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## Executive summary

This report is a product of the EU-funded H2020 project *Global drivers, local consequences: Tools for global change adaptation and sustainable development of industrial and cultural Arctic “hubs”*. The strategic goal of ArcticHubs is the development of sustainable, solution-oriented tools for reconciling competing models of land-use modes and livelihoods in different *Arctic hubs*. Arctic hubs represent geographic nodes that host either a combination of economic activities, a main industry, or means of livelihood where challenges and opportunities facing the Arctic region are acute and tangible. Such impacts might include environmental, socio-cultural, economic, and political pressures facing communities in and around the Arctic hubs.

This report starts from the fact that co-management solutions for the sustainable development of various Arctic economic activities are dependent on how different industries understand the concept of sustainability. From this perspective, this report investigates how companies in different resource-based industries (i.e., aquaculture, tourism, mining, and forestry) understand their corporate social responsibility (CSR) in the context of their business operations in the Arctic. Accordingly, we have analysed the sustainability reports and/or annual reports and corporate websites of 17 companies and associations from the aquaculture, tourism, mining, and forestry sectors that are active in several Arctic hubs. The aim of this analysis was to generate knowledge of sustainable development and associated responsibilities as defined in the reports of the case corporations. The analysis was conducted in a data-driven manner and the findings were clustered according to environmental, economic, and social responsibilities. Additionally, the use of the UN Sustainable Development Goals (SDGs) by the case companies has been considered and compared.

The findings indicate the following. First, the term “corporate social responsibility (CSR)” is rarely used in the corporate reports, which instead emphasize the integrative term “sustainability”. Second, use of the terms sustainability and CSR is not necessarily elaborated on in an Arctic context, and some corporations with only a few operations in the Arctic do not mention Arctic responsibilities specifically. Aquaculture and tourism companies refer to the Arctic regions the most. Third, the three pillars of sustainability (i.e., the “triple bottom line”) are all comprehensively integrated in the CSR understandings of the case companies. Fourth, and more practically, there is an overlapping tendency regarding the detailed disclosure and reporting of company performance, certifications, and stakeholder involvement. Here, according to scholars, different context-specific drivers and motivations regarding why





businesses originally integrated CSR should be considered, and there remains the question of how much the report findings in terms of self-ascribed responsibilities resonate with long-term sustainable development. Fifth, all the case companies consider the impact of climate change on their operations. Here, the focus is mainly on the negative impacts of climate change and the antecedent global warming. Sixth, there is a further dominant tendency among the companies to express their corporate responsibilities in terms of the 17 SDGs.





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## 1. Introduction

This report is a product of the EU-funded H2020 project *Global drivers, local consequences: Tools for global change adaptation and sustainable development of industrial and cultural Arctic “hubs”*<sup>11</sup> The increasing competitiveness of Arctic economic activities and natural resource utilization, fuelled by several global drivers such as globalization and the climate crisis, is influencing development within Arctic regions. In response, the strategic goal of ArcticHubs is to develop sustainable, solution-oriented responses for the reconciliation of competing livelihoods and land-use modes with a special focus on aquaculture, forestry, mining, tourism, and indigenous cultures in 17 selected Arctic hubs. The ArcticHubs project defines these Arctic hubs as geographic nodes that host either a combination of economic activities, a main industry, or means of livelihood where challenges and opportunities facing the Arctic region are acute and tangible (ArcticHubs, 2020). Such impacts might include environmental, ecological, socio-cultural, economic, and political pressures facing communities in and around the Arctic hubs. From this perspective, a clear understanding of evidence-based solutions for the effective co-management of existing and potential sectoral activities in the Arctic hubs is essential in order to mitigate the risks of pollution, biodiversity loss, and threats to traditional livelihoods and cultures.

The UN Agenda 2030 for Sustainable Development has regarded the private sector as pivotal when it comes to co-governing sustainability issues.<sup>12</sup> In this report, we start from the fact that co-management solutions for the sustainable development of various economic activities in the Arctic are dependent on and on how different industries understand the concept of sustainability, including its practical dimension from their point of view. This is linked to one of the main objectives of ArcticHubs, which is to explore how different global actors understand their social, economic, and environmental responsibilities in the Arctic region.<sup>13</sup> In addition, we lack clear knowledge of what policy-driven concepts companies choose to promote in their sustainability visions and practices. This is essential, however, because communicating corporate sustainability to the public contributes to the legitimization and delegitimization of company actions, while feeding back into public thinking and actions in the interest of sustainability transformation.<sup>14</sup>

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<sup>11</sup> LUKE (2019)

<sup>12</sup> D’Amato et al. (2019).

<sup>13</sup> LUKE (2019).

<sup>14</sup> D’Amato et al. (2019).





To uncover how corporations perceive their responsibilities regarding sustainable development and associated practices, this report focuses on how companies understand and integrate corporate social responsibility (CSR) in their business operations. Many firms have adopted CSR in response to a range of pressures but also as a framework for preventing and managing various risks and being proactive in the context of climate change.<sup>15</sup> A broader definition of CSR advocates that companies should be subject to a wider range of responsibilities to society that go beyond financial interests and legal requirements.<sup>16</sup> Here, balancing CSR objectives and their relationships must take account of the relative weights of economic, environmental, and social performance as well as their interconnectedness and reciprocal influence. The relationships between these dimensions of sustainability within CSR have changed over time, with environmental and social goals gaining more prominence than they have had in the past.<sup>17</sup> Accordingly, Aslaksen et al.<sup>18</sup> underlined the gradual development of CSR over the decades. This development has been characterized by an early movement away from a restrictive view stressing the economic responsibility of a company, to a more comprehensive view of CSR in which businesses proactively promote environmental conservation and social wellbeing, making them activists in the sustainability transformation. This evolutionary process of CSR can be linked to various historical publications, figures, and events, such as governmental decisions, public figures, and social and international movements. Some significant examples are the establishment of the Intergovernmental Panel on Climate Change (IPCC) (1988), the Rio Declaration on Environment and Development (1992), the Kyoto Protocol (1997), the Millennium Development Goals (MDGs) (2000), the issuing of ISO 26000 (2010), the publication of the renewed EU Strategy for CSR for 2011–2014 by the European Commission (2011), and certainly the Paris Agreement launching the 17 Sustainable Development Goals (SDGs) in 2015.<sup>19</sup>

The form of the organizational governance of CSR is context specific and depends on both corporate demands and various stakeholder expectations concerning what economic, social, and environmental sustainability should be like.<sup>20</sup> Accordingly, CSR does not stipulate an overall range of responsibilities<sup>21</sup> and a firm's CSR commitments in practice “can range from modest undertakings, adapting to the demands of investors' policies (e.g., societal pressure to

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<sup>15</sup> Agudelo et al. (2020).

<sup>16</sup> Zhang et al. (2019).

<sup>17</sup> Arena et al. (2018).

<sup>18</sup> Aslaksen et al. (2021).

<sup>19</sup> Agudelo et al. (2019).

<sup>20</sup> Dahlin et al. (2020).

<sup>21</sup> Freeman & Dmytriiev (2017).







act responsibly and reducing environmental footprints), to pursuing CSR by infusing it into the firms' core strategic value propositions".<sup>22</sup> As a result, it is generally difficult to stake out a unique position regarding the prioritization of social, economic, and environmental performance dimensions that would be individually necessary, desirable, or detrimental to a particular company.<sup>23</sup> However, relating CSR to the more inclusive definition of the sustainable development concept, this report presupposes that CSR promotes the balanced weighting of the economic, environmental, and social performance dimensions. Sustainable development can be characterized by the full pursuit of the triple bottom line, which is defined by the necessity of balancing social equity, economic prosperity, and environmental quality.<sup>24</sup> This resonates with Ashrafi et al.'s<sup>25</sup> understanding of CSR in the context of sustainable development, presupposing that CSR must balance and integrate the triple bottom line in the long-term nature of business activities to achieve sustainability on the macro level. This equals sustainable development.

Sustainable development thus reflects the highest scope of sustainability that can be reached when incorporating CSR in business activities, and this is what the report focuses on. It aims to explore and cluster the responsibilities that companies ascribe to their business operations and to weigh them simultaneously against all the environmental, economic, and social sustainability dimensions of the triple bottom line. In this regard, this report specifically examines the Arctic regions. Here, the impacts of climate change and rising temperatures can be intensely felt: The rapidly shrinking sea ice cover has come with increasing economic opportunities for Arctic and non-Arctic actors in the last decade, and the Arctic regions with their comprehensive natural resources have accordingly attracted considerable attention from nation states, global businesses, and international policymakers.<sup>26</sup> In this regard, Arctic ecosystems and species have become subject to various pressures from human activities, including complex pollutants from multiple industries, such as wastewater discharge, chemical waste from resource extraction, riverine nutrient inputs, and emissions from shipping and tourism.<sup>27</sup> These circumstances, as well as other developments including changing geopolitics and, more generally, the forces of globalization, have had overarching impacts on the Arctic's social, ecological, and socio-ecological systems. This also includes

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<sup>22</sup> Dahlin et al. (2020).

<sup>23</sup> Arena et al. (2018).

<sup>24</sup> Kantabutra & Ketprapakorn (2020).

<sup>25</sup> Ashrafi et al. (2018).

<sup>26</sup> Biedermann (2020); Minnev et al. (2020).

