



# Non-Renewable Resources 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 Non-Renewable Resources sector standards, which concluded on April 14, 2014. 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 Non-Renewable Resources sector standards issued for public comment, which may be different from the sections presented in the final provisional standards issued on June 25, 2014.

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Industry SICS number	Name and/or Affiliation of Respondent	Topic (Metric Code)	Comment Excerpts	SASB Response
NR0101 NR0102 NR0103 NR0104	Jessica Bramhall, Meagan Harris, Kate Baker, and Shannon Roberts, EY	general comment (n/a)	All accounting metrics cannot say "discussion of". Many of the metrics are too vague and would not allow for measurement nor auditability.  Many of the metrics outlined are not quantifiable and don't have specific criteria which would make accounting very difficult. They need to be more specifically defined with clear and measureable criteria. Agree with Jess' comment for all indicators that start with "Discussion of....." as this is not clearly measurable and therefore auditable.	SASB prioritizes the standardization of quantitative metrics wherever possible. Across the Non-Renewable Sector over 75% of SASB metrics are quantitative. SASB, however, recognizes that performance on certain topics cannot be always adequately captured by a quantitative metrics. In these situations SASB recommends disclosures that provide a "discussion and analysis" around an issue.
NR0101 NR0102 NR0103 NR0104	Jessica Bramhall, Meagan Harris, Kate Baker, and Shannon Roberts, EY	general comment (n/a)	EHS scaled back. Weak on metrics compared to what normally reporting.	Comment noted. SASB intends that its metrics serve as the minimum set of disclosures to capture performance on each topic.
NR0101 NR0102 NR0103 NR0104	Jessica Bramhall, Meagan Harris, Kate Baker, and Shannon Roberts, EY	general comment (n/a)	Missing supply chain alignment with other standards such as GRI	Comment noted.
NR0101 NR0102 NR0103 NR0104	Jessica Bramhall, Meagan Harris, Kate Baker, and Shannon Roberts, EY	general comment (n/a)	Missing listing all violations and fines in all sections (i.e. EPA, state EPA, OSHA)	SASB recognizes that incidence of fines, settlements, and legal violations often serves as a good proxy for performance on sustainability topics, and thus includes this metric in several of its standards. However, SASB recognizes that there are certain limitations in the use of fines, settlements, and violations to measure performance, including the fact that these actions may be determined subjectively (e.g. by a judge, jury, or regulatory agency), and that it is backward looking outcome. Thus, when possible SASB attempts to incorporate more direct, objective and, wherever possible, forward looking metrics.

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NR0101 NR0102 NR0103 NR0104	Jessica Bramhall, Meagan Harris, Kate Baker, and Shannon Roberts, EY	general comment (n/a)	Missing business ethics and transparency disclosures already required by SEC (Dodd Frank 1502 and 1504)	SASB believes that the underlying issues relating to Dodd Frank 1502 and 1504 are well captured by the topic such as, "Community Relations", "Security, Human Rights, and Rights of Indigenous Peoples", "Business Ethics & Payments Transparency".
NR0101 NR0102 NR0103 NR0104	Jessica Bramhall, Meagan Harris, Kate Baker, and Shannon Roberts, EY	general comment (n/a)	Should ensure that have consulted with industry experts (understand Carol's comment for pharma industry), ensure that includes at minimum IPIECA standards which would encompass efforts across industry in recent years	SASB consulted numerous industry experts through formal (e.g., SASB's Industry Working Group) and informal means (e.g. consultation) while preparing SASB's Exposure Draft Standards. SASB consulted 167 industry experts through its Industry Working Group. IPIECA metrics are specifically referenced in several SASB metrics (e.g. NR0101-01, NR0101-04, NR0101-10, etc.)
NR0101 NR0103 NR0201 NR0301 NR0302 NR0401	Dr Jarlath Molloy, Technical Manager, Climate Disclosure Standards Board; Esben Madsen, Senior Technical Officer, CDP	general comment (n/a)	We acknowledge and welcome the various CDSB Framework cross references and suggest they are clarified to refer to the existing version 1.1 of our Framework	SASB has updated its references to be to version 1.1. of the CDSB Framework
NR0101	Dr Jarlath Molloy, Technical Manager, Climate Disclosure Standards Board; Esben Madsen, Senior Technical Officer, CDP	general comment (n/a)	We note that production and reserves of hydrocarbon types are requested in units of MBOE by SASB. CDP requests this information in BOE, and the choice has been not to adopt the terminology of MBOE or even MMBOE, as these terminologies are not always used consistently around the globe (MBOE is sometimes used to denote a thousand BOE and sometimes to denote a million BOE; sometimes the latter is written as MMBOE). As with SASB, CDP preferably follows SI units, therefore any reference to MBOE should be interpreted as $10^6$ (M symbolizes the SI prefix 'mega', representing a factor of 1000000) BOE, or a million BOE, as it is indeed by SASB, but we suggest this should be made clearer to avoid confusion.	Comment noted. SASB has updated its unit of measure to be "BOE" - barrels of oil equivalent - considering it up to disclosing companies to choose to provide figures in BOEs or their multiples.
NR0101 NR0201	Dr Jarlath Molloy, Technical Manager, Climate Disclosure Standards Board; Esben Madsen, Senior Technical Officer, CDP	general comment (n/a)	CDP asks companies to explain which listing requirements or other methodologies they have used to provide reserves data. If they cannot provide data due to legal restrictions on reporting reserves figures in certain countries, they are asked to explain this. SASB may wish to consider asking this information also.	SASB intends users of its standards to be those that file with the U.S. SEC, so SASB defers to SEC guidance on calculating and disclosing hydrocarbon and mineral reserves.

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NR0101 NR0201	Dr Jarlath Molloy, Technical Manager, Climate Disclosure Standards Board; Esben Madsen, Senior Technical Officer, CDP	general comment (n/a)	We suggest SASB to consider asking companies to provide a country level breakdown of reserves, as regulatory limits at national, sub-national and regional levels, together with other demand-risk factors, could lower demand for hydrocarbon products. Investors will want to know companies' regional exposure to such pressures.	SASB intends users of its standards to be those that file with the U.S. SEC, so SASB defers to SEC guidance on calculating and disclosing hydrocarbon and mineral reserves.
NR0101 NR0102 NR0103 NR0104 NR0201 NR0301 NR0302 NR0401	Ara Erickson, Sustainability Manager, Weyerhaeuser	Community Relations (n/a)	The Community Relations section refers repeatedly to community "rights," implying that communities have rights to, for example, employment, education, etc. This would be a highly controversial position for SASB to take. The easiest fix would be to amend each of the references to a "right" to say, "right or interest," adjusted for grammar.	Comment appreciated. Where it appears, SASB has updated this topic and associated metrics to use the terminology "right or interest."

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NR0101 NR0201	John Wunderlin, Staff Attorney, Carbon Tracker Initiative	Reserves Valuation & Capital Expenditures  (NR0101-27; NR0201-29)	<p>II. Additional disclosure topics not included in the Standards that may be material to a reasonable investor</p> <p>1. Strategic positioning for future price projection scenarios that account for a price on emissions. This topic would be provide registrants with the opportunity to discuss how they believe they are positioned for a lower demand/lower price scenario.</p> <p><b>Rationale</b></p> <p>This would fill several gaps in the current draft standard. In particular, such a standard would provide registrants and opportunity for qualitative analysis of risks related to projected revenue from existing projects which do not require significant capital expenditure to develop and bring to market. These risks are not fully captured by NR0101-27 or NR0201-19, which focus primarily on projects that require significant new capital expenditure.</p> <p>More specifically, this topic would provide:</p> <ul style="list-style-type: none"> <li>• An alternative means for management to discuss the potential need for downward revisions of reserve levels (for companies uncomfortable providing sensitivity analysis).</li> <li>• An opportunity for management to provide a more thorough, qualitative analysis of the potential risks associated with low-price/low-demand scenarios, designed to cover the risk of declining revenue from existing reserves which do not require significant new capital expenditure to develop and bring to market.</li> <li>• An opportunity for management to discuss risks associated with declining revenue from production projects for which they do not own the reserves. This risk would not be captured by sensitivity analysis of reserve levels.</li> <li>• A forum to address possible strategic responses to low-demand scenarios other than limiting capital expenditure for exploration, acquisition, and development of fossil fuel assets. Alternative strategies could include sales of existing fossil fuel assets or diversification of revenue sources.</li> </ul>	<p>SASB appreciates this suggestion and feels that (current) metrics NR0101-22, NR0101-23, and NR0101-24 provide opportunity for companies to address most, if not all, of these aspects and implications of future price and demand scenarios.</p> <p>SASB recognizes the complexity of this topic, but seeks to limit the number of metrics to the minimum that are decision-useful, relevant, and cost-effective.</p>

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NR0302	Claire White Manager, Social and Economic Development, International Council on Mining & Metals (ICMM)	general comment (n/a)	<p>Whether and how the working group's input was considered by SASB</p> <p>Claire White from ICMM was a member of the Non-Renewable Resources Sector Industry Working Group for Mining and Metals and submitted responses to the survey based on a review of the industry brief. According to the responses provided by Claire, 13 of the 27 accounting metrics included in the survey met SASB's criteria of being relevant/useful, cost effective, comparable and auditable from ICMM's perspective. Of the 14 environmental metrics (GHG emissions, air quality, energy management, water management, waste management, ecological impacts) only 5 met the SASB criteria. Similarly, only 2 of the 6 community relations metrics met the criteria. It is unclear, whether and if so, how this input and input from others in the working group was used by SASB to inform the matrices in the current exposure draft. Many of the accounting matrices in the exposure draft go beyond what was put forward in the 2013 survey (see Annex I).</p> <p>Given the fact that the Industry Working Groups are cited in such a way that their endorsement of the current exposure draft is implied 2, it would be useful to see if and how the working group's input has been taken into account. ICMM respectfully requests that the record reflect that ICMM's participation in the process in no way implies our endorsement of the end product.</p>	<p>Details of how industry working group (IWG) feedback was incorporated in the Exposure Draft Standards can be found through the links here:  <a href="http://www.sasb.org/sectors/non-renewable-resources/">http://www.sasb.org/sectors/non-renewable-resources/</a></p> <p>SASB notes ICMM's comment on how to characterize its participation in our process.</p>

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NR0302	Claire White Manager, Social and Economic Development, International Council on Mining & Metals (ICMM)	general comment (n/a)	<p><u><b>The duplicative nature of the SASB standards (see, for example, the Global Reporting Initiative (GRI))</b></u></p> <p>The GRI is the leading reporting organization for sustainability reporting. It is unclear why SASB is seeking to duplicate an existing widely accepted international framework that many leading organizations already report to. Established in 1997, the GRI framework has evolved and has been developed collaboratively with expert input through international working groups, extensive stakeholder engagement (including lengthy public comment periods) with thousands of individuals, companies, organizations and experts. To date, over 14,000 GRI reports have been issued by almost 6,000 organizations.</p> <p>Any discussion about material issues for the mining and metals sector should take into account the extensive deliberations that took place over several years which resulted in the current GRI Mining and Metals Sector Supplement which is widely applied by reporting companies in the industry. It is unclear why SASB is seeking to duplicate this work and, in a number of areas, what the rationale is for requiring disclosures that go far beyond what is currently required by GRI. The audience for the GRI framework includes, but is not limited to, investors. Any stakeholders that are interested in obtaining further information from a company regarding its sustainability performance has the ability to contact the company directly to encourage them to provide additional disclosures. ICMM members regularly engage with many stakeholders through robust engagement programs at the local, regional, national and international levels.</p> <p>In addition, the U.S. <b>Securities and Exchange Commission already require companies listed on the U.S. stock exchange to report material risks</b> as part of their 10K filings. This includes sustainability information that the company identifies to have a material impact. <b>It is unclear the additional value of the SASB standards</b> to both the company and shareholders. Finally, some of the information required is duplicative of that required as part of the Carbon Disclosure Project.</p>	<p>SASB recognizes that various sustainability reporting programs have different goals. SASB is focused on the sustainability issues related to shareholder value and accounting metrics that are decision-useful to investors. Where possible, SASB seeks to harmonize with other reporting programs and uses accounting metrics requiring data that may already disclosed on company websites, sustainability reports, regulatory filings, or already collected by companies. SASB's first priority is to achieve a focused, simple disclosure around material sustainability issues, according to the criteria outlined in SASB's Conceptual Framework.</p>

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NR0302	Claire White Manager, Social and Economic Development, International Council on Mining & Metals (ICMM)	general comment (n/a)	The materiality definition used for sustainability disclosures The definition of what constitutes materiality from a sustainability point of view does not match up with materiality for the purposes that SASB has laid out. Whereas, for GRI, material issues are those that "include those topics that have a direct or indirect impact on an organization's ability to create, preserve or erode economic, environmental and social value for itself, its stakeholders and society at large", the definition applied by SASB for materiality as those topics that would be material to a „reasonable investor“ are distinct. While many of the disclosures in the exposure draft might arguably be material under the GRI criteria, many fewer of them would be material from a „reasonable investor“ perspective. The „one-size-fits-all“ approach taken by SASB does not take into account the very different operating environments within which many mining companies do business.	SASB standards follow the U.S. Supreme Court definition of materiality. SASB has attempted to identify - through a multi-stakeholder engagement process - those sustainability topics that it believes may be material for all companies within each SICS industry. SASB recognizes, however, that each company is ultimately responsible for determining materiality.
NR0302	Claire White Manager, Social and Economic Development, International Council on Mining & Metals (ICMM)	general comment (n/a)	In general the various requests for data (MSHA for safety performance and dam hazard ratings, labour rights broken down by US and 'foreign criteria' etc.) are very U.S. centric and would mean onerous data conversion exercises with little or no value to the company in terms of generate useful metrics for their organization.	SASB recognizes that many US-listed companies have significant operations outside of the US. In certain cases SASB uses US regulations, norms, definitions, and standards to establish comparable benchmarks.
NR0302	Kevin McKnight, Chief Sustainability Officer and Vice President, Environment, Health and Safety, Alcoa	general comment (n/a)	We do not believe the issuance of such a standard is warranted given the existing requirements under Reg S-K. S-K already requires registrants to describe in the MD and A of Financial Condition and Results of Ops section of form 10K "any known trends or uncertainties that have had or that the registrant reasonably expects will have a material favorable or unfavorable impact on net sales or revenues or income from continuing operations. If the registrant knows of events that will cause a material change in the relationship between costs and revenues (such as known future increases in costs of labor or materials or price increases or inventory adjustments), the change in the relationship shall be disclosed." As such, we do not see any further need to prescribe specific disclosure requirements related to the sustainability topics in the Exposure Draft.	SASB agrees with Alcoa's characterization of the requirements in Reg. S-K. In fact, many topics in SASB's standards are already regularly disclosed in the Form 10-K in some form or another by many companies. However, SASB believes the capital markets will benefit from standardized disclosure on these topics from all companies for which the topic is material.
NR0302	Kevin McKnight, Chief Sustainability Officer and Vice President, Environment, Health and Safety, Alcoa	general comment (n/a)	Secondly, any disclosure under the Board's standards would be adopted by a registrant on a voluntary basis. Many registrants <b>already publish</b> a separate report on the sustainability topics included in the Exposure Draft (which follows the GRI). SASB efforts are duplicative.	Standalone sustainability reports serve a wide variety of stakeholders and are not comparable within an industry. SASB standards are designed to serve investors by providing comparable, decision-useful information in SEC filings. We believe these types of disclosure serve distinct needs.

