Ocean Disclosure
In Nasdaq Nordic Listed Companies

CBS Consulting Business Project in collaboration with GDFA

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About this report

This report was conducted by researchers from the Copenhagen Business School, as part of the Consulting for Sustainability course and per request of the Green Digital Finance Alliance (G DFA). The Green Digital Finance Alliance is a not for profit foundation with a mission to scale green finance with fintech. The Alliance was co-founded by UN Environment and ANT Financial Services launched in Davos in 2017. The G DFA catalyses market innovation and policy action that leverages digital finance to, on the one hand, address the barriers to scaling green finance and, on the other hand, promote innovation that unlocks green investments in the real economy. The goal of this project was to map the current state of ocean disclosure in the Nordic market, and to provide a framework to assess the quality of current ocean disclosure practices.

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Executive summary

When looking at companies and how they report on their ocean impacts and dependencies, a lack of standards and frameworks is apparent. Ambiguity persists as to what constitutes “good” ocean reporting, because companies are permitted to define and report on their own targets and indicators.

With a focus on Nordic companies, this project explored the current ocean disclosure landscape, and formulated a framework to map out the way firms are reporting on ocean-related impacts and dependencies. This consisted of defining ocean disclosure and classifying this disclosure within four categories based on the quality of the report. Consequently, it was possible to examine if companies have good disclosure practices, and where there is room for improvement.

There were 3 main findings from this analysis. Firstly, only 27% of the Nordic market discloses on oceans, of which 22% were considered good disclosures. Secondly, there is little to no relationship between E(SG) Scores, Revenue and ocean disclosure. Finally, there are currently significant differences between ocean reports and a lack of granularity in ocean disclosure which complicates the assessment of quality.

Based on these findings, recommendations were made in the final part of the report. The most important of which are:

- The **specific criteria outlined for companies** to improve their ocean reports

- The **need for companies to analyse their activities and identify their ocean impacts** and;

- The need for companies to **collaborate with the scientific community** to **develop science-based impact reduction strategies** which are strongly driven by the needs of the ocean.
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Introduction

As the world gears up to tackle the climate crisis, it has become crucial to understand and respect the role of oceans in the ecosystems that support our economic and social development. The ocean was the birthplace of the earliest forms of life and continues to support our living systems as the world’s water storage — comprising 97% of all water on the planet. (1) It also provides a home to 80% of all life on the planet (2) and half of the oxygen, and plays a significant role in regulating global climate (3).

Beyond its role in our living systems, the ocean is also a vital source of economic activity and food. (2) In 2010, the OECD estimated the blue economy to have a global value added of 1.5 trillion USD (2) and in 2017 this was estimated to have reached 2.6 trillion USD by the World Bank. Revenues are estimated at 5.2 trillion across ocean economy sectors. (3) The ocean economy is also responsible for the employment of 168 million people. (3)

The importance of oceans and ocean economy cannot be understated. As we seek to tackle climate challenges, a greater importance ought to be attributed to disclosing the impacts and dependencies of companies on the ocean. This applies to all firms, as the interconnectedness of our oceans with other living systems highlights its relevance to all economic activities. Companies have a responsibility to better disclose in this regard, and financial institutions will play an important role in driving these changes. When investing, financial institutions should consider all the risks affecting the sustainability of a company’s business model, including ocean impacts.

By investing in this way, financial institutions can incentivise individual companies to disclose their ocean impacts and dependencies as they seek to attract greater capital. As it stands, however, there are limited frameworks for disclosing on the oceans and calls for guidelines have grown. (3) There is also a need to understand where disclosure in the market stands today.

This project focussed on developing a framework to map ocean disclosure rate and quality, and used this to map the current landscape in Nasdaq Nordic Listed companies. This was done to paint a picture of how many companies are disclosing, what the quality of disclosure in the market is and the relationships that exist between these and the sector, revenue and E scores of companies. A comparison was also drawn between ocean and non-ocean economy companies. This will help quantify and understand the availability and gaps in the required ocean data for good disclosure and accounting of ocean risks.