<sup>27</sup> Townhill et al. (2021).





the increasing vulnerability of Arctic indigenous peoples as a result of a changing Arctic driven by the aforementioned pressures.<sup>28</sup>

Within this context, this report presupposes an increasing need for knowledge of how companies operating in Arctic states and regions understand sustainable development and how they view their responsibilities in the fragile Arctic environment. Accordingly, this report analyses the latest CSR, sustainability, and annual reports of 17 companies in the mining, aquaculture, forestry, and tourism industries operating in the countries of Arctic Europe. The selection of sectorally representative companies was guided by the geographical and thematic scope of the ArcticHubs project. This will be elaborated on in more detail in the next chapter about the methodological context of this report. Overall, the research question guiding this report is as follows:

***RQ: How do companies in different resource-based industries in Arctic Europe address and understand their corporate social responsibilities in the context of their business operations in the Arctic environment?***

To link the research question to an understanding of sustainable development that presupposes the holistic achievement of the triple bottom line within long-term business activities, the following sub-questions are used to structure the detailed findings:

**SQ-1:**

*How do companies in different resource-based industries understand their environmental responsibilities?*

**SQ-2:**

*How do companies in different resource-based industries understand their economic responsibilities?*

**SQ-3:**

*How do companies in different resource-based industries understand their social responsibilities?*

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<sup>28</sup> Stephen (2018).





## 2. Methodology

The strategic goal of the ArcticHubs project is to develop sustainable, solution-oriented responses for the reconciliation of competing livelihoods and land-use modes in Arctic communities. This takes into consideration the task of mapping the views of and approaches to sustainability and the social responsibilities of companies and business associations within the selected industries. The industries that form the figurative backbone of ArcticHubs are forestry, aquaculture, mining, and tourism. These four industries are addressed in this report, represented by 17 selected companies and associations. For this study, sustainability reports and/or annual reports produced by these companies, including their websites, were analysed. The aim of this analysis was to generate information and knowledge about sustainable development and associated responsibilities as defined in the written reports of the case companies and associations. The analysis was conducted in a data-driven manner. After first reading the data, we observed that instead of referring specifically to CSR, the reports already concentrated on sustainability and its three pillars, applying criteria according to the United Nations Sustainable Development Goals (SDGs). The present analyses and report structure were adjusted to these themes; in the second round of reading, the documents were analysed based on this structure. In effect, as Work Package 1 of ArcticHubs concerns a more global approach to the overarching aim of the ArcticHubs project, this report positions itself within the nexus of the global and local – that is, on the industrial level – with an emphasis on corporate matters.

The selection of reports published by the case companies and business associations in the context of this study was guided by the following criteria: (1) the company/association must have a presence in the European Arctic;<sup>29</sup> (2) the company/association must belong to one of the four industries mentioned in the preceding paragraph; and (3) the company/association must operate in at least one of the 17 Arctic hubs or their associated regions (see Figure 1) defined by the ArcticHubs project. Companies fulfilling these criteria were suggested by fellow researchers of the ArcticHubs project during 2021; based on these suggestions, case companies were selected for this analysis. Table 1 summarises all the companies and business associations selected for this research, listing them by industry, organisational type, country, and hub.

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<sup>29</sup> Kronos is the only case company without corporate operations in the Arctic but represents one of the few more southern hubs of Egersund in Southern Norway.





**Figure 1.** Locations of all hubs in the ArcticHubs project.

The industry that a hub represents is indicated by colour: blue, aquaculture hubs; violet, tourism hubs; red, mining hubs; green, forestry hubs; and yellow, indigenous hubs.



**Table 1.** Companies selected for this study.

	<b>Industry</b>	<b>Ownership, country of origin</b>	<b>Hub locations</b>	<b>Reports analysed</b>
<b>AECO</b>	Tourism	Association, various companies, Norway	10. Varangerfjord (Norway) 11. Svalbard (Norway) 13. Westfjords (Iceland) 14. Nuup Kangerlua (Greenland) 15. Suduroy (Faroe Islands)	Official website (no report published) (2021)
<b>Hurtigruten</b>	Tourism	Public–private company, Norway	10. Varangerfjord (Norway) 11. Svalbard (Norway) 14. Nuup Kangerlua (Greenland) 13. Westfjords (Iceland)	Sustainability report (2018)
<b>Visit Svalbard</b>	Tourism	Private company, Norway	11. Svalbard (Norway)	<i>Master plan: Destination Svalbard towards 2025 (2015)</i>
<b>Agnico Eagle Mines Ltd. (AEM)</b>	Mining	Private company, Canada	4. Kittilä (Finland)	Sustainability report (2020)
<b>Boliden Aktiebolag</b>	Mining	Private company, Sweden	8. Gällivare (Sweden) 6. Kristineberg (Sweden)	Annual and sustainability report (2020)
<b>Stora Enso</b>	Forestry	Private company, Finland	1. Kemi (Finland) 2. Kemijärvi (Finland)	Sustainability report (2020)
<b>Metsä Group</b>	Forestry	Private company, Finland	1. Kemi (Finland) 2. Kemijärvi (Finland)	Sustainability report (2020)
<b>Luossavaara-Kiruna</b>	Mining	State-owned company,	8. Gällivare (Sweden)	Annual and sustainability report





<b>Aktiebolag (LKAB)</b>		Sweden		(2020)
<b>PhosAgro</b>	Mining	Public company, Russia	16. Khibiny Mountains (Russia)	Integrated report (2020)
<b>Svenska Cellulosa Aktiebolag</b>	Forestry	Public company, Sweden	5. Jokkmokk (Sweden) 7. Gran Sameby (Sweden) 8. Gällivare (Sweden)	Relevant sections of the SCA website (2021)
<b>Sveaskog</b>	Forestry	State-owned company, Sweden	5. Jokkmokk (Sweden) 7. Gran Sameby (Sweden) 8. Gällivare (Sweden)	Annual report and sustainability report (2020)
<b>Grieg Seafood</b>	Aquaculture	Private company, Norway	Rogaland region (Norway) <sup>30</sup> Finnmark region (Norway) <sup>31</sup>	Annual report (2020)
<b>Bakkafrost</b>	Aquaculture	Private company, Faroe Islands	15. Suduroy (Faroe Islands)	Healthy Living sustainability report (2020)
<b>Lerøy Seafood Group</b>	Aquaculture	Private company, Norway	10. Varangerfjord (Norway) Rogaland region (Norway) <sup>32</sup>	Sustainability report (2019)
<b>Norway Royal Salmon</b>	Aquaculture	Private company, Norway	13. Westfjords (Iceland) Finnmark region (Norway) <sup>33</sup>	Annual report (2020)
<b>Kronos</b>	Mining	Private company, US	12. Egersund (Norway)	ESG report (2018)
<b>Store Norske</b>	Mining	State-owned company, Norway	11. Svalbard (Norway)	Annual report 2020

<sup>30</sup> Grieg Seafood has activities in the region where hub 12 is located, but not in the exact hub itself.

<sup>31</sup> Grieg Seafood has activities in the region where hub 10 is located, but not in the exact hub itself.

<sup>32</sup> Lerøy Seafood group has activities in the region where hub 12 is located, but not in the exact hub itself.

<sup>33</sup> Norway Royal Salmon has activities in the region where hub 10 is located, but not in the exact hub itself.





The findings of this report are structured by industry. First, the aquaculture industry is introduced, followed by tourism, forestry, and mining. Here, the self-ascribed objectives and responsibilities of the associated companies and business associations are clustered according to the environmental, economic, and social sustainability dimensions. In addition, an extra paragraph has been added for each industry about how the case companies address the United Nations SDGs in their sustainability and annual reports. Finally, a discussion section presents essential concluding remarks and implications for further research.







### 3. Aquaculture

The following section is based on the sustainability and annual reports of the selected aquaculture companies: Grieg Seafood (GS), Leroy (L), and Norway Royal Salmon (NRS), headquartered in Norway, and Bakkafrost (BF), headquartered in the Faroe Islands. In their analysed sustainability reports, the aquaculture companies organize the presentation of their responsibilities in comparable ways. These responsibilities are defined as “approaches to sustainable business”, “towards a sustainable food system”,<sup>34</sup> the “mission to produce healthy”,<sup>35</sup> and the “commitment to sustainable production”.<sup>36</sup> In this regard, GS, Lerøy, and BK organize their responsibilities into five main themes, while NRS distinguishes three themes. Their treatments of these themes overlap in terms of content and terminology, and can be clustered according to environmental, economic, and social perspectives. More specifically, all the reports address shared responsibilities associated with the environment, health, business, people, and local communities. These themes and their underlying aspects are also addressed in the companies’ individual materiality analyses. A materiality analysis is a method and framework commonly used by companies in their published reports “to determine what sustainability information is most significant to them and their stakeholders”.<sup>37</sup> Mostly visualized in diagrams, reporting on key material aspects “makes reports more relevant, more reliable and more transparent, enabling companies to better inform markets and society on their sustainability commitment”.<sup>38</sup> Regarding the aforementioned themes, GS and NRS describe these topics and associated responsibilities as the backbone of how they perceive their CSR, in among the few direct references to the concept of CSR.

#### 3.1. Environmental sustainability and responsibilities

Aquaculture companies associate environmental sustainability with various environmental responsibilities. These include values such as climate-friendly production and the preservation of ecosystems and biodiversity. Here, climate-friendly production refers to the reduction of greenhouse gas (GHG) emissions during production processes. In at least two analysed reports, this target is specifically highlighted as an obstacle in a risk management section.<sup>39,40</sup>

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<sup>34</sup> Grieg Seafood (2020).

<sup>35</sup> Bakkafrost (2020).