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NR0302	Kevin McKnight, Chief Sustainability Officer and Vice President, Environment, Health and Safety, Alcoa	general comment (n/a)	<p>Thirdly, the Board's standards expect registrants to report with the same level of rigor, accuracy, and responsibility as all other information contained in SEC filings. At Alcoa and likely at other metals and mining companies, the data quality associated with most of the metrics is not robust enough to <b>meet data assurance requirements</b>. To globally implement a sustainability data collection, aggregation, and reporting solution that matches the rigor associated with info in SEC filings would be <b>very costly</b>. (cost &gt; benefits of info to the users of our financial statements). In addition, Alcoa would have to create a sustainability-reporting chart of accounts with data fields for quantities and a variety of units of measure similar to a financial chart of accounts. Overall, implementation of the SASB standards would create significant <b>reporting burden</b> and require the implementation of an accounting infrastructure tailored for sustainability reporting that is of similar complexity to the financial accounting infrastructure.</p>	SASB recognizes that there are may be costs and complexities associated with collecting and disclosing sustainability data in the manner outlined by SASB standards. However, SASB standards are designed to be cost-effective and to surface the minimum set of sustainability issues likely to be material for companies in a given industry.
NR0101 NR0102 NR0103 NR0104	Brian Sullivan, Executive Director, IPIECA	general comment (n/a)	<p>IPIECA members do not support SASB's efforts to establish a reporting standard for disclosure in mandatory filings to the Securities and Exchange Commission (SEC), such as the Form 10-K and 20-F. Companies listed on U.S. stock exchanges are <b>already required to report</b> in their regulatory filings on material environmental issues, including but not limited to, regulatory and climate change risks. In addition, a detailed review of the draft SASB guidance <b>did not indicate any significant benefits above reporting to existing frameworks</b> such as the IPIECA, API and OGP Oil and gas industry guidance on voluntary sustainability reporting (henceforth referred to as the IPIECA Guidance) or the Global Reporting Initiative Guidelines that help companies to create a solid platform for productive engagement with stakeholders and performance improvement.</p>	While companies are already required to disclose material sustainability issues in SEC filings, no guidance exists on how to do so in a comparable way. SASB standards are a guideline, not a mandate. SASB believes companies may find it helpful to have a standard for disclosure that enables them to avoid risks associated with omission of material information and disclose decision-useful information for investors.
NR0101 NR0102 NR0103 NR0104	Brian Sullivan, Executive Director, IPIECA	general comment (n/a)	<p>The draft SASB guidance, if implemented, would impose a <b>significant resource and cost burden</b> on both established and new reporting companies without aiding investors, stakeholders or community members in evaluating individual company or cross-industry sustainability performance. By adding one more standard to an already densely packed area, the SASB approach could <b>misdirect attention away from the key issues</b> that demonstrate sustainability performance, or lead to reporting that becomes a rote exercise of providing overly detailed data with <b>no context</b>, simply to fulfil a requirement.</p>	SASB recognizes that companies face disclosure overload, and SASB agrees that the world does not need additional reporting schemes that are onerous for companies to use or difficult for investors to interpret. For this reason, SASB standards are designed to be cost-effective and decision-useful. By identifying only the minimum set of sustainability issues likely to be material at the industry level, and providing guidance on how to disclose such issues, SASB helps reduce reporting fatigue for companies. By designing standards for inclusion into the Form-10K, where investors are accustomed to getting information, and by creating standardized accounting

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				metrics, SASB helps investors compare corporate performance on material sustainability factors.
NR0101 NR0102 NR0103 NR0104	Brian Sullivan, Executive Director, IPIECA	general comment (n/a)	IPIECA members would also like to take this opportunity to outline a number of concerns related to SASB's process to develop the draft standards. We have observed a <b>lack of transparency in the decision-making process regarding which questionnaire comments to incorporate</b> , and from what we can gather by reviewing the latest draft standards, it appears that <b>few responses to the online questionnaire were incorporated into the draft standards</b> . It would be appreciated if SASB would provide more information to stakeholders regarding these processes and decisions. We would highlight the detailed, thorough and transparent process undertaken by the International Integrated Reporting Committee to develop the final draft of the <b>Integrated Reporting Framework</b> as an <b>example of good practice</b> in this area. The SASB "evidence-based" approach is also flawed to the extent that it has a broad range of stakeholders in its working groups to advise on materiality and related standards; but, significantly, this broad group does not represent the points of view of investors or the companies in which they invest. Materiality is framed from the point of view of investors. Information is material if a reasonable investor would consider it important in making an investment decision. Yet, the SASB working groups do not include any cross section of investors. ....	SASB's working groups have significant participation from investors of all types, making up approximately one-third of the 167 Industry Working Group members.  SASB provides details of how industry working group (IWG) feedback was incorporated in the Exposure Draft Standards. This feedback can be found through the links to the Standards Outcome Report and Standards Outcome Report Supplement, available here: <a href="http://www.sasb.org/sectors/non-renewable-resources/">http://www.sasb.org/sectors/non-renewable-resources/</a>  SASB also engages IWG participants through its Delta Series events, where it discusses the outcome of the IWG survey and how it intends to incorporate the comments received.  In addition, SASB presents both its process and outcomes for each sector to an independent Standards Council. The report of the Standards Council can also be found through the link above.
NR0101 NR0102 NR0103 NR0104	Brian Sullivan, Executive Director, IPIECA	general comment (n/a)	A reporting framework should help companies and stakeholders understand a company's material business impacts. SASB's approach has a greater chance to confuse than to inform because it does not recognize that material issues vary greatly based upon a company's size, operating locations and customer base, among other factors. While SASB states in its introductory materials that companies are in the best position to determine their own material risks, the prescriptive nature of the many metrics and references to multiple third party guidelines suggest otherwise. Moreover, these references are likely to lead to confusion as to what data should be reported, and force companies to spend limited time and resources assessing what to report, at the expense of improving performance.	Comment noted. SASB provides disclosure guidelines for sustainability topics that are likely to constitute material information for companies in an industry. In order to facilitate standardization and comparability of corporate reporting, SASB recommends the use of its metrics for topics that a company identifies as material based on its own analysis in the context of its operations. SASB standards also include activity metrics that are operational indicators and that can be used as normalization factors to account for the variation in performance based on company size, production, and other factors.

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NR0101 NR0102 NR0103 NR0104	Brian Sullivan, Executive Director, IPIECA	general comment (n/a)	A reporting framework should use <u>clearly defined and technically robust terms</u> and measurements. SASB's approach uses <b>terms that are not always clearly defined or well understood</b> , which would lead investors and companies to make their best guess about what is actually being reported. This compromises the comparability of the data and increases the likelihood that real impacts and issues would be overlooked. For example, the guidance does not spell out, define or illustrate how a company should measure "financial risk to capital expenditure projects due to country, local or community risks." A broad and vaguely-defined metric like this has no utility to stakeholders and provides no way to compare across companies.	SASB acknowledges the need for clearly defined terms and metrics. Specifically, it has updated its metrics and technical guidance to better define "financial risk" and "country, local, and community risks", aligning with the manner in which financial markets assign prices to factors influenced by qualitative factors. These include VaR (value at risk), default risk, sovereign risk, etc.  Furthermore, the quantitative metric relating to financial risk, NR0101-15 (Exposure Draft), was removed from the Provisional Standards. It is instead included as a recommended component of a qualitative disclosure on community risks, NR0101-15 (Provisional Standards).

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NR0101 NR0102 NR0103 NR0104	Brian Sullivan, Executive Director, IPIECA	general comment (n/a)	<p>Any new reporting framework should adapt metrics used in already-established, well thoughtout reporting frameworks. The standard fails to meet SASB's aim of informing investors about the <b>most material impacts</b> a company faces. Current industry guidance, such as the IPIECA Guidance, provides mature and tested approaches. These frameworks have been developed, and continue to be improved, with material impacts, stakeholder needs and company performance in mind. As an example, the draft SASB standard introduces a new metric that requests data on "Estimated greenhouse gas emissions potential (in metrics tons CO<sub>2</sub>e), embedded in proved hydrocarbon reserves." In the absence of consistent calculation protocols and boundaries, it is not clear why such data would provide <i>any additional insight or comparability than existing disclosures on reserves</i>, which are based on established reporting standards that are already well understood by investors, the IEA and others in terms of hydrocarbon demand and fossil fuel impact...A reporting framework should allow new and established reporting companies to improve their reports and ultimately their performance. This is already achieved by the IPIECA Guidance which was developed to share good practice across the industry and to encourage companies to keep stakeholders informed about their performance. The IPIECA Guidance is the outcome of over ten years of sharing, assessing and debating between industry experts and represents consensus on the most prevalent sustainability issues and indicators, at the same time as supporting continuous improvement of sustainability reporting and performance across the sector. When performed with diligence, sustainability reporting provides business and societal benefits – to enhance communication, improve performance, increase business value and improve stakeholder engagement. But reporting cannot be a means unto itself. Reporting simply to meet a minimum standard can lead to disclosures that fail to provide stakeholders with a clear understanding of how companies are managing sustainability. The SASB guidelines do not satisfy these principles, and do not provide flexibility to allow reporters large and small, in all stages of the reporting process, <b>to identify their most material issues.</b></p>	<p>Where possible, SASB seeks to harmonize with other reporting programs and uses accounting metrics requiring data that may already disclosed on company websites, sustainability reports, regulatory filings, or already collected by companies. SASB's first priority is to achieve a focused, simple disclosure around material sustainability issues, according to the criteria outlined in SASB's Conceptual Framework.</p> <p>IPIECA metrics are specifically referenced in several SASB metrics (e.g. NR0101-01, NR0101-04, NR0101-10, etc.)</p>
NR0101 NR0102 NR0103 NR0104	Brian Sullivan, Executive Director, IPIECA	general comment (n/a)	<p>The SASB Standards appear to seek to alter the clear definition of materiality that has been formulated by the Supreme Court. By introducing concepts such as "may" or "could" to the materiality formulation, SASB would lower the threshold for defining materiality and would require companies to speculate about potential financial impacts that investors may or may not be interested in.</p>	<p>SASB does not attempt modify the U.S. Supreme Court's definition of materiality. It makes use of the terms "may" and "could" because it does not have the authority to make determinations of materiality on behalf of a company.</p>

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NR0101	V. Bruce Thompson, President, American Exploration & Production Council (AXPC); Lee Fuller, Vice President of Government Relations, Independent Petroleum Association of America (IPAA)	general comment (n/a)	<p>The Associations support sustainability reporting frameworks that emphasize flexibility and prioritize the identification of sustainability topics that are deemed material by each company and their stakeholders. We believe that by reporting performance through the application of voluntary, flexible frameworks, we will increase transparency and continue to improve accuracy in reporting across our industry. We do not support SASB's efforts to establish a reporting standard for disclosure in mandatory filings to the SEC, such as the Form 10-K and 20-F. Companies listed on U.S. stock exchanges are already required to report in their regulatory filings on material environmental issues and risks. However, SASB introduces concepts such as "may" or "could" to the materiality formulation. The Supreme Court has been clear on a definition of materiality, and the Associations are concerned that SASB appears to seek to lower the threshold by requiring companies to speculate about potential financial impacts in which investors may or may not be interested. Furthermore, the Associations are not aware of sufficient evidence of investors supporting these disclosures in mandatory filings.</p>	<p>Use of SASB standards is voluntary and flexible, as determination of whether to disclose on a SASB topic or not is up to each user to decide. SASB believes its standards will add maximum value to capital markets if most companies disclose on most SASB topics using most SASB metrics.</p> <p>SASB does not attempt modify the U.S. Supreme Court's definition of materiality. It makes use of the terms "may" and "could" because it does not have the authority to make determinations of materiality on behalf of a company.</p>
NR0101	V. Bruce Thompson, President, American Exploration & Production Council (AXPC); Lee Fuller, Vice President of Government Relations, Independent Petroleum Association of America (IPAA)	general comment (n/a)	<p>The Associations assert that SASB's approach to reporting does <b>not lead to or provide additional benefits beyond existing, voluntary reporting frameworks such as the IPIECA, API and OGP Oil and gas industry guidance on voluntary sustainability reporting ("IPIECA Guidance") or the Global Reporting Initiative ("GRI")</b> Sustainability Reporting Guidelines and Oil and Gas Sector Supplement. In addition, we maintain there is a real and significant cost burden associated with collecting and analyzing data to meet the SASB standard that is not commensurate with the insight these disclosures would provide on companies' sustainability performance.</p>	Comment noted.
NR0101	V. Bruce Thompson, President, American Exploration & Production Council (AXPC); Lee Fuller, Vice President of Government Relations, Independent Petroleum Association of America (IPAA)	general comment (NR0101-26)	<p>1. A reporting framework should adopt metrics used in already-established, well thought-out reporting frameworks. The Associations' member companies do not believe that many of the topics covered in the Exposure Draft represent material information or risk to investors. The Exposure Draft also fails to meet SASB's aim of informing investors about the most material impacts a company faces. Current industry guidance provides mature and tested approaches. These frameworks have been developed, and continue to be improved, with material impacts, stakeholder needs and company performance in mind.</p> <p>Example: Accounting metric NR0101-26 - lack of comparability, defined process, cost great without benefit to investors</p>	<p>SASB identifies topics that are likely to constitute material information for companies in an industry, based on feedback received during the industry working groups (IWG) and public comment period and SASB's research on evidence of financial impact. The evidence behind SASB topics for the Oil &amp; Gas Exploration &amp; Production industry is provided in an industry brief, which is available through this link: <a href="http://www.sasb.org/our-process/industry-briefs/nrr-sector-industry-briefs/">http://www.sasb.org/our-process/industry-briefs/nrr-sector-industry-briefs/</a></p> <p>Appendix II of the brief provides a summary of the evidence for each disclosure topic, including responses from the IWG. For all topics presented to the IWG, between 79 percent and 97 percent of all IWG participants</p>