This is done as the first step in the GFFA’s ‘Making Oceans Count in the Nordic Financial System’ project, a partnership between GFFA, WWF and CBS, supported by VELUX Fonden. Together with Nordic Financial Institutions, the initiative aims to improve understanding and knowledge of ocean risks, dependencies and impacts, creating ocean data pathways and ocean engagement strategies.

(1) Gísli Pállsson, The Human Age, 2020
Methodology and Framework for Mapping Ocean Disclosure

As the focus of this research is on the Nordic market, the 600 companies found on the main list of the Nordic Stock Exchange were used as the basis of the sample. Stratified random sampling was used to derive a representative research sample, by dividing the population into strata. In this case, these represented listed industries (e.g., Real Estates, Consumer Staples) which were attributed equal importance. Therefore, 11 random companies were chosen per industry, ending up with 115 companies in total. In this way, this final random sample would be an unbiased representation of the Nasdaq Nordic listed companies (Appendix 1).

The companies were analysed against many categories to have an overview of the market and the general trends of disclosure. Details of the data gathered and their sources can be consulted in Appendix 2.

Once this information was gathered, the sample was examined to identify which companies belonged to the ocean economy. This analysis was based on the information available in the Business of Ocean Sustainability report. (4) The definition used for this can be found in Appendix 3.

Ocean Disclosure

The focus was then narrowed down to understand which industries are disclosing on the ocean, and among those, close attention was paid to the quality of disclosure. To accomplish this, “ocean disclosure” was defined based on a guide for reporting on biodiversity developed by the UNEP (5)

“Ocean disclosure” is a report that includes one or more of the following aspects:

- The understanding the companies have of their ocean activities and/or their impact
- Ocean related sustainability objectives and/or targets to inform about their development
- Ocean related metrics on impacts
- Ocean related strengthening partnerships

Defining Quality of Ocean Disclosure

After identifying the companies that were disclosing on oceans according to the definition proposed above, the quality of the information provided was assessed.

The criteria in each category below were considered with no hierarchy of importance. These criteria enabled a qualitative analysis of the content of the ocean disclosures that were found in the companies’ reports (website, annual, and sustainability reports).

(5) UNEP. 2018. Guidance for reporting by businesses on their actions related to biodiversity.
Photo by Ben Mack from Pexels
<table>
<thead>
<tr>
<th>QUALITY OF THE REPORT</th>
<th>CRITERIA CONSIDERED</th>
<th>WHY ARE THEY IMPORTANT?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor</td>
<td>▫ No disclosure on the location of their operations</td>
<td>▫ Relevant in order to determine potential effects on the ocean</td>
</tr>
<tr>
<td></td>
<td>▫ Lack of KPIs for tracking ocean impacts</td>
<td>▫ If there are no KPIs, a strategy, or clear understanding of the impacts, the company is failing to provide relevant information to measure and track</td>
</tr>
<tr>
<td></td>
<td>▫ No stated strategy to reduce ocean impact</td>
<td>▫ SDG 14 is a target directly related to the ocean</td>
</tr>
<tr>
<td></td>
<td>▫ Missing clear breakdown of impact and dependencies</td>
<td></td>
</tr>
<tr>
<td></td>
<td>▫ No reporting on SDG 14</td>
<td></td>
</tr>
<tr>
<td>Average</td>
<td>▫ Basic acknowledgment of impacts, e.g. mention of ocean-related words but no further information</td>
<td>▫ Some acknowledgment of impacts can help to understand possible strategies to be taken, as well as relevant metrics to report on</td>
</tr>
<tr>
<td></td>
<td>▫ Surface-level KPIs and data related to ocean impacts</td>
<td>▫ Generic KPIs and a surface-level explanation of targets don’t provide a clear view of strategies, goals, deadlines, etc.</td>
</tr>
<tr>
<td></td>
<td>▫ Mention of ocean-related sustainability goals but no clear strategy or timeline to achieve them</td>
<td>▫ This lack of concrete information can come across as name-dropping and greenwashing</td>
</tr>
<tr>
<td>Good</td>
<td>▫ Presentation of a defined strategy with KPIs</td>
<td>▫ When talking about KPIs there are different approaches considered: GRI, SDGs, SASB, TCFD</td>
</tr>
<tr>
<td></td>
<td>▫ Continued reporting on impacts and progress</td>
<td>▫ A clear presentation of the information, as well as a breakdown of the impacts, shows a clear understanding from the company regarding their activities, the way these affect the ocean, and how they plan to mitigate this, in a way that it’s easy to interpret by the reader</td>
</tr>
<tr>
<td></td>
<td>▫ Information is clearly presented, e.g. use of graphics and tables</td>
<td></td>
</tr>
<tr>
<td></td>
<td>▫ Mention of sustainability standards (e.g. GRI, Ocean Related Standards, etc.)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>▫ Impact breakdown (e.g. reference to water pollutants, solid waste, disturbances)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>▫ Basic reporting on SDG 14</td>
<td></td>
</tr>
<tr>
<td>Excellent</td>
<td>▫ Clear metrics and fact based reporting on impacts over time</td>
<td>▫ An ocean section makes it easier to identify the information and strategies</td>
</tr>
<tr>
<td></td>
<td>▫ Clear Ocean section in the report</td>
<td>▫ SDG 14 delimits clear targets that can act as a guideline to establish goals for companies</td>
</tr>
<tr>
<td></td>
<td>▫ Detailed report on SDG 14 targets</td>
<td>▫ Sustainability partnerships can fill the void when companies don’t possess the knowledge and resources required</td>
</tr>
<tr>
<td></td>
<td>▫ Ocean related partnerships to strengthen their sustainability strategy</td>
<td></td>
</tr>
</tbody>
</table>
Mapping the Nordic Market