<sup>36</sup> Norway Royal Salmon (2020).

<sup>37</sup> Calabrese et al. (2017).

<sup>38</sup> Calabrese et al. (2017).

<sup>39</sup> Grieg Seafood (2020).







As well, as part of its financial results section, Grieg Seafood emphasizes climate risk (after operational and market risks) as an essential risk management factor. The company recognizes that climate change is likely to present a range of challenges to the aquaculture industry. Without proactive adaptation, this will mean increased vulnerability to physical risks such as damage caused by extreme weather, disease due to higher seawater temperatures (aspects also mentioned by L, BK, and NRS), regulatory risks, technology risks, market risks, and reputational risks (GS). Lerøy and Grieg Seafood have emphasized climate change as one of the most significant topics in their sustainability reports. As part of specific risk management concerning climate change, these companies stress that climate change could affect operations and earnings by decreasing catch volumes due to temperature changes. However, if the Gulf Stream remains unaffected, Norwegian coasts will likely remain suitable for fish farming in the future.

The preservation of ecosystems and biodiversity includes shared topics involving, first and foremost, the prevention of pollution, the protection of naturally occurring species in waters used for aquaculture, and animal welfare during operations. Here, pollution prevention focuses on waste management and recycling, sustainable fish feed and associated innovation, the efficient use of fresh water, and sustainable packaging. The maintenance of naturally occurring species in ecosystems where aquaculture companies operate mainly concerns controlling fish escape and preventing impacts on natural food chains and animal ecology. Lastly, animal welfare concerns sea lice prevention, responsible harvesting in terms of minimal harm to animals, and sustainable feed. In addition, Bakkafrost highlights the importance of appropriate water circulation control during hatchery processes, while Norway Royal Salmon emphasizes that medical treatments must be avoided.

Regarding responsibilities associated with fish welfare, all aquaculture companies refer mainly to product safety and quality. The maintenance of healthy nutrition is also highlighted, for example, to keep omega-3 levels high. Lerøy addressed this topic most comprehensively, followed by Norway Royal Salmon. In general, responsibilities linked to health reflect mostly the social responsibility to promote a healthy lifestyle within the broader society. However, Grieg Seafood's theme "sustainable food" also includes aspects that go beyond this, additionally addressing environmental responsibilities such as sustainable fish feed, counteracting climate change, and plastic pollution.

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<sup>40</sup> Lerøy (2019).





In addition, there is a more specific emphasis on how companies practicably integrate environmental responsibility into corporate governance methods and structures. Here, all aquaculture case companies are transparent and tend to incorporate instruments such as certifications, specific standards, and directives. This includes the involvement of standards according to certifications issued by organizations such as the Aquaculture Stewardship Council (ASC), the Marine Stewardship Council (MSC), the globally harmonized scheme for Good Agricultural Practices (GlobalGAP), the Global Sustainable Seafood Initiative (GSSI), Debio, and Best Aquaculture Practices (BAP), as well as adaptation to guidelines and standards such as the Global Salmon Initiative (GSI), the Carbon Disclosure Project (CDP), and the UN Global Compact framework. Moreover, the disclosure of business performance regarding governance aspects related to environmental sustainability plays an essential role. Here too, different reporting and disclosure frameworks are cited as shaping company action. These frameworks are provided by, the Global Reporting Initiative (GRI), the Taskforce on Climate-related Financial Disclosures (TCFD), Morgan Stanley Capital International (MSCI), Euronext, and Sustainalytics. Most of these implemented corporate reporting and disclosure policies are related to environmental, social, governance (ESG) procedures and focus closely on the climate-friendly operation of the companies in terms of environmental sustainability. However, it must be considered that most of the reporting and disclosure frameworks mentioned here are not restricted to environmental sustainability but also include social, economic, and governance dimensions.

Several environmental responsibilities specifically associated with the Arctic region are underlined on the corporate websites of the case companies. For example, in its annual report, Grieg Seafood refers specifically to the corporate website, where all operational locations have individual sections. In this context, “Grieg Seafood Finnmark”<sup>41</sup> refers to more specific sustainability certifications or regulations concerning ecological protection (with a special focus on the Alta River), fish welfare, and interactions with wildlife in the Arctic region. The relevant measures include efficient seabed monitoring, reducing feed waste, the transition to copper-free nets, and the electrification of the regional aquaculture industry.

While there is no reference to the Arctic region in Lerøy’s sustainability report per se, a special website for the subdivision/daughter company Lerøy Aurora has been established.<sup>42</sup> “Aurora” refers to the Aurora Borealis, also known as the northern lights, a signature natural

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<sup>41</sup> Grieg Seafood Finnmark (2021).

<sup>42</sup> Lerøy Aurora (2021).





phenomenon especially within the Arctic circle. Lerøy Aurora conducts fish-farming and processing operations in Troms and Finnmark that emphasize respect for the unique Arctic environment. This includes no use of antibiotics, ecosystem and biodiversity protection, and sustainable salmon feed, such as feed that does not including palm oil.

More uniquely in comparison with the other aquaculture companies, Norway Royal Salmon views Arctic offshore fish farming as a problem-solving opportunity to use free space with fewer competing users. The use of submersible cages in Arctic waters also contributes to sea lice prevention. Although the climate impact of fish farming is rather low in comparison with other animal production systems, according to NRS, a need for sustainable measures is nonetheless highlighted.<sup>43</sup>

Finally, all companies with at least one operational location in the Arctic region visually present the Arctic environment as appealing and characterized by beauty and mystery. Websites and reports use photography and visuals to this end. This additionally refers to the environmental dimension of companies' presented responsibilities – or respect for “mother nature”.<sup>44</sup>

### 3.2. Economic sustainability and responsibilities

Economic sustainability is associated with responsibilities referring to business themes and includes mainly economic considerations such as profitable growth and productivity (Grieg Seafood goes into the most detail regarding this), certification and reporting processes, and the company's emphasis on research and innovation. Here, certification and reporting schemes include those of the International Organization for Standardization (ISO) and the Organization for Economic Co-operation and Development (OECD).

Regarding local communities, some economic responsibilities are underlined, such as local value creation and making community investments. For example, Bakkafrost incorporates community investment plans and funds. In addition, all the companies actively promote the purchase of local goods and services as well as the sponsoring of local organizations, public events, and the like. Purchasing local goods more specifically includes supporting local communities by collaborating with local suppliers in Troms and Finnmark and contributing to local activities and ripple effects. The sponsoring of local events similarly targets sport and

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<sup>43</sup> NRS (2020).

<sup>44</sup> Lerøy Aurora (2021).





cultural initiatives in Arctic region municipalities, with a special focus on children and young people.<sup>45</sup>

### 3.3. Social sustainability and responsibilities

Social responsibility refers mostly to the empowerment of and commitment to people and communities. The former primarily concerns social–corporate aspects with a focus on employees’ work conditions and the quality of the work environment within the enterprises. In this context, “people” often refers to the companies’ staff, but socio–economic aspects such as the creation of employment opportunities for the broader society are also underlined. Shared responsibilities related to the companies’ work environment concern respect for human rights, ethical guidelines, diversity and gender equality, employee health and safety, anti-corruption measures, and the promotion of learning and development. Additional relevant certification schemes, standards, and directives are incorporated, such as the Manufacturing Safety Alliance (MSABC) and the Health and Safety Executive (HSE).<sup>46</sup>

Moreover, the establishment and maintenance of sustainable stakeholder dialogues and engagements as well as ethical and anti-corruption guidelines for local communities are highlighted. Lastly, another aspect related to social sustainability is the societal health benefit of seafood in terms of nutrition. Accordingly, seafood products are promoted as deliverers of healthy protein for future generations contributing to the overall health of society by, for example, positively impacting diabetes, depression, and cardiovascular diseases.<sup>47</sup> Consumer health is further promoted by strict guidelines in terms of quality controls and food safety. In this regard, Lerøy, Norway Royal Salmon, and Grieg Seafood rank consumer health as the highest strategic priority after environmental regulations. This can also be seen in the companies’ materiality analyses. Public health and food safety are also promoted by additional certifications and standards such as the Global Food Safety Initiative (GFSI), the Food Safety System (FSSC22000), the Collier FAIRR Protein Producer Index, and the aforementioned GRI standards.<sup>48</sup>

As operators in High North countries, aquaculture companies emphasize responsibilities that specifically target communities, particularly in the Arctic regions. Here, Grieg Seafood and

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<sup>45</sup> Grieg Seafood (2020).

<sup>46</sup> Grieg Seafood (2020).

<sup>47</sup> Lerøy (2019).

<sup>48</sup> Lerøy (2019); Grieg Seafood (2020).





