rivers, lakes, oceans, groundwater, rainwater, municipal water supplies, or other water utilities
				<i>The metric relative to reportable spills (RR0102-05) includes the following disclosure guidance relative to spill remediation: Note to RR0102-05</i>
				<i>.31 Where applicable, the registrant shall discuss its activities to remediate spills that occurred in years prior to the disclosure period but for which remediation activities are ongoing and long term.</i> <i>.32 Relevant activities include, but are not limited to, land-use controls, site monitoring, site maintenance, and continued cleanup.</i>
				While such disclosure guidance is not applicable to preparations for spill response prior to a spill occurring, SASB's research indicates the ability for investors to evaluate registrants' "Emergency Response Plans" in a concise, comparable, decision-useful manner is not feasible. Therefore, the above referenced metric focuses on reportable spills, as well as providing context for any such spills, including remediation activities.
				For further evidence on why disclosure on each metric in this topic may constitute material information, please refer to the SASB Solar Energy industry research brief available on the Renewable Resources & Alternative Energy sector webpage.
				In regards to Emergency Response Plans SASB directs the respondent to guidance contained in the introduction to its standards on Guidance on Accounting for Sustainability Topics, which states:
				As appropriate—and consistent with Rule 12b-20 —when

Industry SICS number	Name and/or Affiliation of Respondent	Topic (Metric Code)	Comment Excerpts	SASB Response
				disclosing a sustainability topic identified by this Standard, companies should consider including a narrative description of any material factors necessary to ensure completeness, accuracy, and comparability of the data reported. Where not addressed by the specific accounting metrics, but relevant, the registrant should discuss the following, related to the topic: • The registrant's strategic approach to managing performance on material sustainability issues; • The registrant's relative performance with respect to its peers; • The degree of control the registrant has; • Any measures the registrant has undertaken or plans to undertake to improve performance; and • Data for the registrant's last three completed fiscal years (when available).
RR0102	Agnes de Jesus (Energy Development Corporation)	Community & Ecological Impacts of Project Development	3. Social and Ecological Impacts a) In cases filed related to social and ecological impacts, we can ask the number and cost awarded or demanded from the company.	SASB's research indicates that litigation filed against registrants in the Solar Energy industry relative to project development efforts as a result of community and/or ecological impacts does not yield information that is necessarily descriptive of actual impacts, as well as lacking comparability and decision-usefulness. Alternative drivers falling outside of the scope of this disclosure topic are regularly viewed as being connected to litigation. For further evidence on why disclosure on each metric in this topic may constitute material information, please refer to the SASB Solar Energy industry research brief available on the Renewable Resources & Alternative Energy sector webpage.

## Wind Energy

Industry SICS number	Name and/or Affiliation of Respondent	Topic (Metric Code)	Comment Excerpts	SASB Response
RR0103	Vestas Wind Systems A/S	Design to Mitigate Community & Ecological Impacts (RR0103-02)	If issues associated with community or ecological impact occur, a project may be re-planned to remain or re-enter the backlog, which makes the metric less useful and comparable.	In response to this comment, SASB revised disclosure guidance to add the following (RR0103-03): .12 The registrant shall exclude from its calculation any amount of an order backlog cancellation that re-enters order backlog during the same fiscal year as a result of a project developer's successful re-ordering of turbines.
RR0103	Vestas Wind Systems A/S	Design for Materials Efficiency (RR0103-04)	Why not identify at least 95% of materials by mass (this would typically align better with other standards). Nonetheless for a V112 turbine the top five materials are: steel/iron 82%, glass and carbon composites 9%, mixed polymers 5% and aluminum 1%. Or include reporting of what the five materials represent as % of total materials delivered.	SASB acknowledges that there are a variety of approaches to assessing performance on materials consumption. SASB intends that the metrics under each disclosure topic provide a set of relevant, decision-useful, and comparable disclosure for the topic. Disclosure that includes all materials that constitute at least 95% of materials by mass may include a range in the number of materials disclosed by each company, which may be perceived as unequal disclosure, which additionally lacks comparability, due solely to turbine design. SASB's research indicates that identifying the weight of the top five materials consumed presents a simplified presentation format for investor analysis. For further evidence on why disclosure on each metric in this topic may constitute material information, please refer to the SASB Wind Energy industry research brief available on the Renewable Resources & Alternative Energy sector webpage.
RR0103	Vestas Wind Systems A/S	Design for Materials Efficiency (RR0103-05)	What is the logic behind these weightings used? The clearest efficiency measure is tonnes of material per kWh generated by the turbine. This relates directly to the functional performance of the turbine. Not clear what the 'weight scaling' relationship is supposed to represent. Why multiply by the hub height? The clearest efficiency measure is tonnes of material per kWh generated by the turbine. This relates directly to the functional performance of the turbine. Not clear what the 'weight to specific power' relationship is supposed to represent. Same as comment above. Should report tonnes of material per kWh generated, as defined by IEC conditions for the rating and power curve of the turbine. The relationship for 'weight to specific power' has the	In response to this comment and additional research, SASB has withdrawn this metric. The metric has been replaced with RR0103-06: Average top head mass per turbine capacity, by wind turbine class. This new metric was used in order to improve the simplicity of calculation, interpretation, and descriptiveness of performance. SASB acknowledges that "tonnes of material per KWh or MWh of electricity generated" may yield information that is superior in terms of performance measurement for this disclosure topic. However, SASB's research indicates that not all turbine manufacturers are able to collect the necessary data for the calculation of the proposed metric – primarily, data on actual energy generation of operational wind energy