Industry SICs number	Name and/or Affiliation of Respondent	Topic (Metric Code)	Comment Excerpts	SASB Response
				<p>agreed that the topic was likely to constitute material information for companies in the industry. Some additional topics were included after the IWG, based on IWG feedback.</p> <p>NR0101-26 has been updated to be better defined and thus more comparable. SASB welcomes feedback on other disclosure topics and metrics, including reasons why the evidence SASB provides to show that they may be material is not be sufficient.</p>
NR0101	V. Bruce Thompson, President, American Exploration & Production Council (AXPC); Lee Fuller, Vice President of Government Relations, Independent Petroleum Association of America (IPAA)	general comment (NR0101-15)	<p>2. Companies are in the best position to determine their own material risks.</p> <p>This stands in contrast to the prescriptive nature of the numerous accounting metrics and references to multiple third-party guidelines suggested in the SASB standards. The cumbersome nature of collecting and reporting <b>poorly-defined data</b> will force many companies to focus on reporting at the expense of performance. Example: Accounting metric NR0101-15</p>	<p>Use of SASB standards is voluntary and flexible, as determination of whether to disclose on a SASB topic or not is up to each user to decide. SASB believes its standards will add maximum value to capital markets if most companies disclose on most SASB topics using most SASB metrics.</p> <p>SASB has attempted to incorporate metrics that are measures of - or proxies for - performance on a topic.</p> <p>SASB acknowledges that the practice of quantifying value-at-risk associated with community risks is an emerging concept and therefore the quantitative metric, NR0101-15 (Exposure Draft), was removed from the Provisional Standards. It is instead included as a recommended component of a qualitative disclosure on community risks, NR0101-15 (Provisional Standards).</p> <p>At its core, the concept of value at risk, if properly applied, directly indicates performance in managing community risks.</p> <p>During the period in which SASB's Non-Renewable Resource Standards are provisional, SASB will continue to solicit feedback to improve this concepts and others.</p>

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NR0101	V. Bruce Thompson, President, American Exploration & Production Council (AXPC); Lee Fuller, Vice President of Government Relations, Independent Petroleum Association of America (IPAA)	general comment (n/a)	<p>We concur with public comments filed by members of the Society of Corporate Secretaries and Governance Professionals on the SASB Conceptual Framework that:</p> <p><i>"The assumption by SASB that 'information about material issues' automatically rises to the level of itself being 'material information' is not valid. If a particular fact is not material to a company, it does not suddenly rise to the level of being considered material merely because it relates to a topic 'of interest' to certain investors. Instead, the appropriate standard is 'material information about material issues,' or simply 'material information.' The proposal to create an 'industry materiality' standard is similarly flawed. Materiality (or the lack thereof) is determined based upon the specific facts and circumstances facing a particular company."</i></p>	<p>SASB Conceptual Framework: SASB Standards provide disclosure guidance and accounting standards for a minimum set of sustainability issues or topics that have a significant impact on most, if not all, companies in an industry and which—depending on the specific operating context—are likely to be material to a company within that industry. <b>Each company is ultimately responsible for determining which information is material</b>, and which information such company is therefore required to include in its Form 10-K or 20-F and other periodic SEC filings. In identifying sustainability topics that are likely to be material for companies in a specific industry, <b>SASB follows the definition of materiality adopted by U.S. Securities laws and case law</b>. According to the U.S. Supreme Court, information is material if there is "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 approach is <b>consistent with FASB's approach to entity-specific materiality determination</b>.</p>
NR0101	V. Bruce Thompson, President, American Exploration & Production Council (AXPC); Lee Fuller, Vice President of Government Relations, Independent Petroleum Association of America (IPAA)	general comment (NR0101-10)	<p>3. A reporting framework should guide companies on the issues stakeholders increasingly expect companies to report. Companies collect data to inform their risk management and to improve their performance. The Associations do not agree with SASB's inclusion of several metrics in the Exposure Draft as Evidence-Based measures of risk and performance. Example: Accounting metric NR0101-10</p>	<p>Comment noted. SASB directs IPAA/AXPC to the SASB Oil &amp; Gas - Exploration &amp; Production Research Brief for specifics of our evidence-based approach by which we conclude that sites with protected conservation status could present a material risk to companies in the industry. The Brief can be accessed through this link: <a href="http://www.sasb.org/our-process/industry-briefs/nrr-sector-industry-briefs/">http://www.sasb.org/our-process/industry-briefs/nrr-sector-industry-briefs/</a></p>

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NR0101	V. Bruce Thompson, President, American Exploration & Production Council (AXPC); Lee Fuller, Vice President of Government Relations, Independent Petroleum Association of America (IPAA)	general comment (n/a)	<p>4. A reporting framework designed for disclosure in mandatory filings must be actionable by companies.</p> <p>SASB does not provide well defined processes or sufficient guidance on the preparation of disclosures to <b>ensure auditability</b> at the level required by financial accounting standards. Based on the Associations' analysis and review of public comments filed on the SASB Conceptual Framework regarding this topic, we recognize the standard, as proposed, will not meet the American Institute of Certified Public Accountants ("AICPA") definition of suitable criteria. Therefore, the Exposure Draft <b>does not provide sufficient guidance on how to prepare disclosures to ensure companies use the same criteria to obtain materially similar results.</b></p> <p><a href="http://www.aicpa.org/Research/Standards/AuditAttest/DownloadableDocuments/AT-00101.pdf">http://www.aicpa.org/Research/Standards/AuditAttest/Downloadable Documents/AT-00101.pdf</a></p>	<p>Comment noted. SASB's technical guidance and its incorporated references are meant to ensure a minimum level in uniformity in calculating and disclosing each metric. SASB expects registrants to work internally to implement the necessary structures and controls to report accurate data. Furthermore, SASB expects that registrants work with their assurance provider to ensure that an attestation engagement can be carried out.</p>
NR0101	V. Bruce Thompson, President, American Exploration & Production Council (AXPC); Lee Fuller, Vice President of Government Relations, Independent Petroleum Association of America (IPAA)	general comment (n/a)	<p>While we support the reporting of non-financial performance through the application of voluntary, flexible frameworks, we do not agree that the Exposure Draft, including a specific set of accounting metrics, is an effective means of meeting SASB's stated objectives to "assess sustainability risks" and a "complement to financial accounting." The Exposure Draft falls short of its proposed "relationship with financial accounting," and the Associations concur with public comments filed by PricewaterhouseCoopers ("PwC") that:</p> <p><i>"The SASB's emphasis on prescribing material non-financial topics at an industry level may lead to different outcomes than a company-specific process. Given that the FASB has recently consciously moved away from industry level standards, SASB's approach represents a diversion from that used in traditional financial reporting."</i></p>	<p>Comment noted.</p> <p>In response to the public comments to SASB's Conceptual Framework filed by PwC, SASB has responded: "Comment noted. However FASB deals with the accounting of financial capital and flows, which are fungible and can be accounted and compared across industries. As described in the section on relationship between financial and sustainability accounting ... 'unlike financial capital, non-financial capitals associated with sustainability cannot always be reduced to a single fungible unit of measure, like a currency, that can be aggregated into clear flows and accounted for as assets or liabilities.'"</p> <p>SASB directs IPAA/AXPC to the SASB Oil &amp; Gas - Exploration &amp; Production Research Brief for specifics of our evidence-based approach that demonstrates that the sustainability disclosure topics in the provisional standards are likely to constitute material information for companies in the industry. The Brief can be accessed through this link: <a href="http://www.sasb.org/our-process/industry-briefs/nrr-sector-industry-briefs/">http://www.sasb.org/our-process/industry-briefs/nrr-sector-industry-briefs/</a></p>

Industry SICS number	Name and/or Affiliation of Respondent	Topic (Metric Code)	Comment Excerpts	SASB Response
NR0302	Tawny A. Bridgeford, Deputy General Counsel, National Mining Association (NMA)	general comment (n/a)	<p>NMA appreciates SASB's willingness to educate our staff and members on the mission and efforts undertaken by the organization in developing sustainability accounting standards for use by publicly-listed corporations in disclosing material sustainability issues.</p> <p>However, NMA strongly opposes SASB's work to date and will not support in any manner SASB's ongoing efforts to develop disclosure guidance or accounting standards on sustainability topics for coal operations and the metals and mining industry in the "non-renewable resources sector." .... NMA and its members do not support SASB's efforts to date in determining and dictating which sustainability issues are material industry-wide and consequently should be disclosed (voluntarily or through a formal rulemaking process) in annual (i.e., Form 10-K or 20-F) or periodic filings to the U.S. Securities and Exchange Commission (SEC).</p>	<p>Comment noted. SASB notes that use of its standards is voluntary and flexible, as determination of whether to disclose on a SASB topic or not is up to each user to decide.</p>
NR0302	Tawny A. Bridgeford, Deputy General Counsel, National Mining Association (NMA)	general comment (n/a)	<p>1. The SEC's Existing Rules are Comprehensive: Companies listed on the U.S. stock exchange are <b>already required to report material risks</b> in their regulatory filings with the SEC, including sustainability information that a company deems to have a material impact on its current or future financial performance. If the SEC wanted additional disclosures from companies, it would pursue informal or formal guidance to elicit additional information. Additionally, any stakeholder interested in obtaining further information from a company on its sustainability performance may contact that company directly to encourage additional disclosures and engage in direct dialogue with the company on these issues. SASB's efforts to intrude into this process as a third party and push an aggressive campaign on expanded disclosures that are irrelevant to what a "reasonable investor" would expect from companies is entirely inappropriate. <b>In the end, the company and not SASB is in the best position to determine what sustainability information is material to its operations</b> and whether it should be disclosed. Furthermore, there are a multitude of robust voluntary disclosure programs on sustainability that SASB ignores in the development of its program, which only results in an additional scheme that does little to provide clarity and continuity for companies or their investors.</p>	<p>SASB notes that its standards are voluntary. As stated in the introduction to each standard, "SASB's disclosure guidance identifies sustainability topics at an industry level, which may be material— depending on a company's specific operating context— to a company within that industry. Each company is ultimately responsible for determining which information is material and is therefore required to be included in its Form 10-K or 20-F and other periodic SEC filings."</p>

Industry SICS number	Name and/or Affiliation of Respondent	Topic (Metric Code)	Comment Excerpts	SASB Response
NR0302	Tawny A. Bridgeford, Deputy General Counsel, National Mining Association (NMA)	general comment (n/a)	<p>2. SASB's "One-Size-Fits-All" Approach Improperly Expands the "Materiality" Standards under Current SEC Law: In its briefing of NMA members, SASB proclaims that companies, within the confines of U.S. Supreme Court precedent, define "materiality". However, SASB's entire approach is to determine for an industry sector what is "material information" and "materiality" for disclosing sustainability issues. In the Conceptual Framework, SASB states that an aggregated analysis at the industry level is appropriate "because companies that provide similar products and services tend to have similar business models, use resources in similar ways, and therefore tend to have similar impacts on society and the environment." See SASB, Conceptual Framework at 9-10 (October 2013). SASB goes on to explain that "analysis of the impact of sustainability topics at the industry-level is meant to provide guidance for disclosure on sustainability topics that are likely to be material at the company-level." <i>Id.</i> at 10 (<i>emphasis added</i>)....This analysis turns the whole concept of a "materiality" determination on its head. By acting as the self-empowered arbiter on sustainability accounting metrics –metrics that are based on largely insupportable research and findings on the regulatory trends and sustainability-related risks facing the industry without meaningful participation of industry experts – SASB acts in direct conflict with SEC's approach to entity-specific materiality determinations and the Supreme Court's fact-specific standard. Furthermore, by creating an "industry materiality" standard, SASB ignores the incredibly important fact that companies within the mining sector operate under a unique set of circumstances (i.e., the region in which a company operates, the scale of the operation, the grade of the ore mined and how it is processed, the ownership and size of the operation, etc.). Therefore, what is material for company "A" will not be material for company "B." Providing "industry materiality" guidance will only serve to confuse shareholders and other stakeholders into believing that all of the activity and accounting metrics identified by SASB are material and companies that do not disclose all of them are misleading investors. SASB is not "complete[ing] the picture on corporate performance" as proclaimed by the organization in its presentation, but creating a system of disclosure that will mislead and confuse investors in their investment decisions.</p>	<p>SASB notes that its standards are voluntary. As stated in the introduction to each standard, "SASB's disclosure guidance identifies sustainability topics at an industry level, which may be material— depending on a company's specific operating context— to a company within that industry. Each company is ultimately responsible for determining which information is material and is therefore required to be included in its Form 10-K or 20-F and other periodic SEC filings."</p> <p>SASB's process engaged with 167 industry experts during its Industry Working Group process.</p> <p>SASB standards also include activity metrics that are operational indicators that can be used as normalization factors to account for the variation in performance based on company size, production, and other factors.</p>