Norway Royal Salmon mention the importance of maintaining indigenous rights and respecting traditional knowledge. While referring to operational responsibilities towards indigenous people in British Columbia, Canada, the traditional use of coastal areas by Sámi people specifically in Finnmark is also acknowledged. The recognition of and care for indigenous rights according to the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) is underlined more specifically.<sup>49</sup>

More cited responsibilities that are linked to local community engagement or investment include educational programmes for secondary school students (e.g., the “Salmon House” visitation centre in Alta), sponsoring sport clubs in municipalities (e.g., Nordlysbyen Ski), and sponsoring and supporting local and regional events such as the Finnmarksløpet (the region’s biggest husky sledge race).<sup>50</sup>

Finally, more detailed stakeholder management approaches and materiality analyses are presented in the individual reports, identifying important risks and opportunities that encompass environmental, economic, and social dimensions, as described above. Highlighted internal and external stakeholder groups are employees, customers, authorities, interest groups, non-governmental organizations (NGOs), research and development (R&D) actors,<sup>51</sup> local and indigenous communities,<sup>52</sup> industrial associations, shareholders, advocacy groups, and citizen initiatives.<sup>53</sup> Also, cooperation with specific organizations and NGOs is stressed by at least one company as part of its “knowledge-based sustainable stewardship”.<sup>54</sup> This includes collaborations with, for example, Bellona, Amnesty International, the Norwegian Seafood Federation, the NCE Seafood Innovation cluster, Red Cross, and Cerrado Manifesto.<sup>55</sup>

### 3.4. United Nations Sustainable Development Goals

All analysed aquaculture companies address and incorporate the UN SDGs in their corporate reports. The case companies assign specific responsibilities to a minimum of six and a

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<sup>49</sup> Grieg Seafood (2020).

<sup>50</sup> Grieg Seafood (2020); Lerøy (2019).

<sup>51</sup> Norway Royal Salmon (2020).

<sup>52</sup> Grieg Seafood (2020); Lerøy (2019); Norway Royal Salmon (2020).

<sup>53</sup> Lerøy (2019); Bakkafrost (2020).

<sup>54</sup> Lerøy (2019).

<sup>55</sup> The Cerrado Manifesto is a statement of support aiming to halt deforestation and promote sustainable land-use practices in the Cerrado eco-region of Brazil; it was initiated by the FAIRR Coller Initiative. For more information, see FAIRR Coller Initiative (2021).





maximum of 11 of the 17 SDGs. Table 2 shows the SDGs that the selected aquaculture companies have integrated into their business operations.

**Table 2.** SDGs in aquaculture.

SDG	Grieg Seafood	Lerøy	Norway Royal Salmon	Bakkafrost
(1) No poverty	-	-	-	-
(2) Zero hunger	-	✓	✓	✓
(3) Good health and well-being	✓	✓	✓	-
(4) Quality education	✓	-	-	-
(5) Gender equality	✓	-	-	✓
(6) Clean water and sanitation	✓	-	-	✓
(7) Affordable and clean energy	-	-	-	✓
(8) Decent work and economic growth	✓	✓	✓	✓
(9) Industry, innovation, and infrastructure	✓	-	-	✓
(10) Reduced inequalities	-	-	-	-
(11) Sustainable cities and communities	-	-	-	-
(12) Responsible consumption and reproduction	✓	✓	✓	✓
(13) Climate action	✓	✓	✓	✓
(14) Life below water	✓	✓	✓	✓
(15) Life on land	✓	-	-	✓
(16) Peace, justice, and strong institutions	✓	-	-	-
(17) Partnerships for the goals	✓	✓	-	✓





In this regard, SDGs 8 – decent work and economic growth, 12 – responsible consumption and production, 13 – climate action, and 14 – life below water are most frequently addressed in the relevant reports; these are followed by the second-most frequently addressed SDGs, 2 – zero hunger, 3 – good health and well-being and 17 – partnerships for the goals.





#### 4. Tourism

The following section is based on the website of the Association of Arctic Expedition Cruise Operators (AECO), the sustainability report of Hurtigruten (H), and *Master plan: Destination Svalbard towards 2025* of Visit Svalbard (VS). All these organizations have their headquarters in Norway. In recent years, cruise tourism has expanded significantly in the Arctic region, visiting destinations in Svalbard, Iceland, Greenland, and the eastern Canadian Arctic. This growth has promoted considerable debate regarding the sustainability of cruise tourism and its management in a harsh, remote, and unpredictable environment. Considering that the literature on the impacts of cruise tourism is generally limited to considering small and medium-sized destinations other than Caribbean and Mediterranean destinations,<sup>56</sup> this report emphasizes cruise tourism in the Arctic and how the tourism sector understands sustainability and the associated operational responsibility. More specifically, the Svalbard Archipelago is largely characterised by “expedition cruising”, and the increased number of disembarkation sites means more tourists scattered around the Archipelago’s coastal areas and natural environment.<sup>57</sup> Because of this, but also acknowledging Svalbard’s unique Arctic nature as a key element of discourses about the development of the Archipelago,<sup>58</sup> this report links these discussions by addressing Svalbard tourism in particular.

In all analysed sustainability and annual reports, the Arctic environment is specifically addressed, and the selected companies present their responsibilities in various documents. While the AECO website refers to several guidelines that promote the sustainable operation of cruise-ship companies and sustainable tourist behaviour, Visit Svalbard and Hurtigruten have published *Master plan: Destination Svalbard towards 2025* and a sustainability report, respectively.<sup>59,60,61</sup>

AECO’s extensive guidelines set out obligations for tourist behaviour and require the association’s members to operate in accordance with national and international laws and regulations. According to AECO’s Operational Guidelines, members must be prepared for

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<sup>56</sup> James et al. (2020).

<sup>57</sup> Holmgaard et al. (2019).

<sup>58</sup> Hovelsrud et al. (2020).

<sup>59</sup> AECO (2021).

<sup>60</sup> Hurtigruten (2018).

<sup>61</sup> Mimir AS & Visit Svalbard AS (2015).







these responsibilities and implement them through self-regulation. Such responsibilities include environmental, social, cultural, and a few economic dimensions.<sup>62</sup>

Visit Svalbard's *Master plan* is a long-term strategic plan that aims to develop Longyearbyen on Svalbard as an improved tourism destination by 2025. In the document, the understanding of a sustainable tourism industry is guided by the ten principles of sustainable tourism of Innovation Norway and the Norwegian Hospitality Association (Norwegian: NHO Reiseliv). Those ten principles are divided into three themes: (1) the conservation of nature, environment, and culture, (2) the strengthening of social values, and (3) and economic sustainability.<sup>63</sup>

Lastly, Hurtigruten has published an official sustainability report. Unlike other tourism companies' reports, this document is strictly organized according to the United Nations SDGs. In other words, all the self-ascribed responsibilities of this company are oriented towards specific SDGs.<sup>64</sup>

Like the aquaculture companies, the selected tourism enterprises also address various themes related to ecological, social, and economic sustainability in their published reports. In the next section, the underlying content of all these themes is presented from a tourism industry perspective and organized according to the three sustainability dimensions.

#### 4.1. Environmental sustainability and responsibilities

The tourism sector's perceived environmental responsibilities comprise contributing to a clean environment, preserving biodiversity, and combating climate change.

Contributing to a clean environment mainly entails the maintenance of clean seas (and land) in terms of decreasing or banning plastic pollution,<sup>65</sup> the establishment of environmentally friendly waste management routines,<sup>66</sup> and the protection of the physical and visual integrity of landscapes<sup>67</sup> and environmental heritage.<sup>68</sup> The preservation of biodiversity includes the protection of vegetation and wildlife (AECO offers special guidelines focusing on the Arctic

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<sup>62</sup> AECO (2021).

<sup>63</sup> Mimir AS & Visit Svalbard AS (2015).

<sup>64</sup> Hurtigruten (2018).

<sup>65</sup> AECO (2021); Mimir AS & Visit Svalbard AS (2015); Hurtigruten (2018).

<sup>66</sup> AECO (2021); Mimir AS & Visit Svalbard AS (2015).

<sup>67</sup> Mimir AS & Visit Svalbard AS (2015).

<sup>68</sup> Hurtigruten (2018).





fox, birds, cetaceans, polar bears, reindeer, seals, and walruses),<sup>69</sup> the maintenance of biosecurity (protecting native vegetation from the introduction of invasive species transported via shipping and tourists),<sup>70</sup> and resource-use efficiency.<sup>71</sup> Moreover, climate action is specifically emphasized in terms of reducing GHG emissions. In this context, Hurtigruten emphasizes, for example, the company's innovative fuel use in terms of converting its whole fleet to hybrid electrified ships.

The AECO has in addition published Operational Guidelines on its website. These guidelines constitute a more detailed framework that summarizes all the broader responsibilities, but from a more practical and executive perspective in comparison with the earlier-mentioned guidelines. The Operational Guidelines include mandatory requirements (concerning staff assessments and reporting and disclosure to AECO databases, e.g., operational incidents at sea, fuel use, and vessel tracking), recommendations (e.g., concerning supporting research activities and using lower-emission engines), and requirements associated with safeguarding the environment and wildlife.

As mentioned previously, the regulative responsibilities of AECO members are understood in terms of: (1) comprehensive convention systems, as adopted by the International Maritime Organization (IMO), the International Convention for the Safety of Life at Sea (SOLAS; regarding safety), and the International Convention for the Prevention of Pollution from Ships (MARPOL); (2) management standards such as the International Management System Code (ISM Code); and (3) liability. In addition to social and economic sustainability perspectives, these requirements have a direct influence on many environmental responsibilities of association members. In addition, AECO supports the United Nations Environment Programme's clean seas campaign Clean-up Svalbard.<sup>72</sup>

On top of that, to prepare for Visit Svalbard's goal of delivering a tourism destination concept that is in line with the values of nature, culture, and society, the corporation aims to integrate the certification programme of Innovation Norway. This certification scheme covers three focus areas, one of which is the preservation of nature, the environment, and culture. More specific measures for the three focus areas are to be specified in a separate sustainability plan for Svalbard as a tourism destination. Moreover, Visit Svalbard understands the company's

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<sup>69</sup> AECO (2021); Mimir AS & Visit Svalbard AS (2015); Hurtigruten (2018).

<sup>70</sup> AECO (2021).