Overview of Nordic Market
Based on the companies surveyed, it can be inferred that the Nordic market is split into the following sectors:*

*Sectors are different sizes than the initial sample (11 companies per sector) as certain companies were placed within a different sector based on team analysis of GICS

The largest sectors, in terms of number of companies, appear to be Industrials, Financials, Healthcare, Real Estate, and Consumer Discretionary. The survey also showed that only 27% of the companies in the Nordics are disclosing on the oceans. This highlights the significant gap which exists in the market as the vast majority of the market (73%) is not disclosing their ocean impacts and dependencies. The survey also showed that a small minority of the Nordic market belongs to the Ocean Economy — 10.4% of the companies surveyed. The sector breakdown within these companies is as follows: Energy (42%) constituted mainly of offshore drilling and oil companies; Industrials (33%) made up of shipping and port operation companies; Consumer Staples (17%) represented by food processing and production companies; and finally, Utilities (8%) represented by offshore wind.

Key Figures

10.4%  
Ocean economy companies

73%  
of all companies not disclosing

78%  
Poor or Average disclosures
State of Ocean Disclosure

Within the 27% of companies disclosing, the sectors disclosing most were Consumer Staples (19% of those disclosing), Industrials (16%), Energy (16%), and Consumer Discretionary (13%). The sectors disclosing least were Utilities (6%) and Real Estate (3%). Furthermore, only 22% of the disclosures were considered ‘Good’, while 42% of disclosures were considered ‘Poor’. Most revealing was the fact that no companies were considered to have ‘Excellent’ disclosure – representing the significant improvements required in ocean disclosure. Recommendations for such improvements are discussed at the end of the report.

Figure 2 displays the breakdown of disclosure quality and the sector composition of the companies considered to have ‘Good’ disclosure:

![Figure 2: Ocean disclosure quality breakdown](image)

The best performing sector in terms of quality is Consumer Staples which represents 28.5% of companies with ‘Good’ disclosure. This aligns with observed trends (6) and may be driven by the fact that consumers have been paying increased attention to sustainability matters. This could have resulted in the sector making efforts to cater to consumer demand. In contrast, Industrials fared the worst as the sector represents around 39% of companies with ‘Poor’ disclosure. Overall, this breakdown shows that the majority of the companies surveyed had Average or Poor disclosures – 78%.