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NR0201	Tawny A. Bridgeford, Deputy General Counsel, National Mining Association (NMA)	general comment (n/a)	<u>SASB's Reporting Requirements are Largely Inappropriate, Go Beyond the "Reasonable Investor" Standard and are Inappropriately Forward-Looking and Speculative:</u> As a whole, NMA objects to the Exposure Drafts for coal operations and the metals and mining industry and lends no support to individual topics or metrics identified. However, given this opportunity to comment, there are several important overarching concerns with the approach SASB has taken. <b>First, many of the metrics do not even meet SASB's own criteria of being relevant/useful, cost effective, comparable and auditable.</b> Second, <b>many of the metrics are not reflective of the "reasonable investor" standard under U.S. securities laws.</b> Finally, some of SASB's reporting requirements are <b>inappropriately forward-looking and speculative and beyond what the SEC requires.</b> For example, speculation on the potential for greenhouse gas emissions embedded in proved coal reserves are not base level risks to investors. Such metrics do not account for advances in control technology that are arguably more relevant to investors than the metrics identified by SASB.	Comment noted. SASB has revised the metric on "potential greenhouse gas emissions embedded in proved coal reserves" to focus on carbon dioxide emissions, which is not speculative but inherent to the hydrocarbon resource, assuming that the reserves are combusted at some point. SASB's research and stakeholder engagement process identified future risks and uncertainty to price and demand of coal due to the associated greenhouse gas emissions potential. SASB's Coal Production Research Brief provides additional information on SASB's rationale.
NR0101	Jessica Bramhall, Meagan Harris, Kate Baker, and Shannon Roberts, EY	n/a	Should there be a metric around amount of fines for non-compliance under issue Regulatory Compliance in E&P? Similar to NR0102-10 in Midstream?	This issue focuses primarily on risks and opportunities relating to lobbying and political spending. SASB did not identify a topic in the E&P industry similar to that faced by the Midstream industry with respect to compliance with federal pipeline and storage regulations.
NR0101	Jessica Bramhall, Meagan Harris, Kate Baker, and Shannon Roberts, EY	n/a	Fracking, water use and fluids	Risks and opportunities relating to hydraulic fracturing ("fracking") including the associated water, fluid, and other chemical issues are addressed in NR0101-07 and NR0101-08.
NR0101	Jessica Bramhall, Meagan Harris, Kate Baker, and Shannon Roberts, EY	n/a	Where do Oilsands get covered? It's not clear to be where specific metrics are covered for Oilsands operations and specific metrics should be developed for Oilsands operations that would reach beyond mining & metals as there is both In-Situ and surface mining. There are also many more specific indicators that apply to Oilsands that I do not see covered anywhere.	As stated in the introduction to SASB's standards there are some limitations to the level of detail addressed therein. SASB anticipates the need for companies to disclose unique impacts associated with different hydrocarbon resources and has attempted to address this need in the technical protocols. See for example, metric NR0101-09, Section .48 on biodiversity impacts: <i>Where environmental management policies and practices differ significantly by hydrocarbon resource (e.g., conventional oil as compared to unconventional natural gas), then the registrant shall describe differences for each resource.</i>

Industry SICS number	Name and/or Affiliation of Respondent	Topic (Metric Code)	Comment Excerpts	SASB Response
NR0101	Jessica Bramhall, Meagan Harris, Kate Baker, and Shannon Roberts, EY	Greenhouse Gas Emissions (NR0101-01)	For Greenhouse Gas Emissions, why is intensity not covered?	SASB has introduced Activity Metrics to allow for normalization of all sustainability accounting metrics across a number of aspects that will characterize the disclosures. See Activity Level Accounting Metric NR0101-A.
NR0101	Jessica Bramhall, Meagan Harris, Kate Baker, and Shannon Roberts, EY	Greenhouse Gas Emissions (NR0101-03)	"Description of long-term and short-term strategy...": Not enough criteria and guidance here for this to be an accounting metric, too vague.	Comment noted.
NR0101	Jessica Bramhall, Meagan Harris, Kate Baker, and Shannon Roberts, EY	Air Quality (NR0101-04 NR0101-05)	Where do other jurisdictional standards get measured? i.e. for Canadian companies that are SEC registrants. There needs to be a clear indication of how other regulatory requirements get factored in here as EPA many not always be the standard. How will that be addressed?	SASB makes use of the certain US regulatory norms and definitions - such as EPA requirements - in order to bring standardization and comparability to disclosures. Several SASB topics, for example air emissions and waste, are likely material for reasons additional to purely regulatory compliance. They relate to operational efficiency, local pollution risks, community protests, litigation risks, and costs associated with controls and disposal. Therefore SASB believes the users of its standards will benefit from having a single definition for terms rather than having to rely on separate definitions and expectations based on jurisdiction.  Where regulatory compliance is the core focus of the topic and/or metric the scope applies to all jurisdictions in which the registrant operates. See for example, metric NR0302-06 in the Metals & Mining industry.
NR0101	Jessica Bramhall, Meagan Harris, Kate Baker, and Shannon Roberts, EY	Water Management (NR0101-06)	Water management: What about saline vs. non-saline for water metrics? There is metric for fresh water but not non-fresh.	SASB has not come across data or research that shows that company value is materially affected by saline (non-fresh) water management. SASB welcomes this feedback and will continue to monitor this aspect of water management.
NR0101	Jessica Bramhall, Meagan Harris, Kate Baker, and Shannon Roberts, EY	Water Management (NR0101-09)	This isn't a metric, there should be more <b>specific criteria</b> for this metric. Define "Regular" monitoring? What is the criteria/unit of measurement for communication of findings to relevant stakeholders. How are "relevant" stakeholders defined?	For its provisional standards, SASB has replaced this metric with NR0101-08 "Percentage of hydraulic fracturing sites where ground or surface water quality deteriorated compared to a baseline" where all terms and criteria are defined in the SASB technical guidance.

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NR0101	Jessica Bramhall, Meagan Harris, Kate Baker, and Shannon Roberts, EY	Land Use & Biodiversity Impacts  (NR0101-13)	Seems specific to pull out ARCTIC? What about other areas? Should be measure pipeline spills as well (# and volume per 1000 kms of pipeline). Pipeline spills should be separate out as a separate metrics.	The Arctic is an ecologically sensitive area which creates regulatory uncertainty for companies and operational risks from drilling in harsh environments. SASB recognizes that spills in other areas create similar risks and has expanded the metric to include disclosure of spills in shoreline areas with an Ecological Sensitivity Index (ESI) ranking of 8 or higher.  Pipeline spills are addressed separately in SASB Standard NR0102 - Oil & Gas- Midstream, but SASB did not determine the need to include a separate metric in the Oil & Gas - Exploration & Production Standard.
NR0101	Jessica Bramhall, Meagan Harris, Kate Baker, and Shannon Roberts, EY	Security, Human Rights & Rights of Indigenous People  (NR0101-16)	Same comment re: "Discussion of...." What about taking into account environmental issues and health concerns on aboriginal land? Water quality etc.? This issue fall more beyond human rights. Metric is too high-level and needs to be more specific to address the granular issues.	For the provisional standards, SASB has replaced this metric with the following three metrics (NR0101-12, NR0101-13, NR0101-14), which more specifically address the risk involved with operating in indigenous land and areas of conflict. Community rights, including environmental rights (e.g., water concerns) are addressed in metric NR0101-15.
NR0101	Jessica Bramhall, Meagan Harris, Kate Baker, and Shannon Roberts, EY	Security, Human Rights & Rights of Indigenous People  (NR0101-17)	What about hiring of part of the aboriginal community /businesses as part of the workforce? Should be part of supply chain management (Contractor & supply chain management). This is already a metric being used by E&P companies such as Cenovus.	This concept is not directly addressed in SASB standards. However, SASB includes the following guidance in metric NR0101-15 on community rights, which would be an appropriate section to discuss efforts to hire indigenous peoples:  <i>Section .91 The registrant should describe its efforts to eliminate or mitigate community risks and/or address community concerns, including, but not limited to:</i> • The use of social impact assessment (SIA) that evaluates, manages, and mitigates risks. • Efforts to engage with stakeholders, build consensus, and collaborate with communities. • "Shared" or "blended" value projects that provide quantifiable benefits to the community and the registrant.
NR0101	Jessica Bramhall, Meagan Harris, Kate Baker, and Shannon Roberts, EY	Workforce Health, Safety & Well-being  (NR0101-18)	What about LTIF and Fatalities?	Comment addressed. The metric now includes fatalities alongside total recordable injury rate (TRIR). SASB does not include LTIF in order to limit disclosure to a minimum set of metrics.

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NR0101	Jessica Bramhall, Meagan Harris, Kate Baker, and Shannon Roberts, EY	Business Ethics & Payment Transparency (n/a)	Why isn't there a metric for payments to foreign governments? Isn't there a royalty payment disclosure requirement for SEC registrants above a certain threshold?	Pursuant to Section 1504 of the Dodd-Frank Act, the SEC issued rules in September 2012 requiring companies that file an annual report with the SEC to file separately a certified report of all payments totaling \$100,000 or more made to the U.S. or a foreign government. This rule was vacated by the U.S. District Court for DC in July 2013 due to concerns about its public disclosure requirements and the lack of exemptions for these. The SEC indicated recently that it would begin rewriting its plan to implement Section 1504.  In this context, SASB is not proposing a separate metric on payments to foreign governments. However, SASB's metric, NR0101-20, addresses the risks of operating in corruption-prone countries.
NR0101	Jessica Bramhall, Meagan Harris, Kate Baker, and Shannon Roberts, EY	Workforce Health, Safety & Well-being (n/a)	Where are metrics captures for overall incident management other than TRIR?	SASB metric focus on "near miss" events as well as a qualitative disclosure on safety culture and emergency preparedness (NR0101-19).
NR0101	Jessica Bramhall, Meagan Harris, Kate Baker, and Shannon Roberts, EY	Management of Legal & Regulatory Environment (NR0101-28)	This should be under Business Ethics & Payment Transparency.	Comment noted. However, SASB continues to maintain that political contributions is a separate topic from "Business Ethics & Payments Transparency" where "payments" do not refer to political contributions.
NR0101	Jessica Bramhall, Meagan Harris, Kate Baker, and Shannon Roberts, EY	Reserves, Valuation & Capital Expenditures (n/a)	Why not include disclosure of financial penalties related to regulatory non-compliances and financial penalties related to exceeding thresholds i.e. paying emissions management fund or water permit exceedance? etc.	SASB recognizes that incidence of fines, settlements, and legal violations often serves as a good proxy for performance on sustainability topics, and thus includes this metric in several of its standards. However, SASB recognizes that there are certain limitations in the use of fines, settlements, and violations to measure performance, including that these actions may be determined subjectively (e.g. by a judge, jury, or regulatory agency) and that it is backward looking outcome. Thus, when possible SASB attempts to incorporate more direct, objective and, wherever possible, forward looking metrics.

Industry SICS number	Name and/or Affiliation of Respondent	Topic (Metric Code)	Comment Excerpts	SASB Response
NR0101	Jessica Bramhall, Meagan Harris, Kate Baker, and Shannon Roberts, EY	Contractor & Supply Chain Management (n/a)	Why not include this in NR0101-17 and NR0101-15? Shouldn't this be included in all indicators for full integration into supply chain? Shouldn't partners and contractors be all held to similar standards?	Contractor and supply chain management is addressed through integration into the following metrics: NR0101-09, NR0101-14, NR0101-15, NR0101-17, NR0101-18, NR0101-19, NR0101-21.
NR0101	Dr Jarlath Molloy, Technical Manager, Climate Disclosure Standards Board; Esben Madsen, Senior Technical Officer, CDP	Reserves Valuation & Capital Expenditure (NR0101-25;26;27)	We commend SASB for including accounting metrics on 'Reserves Valuation & Capital Expenditure' (NR0101-25;26;27) which are broadly aligned with new questions in CDP's Oil & Gas sector module 2014, on breakeven costs of production, low-carbon scenario analysis, and capital expenditure for continued exploration and development of hydrocarbon reserves; these questions were included to provide investors with information that will enable them to assess the risk facing oil and gas companies stemming from current and future action to limit global temperature increases to two degrees Celsius.	Comment noted.
NR0101	Dr Jarlath Molloy, Technical Manager, Climate Disclosure Standards Board; Esben Madsen, Senior Technical Officer, CDP	Reserves Valuation & Capital Expenditure (NR0101-26)	In NR0101-26, NR0201-18, SASB may wish to refer specifically to the Scope 3 category 'Use of sold products', as per the Greenhouse Gas Protocol's Corporate Value Chain (Scope 3) Accounting and Reporting Standard. Reporting for this and other Scope 3 categories if facilitated in CDP question CC14.1.	Current metric NR0101-23 has been revised to focus on embedded carbon dioxide emissions as a proxy for greenhouse gas emissions, therefore a reference to Scope 3 emissions is no longer relevant.
NR0101	Dr Jarlath Molloy, Technical Manager, Climate Disclosure Standards Board; Esben Madsen, Senior Technical Officer, CDP	Reserves Valuation & Capital Expenditure (NR0101-27)	In reference to NR0101-27 SASB may wish to refer to CDP question OG1.6 and sub-questions OG1.6a and OG1.6b, on whether oil and gas companies are considering the risk of scenarios where demand and prices are lower than companies currently forecast, due to efforts to mitigate climate change, and the implications for companies' capital expenditure plans.	SASB has referenced overlap with OG1.6a and OG1.6b in current metric NR0101-24.