<sup>71</sup> Mimir AS & Visit Svalbard AS (2015).

<sup>72</sup> Hurtigruten (2018).





operational responsibilities according to the Svalbard Environment Act. The Act aims to maintain the virtually untouched environment of Svalbard in terms of nature and cultural monuments. According to the precautionary principle, the framework of the Act allows latitude for environmentally sound settlement, research, and business development.<sup>73</sup>

#### 4.2. Economic sustainability and responsibilities

Hurtigruten and Visit Svalbard, in particular, highlight several economic responsibilities. The focus is on the establishment of long-term competitive tourism destinations that enable ongoing local value creation.<sup>74</sup> This entails collaboration with local suppliers along the value chain.<sup>75</sup> On top of that, Visit Svalbard addresses a second focus area in its certification scheme, developed by Innovation Norge (see previous sub-section), which is the strengthening of economic viability.<sup>76</sup>

#### 4.3. Social sustainability and responsibilities

All tourism companies/associations stress several social responsibilities in their reports. This largely concerns strengthening social and socio-cultural values, as well as preserving cultural, historical, and archaeological remains and artefacts. Maintaining social or socio-cultural values entails preserving local quality of life in terms of, for example, respectful behaviour towards featured local communities such as the Maniitsoq, Kangerlussuaq, Nuuk, and Paamiut in Greenland.<sup>77</sup> This involves the inclusion of communities in planning processes or giving more power to them within decision-making structures. In addition, the protection of cultural artefacts concerns the maintenance of cultural identity and the respectful treatment of cultural heritage.<sup>78</sup> This puts an emphasis on historical buildings, grounds, and similar remains and artefacts.<sup>79</sup> In this context, and from an environmental perspective, AECO has published more specific visitor and site-specific guidelines that target traveller behaviour in general but also stress rules and information adapted to specific localities, particularly on Svalbard and Franz Josef Land.

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<sup>73</sup> Mimir AS & Visit Svalbard AS (2015).

<sup>74</sup> Mimir AS & Visit Svalbard AS (2015); Hurtigruten (2018).

<sup>75</sup> Hurtigruten (2018).

<sup>76</sup> Mimir AS & Visit Svalbard AS (2015).

<sup>77</sup> AECO (2021); Mimir AS & Visit Svalbard AS (2015).

<sup>78</sup> AECO (2021).

<sup>79</sup> AECO (2021); Hurtigruten (2018).





Furthermore, Visit Svalbard's certification scheme, in collaboration with Innovation Norway, considers a third focus area: strengthening social values.<sup>80</sup>

In addition, all studied corporate reports stressed the importance of maintaining a high-quality working environment within companies. More specifically, this refers to business ethics, health and safety guidelines,<sup>81</sup> anti-corruption measures, training programmes for responsible operations, as well as gender and anti-discrimination policies.<sup>82</sup> Furthermore, Hurtigruten also emphasizes the importance of reducing food waste.<sup>83</sup>

In the context of the aforementioned AECO Operational Guidelines, additional obligations concern planning, reporting information related to safety measures, technical preparations, and respect for off-board cultural and social interactions.

Moreover, Hurtigruten has established the Hurtigruten Foundation. The Foundation financially supports several initiatives and has already raised up to NOK 1.5 million. Its social and environmental initiatives include Children of Greenland, Hearts in Ice, Disco Arts Festival, and Svalbard Turn. Also, collaboration with and support for local entrepreneurs as well as various research projects are Foundation efforts addressing sustainable stakeholder management and local community investment.<sup>84</sup>

#### 4.4. United Nations Sustainable Development Goals

Hurtigruten's published sustainability report is strictly organized according to the United Nation's SDGs. In other words, all the self-ascribed responsibilities of the tourism company are oriented towards individual SDGs. From this perspective, Hurtigruten distinguishes between "Impact Goals" and "Foundation Goals". Based on the company's materiality analysis involving feedback from staff and selected external stakeholders, Hurtigruten ascribes its biggest positive impact to five SDGs that benefit business and society the most. These goals are the Impact Goals and comprise SDG 9 – industry, innovation, and infrastructure, 11 – sustainable cities and communities, 12 – responsible consumption and production, 13 – climate action, and 14 – life below water. On the other hand, Hurtigruten also defines four additional SDGs as the backbone of the company, resonating with the

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<sup>80</sup> Mimir AS & Visit Svalbard AS (2015).

<sup>81</sup> AECO (2021); Mimir AS & Visit Svalbard AS (2015); Hurtigruten (2018).

<sup>82</sup> Hurtigruten (2018).

<sup>83</sup> Hurtigruten (2018).

<sup>84</sup> Hurtigruten (2018).





company’s values, culture, and identity. These are the Foundation Goals and comprise SDG 4 – quality education, 5 – gender equality, 8 – decent work and economic growth, and 16 – peace, justice, and strong institutions. Altogether, the Impact Goals and Foundation Goals constitute the basis of Hurtigruten’s sustainability strategy up to 2030.<sup>85</sup> Unlike Hurtigruten, AECO and Visit Svalbard do not address the UN SDGs in their analysed content. All addressed SDGs are summarized in Table 3.

**Table 3.** SDGs in tourism.

SDG	Arctic Expedition Cruise Operators (AECO)	Hurtigruten	Visit Svalbard
(1) No Poverty	-	-	-
(2) Zero Hunger	-	-	-
(3) Good health and well-being	-	-	-
(4) Quality education	-	✓	-
(5) Gender equality	-	✓	-
(6) Clean water and sanitation	-	-	-
(7) Affordable and clean energy	-	-	-
(8) Decent work and economic growth	-	✓	-
(9) Industry, innovation and infrastructure	-	✓	-
(10) Reduced inequalities	-	-	-
(11) Sustainable cities and communities	-	✓	-
(12) Responsible consumption and reproduction	-	✓	-
(13) Climate action	-	✓	-
(14) Life below water	-	✓	-
(15) Life on land	-	-	-

<sup>85</sup> Hurtigruten (2018).





(16) Peace, justice, and strong institutions	-	✓	-
(17) Partnership for the goals	-	-	-





## 5. Mining

The following section is based on the sustainability and annual reports of Luossavaara-Kiruna Aktiebolag (LKAB), the sustainability and annual reports of Boliden Aktiebolag (BA), the annual report of Store Norske (SN), the sustainability report of Agnico Eagle Mines Ltd. (AEM), the ESG report of Kronos, and the integrated report of PhosAgro (PA). While LKAB and Boliden have their headquarters in Luleå and Stockholm, Sweden, Store Norske operates out of Svalbard, Norway. Kronos has its headquarters in Dallas, Texas, USA, and Leverkusen, Germany, but has significant operations in Egersund, Norway. While Agnico Eagle has its headquarters in Toronto, Ontario, Canada, the company operates, among other locations, in Kittilä, Finland. PhosAgro has its head office in Moscow and significant operations in the Khibiny Mountains located in North-Western Russia.

### 5.1. Environmental sustainability and responsibilities

All analysed companies posit climate change as something to be mitigated or hindered, or as something within the realm of their responsibilities to be proactively countered. In particular, LKAB and Agnico Eagle Mines explicitly posit climate change as a risk to global humankind, including to their livelihoods and opportunities to survive and thrive. Simultaneously, AEM recognises that climate change and biodiversity losses can threaten their own operations. LKAB and Boliden also see an opportunity in climate change, as “climate change and megatrends such as electrification are increasing demand – including the need for certain new types of minerals and metals”.<sup>86</sup> However, reports from Kronos, PhosAgro, and Store Norske discuss climate change on a more general level. In this context, no specific risks or opportunities are addressed and there are no significant mentions of global and local impacts. However, all these company reports declare a responsibility for mitigation and adaptation. In addition, according to the company’s materiality analysis, Kronos ascribes climate risk a rather low importance for both the company and its external stakeholders. However, Kronos briefly states in its sustainability report that the company is focusing on reducing energy use and GHG emissions to minimize its contribution to the risks of climate change.

In this regard, all analysed companies have similar goals regarding achieving less emission-intensive operations. While PhosAgro aims for a 30.9% reduction in GHG emissions per tonne of finished or semi-finished products by 2025, Agnico Eagle Mines and LKAB aim for

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<sup>86</sup> LKAB (2020).





carbon-free or zero-carbon production: AEM projects this to happen by 2050, and LKAB by 2045. Store Norske lacks a detailed plan in this context, but the Norwegian government has announced the total cessation of Store Norske mining activity in 2023, bringing its emissions to zero. LKAB also aims to be a pioneer and the first operator globally to produce carbon-free iron products. In addition to plans for reducing GHG emissions, PhosAgro, a globally leading producer of phosphate fertilisers, notes that its products are already inherently involved in GHG mitigation as they increase the growth of agricultural and horticultural flora, reducing the amount of free CO<sub>2</sub> in the atmosphere.

Furthermore, all companies affirm the importance of preserving biodiversity, and of mitigating the possible negative impacts on biodiversity of their operations. LKAB admits that its mining operations take place in ecologically and aesthetically valuable areas, reflecting a certain understanding of the challenges related to the values of the operating environment. Linked to ecologically and aesthetically vulnerable areas, Store Norske has developed two “milieu projects” that represent the closing and “renaturation” of the two Svea and Lunckefjell coal mines. These projects specifically target the environmental and aesthetic wellbeing of the Arctic Svalbard Archipelago.