This indicates that in the current landscape, there is a significant lack of concrete disclosure on ocean impacts and dependencies. This limits the extent to which the impacts of companies overall can be gauged. Furthermore, the information provided remains highly elementary and lacks measurable metrics and strategy.

Furthermore, the survey revealed that **Ocean Economy companies perform better** in terms of disclosure, as 50% disclosed on their ocean impacts and dependencies – compared to 24% of non-ocean companies. It was expected that ocean companies would perform better as their impacts and dependencies are more direct. However, this is reflective of the extent of the current gaps that exist in the market as half of the companies directly operating and depending on the ocean are not disclosing on this relationship.

"Half of the companies directly operating and depending on the ocean are not disclosing on this relationship."

![Ocean vs Non-Ocean companies disclosing](image)

In terms of quality, the differences between ocean and non-ocean companies that are disclosing are as follows:

<table>
<thead>
<tr>
<th>OCEAN COMPANIES</th>
<th>NON-OCEAN COMPANIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>50% had good disclosure</td>
<td>20% had good disclosure</td>
</tr>
<tr>
<td>17% had average disclosure</td>
<td>36% had average disclosure</td>
</tr>
<tr>
<td>33% had poor disclosure</td>
<td>44% had poor disclosures</td>
</tr>
</tbody>
</table>

Once again, ocean economy companies seem to be performing better. While this can be considered encouraging, it can be said that the ocean economy companies ought to be disclosing at a higher rate and greater quality considering their greater exposure. It is important at this point to note that this finding is perhaps linked to the sample size of ocean companies (12 ocean companies in a sample of 115). The results should scale but greater accuracy would be achieved with a larger sample.
Analysis of possible relationships

Relationship with revenue

Other variables were considered to understand if the quality of reporting could be potentially influenced by financial factors as the lack of financial resources could be an important barrier for firms to invest in reporting to the stakeholder community. This would be particularly amplified within an ocean context given that the current lack of frameworks would require companies to invest greater resources in the matter. On the other hand, larger companies with more funds could better allocate their assets and could be incentivised to invest in these activities, as they are more exposed and sensitive to public perception. (7)

The graph below shows instead that the quality of reporting is not influenced greatly by an organization’s revenues. The majority of the companies, under 2 billion USD in revenue, appear to be spread across the qualitative categories. However, the companies with revenue over 2 billion USD, seem to fall within the ‘Average’ and to a lesser extent ‘Good’ disclosure group.

Figure 4: Companies ocean disclosure quality and revenues.
Nonetheless, it seems that quality of disclosure is not related to the firms’ financial size as relatively smaller companies have delivered Good ocean disclosure. In contrast, larger ones have developed Poor ocean quality reports. Rather than financial considerations, the scope and depth of disclosure seems to differ as a result of the subjective approaches companies adopt to reporting: which frameworks and standards to follow, which stakeholders to address, and which information to make public. (8)

Relationship with E ratings

The relationship between E performance and ocean disclosure was examined to understand if firms with higher scores disclosed more on oceans and whether they had higher quality disclosure. This is relevant for investors as it is crucial to understand whether a metric such as E performance translates into better consideration of ocean impacts and dependencies.

Refinitiv was used to extract E scores. (9) This is one category of the three pillars of an ESG score. This rating examines companies according to three categories in particular: resource use, emissions, and innovations and uses a 0-100 scale (100 being the highest) to quantify this examination.

<table>
<thead>
<tr>
<th>Companies Disclosing:</th>
<th>Non-Disclosing Companies:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Score* <strong>15-30</strong></td>
<td>Score <strong>65-75</strong></td>
</tr>
</tbody>
</table>

Overall, it was found that non-disclosing companies have on average an E score between 15 and 30. In contrast, disclosing firms have higher E scores on average - between 65 to 75. Those disclosing, generally fell within a higher range with E scores from 25 to 90. (Appendix 4) The E score data set was relatively limited as the calculated score could only be found for 46 of the 115 companies surveyed. However, among those, a weak positive correlation (0.35 correlation coefficient) is observed between E scores and disclosure. This suggests that higher Refinitiv E scores could be indicative of greater ocean disclosure, to a certain degree - a larger sample would be needed to confirm this finding.