Industry SICS number	Name and/or Affiliation of Respondent	Topic (Metric Code)	Comment Excerpts	SASB Response
NR0101	Dr Jarlath Molloy, Technical Manager, Climate Disclosure Standards Board; Esben Madsen, Senior Technical Officer, CDP	Water Management (NR0101-06 NR0101-07)	<p>We also suggest the CDP cross references are prefaced by the year in which they were issued. The CDP information requests continue to evolve annually and question numbering does change slightly. Therefore we invite you to reference the latest version of the CDP climate change questionnaire guidance. SASB may also wish to refer to CDP's water program and guidance, for example in the 'Water accounting section' W5, in relation to SASB's accounting metrics on water management (NR0101-06; NR0101-07; NR0103-06).</p>	<p>In the provisional standards, SASB has refined its metrics to reference the latest version of the CDP climate change questionnaire guidance. It has included a reference to the Section 5 of the CDP Water Questionnaire in NR0101-05.</p>
NR0101	John Wunderlin, Staff Attorney, Carbon Tracker Initiative	Reserves Valuation & Capital Expenditures (NR0101-25)	<p>We recommend allowing sensitivity analysis of additional reasonable low-demand scenarios. This could be accomplished by including an additional bullet point under metric NR0101-25.121 and NR0201-17.78.1 For example, the additional text for oil and gas could read:</p> <ul style="list-style-type: none"> <li>• Any additional reasonable low-demand scenarios that the registrant considers appropriate. In developing the scenario, the registrant may wish to incorporate other factors which could reduce above and beyond climate policy, including fuel duties, alternative energy substitution, efforts to reduce air pollution, energy security concerns, and demand destruction from sustained high prices, as well as wider trends in technology and economic growth.</li> </ul> <p><b>Rationale</b>  To-date, we are not aware of any company agreeing to provide sensitivity analysis of reserve levels under IEA's New Policies and 450 Scenarios. It may be beneficial to provide registrants the option to conduct sensitivity analysis based on their own price and demand projections for low-demand scenarios.</p>	<p>Comment appreciated. SASB sees value in standardizing the scenario used for sensitivity analysis. SASB, however, has added the line:</p> <p><i>.128 The registrant may choose to disclose the sensitivity of its reserve levels in other price and demand scenarios in addition to those described above, particularly if these scenarios differ depending on the type of hydrocarbon reserves, regulatory environment in the countries or regions where exploration occurs, end-use of the registrant's products, or other factors.</i></p>

Industry SICS number	Name and/or Affiliation of Respondent	Topic (Metric Code)	Comment Excerpts	SASB Response
NR0101	John Wunderlin, Staff Attorney, Carbon Tracker Initiative	Reserves Valuation & Capital Expenditures  (NR0101-27)	<p>We recommend including the following changes to the metrics, which would help provide a more complete picture of management's approach to capital allocation strategy.</p> <ul style="list-style-type: none"> <li>• Add to .131, following 'other factors.' <ul style="list-style-type: none"> <li>◦ The registrant may wish to include a discussion of other factors which could reduce demand, including fuel duties, alternative energy substitution, efforts to reduce air pollution, energy security concerns, and demand destruction from sustained high prices, as well as wider trends in technology and economic growth.</li> <li>• Add the following additional bullet point to .132: Whether and how the capital allocation process takes into account the possibility of stable or lower oil and gas prices due to reduced demand over the next 5-10 years and beyond.</li> <li>• Add the following additional metric: <ul style="list-style-type: none"> <li>◦ Whether and how the registrant actively considers alternative uses for capital, including returning capital to shareholders via buybacks and increased dividends.</li> </ul> </li> </ul> </li> </ul>	<p>Comment noted. SASB agrees that other factors may affect demand for hydrocarbons thereby influencing price. However, SASB chooses to retain the focus of disclosure on scenarios driven by climate change concerns, as SASB's research process identifies this to create the most risk and uncertainty for the industry.</p>
NR0101	Ms. Soledad Mills, VP Standards & Stakeholder Engagement, Equitable Origin	Land Use & Biodiversity Impacts  (NR0101-13)	<p>Accounting of hydrocarbon spills should also include an account of the impacts on the livelihoods of communities that may rely on the body of water affected for commercial and/or subsistence activities.</p>	<p>SASB believes that this is addressed through metric <b>NR0101-15: Discussion of process to manage risks and opportunities associated with community rights and interests</b>, which includes:</p> <ul style="list-style-type: none"> <li>• <i>Environmental rights and interests, including the right to clean local air and water, as well as safe discharge and disposal of waste.</i></li> </ul>

Industry SICS number	Name and/or Affiliation of Respondent	Topic (Metric Code)	Comment Excerpts	SASB Response
NR0101	Ms. Soledad Mills, VP Standards & Stakeholder Engagement, Equitable Origin	Security, Human Rights & Rights of Indigenous People  (NR0101-16)	<p>The metric addresses <b>three topics that may be better addressed separately as:</b></p> <ul style="list-style-type: none"> <li>o <b>Security and Human Rights:</b> Description of security arrangements and discussion of risk assessment, training, due diligence and remediation practices with respect to security personnel.</li> <li>o <b>Human Rights:</b> Discussion of level of implementation of the UN Guiding Principles on Business and Human Rights, including processes for operating in conflict zones. Percentage of exploration and production sites located in conflict zones.</li> <li>o <b>Indigenous Peoples' Rights:</b> Discussion of processes to identify impacts on Indigenous Peoples' rights, including the right to Free, Prior and Informed Consent. Percentage of exploration and production sites located on or near lands owned, occupied or used by Indigenous Peoples (or based on measures of exposure to Indigenous rights risk1). 1 See, for example, First Peoples Worldwide's Indigenous Rights Risk Report for the Extractive Industry: <a href="http://www.firstpeoples.org/images/uploads/R1KReport2.pdf">http://www.firstpeoples.org/images/uploads/R1KReport2.pdf</a> or EIRIS' report on Indigenous Rights risks and opportunities for investors: <a href="http://www.eiris.org/files/research%20publications/indigenousrightsjune09.pdf">http://www.eiris.org/files/research%20publications/indigenousrightsjune09.pdf</a></li> </ul>	<p>SASB incorporated this feedback into its Provisional Standards by having separate metrics that cover:</p> <ol style="list-style-type: none"> <li>(1) operating in conflict zones</li> <li>(2) operating in indigenous peoples' land</li> <li>(3) policies with respect to human rights, indigenous rights, and operating in conflict zones.</li> </ol>
NR0101	Ms. Soledad Mills, VP Standards & Stakeholder Engagement, Equitable Origin	Workforce  (NR0101-17 NR0101-18)	<p>The percentage of unionized employees and contractors as well as the ratio of employees to contractors <b>would provide additional information to investors</b> regarding potential exposure to risks related to industrial relations and contractor workforce risks.</p>	<p>Where relevant, SASB includes a breakdown of metrics by full-time and contract employees (see NR0101-17 on injuries, fatalities, and near misses). However, SASB did not identify labor relations as a separate disclosure topic.</p>
NR0101	Ms. Soledad Mills, VP Standards & Stakeholder Engagement, Equitable Origin	Business Ethics & Payment Transparency  (NR0101-19 NR0101-20)	<p>Neither metric directly addresses payment transparency. While project-level reporting of payments to the host government may be addressed by other reporting guidelines, participation in the Extractives Industry Transparency Initiative may be a relevant indicator.</p>	<p>Metric <b>NR0101-21: Description of the management system for prevention of corruption and bribery throughout the value chain</b> contains the following:</p> <p><i>.23 Relevant aspects of a management system include employee awareness programs, internal mechanisms for reporting and following up on suspected violations, anti-</i></p>

Industry SICS number	Name and/or Affiliation of Respondent	Topic (Metric Code)	Comment Excerpts	SASB Response
				<i>corruption policies, and participation in the Extractive Industry Transparency Initiative (EITI).</i>
NR0101	Ms. Soledad Mills, VP Standards & Stakeholder Engagement, Equitable Origin	n/a	Lastly, we recommend incorporating a metric on remediation of environmental liabilities. Given the legal precedents in this area and the potential global applicability, especially when acquiring assets operated in a context with historically lax environmental regulatory enforcement, establishing a reporting requirement to disclose an inventory of pre-existing environmental liabilities would seem materially relevant information for investors.	Rather than explicitly requiring disclosure of environmental liabilities, SASB metric NR0101-09 (Provisional Standards) requires a description of a company's environmental policies and practices for all stages of operations. The metric includes a disclosure on the degree to which policies and practices are aligned with the International Finance Corporation's (IFC) Performance Standards on Environmental and Social Sustainability, January 1, 2012, including specifically: Performance Standard 1 – Assessment and Management of Environmental and Social Risks and Impacts; and Performance Standard 3 – Resource Efficiency and Pollution Prevention, among others. Remediation is also discussed in metric NR0101-10 (Provisional Standards).  SASB believes this disclosure to be a cost-effective decision-useful method to provide investors with information on company performance related to the likely material risk from impacts on biodiversity resulting from environmental contamination and other operational impacts.
NR0101	Brian Sullivan, Executive Director, IPIECA	Land Use & Biodiversity Impacts (NR0101-10)	Whether a company operates in a specified acreage of high conservation value (in the Arctic or elsewhere) does not reveal how well it is operating, or what steps it is taking to protect the conservation value, or the net positive environmental and societal impact that can be achieved.	SASB has included a discussion and analysis metric for companies to disclose on their environmental management policies and practices for active sites.

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NR0101	V. Bruce Thompson, President, American Exploration & Production Council (AXPC); Lee Fuller, Vice President of Government Relations, Independent Petroleum Association of America (IPAA)	Reserves Valuation & Capital Expenditures (NR0101-26)	<p>Separate from the Associations' challenge to the accounting metric guidance (.126 and .127) stating that, " registrant shall make reasonable assumptions about the downstream use of hydrocarbon products," and "in the absence of primary data, the registrant should refer to sources such as the US EIA or the IEA for assumptions about downstream disposition of crude oil, petroleum distillates, and natural gas," <b>the lack of comparability and a defined process for these calculations</b> renders this disclosure meaningless to investors. Additionally, the <b>cost</b> associated with obtaining this information would be substantial <b>without providing a clear benefit</b> to investors and shareholders. Such "metrics" represent poorly developed disclosures that do not capture material industry information better than what is already reported through existing frameworks</p>	<p>Current metric NR0101-23 has been revised to focus on embedded carbon dioxide emissions as a proxy for greenhouse gas emissions, thereby eliminating uncertainty associated with downstream use and addressing IPAA and AXPC's concerns in this regard.</p>
NR0101	V. Bruce Thompson, President, American Exploration & Production Council (AXPC); Lee Fuller, Vice President of Government Relations, Independent Petroleum Association of America (IPAA)	Community Relations (NR0101-15)	<p>Companies are in the best position to determine their own material risks: Example: The Associations question SASB's Evidence-Based Determination of Materiality when offering <b>guidance and using terms without clear and well-understood definitions</b>, which may result in information that is not decision-useful for corporate management and investors. This <b>compromises the quality and comparability</b> of data and increases the likelihood that real impacts and issues would be overlooked. A broad and <b>vaguely-defined</b> metric has no utility to investors or other stakeholders</p>	<p>SASB uses the SEC definition of materiality (U.S. Supreme Court definition, (TSC Indus. V. Northway, Inc., 426 U.S. 438 (1976) and Basic v. Levinson, 485 U.S. 224 (1988)), and recognizes that each company is ultimately responsible for determining which information is material, and which information such company is therefore required to include in its Form 10-K or 20-F and other periodic SEC filings.</p>

Industry SICS number	Name and/or Affiliation of Respondent	Topic (Metric Code)	Comment Excerpts	SASB Response
NR0101	V. Bruce Thompson, President, American Exploration & Production Council (AXPC); Lee Fuller, Vice President of Government Relations, Independent Petroleum Association of America (IPAA)	Land Use & Biodiversity Impacts  (NR0101-10)	<p>This metric fails to provide investors with valuable information that could guide decision-making. First, the accounting metric guidance on determination of “high conservation value” (.43) <b>does not account for many other ecologically sensitive areas</b> in which companies may operate and focus on only the Arctic will result in narrow and incomplete disclosures. Further, and perhaps more importantly, NR0101-10 does not take into consideration all the <b>mitigation measures and best management practices that companies are often required to implement if they are allowed to operate</b> in these areas at all. Finally, calling out a specific area of “high conservation value” to report on, such as the Arctic, seems somewhat <b>arbitrary</b>. For these reasons, we believe that these “metrics” do not provide a measure of risk or performance for investors.</p>	<p>Comment appreciated. SASB has revised its provisional standards to focus on areas with protected conservation status and areas that are endangered species habitat. SASB believes these designations to be more narrowly defined and those that indicate potential risk to current and future development.</p> <p>Metric NR0101-11 includes the following guidance:<sup>68</sup> <i>The registrant may choose to provide discussion around reserves that are located in protected areas or endangered species habitat, but present low risk to biodiversity or ecosystem services; the registrant may choose to provide similar discussion for reserves located in areas with no official designation of high biodiversity value but that present high biodiversity or ecosystem services risks.</i></p> <p>Furthermore, metric <b>NR0101-09 Description of environmental management policies and practices for active sites</b> should allow for discussion of mitigation measures and best management practices, among other relevant pieces of contextual information necessary for an investor to guide decision making.</p>

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NR0101	V. Bruce Thompson, President, American Exploration & Production Council (AXPC); Lee Fuller, Vice President of Government Relations, Independent Petroleum Association of America (IPAA)	Water Management (NR0101-06)	<p>In support of this point (above), the Associations are also not satisfied by SASB's public response to suggestions and concerns raised by stakeholders regarding auditability, as stated by SASB in its Conceptual Framework Record of Public Comment:</p> <p><i>"Suggestion to make sure that standards are suitable criteria for AICPA will be considered as an additional duty of the [SASB] Standards Council [emphasis added]."</i> Entrusting the SASB Standards Council to the "additional duty" of ensuring the standard contains suitable criteria renders the current standard <u>not actionable by companies</u> and, if adopted, <u>may result in information that is not decision-useful for corporate management and investors.</u> Example: Accounting metric NR0101-06. .... In contrast, the IPIECA <i>Guidance</i> is the outcome of over ten years of sharing, assessing and debating among industry experts and represents consensus on the most prevalent sustainability issues, indicators and criteria for the oil and gas industry, at the same time as supporting continuous improvement of sustainability reporting and performance across the sector.</p>	<p>The role of SASB's Standard Council is to evaluate the Standards and provide feedback on the suitability of criteria. The SASB Conceptual Framework should not be interpreted to say that the Standards Council will undertake additional work to add "suitable criteria".</p> <p>SASB appreciates the leadership and longstanding work of IPIECA and other organizations. SASB notes that IPIECA metrics are specifically referenced in several SASB metrics (e.g. NR0101-01, NR0101-04, NR0101-10, etc.).</p> <p>SASB's process, in addition to engaging with industry professionals incorporates the expertise of intermediaries (auditors, accountants, consultants, non-governmental organizations) and market participants (investors, research analysts, exchanges).</p>
NR0103	Jessica Bramhall, Meagan Harris, Kate Baker, and Shannon Roberts, EY	n/a (Management of the Legal & Regulatory Environment)	Should there be a metric around amount of fines for non-compliance under issue Regulatory Compliance in RM similar to NR0102-10 in Midstream?	This issue focuses primarily on risks and opportunities relating to lobbying and political spending. SASB did not identify a topic in the R&M industry similar to that faced by the Midstream industry with respect to compliance with federal pipeline and storage regulations. However, SASB includes a metric relating to fines and settlements related to price fixing and/or price manipulation.