The only companies to mention the Arctic environment, specifically from an environmental sustainability perspective, are Agnico Eagle Mines and Store Norske. While AEM refers to its operations in the “arctic tundra in Nunavut” (their operations in the Finnish Arctic region, Kittilä, are not cited in the context of the Arctic), Store Norske operates exclusively under Arctic conditions on Svalbard and published its report from this perspective.

## 5.2. Economic sustainability and responsibilities

LKAB specifically emphasizes economic sustainability, which represents an intrinsic economic interest of the company in its operations. As the effective lifespan of its mines is estimated to end in the 2030–2035 period, LKAB wishes to extend operations to well beyond 2060. This would also benefit the local economy and community as, for example, Kiruna’s local economy is heavily dependent on mining. LKAB has also committed to developing adjacent local communities in tandem with its operational activities, to ensure viable and attractive living conditions even after the cessation of mining operations.

All the companies have significant local employment schemes. Most companies also offer data regarding spending on local suppliers and contractors, which turn benefits the local economy. All analysed companies emphasize the importance of maintaining a good, fair, and







safe operational environment for their workforce. This includes non-discriminatory employment practices (regarding gender, age, and ethnicity) and ensuring workforce safety during operations.

LKAB mentions that it has taken some proactive measures to mitigate possible negative impacts on local traditional livelihoods, with a focus on reindeer herding, which mainly concerns Sámi communities. In addition to establishing dialogue with reindeer herders, through its remediation plans, LKAB seeks to ensure that its operations in grazing and herding areas cause no permanent damage to reindeer herding. Agnico Eagle Mines in turn mentions that at its Kittilä site, reindeer fences are regularly maintained and newly constructed, as required, to prevent reindeer from wandering onto the mine site.

### 5.3. Social sustainability and responsibilities

All mining companies recognize the importance of addressing social and cultural considerations when conducting their operations. They do this through, for example, community hearings, heeding complaints from the public, and ensuring that operations also benefit local communities. This “dual-positive” relationship is espoused by all mining companies to some extent, ensuring that operations have as little negative impact on neighbouring communities as possible.<sup>87</sup>

All companies except Kronos and Store Norske (there are no indigenous communities in the geographical operational areas of these companies) refer to indigenous peoples and the need to ensure their rights and needs in the context of corporate operations. LKAB remains the only company to mention Sámi peoples explicitly, highlighting various methods to maintain dialogue with local Sámi communities with respect to the impacts (e.g., on reindeer herding) of the company’s operations. LKAB also refers to the principle of free, prior, and informed consent (FPIC), which allows the affected indigenous communities to give or withhold consent for projects that may affect them or their territories. Agnico Eagle Mines in particular has extensive remarks regarding indigenous peoples and maintaining their rights and opportunities for livelihoods. Here, the emphasis is on the Inuit peoples of Northern Canada (in the Nunavut Territory, where a significant proportion of its operations is conducted).

Regarding social and cultural aspects of mining operations, PhosAgro emphasizes two instances on its agenda: religious matters and patriotic matters. These both are included under

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<sup>87</sup> LKAB (2020); PhosAgro (2020); Agnico Eagle Mines Ltd. (2020); Boliden (2020); Kronos (2018).





“spiritual revival”, which in turn is a programme within its sustainability and socio-economic practices. According to PhosAgro, the company “endeavours to restore and enhance Russian national traditions and to underpin Orthodox Christian values as a driving force for the prosperity of the nation and its people”.<sup>88</sup> PhosAgro has budgeted considerable amounts for community investments and engagements via churches. On top of that, the company also maintains and builds Orthodox churches at its operational sites, said to be for maintaining and promoting the “spiritual and moral health” of the workers. Simultaneously, PhosAgro offers “spiritual and patriotic training” for youth, in addition to environmental projects and awareness-building, art programmes, festivals, and other cultural events as part of its “Educated and Healthy Children of Russia (DROZD)” programme. All analysed companies emphasize the need to engage with the public, especially with the local communities affected by their operations. PhosAgro characterizes its rationale for engaging with stakeholders, such as local communities and regional governments, in the following way: “To ensure that we act as a good neighbour”. This discourse of “neighbours” is also apparent within Agnico Eagle Mines, perhaps to burnish the image of a mining operation as a beneficial component of the local social matrix. AEM mentions that at its Goldex mining site in north-western Quebec, “the Good Neighbour Framework” has been initiated to advance and deepen community and stakeholder engagement.<sup>89</sup>

LKAB constitutes an interesting case regarding interactions between the company and its operations, and the surrounding community. Mining in Kiruna proved to endanger the safety of central Kiruna, forcing the relocation of the entire town. This was deemed more economic than altogether ceasing operations of the Kiruna mine. LKAB was active in this relocation and resettlement of Kiruna. The relocation itself is not emphasized in the 2020 report,<sup>90</sup> although the Kiruna relocation plan is a unique event in the global history of responsibility in mining operations.

None of the analysed mining companies has been involved in any significant incidents regarding their public image or conflicts with local communities. As is inevitable, some disputes and conflicts are bound to happen, but only Agnico Eagle Mines and LKAB have quantified their data regarding this. According to AEM, the number of “significant disputes” from 2018 to 2020 is zero, but the number of environmental complaints, including social (24%), environmental (7%), health and safety (48%), and indigenous rights (0%) issues, was

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<sup>88</sup> PhosAgro (2020).

<sup>89</sup> Agnico Eagle Mines Ltd. (2020).

<sup>90</sup> To be precise, only one section of a page on sustainability addresses this topic.





71 as of 2020.<sup>91</sup> These incidents are not elaborated on further. LKAB received eight complaints regarding social issues in 2020. PhosAgro offers no data regarding such issues and mentions no such complaints received.

As for managing the negative impact of their operations to the health and wellbeing of the surrounding communities and the public, none of the companies noted any major or impactful risks as possibly endangering the local communities or the public. LKAB and Boliden, however, recognise that there exists the possibility of dam failure, which would negatively affect the well-being and safety of neighbouring communities. Regarding COVID-19 (SARS-CoV-2), all companies had initiatives to support local healthcare with resources (e.g., personal protective equipment) and/or investments. LKAB in turn supported local businesses, and “LKAB Fastigheter [i.e., a real estate company owned and operated by LKAB] halved rents for commercial tenants”.<sup>92</sup> Agnico Eagle Mines mentions that, as their operations in Finland are located near a vibrant and attractive tourism destination (Levi in Kittilä), a representative of its mine became a member of the COVID-19 team in Kittilä. The function of this team was to “instantly share information related to the coronavirus situation in this popular tourist destination and ski resort”.<sup>93</sup> AEM’s mission was to ensure that any cases of COVID-19 would not spread to neighbouring communities. Interestingly, it appears as though AEM was the only mining company analysed here to make this mission part of its COVID-19 agenda. Not exclusively related to COVID-19 protections, Store Norske presents its mining activities on Svalbard from the multi-industrial perspective of Longyearbyen and its community. Store Norske’s operational activities are intended to benefit society, which assumes harmonization with other sectors, especially the tourism industry.

#### 5.4. United Nations Sustainable Development Goals

As is common among companies in other industries, mining companies have also taken to listing their contributions to UN SDGs. Table 4 lists the SDGs that mining companies claim to have positively addressed. Boliden and Kronos do not specifically refer to the SDGs in their corporate reports. As is evident, SDGs 8, 11, 13, and 17 are common to all companies that declare their SDG contributions. Agnico Eagle Mines is the sole company to claim to make a positive contribution to all 17 SDGs. Only LKAB and AEM claim to make a positive

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<sup>91</sup> Agnico Eagle Mines Ltd. (2020).

<sup>92</sup> LKAB (2020).

<sup>93</sup> Agnico Eagle Mines Ltd. (2020).





contribution to goal 5, gender equality, and AEM is the sole company claiming to make a positive contribution to matters associated with goal 14, life below water. This could be interpreted as a meaningful goal for a mining company to address, as mining effluent could potentially have a major impact on aquatic ecosystems.

**Table 4.** SDGs in mining.

SDG	AEM	PhosAgro	LKAB*	Store Norske	Boliden	Kronos
(1) No poverty	✓	-	-	-	-	-
(2) Zero hunger	✓	✓	-	-	-	-
(3) Good health and well-being	✓	✓	-	-	-	-
(4) Quality education	✓	✓	-	-	-	-
(5) Gender equality	✓	-	✓	-	-	-
(6) Clean water and sanitation	✓	✓	-	-	-	-
(7) Affordable and clean energy	✓	-	✓	✓	-	-
(8) Decent work and economic growth	✓	✓	✓	✓	-	-
(9) Industry, innovation, and infrastructure	✓	✓	✓	-	-	-
(10) Reduced inequalities	✓	-	-	-	-	-
(11) Sustainable cities and communities	✓	✓	✓	✓	-	-
(12) Responsible consumption and reproduction	✓	✓	-	✓	-	-
(13) Climate action	✓	✓	✓	✓	-	-
(14) Life below water	✓	-	-	-	-	-
(15) Life on land	✓	✓	✓	-	-	-
(16) Peace, justice, and strong institutions	✓	-	-	-	-	-
(17) Partnership for the goals	✓	✓	✓	✓	-	-





\* The company mentions that it contributes to all 17 SDGs, but claims to emphasize these in particular.



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## 6. Forestry

The following section is based on the sustainability reports of Stora Enso and Metsä Group, which both have their headquarters in Helsinki, Finland. Furthermore, the annual and sustainability reports of Sveaskog and the website of Svenska Cellulosa Aktiebolag (SCA) have been analysed. Both companies operate from Sweden with headquarters in Stockholm and Sundsvall, respectively.