The relationship between E scores and ocean disclosure quality was also examined. Although the sample for this analysis consisted of only 17 companies, the correlation coefficient (0.14) reveals that there is no apparent linear relationship quality of disclosure and E scores.

The limited relationship between E scores, reporting, and the quality of ocean disclosure, indicates that E scores cannot be used to guide investment into companies disclosing about their ocean impacts. It appears to be an inadequate tool to screen which companies are reporting and even more ineffective at screening good quality disclosure. This is relevant to investors as it further highlights that ocean impacts and dependencies require a separate framework for analysis.

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* Average score ranging between
(9) Refinitiv, 2021, Environmental, Social and Governance (ESG) Scores from Refinitiv Methodology
Content analysis of current ocean disclosures

One of the main takeaways produced by the research is the lack of granularity within the reports. From the companies surveyed, 58 made use of various sustainability reporting standards, often referring to several in one report: among these, 29 referred to the UN Sustainable Development Goals (SDGs), 13 referred to the Global Reporting Initiatives (GRI) standards, 4 referred to SASB, and 14 made reference to the International Organization for Standardization (ISO), among others. These standards, however, are not directly aimed at the oceans and only 7 references to SDG 14 were made. This highlights that the standards used and the level of detailed analysis varies greatly and widely between companies.

Moreover, firms could refer to ocean specific certificates, for example the Ship Energy Efficiency Management Plan (SEEMP) that is used to check on fleet efficiency performance and monitoring and the Clean Shipping Index to track vessels’ environmental performance and sustainable shipping. References to these, however, were limited and varied perhaps based on the company’s individual activities.

Besides the standards used, reporting on ocean related metrics often varied significantly between companies.

Case Study

**Non ocean company** in the Sport Clothes and Accessories sector vs. **Ocean company** in the Oil & Gas Exploration and Production sector. Between these, significant differences can be seen. In the first scenario, the company included a dedicated SDG 14 section with a related strategy, targets achieved and future goals, among other metrics (Appendix 5). In the second case, the firm reports on the specific locations of its operations, and metrics such as water management and GHG emissions (Appendix 5). However, despite its current dependence on the oceans, it does not outline the clear impact areas of its ocean activities and the consequences these have on ocean health.

Due to the inconsistency among reports and the lack of alignment between standards and metrics, assessment of ocean disclosure can be difficult to quantify and standardise. Assessing companies independently proved to be more effective. This can lead to a degree of subjectivity when classifying the quality of disclosure. However, the recommendations below and the classification of disclosure quality on page 8 of this can help guide this evaluation.
Recommendations for Good Disclosure

Based on the findings of the research, the following recommendations are made for companies, investors, and regulators, and those looking to analyze and understand ocean disclosure.

Companies and Investors

As it stands, there are limited standards and guidelines for corporations to follow for disclosing on the oceans. However, the following requirements have been deemed crucial to raise the current standard in the market – companies need to:

- Disclose operation locations.
- Analyse their impacts and dependencies on the oceans and clearly disclose these.
- Use the analysis as the basis for the metrics they track and their ocean impact reduction strategy.
- Have clear strategies and KPIs formulated in relation to the ocean.
- Have scientifically driven disclosure, aligned with the GES descriptors of marine health – considering, for instance, their:
  - Effects on marine biology
  - The introduction of contaminants into the marine ecosystem
  - Pollution of the ocean and marine environments through discharge of litter and other human-created waste.
- Disclose SDG 14 targets as it can serve as a point of comparison between organisations.

The adoption of better and satisfactory reporting is of utmost importance for Ocean economy companies due to their direct presence and immediate impacts on the ocean. Consequently, if they fail to manage these dependencies adequately, their business model will be at risk in the long term as they directly depend on the ocean’s resources. Thus, their ocean disclosure ought to be comprehensive and outlined in a clear ocean section of their sustainability reporting.