Industry SICS number	Name and/or Affiliation of Respondent	Topic (Metric Code)	Comment Excerpts	SASB Response
			underlying assumption that an increase in turbine nameplate capacity (MW) gives a linear increase in energy production. This is not a correct assumption. For example, increase from 3.0MW to 3.3MW turbine is a 10% in nameplate capacity (MW), but this increase results in an energy production increase of about 3%. Recommend to report tonnes of material per kWh or MWh of electricity generated by the turbine at IEC conditions and to remove the two proposed indicators for average performance.	projects. This would result in a lack of comparability and decision-usefulness. Furthermore, research indicates the cost- effectiveness of the proposed metric may be drastically reduced relative to RR0103-06 in the provisional standards. Finally, the methodology for calculation of the proposed metric was seen to present significant challenges, including the scope of date ranges to be used.
RR0103	Vestas Wind Systems A/S	Sensitive & Critical Materials Sourcing (RR0103-07)	The metric is influenced by non-comparable factors e.g. one company may be good at sourcing at a low cost and another company may source at a high cost and they might use the same amount of critical material. Furthermore if the critical material only constitutes a part of a bought component then the cost of critical material will have to be estimated and thereby the metric will be an estimate. Finally it is unclear why freight and storage should be included. As above freight and storage will be estimates.	SASB acknowledges that the sourcing of critical materials may occur at differing costs. SASB's research indicates that the Wind Energy industry's use of critical materials commonly occurs through the purchase of turbine parts and components, rather than raw materials. SASB revised the metric (RR0103- 08) to address this industry dynamic through focusing on the cost of "items that contain critical materials." The revised metric represents the percentage of costs of goods sold that is subject to risks associated with critical materials. Disclosure guidance continues to include freight and storage to improve the cost-effectiveness of the metric. For further evidence on why disclosure on each metric in this topic may constitute material information, please refer to the SASB Wind Energy industry research brief available on the Renewable Resources & Alternative Energy sector webpage.
RR0103	Vestas Wind Systems A/S	Sensitive & Critical Materials Sourcing (RR0103-08)	The metric could be relevant, but it is difficult to get reliable information from suppliers and sub-suppliers.	SASB acknowledges that challenges to data collection may exist, but believes that this information is decision-useful to investors and attainable by companies. In the introduction to the SASB standard, SASB acknowledges that there may be uncertainties and estimates when preparing sustainability disclosures. The introductions states: Uncertainty SASB recognizes that there may be inherent uncertainty when disclosing certain sustainability data and information. This may be related to variables such as the reliance on data from third-party reporting systems and technologies, or the unpredictable nature of climate events. Where uncertainty