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NR0103	Jessica Bramhall, Meagan Harris, Kate Baker, and Shannon Roberts, EY	Water Management (NR0103-06)	Include comments about reduction strategies for water reduction (not just for emissions)	The introduction to SASB's standard states:  "As appropriate—and consistent with Rule 12b-20 —for each sustainability topic, 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: <ul style="list-style-type: none"><li>• the registrant's strategic approach to managing performance on material sustainability issues;</li><li>• the registrant's competitive positioning;</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 registrant's last three completed fiscal years (when available).</li></ul>
NR0103	Jessica Bramhall, Meagan Harris, Kate Baker, and Shannon Roberts, EY	Greenhouse Gas Emissions (NR0103-02)	Provide opportunity to list any energy reduction activites implemented in refinery which may or may not have effect on emissions	Comment noted. Energy management – where it does not overlap with direct GHG emissions – was not identified by SASB as a standalone disclosure topic for the Oil & Gas - Refining & Marketing Industry. Energy management that is related direct GHG emissions are addressed under the topic of Greenhouse Gas Emissions.
NR0103	Jessica Bramhall, Meagan Harris, Kate Baker, and Shannon Roberts, EY	Air Quality (NR0103-04)	For 'amount (in metric tons of hydrocarbon content) of flue gas flared, what about flaring things other than hydrocarbons (i.e. H <sub>2</sub> S, H <sub>2</sub> )?	SASB has included disclosure of H <sub>2</sub> S sulfide air emissions.
NR0103	Jessica Bramhall, Meagan Harris, Kate Baker, and Shannon Roberts, EY	Hazardous Materials Management	Hazardous Waste Management section should include something regarding hydrocarbon or other hazardous materials spills? A section should include amount of liabilities, their extent of contamination, and ongoing remediation efforts. A listing of violations and fines should be included for last year. Also can site amount of remediation site closures.	Spills are addressed in the issue "Health, Safety, and Emergency Management" insofar as they are "loss of primary containment" events. Additionally, leaks of hydrocarbons and hazardous materials from underground storage tanks (USTs) are addressed in NR0101-08.  SASB does not include a specific metric on spills to the environment for the R&M industry, however, these are included in the Oil & Gas - Exploration & Production and the Oil & Gas - Midstream Standards.

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NR0103	Jessica Bramhall, Meagan Harris, Kate Baker, and Shannon Roberts, EY	Employee Health, Safety & Well-being	EHS section should include disclosure of OSHA violations.	SASB believes that OSHA injuries, fatalities, and near misses provide a better indication of risk, governance, and performance on safety than OSHA violations. OSHA violations depend on subjective factors thus may be less relevant, decision-useful, and comparable.
NR0103	Dr Jarlath Molloy, Technical Manager, Climate Disclosure Standards Board; Esben Madsen, Senior Technical Officer, CDP	Water Management (NR0103-06)	We also suggest the <b>CDP cross references are prefaced by the year in which they were issued</b> . The CDP information requests continue to evolve annually and question numbering does change slightly. Therefore we invite you to reference the <b>latest version</b> of the CDP climate change questionnaire guidance. SASB may also wish to refer to CDP's water program and guidance, for example in the 'Water accounting section' W5, in relation to SASB's accounting metrics on water management (NR0101-06; NR0101-07; NR0103-06).	<p>SASB has added years to the reference in the standards to CDP's questionnaire and included a line that states:</p> <ul style="list-style-type: none"> <li>• <i>The registrant shall consider the CDP Guidance as a normative reference; thus, any updates made year-on-year shall be considered updates to this guidance.</i></li> </ul> <p>SASB has referenced CDP's water disclosure guidance, Section W5.</p>

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NR0103	Andrew C. Brengle, independent	Hazardous Materials Management or Air Quality  ( NR0103-06 or NR0103-05)	<p>For your consideration: include an accounting metric that discloses whether a company has any facilities subject to the Risk Management Plan Rule (RMP Rule) under Section 112(r) of the Clean Air Act Amendments of 1990. The RMP rule requires companies storing or holding large quantities (usually &gt;10,000 lbs) of "extremely hazardous substances" to scope out "worst case" scenarios should the hazardous substance explode or otherwise be released and pose threats to workers and neighbors. Oil refineries are among the 14,000 facilities in the U.S. subject to the rule as of 2009. I have provided some links below for reference material. If not worthy of inclusion in the accounting metric code itself, it is worth including in the disclosure notes explaining the codes. Disclosure on the RMP rule would alert investors to specific acute risks that certain OG-RM companies might present. It should suffice for a company to report only that they are subject to the rule at one or more facilities. Further detail on facility names and locations shouldn't be necessary—especially as companies are understandably concerned about security issues related to such information. It probably fits best under Hazardous Materials Management (NR0103-08), although it is regulated under an air quality law (i.e NR0103-05). The rule also straddles H&amp;S process safety and community disclosure.</p> <p><a href="http://www.epa.gov/emergencies/docs/chem/gdc-fact.pdf">http://www.epa.gov/emergencies/docs/chem/gdc-fact.pdf</a> 3-page fact sheet <a href="http://www.epa.gov/emergencies/content/rmp/index.htm">http://www.epa.gov/emergencies/content/rmp/index.htm</a> EPA webpages on the rule</p> <p><a href="http://www.epa.gov/region07/toxics/pdf/guide.pdf">http://www.epa.gov/region07/toxics/pdf/guide.pdf</a> 1997 EPA guidance includes refs to refineries</p> <p><a href="http://www.bdlaw.com/news-1403.html">http://www.bdlaw.com/news-1403.html</a> 2012 article by law firm on RMP enforcement</p>	<p>SASB appreciates this comment. After careful consideration of the suitability of a metric specific to the Risk Management Plan Rule, SASB has decided not to include one in its Provisional Standards. SASB however has incorporated concepts raised by this comment into the metric: <b>NR0103-04 Number of refineries in or near areas of dense population.</b></p>

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NR0102	Jessica Bramhall, Meagan Harris, Kate Baker, and Shannon Roberts, EY	Process Safety, Emergency Preparedness & Response (NR0102-14)	Does metric #NR0102-14 in Midstream encompass spills as well when they say 'pipeline incidents'?	Pipeline incidents includes spills, as described by .51 and .52 of metric NR0102-09.
NR0104	Jessica Bramhall, Meagan Harris, Kate Baker, and Shannon Roberts, EY	n/a	Should there be a metric around amount of fines for non-compliance under issue Regulatory Compliance in Services similar to NR0102-10 in Midstream?	This issue focuses primarily on risks and opportunities relating to lobbying and political spending. SASB did not identify a topic in the Oil & Gas - Services industry similar to that faced by the Midstream industry with respect to compliance with federal pipeline and storage regulations.
NR0104	Brian Sullivan, Executive Director, IPIECA	Activity Level	Metrics should be measures of risk and performance. Companies collect data to inform their risk management and to improve their performance. Data such as the "Total footage (in meters) of drilling performed in the reporting period" are <b>not collected</b> by major integrated oil and gas companies at the enterprise level because such a metric does not help assess risk. Wells vary in complexity and risk, dependent upon the geology of the reservoir and the geographic location, among other things	<p>SASB includes metrics such as the one referenced for the purpose of normalization by users of SASB standards. SASB agrees that it does not communicate performance. As described in the introduction to SASB standards:</p> <p><i>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.).</i></p> <p><i>Activity metrics disclosed should:</i></p> <ul style="list-style-type: none"> <li>• Convey contextual information that would not otherwise be apparent from SASB accounting metrics.</li> <li>• Be deemed generally useful for users of SASB accounting metrics (e.g., investors) 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>

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NR0201	Dr Jarlath Molloy, Technical Manager, Climate Disclosure Standards Board; Esben Madsen, Senior Technical Officer, CDP	Reserves Valuation & Capital Expenditures (NR0201-18)	In NR0101-26, NR0201-18, SASB may wish to refer specifically to the Scope 3 category 'Use of sold products', as per the Greenhouse Gas Protocol's Corporate Value Chain (Scope 3) Accounting and Reporting Standard. Reporting for this and other Scope 3 categories if facilitated in CDP question CC14.1.	Current metric NR0201-17 has been revised to focus on embedded carbon dioxide emissions as a proxy for greenhouse gas emissions, therefore a reference to Scope 3 emissions is no longer relevant.
NR0201	John Wunderlin, Staff Attorney, Carbon Tracker Initiative	Reserves Valuation & Capital Expenditures (NR0201-19)	We would recommend similar changes for coal, as follows: <ul style="list-style-type: none"><li>• Add to .88, following 'other factors.'<ul style="list-style-type: none"><li>◦ The registrant may wish to include a discussion of other factors which could reduce demand, including alternative energy substitution, efforts to reduce air pollution, energy security concerns, further price erosion due to increased supply, as well as wider trends in technology and economic growth.</li></ul></li><li>• Add the following additional bullet point to .89:<ul style="list-style-type: none"><li>◦ Whether and how the capital allocation process takes into account the possibility of stable or lower coal prices due to reduced demand over the next 5-10 years and beyond.</li></ul></li><li>• Add the following additional metric:<ul style="list-style-type: none"><li>◦ Whether and how the registrant actively considers alternative uses for capital, including returning capital to shareholders via buybacks and increased dividends.</li></ul></li></ul>	Comment appreciated. SASB sees value in standardizing the scenario used for sensitivity analysis. SASB, however, has added the line:  <i>.128 The registrant may choose to disclose the sensitivity of its reserve levels in other price and demand scenarios in addition to those described above, particularly if these scenarios differ depending on the type of hydrocarbon reserves, regulatory environment in the countries or regions where exploration occurs, end-use of the registrant's products, or other factors.</i>
NR0301	Arcelor Mittal	Greenhouse Gas Emissions (NR0301-01)	A coke plant included in integrated plant is difficult to separate emissions from site emissions. In general coke plants on integrated sites make use of a mixture of steel making gases which are not available on a stand alone sites and which makes the emissions incomparable with these plants.	Comment appreciated. SASB has eliminated the portion of the metric which asks for a breakdown of greenhouse gas emissions. It has included "Activity Level" metrics relating to level of steel production, iron ore production, and coking coal production.
NR0301	Arcelor Mittal	Air Quality (NR0301-03)	Line of disclosure: .15 - Generally particulate matter is requested as a whole and rarely PM10 and PM 2.5 are measurement requirements	SASB notes that it suggests disclosure of PM as one figure, the sum of all particulate matter of all diameters.
NR0301	Arcelor Mittal	Air Quality (NR0301-03)	Line of disclosure: .15 - Hazardous form of Manganese is the oxide and not metal	Comment appreciated. NR0301-03 has been updated to reference manganese oxide.

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NR0301	Arcelor Mittal	Air Quality (NR0301-03)	Line of disclosure: .15 - Depending on the list of PAHs figures will be different. It will be best to request the list of PAH included as many countries use a truncated PAH list.	SASB notes that it references specifically the PAHs listed in Table 1 of the European Commission Joint Research Centre's Institute for Reference Materials and Measurements PAH Factsheet.
NR0301	Arcelor Mittal	Energy Management (NR0301-04)	Line of disclosure- .19 - Conversion of kWh in GJ shall indicate if it is related to primary energy (using efficiency of the power plant) or not (using only conversion unit)	Comment noted.
NR0301	Arcelor Mittal	Energy Management (NR0301-04)	Line of disclosure: .20 - Outside US most of heating values (especially for condensed fuels) are expressed in Low Calorific Value. This unit is used for reporting in the Carbon Disclosure Project.	Comment noted. As higher heating values (HHVs) are used in the US and Canada, SASB has used HHVs in its Standards as they are focused on disclosure of US-listed companies. SASB will continue to solicit feedback as to the heating (calorific) value that would result in the most cost-effective and decision-useful disclosure.
NR0301	Arcelor Mittal	Water Management (NR0301-05)	Line of disclosure: .23 - At Group level no difference is made on quality of water withdrawals. Taking this into account will be beneficial for the reporting but will distort figures. In some regions large quantity of fresh water are over 1000 mg/l for TDS also quite some brackish water may be used in coastal areas.	Comment noted.