### 6.1. Environmental sustainability and responsibilities

All companies recognize climate change as a major global predicament. While climate change is invariably understood mainly as a threat to the environment and human existence, some companies<sup>94</sup> also posit climate change and the resulting global warming as a potentially positive factor for the growth of the forestry industry for two reasons. First, with further climate warming, forest growth is predicted to accelerate as a result of lengthened growing seasons, in turn increasing the supply of wood and timber. Second, there is a dire need for renewable and carbon-efficient alternatives and solutions to replace carbon-heavy and fossil-sourced energy, construction material, and miscellaneous materials, such as plastics, cement, and lubricating oil. While climate change and global warming could possibly benefit the forestry industry, all companies recognize the need to mitigate their climate impacts, with an emphasis on mitigating GHG emissions. Some companies<sup>95</sup> have granted permission for renewable energy production in areas they own. Regarding wind energy, a total of 9.2 TWh is produced annually in northern Sweden on land owned by forestry companies.<sup>96</sup> As part of forestry company plans to mitigate their overall carbon footprints and GHG emissions, the forests – either owned or remediated by the companies – serve as an integral component along with the forest products.

Due to their intrinsic nature, forests are valuable natural carbon sinks, and all analysed companies recognize this. Simultaneously, all companies emphasize that their products support carbon storage. As carbon dioxide is used by trees to grow and thrive, a large majority of this carbon is stored within the biomass of the tree. This carbon is effectively sequestered from the atmosphere within this biomass, and most of this is then redirected to further

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<sup>94</sup> Sveaskog (2020); Metsä Group (2020).

<sup>95</sup> Svenska Cellulosa Aktiebolaget (2021); Sveaskog (2020).

<sup>96</sup> Svenska Cellulosa Aktiebolaget (2021); Sveaskog (2020).





“storage” within the products produced. Part of this carbon is naturally released back to circulation due to, for example, foliage withering in the winter, debris from felling and from the natural renewal of the trees and rotting wood. This removal and storage of carbon as a beneficial factor is emphasized by all companies regarding their respective climate impacts. For example, Svenska Cellulosa Aktiebolaget claims that the forests it owns bind approximately four million tons of carbon dioxide annually. Similar calculations are offered by Stora Enso and Sveaskog, both of which present their efforts to reduce GHG (i.e., carbon dioxide) emissions in a similar manner.

Stora Enso in particular presents its net annual climate impact as a negative number (–11.5 Mt CO<sub>2e</sub>), claiming that its operations are calculated to remove carbon dioxide in sum rather than producing it. This removal is due to the aforementioned carbon stores (e.g., products) and carbon sinks (i.e., new growth in forests), but also because Stora Enso provides wood-based solutions to replace fossil-based materials (e.g., plastic), totalling approximately –17.9 Mt CO<sub>2e</sub> annually. Sveaskog also presents this positive climatic impact, amounting to 3–7 MT CO<sub>2e</sub> annually. These calculations are rather approximate, as Stora Enso in particular seems to take account, to its benefit, of the climatic impact of using products offered and produced by the company instead of products produced from fossil resources. While it is certainly true that favouring the use of renewable-sourced instead of fossil-sourced products has a beneficial climatic impact, it could seem rather presumptuous to calculate this as net impact. This beneficial impact is certainly there, but the “ownership” of this impact (i.e., who actually contributes to it) can be questioned.

All analysed company reports reflect on the biodiversity and environmental impacts of on-site felling operations (possible loss of biodiversity and ecologically valuable forest areas) and negative impacts emanating from their industrial complexes (e.g., effluents and emissions). However, the impacts on soil and terrain, such as erosion, compaction, and potential pollution with oil, went unmentioned in these reports. Generally, such impacts are less emphasized since the renewal of forested areas after felling is more or less common practice among all analysed companies. The companies also present their ambitions and aspirations to protect areas of intrinsic ecological, aesthetic, and scientific value. All companies have corresponding plans to ensure the protection of biodiversity and of ecologically valuable forest areas. Sveaskog and Svenska Cellulosa Aktiebolaget have established ecoparks for these purposes. These ecoparks are protected natural areas where forestry operations are not generally undertaken. Metsä Group and Stora Enso mention no such programmes in their reports, but this could be due to differences in the holding structures of the companies. Sveaskog, for





example, is a government-owned entity that retains most of the land on which it operates, permitting such protection measures. SCA, while not government owned, also uses this vertical model in its value chain. Metsä Group and Stora Enso, however, use more diversified sourcing from, for example, private-owned forests, which makes the establishment of these designated protected areas difficult.

The Arctic is not usually referred to as such. SCA and Metsä, with operations mainly in northern Scandinavia, do posit a need to protect the environment where they operate, which in turn is essentially a stance regarding the Arctic environment. However, this is not done in an explicit manner. All the companies use a wide range of imagery regarding the environment: lush and vast green forests, but interestingly enough, no pictures of felling sites or cut blocks. None of the companies mentions the word “Arctic” in their reports or websites. The selected images signify a certain misrepresentation, as companies actively involved in felling the forests present imagery of lush full-grown or actively growing forests.

This misrepresentation on the environmental front is also discussed by Sveaskog. In 2020, Sveaskog received a questionable commendation, or anti-award, for greenwashing<sup>97</sup> from the Swedish branch of the Friends of the Earth. This anti-award is given to a company allegedly engaging in unsustainable or un-ecological practices while presenting its operations to be otherwise.<sup>98</sup> Sveaskog frames this greenwashing prize as a proof of the “challenge we face in being able to clearly demonstrate the conservation measures that the company is implementing”.<sup>99</sup> Sveaskog also published a comment regarding this, in which it disputes the rationale for this anti-award and for its winning of it. A main argument is the preservation programme conducted by Sveaskog, in which the company claims to be maintaining protected valuable forest land totalling approximately 460,000 hectares as of 2020.<sup>100</sup> It is not within the scope of this report to analyse the rationale for this anti-award, which is mentioned only to illustrate disputes and conflicts regarding the environment. Other analysed companies make no mention of such significant disputes, or such anti-awards, in their reports.

In forestry, certifications seem to occupy an influential position in assessing the sustainability of the production and value chain. All companies mention that their forests are Forest Stewardship Council (FSC) and Programme for the Endorsement of Forest Certification (PEFC) certified. Various ISO certificates are also given regarding other aspects of

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<sup>97</sup> Sveaskog (2020).

<sup>98</sup> Jordens Väner (2020).

<sup>99</sup> Sveaskog (2020).

<sup>100</sup> Sveaskog (2020).







production. These ISO certificates and standards are closely related to technical aspects of production.

## 6.2. Economic sustainability and responsibilities

All studied forest companies refer to the importance of maintaining local economies, and of ensuring opportunities for local livelihoods. As seems to be usual in extractive industries, one key component in achieving these goals is to source locally and employ local contractors in operations. This creates value on a local scale and provides the local population with employment opportunities. This seems to be the only monetary instrument mentioned as promoting economic sustainability in the reports and websites analysed here. No major economic investments were mentioned as being made on a local scale (with aspects related to economic sustainability) in the Arctic. Svenska Cellulosa Aktiebolaget Metsä Group recognises that one of its responsibilities is to ensure that local livelihoods are not negatively affected by its forestry operations. Reindeer herding, a locally and culturally important livelihood in the Nordic Arctic region, is mentioned by all analysed companies except Metsä Group. All companies mentioning reindeer herding acknowledge the need to maintain the viability of reindeer herding in the areas of their operations, and to consult local stakeholders about the matter. A key theme presented regarding this issue is to have reindeer herding and forestry happen simultaneously in areas of operations – or as Sveaskog puts it, “coexistence” between reindeer herding and husbandry and forestry.<sup>101</sup>

The most prevalent mentioned way to maintain local economic sustainability and the viability of local economies is local spending, i.e., to use the local workforce either through hiring or by contracting local suppliers. This “ripple effect” creates employment and financial opportunities for local inhabitants and communities, benefiting the local economy. However, forestry as an industry is less dependent on local infrastructure than, for example, tourism, meaning that the ripple effect is based more on salaries than on having a shared beneficial base of services. Nevertheless, Sveaskog and Svenska Cellulosa Aktiebolaget emphasize that as felling operations do require dirt roads to access the forest areas, these roads are freely accessible to the public and fire brigades, making the forests more accessible for leisure, recreation, emergency operations, and even ecotourism. This in turn can provide local

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<sup>101</sup> Sveaskog (2020).





economies with new opportunities for employment, for example, by utilizing their surrounding environment for tourism-related purposes.

### 6.3. Social sustainability and responsibilities

In terms of extent and scope, cultural and social implications are less emphasized in forestry than in mining. However, the forestry industry does not overlook the social and local implications and impacts of its operations. All case companies reflect on their responsibilities to the public, local communities, and their stakeholders. Each has independently established communication links with local communities and governments to ensure the flow of information, consent, and benefits.