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				around a particular disclosure exists, SASB recommends that the registrant should consider discussing its nature and likelihood.
				Estimates SASB recognizes that scientifically based estimates, such as the reliance on certain conversion factors or the exclusion of de minimis values, may occur for certain quantitative disclosures. Where appropriate, SASB does not discourage the use of such estimates. When using an estimate for a particular disclosure, SASB expects that the registrant discuss its nature and substantiate its basis.
RR0103	Vestas Wind Systems A/S	Safety of Wind Farm Operations (RR0103-10)	When the heading of the topic is Safety of Wind Farm Operations, should the metric only cover Wind Farm Operations? Today only overall company rates are reported.	In response to this comment, SASB revised the Disclosure Topic title to "Workforce Health & Safety." Furthermore, disclosure guidance for RR0103-01 specifies that the scope of disclosure includes "all employees," and similarly does not restrict "contract employees" to any specific function, duty, location, or division. As a result, the metric is aligned with the overall company rate.
				As communicated in the SASB Wind Energy industry research brief available on the Renewable Resources & Alternative Energy sector webpage, we recognize that activities occurring onsite at wind farms may present heightened risks related to workforce health & safety, but we do not restrict the scope of the disclosure topic nor metric to wind farm operations.
RR0103	Vestas Wind Systems A/S	Safety of Wind Farm Operations (RR0103-11)	The data may be available in some form or another, but it would not be cost-effective to collect.	In response to this comment, SASB has withdrawn this metric from the provisional standard.
RR0103	Agnes de Jesus (Energy Development Corporation)	Design to Mitigate Community & Ecological Impacts	<ol> <li>On the mitigation of community and ecological impacts         <ul> <li>a) Cases or complaints filed by persons, communities or organizations arising from community or ecological impacts (Metrics are the number of cases and cost awarded to or demanded by the complainant)</li> </ul> </li> </ol>	The Wind Energy Industry Description states: The Wind Energy industry comprises companies that manufacture wind turbines, blades, towers, and other components of wind power systems. Companies that develop, build, and manage wind energy projects are also included within the scope of this industry, but few companies publicly listed in the U.S. operate primarily in this segment. SASB standards for the Wind Energy industry therefore focus on the manufacturing segment

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				SASB's research indicates that litigation filed in a manner consistent with this comment is likely to focus on the wind energy project, rather than the turbine manufacturer, which as stated above, is the focus of the Wind Energy standards. Furthermore, research indicates that litigation filed against companies in the industry relative to project development efforts for community and/or ecological impacts is not descriptive of actual impacts. Alternative drivers falling outside of the scope of this disclosure topic are connected to litigation.
RR0103	Agnes de Jesus (Energy Development Corporation)	Safety of Wind Farm Operations	<ul> <li>2. On the Safety of Wind Farm Operations</li> <li>a) Cases or complaints filed by persons, communities or organizations arising from safety of wind farm operations. Metrics are the number of cases and cost awarded to or demanded by complainant.</li> <li>b) Near miss incidents (number and nature) are also good indicators of areas of concern as well as areas for improvement in turbine design and operation. They can be included.</li> </ul>	The relevant Disclosure Topic was revised to focus on the workforce, as opposed to the surrounding community. SASB considered the incorporation of Near Miss Frequency Rate into this metric. However, SASB's research indicates that this rate is not widely used in the industry, especially onsite at wind farms where heightened risks of workforce health and safety exist, while the Total Recordable Injury Rate and Fatality Rate is commonly tracked. Therefore, the metric used benefits from current industry-use and increased cost- effectiveness.
RR0103	Agnes de Jesus (Energy Development Corporation)	Design to Mitigate Community & Ecological Impacts	<ul> <li>3. Efforts to address ecological and community impacts</li> <li>a) Cost involved in the research and testing of the initiative and its share in the total cost of the product or turbines.</li> <li>Thank you for the opportunity to comment on your sustainability standards.</li> </ul>	SASB appreciates the suggested metric. We considered the use of the metric but found comparability among registrants in the industry to present significant challenges that were expected to erode the decision-usefulness of the metric. Registrants in the industry allocate R&D budgets to various aspects of turbine design, and increased spending on design to mitigate community and ecological impacts does not imply the production and sales of higher performing turbines, in terms of community and ecological impacts.

## **Fuel Cells & Industrial Batteries**

There were no public comments received applicable to the Fuel Cells & Industrial Batteries industry.