Industry SICS number	Name and/or Affiliation of Respondent	Topic (Metric Code)	Comment Excerpts	SASB Response
NR0301	Arcelor Mittal	Water Management (NR0301-05)	<p>Line of disclosure: .25 - Iron and steel industry, especially integrated sites, recycled in a large extent water (up to 150 times). It is difficult to impossible to measure the recycling rate. An attempt to approximate the recycling rate can be obtained to consider that a fully integrated plant needs about 150 m<sup>3</sup>/t to produce a ton of finished steel. This value however cannot be accurately determined for a single site.</p>	<p>Comment noted. SASB refers Arcelor Mittal to the section from the Introduction to SASB Standards:</p> <p><b>Uncertainty</b> SASB recognizes that there may be inherent uncertainty when disclosing certain sustainability data and information. This may be related to variables like the imperfection of third-party reporting systems 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.</p> <p><b>Estimates</b> SASB recognizes that scientifically-based estimates, such as the reliance on certain conversion factors or the exclusion of de minimis values, may be necessary 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.</p>

Industry SICS number	Name and/or Affiliation of Respondent	Topic (Metric Code)	Comment Excerpts	SASB Response
NR0301	Arcelor Mittal	Waste Management (NR0301-06)	<p>Line of disclosure: .27- The term waste has a very strict legal definition depending on the region with serious consequences for the treatment. It cannot be used as a generic term. To avoid any misunderstanding Arcelor Mittal uses the notion of 'RESIDUES'. It was established years ago by the environmental community of Arcelormittal after intensive discussions. A solution was needed in order to be able to start collecting data and reporting on it. The matter is extremely complex because there is no consistency about the notion waste between different countries and plants. The same product can change from waste over by-product to co-product even to product depending on the site, the local legislation and the situation. Moreover some cannot declare or recognize certain categories as waste since this could have major consequences for the treatment and storage of the products. Moreover it is not appropriate to label material flows (such as dust, sludges...) and other reverts that are naturally rerouted into the processes as waste. For this reason and after long discussions the environmental community decided on suggestion of the Brazilian experts that it was not useful to talk about wastes but decided to label all materials that are produced and are not steel as residues. It is only the destination of the residues that has relevancy: eliminated (land filled, incinerated or otherwise destroyed) which could be assimilated to 'Waste', reused internally (these can never be called waste as they are returned in the process where they originated) or reused externally. Finally we have also residues which are going into temporary storage awaiting sale for several applications.</p>	<p>SASB makes use of the certain US regulatory norms and definitions - such as the US EPA's - in order to bring standardization and comparability to disclosures. Furthermore, SASB has leveraged ISO's work in defining terms like waste and recycling.</p> <p>While SASB acknowledges that the regulatory implications for defining waste depend on the jurisdiction, SASB sees this topic as likely material for reasons additional to pure regulatory compliance. This relates to operational efficiency, local pollution risks and remediation liabilities, and costs associated with controls and disposal. In addition, recycling and reuse of by-products such as slag and sludges in the Iron &amp; Steel industry or in other industries can increase revenues for iron and steel companies. Therefore SASB believes the users of its standards will benefit from having a single definition for terms rather than having to rely on separate definitions and expectations based on jurisdiction.</p> <p>SASB's Iron &amp; Steel Industry Research Brief outlines evidence of both the risks and opportunities associated with by-products and hazardous wastes generated from the industry. The Brief can be accessed through this link: <a href="http://www.sasb.org/our-process/industry-briefs/nrr-sector-industry-briefs/">http://www.sasb.org/our-process/industry-briefs/nrr-sector-industry-briefs/</a></p>
NR0302	Claire White Manager, Social and Economic Development, International Council on Mining & Metals (ICMM)	Greenhouse Gas Emissions (NR0302-01 NR0302-03)	The shift from aggregate information at the corporate level to disclosures by "mineral or business unit" on a number of indicators would be especially onerous for reporting companies. This information is also of questionable value given that most investors want to know how risks are being managed and how the company as a whole is performing.	SASB notes that its disclosures request all reporting to be done on an aggregate basis. Guidance for companies to report on minerals or business units is optional or additional. However, SASB sees this segmented reporting as potentially necessary to provide appropriate context for users of the disclosure (e.g. investors). SASB notes that this is analogous to "segment reporting" of financial data.
NR0302	Claire White Manager, Social and Economic Development, International Council on Mining & Metals (ICMM)	Greenhouse Gas Emissions (NR0302-02)	How will different company approaches to identifying risks, opportunities, impacts be assessed? Statement that "may choose where relevant to provide a breakdown of its emissions by mineral or business unit" will facilitate patchy and incomparable data which does not reflect the variation in emission intensities of different commodities.	SASB notes that its disclosures request all reporting to be done on an aggregate basis. Guidance for companies to report on minerals or business units is optional or additional. However, SASB sees this segmented reporting as potentially necessary to provide appropriate context for users of the disclosure (e.g. investors). SASB notes that this is analogous to "segment reporting" of financial data.

Industry SICS number	Name and/or Affiliation of Respondent	Topic (Metric Code)	Comment Excerpts	SASB Response
NR0302	Claire White Manager, Social and Economic Development, International Council on Mining & Metals (ICMM)	Water Management (NR0302-05)	In isolation of additional information on, for example, efficiency / improvements / targets / commodity – the % figure is not indicative of impact.	<p>SASB notes that the introduction to its standard provides the following guidance:</p> <p>As appropriate—and consistent with Rule 12b-20—for each sustainability topic, 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:</p> <ul style="list-style-type: none"> <li>• the registrant's strategic approach to managing performance on material sustainability issues;</li> <li>• the registrant's competitive positioning;</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 registrant's last three completed fiscal years (when available).</li> </ul>
NR0302	Claire White Manager, Social and Economic Development, International Council on Mining & Metals (ICMM)	Land Use and Biodiversity Impacts (NR0302-10)	<p>Location of "reserve" in area of HCV does not equate to impact (high operating standards can apply and only a small % of reserve reaches exploration/development stage). There is no universally agreed definition of HCV. Unclear what the relevance of reporting by business or mineral unit.</p> <p>.48 – definition of HCV is expanded and unclear.</p> <p>.49 – this is a good opportunity but currently does not provide for consistent reporting,</p>	<p>Comment appreciated. SASB has revised its provisional standards to focus on areas with protected conservation status and areas that are endangered species habitat. SASB believes these designations to be more narrowly defined and those that indicate potential risk to current and future development.</p> <p>Metric NR0101-11 includes the following guidance:<sup>68</sup> <i>The registrant may choose to provide discussion around reserves that are located in protected areas or endangered species habitat, but present low risk to biodiversity or ecosystem services; the registrant may choose to provide similar discussion for reserves located in areas with no official designation of high biodiversity value but that present high biodiversity or ecosystem services risks.</i></p> <p>Furthermore, metric NR0101-09 <b>Description of environmental management policies and practices for active sites</b> should allow for discussion of mitigation measures and best management practices, among other relevant pieces of contextual information necessary for an investor to guide decision making.</p>

Industry SICS number	Name and/or Affiliation of Respondent	Topic (Metric Code)	Comment Excerpts	SASB Response
NR0302	Claire White Manager, Social and Economic Development, International Council on Mining & Metals (ICMM)	Land Use and Biodiversity Impacts (NR0302-11)	Unclear what % of sites subject to best-practice biodiversity managed will indicate – over and above the scale of operations in high risk sites.	Comment appreciated. This aspect of the metric has been eliminated.
NR0302	Claire White Manager, Social and Economic Development, International Council on Mining & Metals (ICMM)	Community Relations (NR0302-13)	No definition of what constitutes "Due-diligence" is provided. .61-expecting reporting on areas where companies "conduct business, intends to conduct business, or previously conducted business" is extremely onerous and not cost effective. Companies are unlikely to report on areas where they "intend to conduct business" (for example where exploration activities are taking place) as this is a competitive issue.	Comment noted. SASB believes that it may be relevant for a company to discuss risks related to human rights, indigenous rights, and operating in conflict zones for future projects, or "communities in which it intends to operate". SASB identifies potential risks to the ability to gain access to land, resources, infrastructure, labor, etc. that is may be relevant for companies to disclose. As the disclosure asks for a discussion of "policies and practices", SASB does request disclosure of specific projects, sites, or communities, which may be of competitive concern for a company. Furthermore, all of SASB disclosure 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.
NR0302	Claire White Manager, Social and Economic Development, International Council on Mining & Metals (ICMM)	Community Relations (NR0302-14)	No country is "free from country, regional, and/or community risk" as this disclosure states. Absent commonly accepted definition on what defines country risk, this would be impossible to calculate on aggregate level.	SASB has incorporated this disclosure into a recommended but not required component of a qualitative disclosure: <b>NR0302-13. Discussion of process to manage risks and opportunities associated with community rights and interests).</b>  SASB agrees that no countries may be free from risk. However, this concept is used to parallel the concept of "risk-free rate of return", which is a theoretical return should there be zero risk.

Industry SICS number	Name and/or Affiliation of Respondent	Topic (Metric Code)	Comment Excerpts	SASB Response
NR0302	Claire White Manager, Social and Economic Development, International Council on Mining & Metals (ICMM)	Security, Human Rights and Rights of Indigenous Peoples  (NR0302-15)	Bundling of concepts - security, human rights and Indigenous Peoples. Again, no definition of what constitutes due diligence is provided. There is currently no commonly used definition of "conflict zones". Upholding ILO169 is a government responsibility, not a company's.	<p>SASB incorporated this feedback into its Provisional Standards by having separate metrics to cover:</p> <ul style="list-style-type: none"> <li>(1) operating in conflict zones</li> <li>(2) operating in indigenous peoples' land</li> <li>(3) policies with respect to human rights, indigenous rights, and operating in conflict zones</li> </ul> <p>SASB has included a definition for "conflict zones" but welcomes additional feedback on its suitability.</p> <p>SASB believes that "due diligence" is a well-understood business concept, but includes relevant reference in its technical protocols, such as those published by the OECD and the United Nations.</p>
NR0302	Claire White Manager, Social and Economic Development, International Council on Mining & Metals (ICMM)	Workforce, Health, Safety and Well Being  (NR0302-16)	There is no common definition applied by companies on "near-misses". A variety of terms from "high potential incident" to "potential fatal incident/occurrence" are used and can mean different things. Would not result in comparable data.	<p>SASB acknowledges that there is no common definition for "near misses". However SASB recognizes the importance of measuring this concept. Through implementation of these standards, which include a definition of "near misses," SASB anticipates convergence of a definition for near misses, which would benefit companies, investors, and others.</p> <p>Furthermore, SASB sees usefulness in this metric when viewed in the context of the other components of metric NR0302-18, MSHA incidence rate and fatality rate</p>
NR0302	Claire White Manager, Social and Economic Development, International Council on Mining & Metals (ICMM)	Employee Recruitment, Development and Inclusion  (NR0302-17)	There are issues with the description for this metric especially the notion that there is a "diverse talent pool" available for the industry. "Innovative technological solutions" may actually result in less jobs being available, not more.	Comment noted. SASB has removed this disclosure topic from its Provisional Standard and has included it on its "watch list" of potentially emerging topics.
NR0302	Claire White Manager, Social and Economic Development, International Council on Mining & Metals (ICMM)	Labor Relations  (NR0302-18)	Often, the majority of a multi-national companies' workforce would be considered "foreign" according to this reporting indicator. This is a somewhat offensive way to categorize people and provides no value regarding the sustainability performance related to worker rights of any given company.	Comment noted.

Industry SICS number	Name and/or Affiliation of Respondent	Topic (Metric Code)	Comment Excerpts	SASB Response
NR0302	Claire White Manager, Social and Economic Development, International Council on Mining & Metals (ICMM)	Business Ethics and Payments Transparency (NR0302-21)	Companies unlikely to report where there "probable" reserves are. This is almost certainly business sensitive information. Reporting to this metric implies risk simply by association without taking into account mitigation measures a company puts in place to minimize the risk, which is a more meaningful way for a shareholders to evaluate risk exposure.	SASB clarifies that its disclosure asks that companies categorize if production comes from a subset of countries or not; it does not request disclosure of the specific location of production or reserves.  SASB appreciates the comment relating to risk and includes the following in its Provisional Standard: <i>.117 The registrant may choose to provide discussion around operations that are located in countries with low rankings in the index but present low business ethics risks; the registrant may choose to provide similar discussion for operations located in countries that do not have one of the 20 lowest rankings in the index but that present unique or high business ethics risks.</i>
NR0302	Kevin McKnight, Chief Sustainability Officer and Vice President, Environment, Health and Safety, Alcoa	Greenhouse Gas Emissions (NR0302-01)	Line: .01- We recommend using updated IPCC 4th Technical Assessment global warming potentials consistent with reporting now required by the European Union Emissions Trading Scheme.	Comment appreciated. The reference has been updated.
NR0302	Kevin McKnight, Chief Sustainability Officer and Vice President, Environment, Health and Safety, Alcoa	Air Quality (NR0302-03 NR0302-04)	Line: .014- Direct air emissions from some activities, such as mobile sources, office buildings, product transport, and moveable equipment may be minor and/or not have measureable environmental impacts for the registrant. The standard should either set reasonable minimum levels for these types of emission sources or only require disclosure for emission sources that may have a measureable environmental impact.  Line: .15- Instead of requiring registrants to disclose Carbon Monoxide (CO), Sox, Nox, PM, Hg, Pb, and VOCs air emissions, the standard should only require disclosure of air emissions that may have a measureable environmental impact for the overall reporting entity.	SASB requests an aggregate disclosure of air emissions. In the introduction to its standards SASB states the following:  <b>Estimates</b> <i>SASB recognizes that scientifically-based estimates, such as the reliance on certain conversion factors or the exclusion of de minimis values, may be necessary 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.</i>
NR0302	Kevin McKnight, Chief Sustainability Officer and Vice President, Environment, Health and Safety, Alcoa	Energy Management (NR0302-04)	For consistency and completeness, add "hydroelectric" to the list of purchased renewables (that is, wind, biomass, and solar). The IPCC classifies hydroelectric as well as wind, biomass, and solar as renewable energy.	The metric in the Provisional Standard includes the following as a definition for renewable energy: <i>.25 Renewable energy is defined as energy from sources that are capable of being replenished in a short time through ecological cycles, such as geothermal, wind, solar, hydro, and biomass.</i>

Industry SICS number	Name and/or Affiliation of Respondent	Topic (Metric Code)	Comment Excerpts	SASB Response
NR0302	Kevin McKnight, Chief Sustainability Officer and Vice President, Environment, Health and Safety, Alcoa	Water Management (NR0302-05)	<p>Line: .24 and .24- Large mining and metals companies operate numerous entities, which may or may not be located in water-stressed areas. Reporting total amount of water discharged (directly and indirectly) and total amount of water recycled would be costly to measure and does not necessarily correlate to any material cost or ecological impact at locations which are not water stressed. We recommend that reporting of total water discharged and recycled be required only for mining and metals operations located in water stressed regions, but not for all of the registrants operations.</p> <p>According to the WRI, areas where per capita water supply drops below 1,700 cubic meters per year are experiencing water stress - a situation in which disruptive water shortages can frequently occur.</p>	Comment noted. SASB agrees that disclosure of water consumption in water stressed regions is of key importance. However, SASB also recognizes that overall efficiency of water usage in industries that are water intensive may be a material disclosure. SASB recognizes that water intensity within the metals & mining industry is highly dependent on the mineral or metal being extracted.
NR0302	Kevin McKnight, Chief Sustainability Officer and Vice President, Environment, Health and Safety, Alcoa	Water Management (NR0302-05)	<p>Line: .23-.26- This parameter does not take into account the entire water profile of the operation, in particular, water losses. There can be significant water losses from evaporation, water content of waste and sludges disposed, and water content of products (for example, the chemically combined water in aluminias). By not accounting for water losses, there may appear to be a significant discrepancy between water withdrawn and water returned.</p>	Comment noted. SASB has revised this metric to focus on (1) withdrawals, (2) withdrawals in high stress regions, and (3) recycling.
NR0302	Kevin McKnight, Chief Sustainability Officer and Vice President, Environment, Health and Safety, Alcoa	Water Management (NR0302-06)	<p>Line: .27- Requiring the disclosure of number of incidents of non-compliance is too vague. Instead, the number and scope of non-compliance that may result in financial and ecological impacts should be required.</p>	SASB includes the number of incidents of non-compliance as a proxy for performance. While financial and ecological impacts are often a result of non-compliance, there is also subjectivity in defining reporting thresholds and/or defining "impact". Therefore, SASB continues to use the existing formulation for metric NR0301-06 in its Provisional Standard.
NR0302	Kevin McKnight, Chief Sustainability Officer and Vice President, Environment, Health and Safety, Alcoa	Waste & Hazardous Materials Management (NR0302-07)	<p>Requiring the disclosure of metric tons of tailings and overburden would be costly to measure and does not necessarily correlate to any material cost or ecological impact. We recommend deleting this metric altogether.</p>	Comment noted. SASB has excluded overburden from the scope of disclosure. However, SASB continues to include a metric on generation of tailings waste, which SASB's research shows can have financial impacts and create risks with respect to storage and disposal.