To achieve these recommendations, suggestions have been developed for firms:

- Ask for external aid from specialists and/or scientists regarding ocean-specific matters, to help assess impacts and where the company is directly or indirectly playing a role.
- Having control and transparency on the entire supply chain as much as possible to measure and reduce the impact.
- Actively look for partnerships and solutions to reduce their impact and seek to collaborate with organizations such as NGOs to create clear target goals and areas of improvement.

While limitations will exist in practice on the extent to which organizations can fulfill these recommendations, companies need to start acting towards, at the very least, fully understanding the extent of their impacts on the oceans as this would be a stepping stone to developing KPIs and strategy to reduce impacts. This would also, however, help drive the market forward towards improved ocean reporting. Investors have a large role to play in this by signaling and encouraging greater ocean disclosure through the investments they make and can help drive rapid and much-needed progress.
Regulators

Work has begun at an EU level with the NFRD and EC proposal of April 2021. Such work is crucial as regulators have a large role to play in the shift towards greater ocean reporting. In particular, regulators should aim to:

- Impose science-driven disclosure requirements related to the GES indicators of marine health – so that disclosure is driven by the needs of the ocean. This can be done in collaboration with academia and the scientific community.
- Publish a defined and clear set of standards for companies to abide by, based on the analysis and recommendations made above.
- Encourage collaboration among stakeholders such as companies, governments, academia, and NGOs to accelerate the reporting standards creation.
- Attempt and encourage cross border alignment of disclosure

Conclusion

The survey of ocean disclosure in the Nordic market has successfully measured the gap between the companies disclosing and those that have yet to, thus making clear the challenge which lies ahead. Currently, there is a lack of standards in the market which has resulted in significant differences between reports and their level of granularity.

This paper outlined a framework to define the quality of disclosure which enables an improved assessment of the current landscape. However, the results generated only further emphasize the need for action as the market continues to fall short of Excellent ocean reporting which is needed now more than ever. Nevertheless, the framework proved effective to analyse the relationships between disclosure, sector, revenues and E scores. It serves as a stepping stone onto greater understanding of the current state of ocean disclosure.

Finally, it is hoped that the recommendations provided can serve as a guideline for improving disclosure and act as an important step towards greater understanding of the oceans.
Appendices

Appendix 1 - Random data sampling

To obtain a random sample, Excel was used as a tool – the rand() function was used to attribute a random number to all 600 companies. These values were then copied and pasted ‘as values’ so they did not change. The following custom sorting was then applied to randomise the companies:

Once the companies had been randomised the first 11 companies were selected from each industry.

Appendix 2 - Data gathered and sources

**Name, listed location, size, and sector**: using data and definitions from Nasdaq Nordic – ‘The Nordic List with First North GM’ from March 14.

**Yearly revenue**: latest available data from Orbis.

**Operating location**: company website/reports/publicly available information.

**Sector and Sub-sector/Business Line**: team assessment using GiCS methodology.

**Ocean Economy status**: using the definition provided in this research.

**E score**: using Refinitiv from CBS data lab.
Appendix 3 – Definitions

Ocean economy companies:
The One Ocean Foundation states that the ocean economy comprises seven established sectors: coastal tourism, commercial fishing, industrial aquaculture, shipbuilding and ship maintenance, offshore oil and gas extraction, port activities, shipping, and maritime transport, as well as four emerging and innovative sectors: marine renewable energy, seabed mining, desalination, and blue bio–economy.

Source:

Appendix 4 – E Score relationship with ocean disclosure
Appendix 5 - Examples of reporting

Example of the SDG 14 section and the strategy plan of a Apparel, Accessories and Luxury Goods company.

14 – LIFE BELOW WATER

More than 3 billion people depend on the oceans as their primary source of protein (it’s the world’s largest source). But 40% of the oceans are suffering ill effects. Plastic, for instance, makes up the majority of marine debris. Oceans are also becoming more acidic. Carbon dioxide dissolves readily in seawater to become a marine pollutant of global proportions that could have significant consequences on marine organisms.

We contribute in two ways. First, through the recycling of plastics from oceans, industries and other sources. Two of the sustainable materials that we use in our products are made from such plastics, among others PET bottles and plastics found in the seas, such as fish nets and carpets.