Industry SICS number	Name and/or Affiliation of Respondent	Topic (Metric Code)	Comment Excerpts	SASB Response
NR0401	Ara Erickson, Sustainability Manager, Weyerhaeuser	Water Management (NR0401-05)	<p>Per ANSI essential elements for due process section 3.2, SASB should avoid references to proprietary (non-governmental) tools, unless they are embodied in an ANSI designated standard or are developed by an ANSI Audited Designator. If a reference is essential, then it should be in a footnote or appendix and always include the phrase "or equivalent." Here, for example, SASB should provide a concise summary of what the WRI tool provides and then add a footnote, "such as the WRI Water Risk Atlas Tool, or equivalent." This enables competition in developing more effective and efficient tools and addresses in part the problem of the lack of due process afforded by proprietary tool developers, and concerns about the tool becoming obsolete, out of date, or no longer supported.</p>	<p>Comments noted. SASB currently makes use of the phrase "or equivalent" where appropriate (see NR0401-11). Where possible, SASB sees value in utilizing a single reference, standard, or methodology to allow for comparability of disclosure to SASB metrics. Specifically, SASB believes the WRI Water Risk Atlas tool to be an acceptable reference as it is widely used, transparent, publicly available, and technically rigorous.</p> <p>SASB standards will be continually reviewed and updated as necessary to ensure they do not become obsolete.</p>
NR0401	Ara Erickson, Sustainability Manager, Weyerhaeuser	Land Use & Biodiversity Impacts (NR0401-07)	<p>The term "high conservation area" is defined in the proprietary Forest Stewardship Council standard, and used in other standards related to that system, such as the Roundtable on Sustainable Palm Oil. It has a very broad definition that is subject to negotiation and pinned down only in the context of a given project audited to a relevant standard. SASB should not use the term, even if you intend to define it more narrowly, because it will cause confusion and unrealistic expectations. Assuming a revised term, the reference to WWF's Global 200 ecoregions should be deleted. WWF identified the Global 200 as a set of ecoregions that, if protected from development, could form a network of protected areas representing the "best of" all of the world's ecoregions. It is an admirable goal but not one that reflects an actual level of risk in any particular ecoregion. For example, all of the Southeastern US is in a Global 200 ecoregion, but there is no risk that it will be designated as a protected area. A more logical measure might be to use ecoregions identified by WWF as at risk – e.g., critical or threatened – because they have a history of development. But this would include most of the developed world, where further development is generally either accepted or encouraged. A better measure of risk might be a current version of WRI's frontier forest analysis, showing large areas of intact natural habitats. The scale of areas identified by SASB should be large – i.e., globally significant – unless they are legally protected areas.</p> <p><u>Additional comment for NR0401-07</u> The word extractive is not defined. Mining "extracts" materials from the ground, forestry "harvests" trees and replants, similar to crops.</p>	<p>Comment appreciated. SASB has revised its provisional standards to focus on areas with protected conservation status and areas that are endangered species habitat. SASB believes these designations to be more narrowly defined and those that indicate potential risk to current and future development.</p> <p>Metric NR0101-11 includes the following guidance: .68 <i>The registrant may choose to provide discussion around reserves that are located in protected areas or endangered species habitat, but present low risk to biodiversity or ecosystem services; the registrant may choose to provide similar discussion for reserves located in areas with no official designation of high biodiversity value but that present high biodiversity or ecosystem services risks.</i></p> <p>Furthermore, metric NR0101-09 <b>Description of environmental management policies and practices for active sites</b> should allow for discussion of mitigation measures and best management practices, among other relevant pieces of contextual information necessary for an investor to guide decision making.</p>

Industry SICS number	Name and/or Affiliation of Respondent	Topic (Metric Code)	Comment Excerpts	SASB Response
NR0401	Ara Erickson, Sustainability Manager, Weyerhaeuser	Energy Management (NR0401-04)	It is important to maintain biomass as a renewable resource throughout all sectors.	SASB notes that it refers to biomass as a renewable source with the qualification that:  <i>Energy from biomass sources biomass sources are limited to those that are considered "eligible renewables" according to the Green-e Energy National Standard Version 2.4 or eligible for a state Renewable Portfolio Standard.</i>
NR0401	Ara Erickson, Sustainability Manager, Weyerhaeuser	Product Innovation (NR0401-12)	It is important to maintain all certification programs provided in list.	Comment noted.
NR0401	Ara Erickson, Sustainability Manager, Weyerhaeuser	Product Innovation (NR0401-12)	This information will be challenging to compare across companies and industries since the metric is requesting quite a broad set of statements and descriptions.  Additionally, there is no mention of the use of renewable materials to begin with. Consider adding to the list of bullet points, along with the mention of secondary or recycled materials. Beginning with renewable materials is just as key as using recycled materials. Although this sector is only focusing on Non-Renewable Construction Materials (e.g., not wood-based construction materials), some of these companies may be incorporating renewable materials into their products.	Comment appreciated. SASB has revised this metric to more narrowly focus the disclosure on the size of the market for these products and size of the market that is captured by the company that is disclosing. SASB acknowledges the inherent uncertainty with this metric, but believes it to be consistent with what is discussed in the 10-K's MD&A section.
NR0401	American Chemistry Council (ACC)	Energy Management (NR0401-04)	Line of disclosure: .18- Our comment is limited to Accounting Metrics, and our comment is offered to improve the accounting metrics in the standards. Specifically, we suggest that performance should be measured consistent with the existing ISO 14040 series of global standards for Life Cycle Assessment. Not only is this approach consistent with internationally accepted standards, it would yield a much more complete and accurate picture of the full energy "footprint" of a product across its entire product life span, from the raw material extraction through materials processing, manufacturing, distribution, use, repair/maintenance and eventual disposal or recycling/reuse/energy conversion.	In order to work towards a favorable cost-benefit for disclosure to SASB standards, SASB focuses on metrics that are directly related to, or are proxies for, company performance or have impacts on company value. While SASB supports the robust approach suggested, it believes that the metrics for the topics of Energy Management and Production Innovation in SASB's Provisional Standards represent decision-useful, cost-effective, and comparable information.

Industry SICS number	Name and/or Affiliation of Respondent	Topic (Metric Code)	Comment Excerpts	SASB Response
NR0401	American Chemistry Council (ACC)	Product Innovation (NR0401-12)	<p>Recognized Green Building Certification Systems Should be Recognized Voluntary Consensus Standards- Line of Disclosure: .53 - Our comment is limited to Accounting Metrics, and our comment is offered to improve the accounting metrics in the standards. This section rewards use of selected green building certification systems; however, the market offers many systems of varying quality and effectiveness in terms of the underlying standards, and varying credibility as a function of the procedures used to develop the standard and certification system. SASB should limit this credit to credible sustainability standards and certification systems, such as those that have been approved as American National Standards by the American National Standards Institute (ANSI). Consideration of whether the system has been developed by an accredited organization is useful, but not dispositive, of whether a system's procedures actually adhered to accepted voluntary consensus standard development procedures.</p>	<p>SASB's provisional standards include the following note: <i>"SASB is not affiliated with any of the standards or organization listed, and listing should not be taken as an endorsement of any standard or organization. Listing of standards is not meant to imply that standards are identical in scope, underlying requirements, or criteria, or that standards are interchangeable."</i></p> <p>Furthermore, the following is included: <i>.53 If the registrant's products can be used to obtain credits in certifications other than those described above, it shall provide the name of the certification and evidence of why it is equal to or more rigorous than those standards listed here.</i></p> <p>SASB seeks to limit the list of certification programs to those that are credible in order to create a degree of comparability in disclosure. However, it is not meant to "reward" specific programs; instead, SASB recognizes that green building certification programs drive demand for sustainable building products. Therefore it is likely material for companies in the Construction Materials industry to discuss how they address this demand.</p> <p>In determining if a certification is widely accepted by the market, SASB cites the following type of data in its Construction Materials Industry Brief: <i>According to the USGBC, every day more than 1.5 million square feet of space is certified using LEED. In December 2013, the organization announced that it had issued its 20,000th LEED certification since its creation in 1993. The organization reports that more than 56,000 commercial and institutional projects, comprising 10.5 billion square feet of construction space worldwide, and more than 47,000 residential units currently participate in LEED.</i></p>

Industry SICS number	Name and/or Affiliation of Respondent	Topic (Metric Code)	Comment Excerpts	SASB Response
NR0401	American Chemistry Council (ACC)	general	Reporting of Complaints and Litigation Risk - Our comment applies to Disclosure Topics with respect to complaint, litigation, and liability reporting generally. The standard takes an inconsistent approach with respect to what should be disclosed and when, and the approach is inconsistent in connection with many measures: acute versus chronic hazard (e.g., short versus long term exposures); specific chemistries (e.g., the standard evinces a particular concern with possible silica exposure without a basis for this particular attention to the exclusion of other historical litigation and class action activity); nature of litigation (e.g., competition law versus toxic tort litigation). Because specific comments on these points would be extensive, at this stage of comment development we urge SASB to reconsider the framework and approach of the standard be considered in toto and that an internally consistent approach be applied.	Comment noted. SASB believes that the incidence of fines, settlements, and legal violations often serves as a good proxy for performance on sustainability topics, and thus includes this metric in several of its standards. SASB does recognize that there are certain limitations in the use of fines, settlements, and violations to measure performance, including that these actions may be determined subjectively (e.g. by a judge, jury, or regulatory agency) and that it is backward looking outcome. Thus, when possible SASB attempts to incorporate more direct, objective and, wherever possible, forward looking metrics.
NR0401	Owens Corning	general	Flexibility should be maintained in the report timing. While financial systems are mature and well developed to support quarterly and annual reporting deadlines, systems to collect sustainability data are not yet mature and require significant effort to support reporting. It can be expected that sustainability reporting systems will also mature, but that will not be the case in the near term. We recommend for the foreseeable future, that sustainability reporting be allowed to continue on a reporting schedule that is reflective of the organization's capability to accumulate the data	SASB recognizes the challenges with collection and reporting of sustainability data. However, part of SASB's mission is to promote the disclosure of comparable data, which requires companies to disclose data for the same period as one another.
NR0401	Owens Corning	general	Consistency in definitions among established reporting protocols (GRI, DJSI, etc.) will speed implementation of the standard and eliminate the waste associated with multiple reporting requirements. Each metric that is included in the standard should be tested against this criteria and differences identified for either correction or rationalization as to why a different metric adds more value.	Where possible, SASB seeks to harmonize with other reporting programs and uses accounting metrics requiring data that may already disclosed on company websites, sustainability reports, regulatory filings, or already collected by companies. SASB's first priority is to achieve a focused, simple disclosure around material sustainability issues, according to the criteria outlined in SASB's Conceptual Framework.
NR0401	Owens Corning	general	We recommend that a <b>table be created for each metric that cross references the metric to established reporting standards and any exception in SASB reporting be highlighted, rationalized, and explained if necessary. This should encourage as much standardization to existing metrics as is possible without compromising improvement as a result of the SASB standard.</b>	SASB appreciates this suggestion and will consider such a table in future publications.

Industry SICS number	Name and/or Affiliation of Respondent	Topic (Metric Code)	Comment Excerpts	SASB Response
NR0401	Owens Corning	general	We recommend that consolidation of data for global operations be reflective of the regulatory standards in effect unless organizations have standardized to a consistent standard already in their operational reporting. A specific example includes reporting waste globally based on RCRA when waste for category purposes may be defined differently depending on jurisdiction. A summary of hazardous waste defined by local regulation versus a standard definition that requires multiple reporting protocols should be sufficient.	SASB makes use of the certain US regulatory norms and definitions - such as the RCRA definition of hazardous waste - in order to bring standardization and comparability to disclosures. Several SASB topics, for example waste, are likely material for reasons additional to compliance (e.g. efficiency, safety risks, disposal costs/risks, etc.), therefore SASB believes the users of its standards will benefit from having a single definition for terms.
NR0401	Owens Corning	general	The metrics in the standard are primarily negative metrics. The opportunity should also exist to also report the positive impacts that a company has created through their efforts. 1. Examples of positive impacts could include among others: I. Reduced energy use and GHG impact due to the use of the products produced versus current solutions II. Charitable contributions and volunteerism III. Solid waste diversion as a result of utilizing recycled materials and promoting end of life solutions for products that are manufactured IV. Human health improvements through company initiatives and product improvements versus current solutions 2. The net-positive representation should be left for the company to define as long as the logic and calculation approach are documented and disclosed. Standards that are currently under development such as the Harvard studies on net-positive Handprint accounting will bring clarity to this approach in the future.	SASB recognizes the value in companies disclosing their opportunities around sustainability. In the Construction Materials Industry and the Oil & Gas - Refining & Marketing industry, SASB has included a metric to capture upside of potential of "reduced environmental impact building products" and advanced biofuels, in each industry respectively.  SASB encourages companies, when relevant, to follow its "General Disclosure Guidance":  • the registrant's strategic approach to managing performance on material sustainability issues; • the registrant's competitive positioning; • the degree of control the registrant has; • any measures the registrant has undertaken or plans to undertake to improve performance; and • data for registrant's last three completed fiscal years (when available).