Another way to contribute is through more efficient packaging – both for our products in general, but also in shipping boxes, packaging for our e-com business and other. Our goal is to offer fully sustainable packaging by 2022, i.e. to phase out all plastics or any other harmful materials from our product packaging. Within our e-com business, we introduced climate positive shipping bags a couple of years ago, an initiative that has fallen well out. Our logistics team is also working with optimising export carton filling, which will minimise both our carbon footprint and the usage of so-called polybags.
## Disclosure of an Oil & Gas Production company on GHG emissions and water management

<table>
<thead>
<tr>
<th>Topic</th>
<th>Accounting metric</th>
<th>Category</th>
<th>Unit of measure</th>
<th>Code</th>
<th>Drafted answers</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Greenhouse Gas Emissions</strong></td>
<td>Gross global Scope 1 emissions, percentage methane, percentage covered under emissions-limiting regulations</td>
<td>Quantitative</td>
<td>Metric tons CO₂-e (t), Percentage (%)</td>
<td>EM-EP-110a.1</td>
<td>Net emissions of 129,231 tCO₂-e attributable to Africa Oil shareholding in Prime Oil &amp; Gas BV. As we are not the operator, we do not capture information on percentage methane emissions.</td>
</tr>
<tr>
<td></td>
<td>(1) flared hydrocarbons (2) other combustion (3) process emissions (4) other vented emissions, and (5) fugitive emissions</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets</td>
<td>Discussion and Analysis</td>
<td>n/a</td>
<td>EM-EP-110a.3</td>
<td>Regarding measures to manage Scope 1 emissions in Nigeria, this includes the Agbami flare gas project, as well as the operator’s plan to implement a’21 10mmscf/d flare target (vs ’20 forecast of 66mmscf/d).</td>
</tr>
<tr>
<td><strong>Air Quality</strong></td>
<td>Air emissions of the following pollutants:</td>
<td>Quantitative</td>
<td>Metric tons [t]</td>
<td>EM-EP-120a.1</td>
<td>As we are not the operator, we do not capture this information. For further information please visit our operators’ websites. <a href="https://www.tullowoil.com/sustainability/">https://www.tullowoil.com/sustainability/</a></td>
</tr>
<tr>
<td></td>
<td>(1) NOx (excluding N2O) (2) SOx (3) volatile organic compounds (VOCs), and (4) particulate matter (PM10)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Water Management</strong></td>
<td>(1) Total fresh water withdrawn</td>
<td>Quantitative</td>
<td>Thousand cubic meters [m³], Percentage (%)</td>
<td>EM-EP-140a.1</td>
<td>This metric is not material to the Company as our assets are currently offshore and therefore freshwater is not withdrawn/consumed.</td>
</tr>
<tr>
<td></td>
<td>(2) total fresh water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Volume of produced water and flowback generated; percentage</td>
<td>Quantitative</td>
<td>Thousand cubic meters [m³], Percentage (%)</td>
<td>EM-EP-140a.2</td>
<td>As we are not the operator, we do not capture this information. Prime, our operator in Nigeria, reports its gross water usage. For further information please visit our operators’ websites. <a href="https://www.tullowoil.com/sustainability/">https://www.tullowoil.com/sustainability/</a></td>
</tr>
<tr>
<td></td>
<td>(1) discharged, (2) injected, (3) recycled; hydrocarbon content in discharged water</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>Percentage of hydraulically fractured wells for which there is public disclosure of all fracturing fluid chemicals used</td>
<td>Quantitative</td>
<td>Percentage (%)</td>
<td>EM-EP-140a.3</td>
<td>This metric is not material to the Company as we neither own nor operate any hydraulically fractured wells.</td>
</tr>
<tr>
<td></td>
<td>Percentage of hydraulic fracturing sites where ground or surface water quality deteriorated compared to a baseline</td>
<td>Quantitative</td>
<td>Percentage (%)</td>
<td>EM-EP-140a.4</td>
<td>This metric is not material to the Company as we neither own nor operate any hydraulically fractured wells.</td>
</tr>
</tbody>
</table>