Sveaskog and Svenska Cellulosa Aktiebolaget in particular highlight their recognition of local cultures and needs. As both companies situate most of their operations on Swedish soil, they have taken steps to embrace certain socio–culturally important aspects in their operations. In Sweden, as in most Nordic or Scandinavian countries in general, the public’s right of access (Swedish: *Allemansrätten* – literally, everyman’s right) is respected and embraced as both a tradition and as a socio–cultural “foundation stone”. This includes the right to access natural areas wherever no other reason forbids it and to forage for berries, mushrooms, and non-endangered, non-prohibited, and non-protected plants. This right is supported by both Sveaskog and Svenska Cellulosa Aktiebolaget, as they maintain the right of public access to the areas owned by them. This right is also maintained regarding the roads constructed by the companies for their operations, which in turn enables easier access to forested areas. These service roads also benefit the community in a protective manner, as, for example, in the unfortunate case of a forest fire, fire brigades have easier and better access to the site of the fire, making the fight against its spread easier and more manageable. The aforementioned ecoparks, provided and protected by Sveaskog and SCA, are also open to the public, serving their recreational and leisure needs, but have an ecological purpose as well.

As these Nordic rights of access do not usually encompass fishing and hunting as a specific right, or within the scope of these rights, all unauthorized fishing and hunting – even in hunting seasons – is usually and almost universally prohibited. However, both Sveaskog and SCA lease the lands and waters they own to hunters and fishers on a regular basis. This gives the public access to additional hunting and fishing territory, benefiting the hunting scene. This also benefits the company, especially regarding hunting. For example, elks can cause extensive damage to new-growth forests, as certain tree saplings in the younger stages of





growth are important parts of their diet. As these companies lease the hunting permits on their lands, the hunting taking place reduces the risk of wildlife-related damage to the company's profit margin. This also has an environmental sustainability aspect, as hunting serves as a way to manage the stocks of wildlife game, mitigating the possibility of overpopulation in specific habitats. As other companies<sup>102</sup> utilize this vertical mode of ownership within their value chains to a lesser extent, they mention little to nothing about the sort of public benefits provided by Sveaskog and SCA.

Indigenous peoples are referred to by all companies except Metsä Group. In an Arctic context, all these companies claim to maintain frequent dialogue and that co-operative planning is widely used when operating on Sámi territory or in zones allocated for reindeer husbandry. Sveaskog is the only company that specifies the exact number of consultations with Sámi communities regarding their operations, holding approximately 160 such consultations annually. Stora Enso, however, claims to have “special agreements” with five local Sámi communities in Sweden, in effect since 1992, including consultations regarding the overlapping of forestry operations with their local livelihood, i.e., reindeer husbandry.<sup>103</sup> Only one company, Sveaskog, mentions a specific conflict involving Sámi communities and peoples. In its 2020 report, Sveaskog mentions that it halted planned felling operations to take place in Northern Sweden. More specifically, these operations were to be conducted on the grazing and winter pasture area of Luokta-Mávas, a local Sámi village (Swedish: *Luokta-Mávas sameby*) and community. As a result of the local social controversy, Sveaskog eventually decided to halt its planned operations, and to continue the planning process for these operations in closer dialogue with Luokta-Mávas' representatives. In commenting on the matter, Sveaskog emphasizes that it “believed we had taken all these considerations into account, and perhaps even more, but we respect that Luokta-Mávas sees it differently”.<sup>104</sup> No other companies analysed provided any data regarding significant social disputes or complaints, nor regarding disputes or complaints concerning indigenous communities or peoples.

Stora Enso claims to employ free, prior, and informed consent (FPIC) as a guiding principle in engaging stakeholders and local communities before conducting operations, to ensure their consent. FPIC is commonly understood to be a principal component when engaging in operations where indigenous peoples are concerned, but Stora Enso seems to claim that FPIC

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<sup>102</sup> Stora Enso (2020); Metsä Group (2020).

<sup>103</sup> Stora Enso (2020).

<sup>104</sup> Sveaskog (2020).





is used in all operations, but especially “concerning land leasing and indigenous peoples’ rights”.<sup>105</sup>

In the reports and websites analysed, some community engagements and investments are mentioned, but more often than not, these engagements concern non-Arctic areas and communities. Most of the concrete community measures mentioned in reports focus on non-Arctic areas, as Stora Enso has operations in various locations globally. In the Arctic region (i.e., in Finland and Sweden), community measures are usually related to funded programmes, such as financially aiding local underprivileged youth to engage in hobbies, recreational activities, and education. No major risks or programmes pertaining to public health and protection thereof are mentioned. During the SARS-CoV-2 pandemic, companies donated personal protection equipment (PPE) to alleviate the shortage of PPE in hospitals and health services, and Stora Enso converted some of its industrial capacity to producing disinfectants.

#### 6.4. United Nations Sustainable Development Goals

As is common among the other studied industries, forestry companies have also taken to listing their contributions to the UN SDGs. Table 5 lists the SDGs that forestry companies claim to have positively addressed. As is evident, Svenska Cellulosa Aktiebolaget is the only forestry company analysed here to claim to support all 17 goals. All analysed companies address goals 12 – responsible consumption and reproduction, 13 – climate action, and 15 – life on land. When considering the typology of SDGs presented by the Stockholm Resilience Institute (2021) according to the tripartite environmental (Biosphere), social (Society), and economic (Economy) schema (and, additionally, the co-operative component of goal 17, partnership), we can see that the emphases of SDG contributions are distributed more or less evenly across the schema by most analysed companies. An outlier in this matter is Stora Enso, which emphasizes only three SDGs, two of which concern environmental (Biosphere) goals, i.e., 13 – climate action and 15 – life on land, and one an economic goal, i.e., 12 – responsible consumption and reproduction. Only the two mainly Swedish companies, SCA and Sveaskog, claim to have a positive impact on goal 5 – gender equality.

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<sup>105</sup> Stora Enso (2020).





**Table 5.** SDGs in forestry.

SDG	SCA	Sveaskog	Metsä Group	Stora Enso
(1) No poverty	✓	-	-	-
(2) Zero hunger	✓	-	-	-
(3) Good health and well-being	✓	-	-	-
(4) Quality education	✓	-	-	-
(5) Gender equality	✓	✓	-	-
(6) Clean water and sanitation	✓	-	✓	-
(7) Affordable and clean energy	✓	✓	✓	-
(8) Decent work and economic growth	✓	✓	✓	-
(9) Industry, innovation, and infrastructure	✓	✓	✓	-
(10) Reduced inequalities	✓	-	-	-
(11) Sustainable cities and communities	✓	✓	-	-
(12) Responsible consumption and reproduction	✓	✓	✓	✓
(13) Climate action	✓	✓	✓	✓
(14) Life below water	✓	-	-	-
(15) Life on land	✓	✓	✓	✓
(16) Peace, justice, and strong institutions	✓	-	-	-
(17) Partnership for the goals	✓	-	-	-





## 7. Conclusion and discussion

The goal of this report was to analyse how companies and important industry associations in Arctic Europe understand their corporate social responsibilities in the context of industry-associated operations in the Arctic environment and socio-economic contexts. As this report, as a product of the ArcticHubs project, intends to relate these responsibilities to a sustainable development perspective guided by the inclusion of all dimensions of the triple bottom line, there was a focus on the companies' social, environmental, and economic responsibilities that are highlighted in their official sustainability and annual reports. Here, the results associated with industrial perspectives on what responsibilities matter in the Arctic regions provide steering information and facilitate the effective co-management of sectoral activities in this operational environment. The results indicate that the selected industries operating in Arctic Europe<sup>106</sup> share several tendencies.

First, the term “CSR” is rarely used in the reports, and only the mining and aquaculture sectors use the term a few times. Instead, there is a much stronger emphasis on the integrative term “sustainability”. All analysed reports were either published directly as sustainability reports or as annual reports and master plans that specifically contain a sustainability chapter in which various corporate responsibilities are stressed.

Second, use of the terms sustainability and CSR is not necessarily elaborated in a fully Arctic context. Some corporations with only a few operations here do not mention responsibilities specifically associated with the Arctic environment. However, tourism and aquaculture companies especially mention the Arctic and European Arctic in their reports and strategies. This forms a strong contrast to forestry and mining companies, which hardly mention the European Arctic. Nevertheless, most companies make circumstantial references to the European Arctic through mentioning local Arctic indigenous peoples, such as the Sámi and Inuit peoples. These can be understood as references to the European Arctic. This would suggest a further research avenue regarding whether Arctic-ness is even understood to be a specific feature that companies should acknowledge and address as a responsibility in their operations.

Third, there is a shared tendency in all reports for the term sustainability, or CSR, and associated responsibilities to be clustered according to certain themes (see, e.g., Tables 2, 4, and 8) defined by individual sub-themes (as described in the abovementioned tables). These

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<sup>106</sup> Including Kronos, which operates only in southern Norway.





themes are strongly clustered according to environmental, social, and economic dimensions. This is an essential response to the research question of this report: the three pillars of sustainability (i.e., the triple bottom line) are all comprehensively integrated in the CSR understandings of the case companies.

Fourth, there is an overlapping tendency regarding the detailed disclosure and reporting of company performance, certifications, and stakeholder involvement. This is closely related to a framework commonly known as ESG data. The term “ESG data” refers to a company’s measurement and reporting of environmental data (e.g., GHG emissions, water consumption, and waste generation), social data (e.g., employee composition, product information, and customer-related information), and governance data (e.g., anti-corruption programmes, board diversity, and political lobbying).<sup>107</sup> Many of the analysed reports are largely structured according to these dimensions; for example, Kronos recently published a new ESG Report 2021. The ESG framework can be viewed as a means of inculcating the principles espoused by the triple bottom line into corporate culture.<sup>108</sup> As this report views CSR from a sustainable development perspective focusing on the balanced achievement of social equity, economic prosperity, and environmental quality through long-term business activities, there is a need to consider responsibilities, including the reported content, in relation to long-term sustainability. In other words, do the understandings and efforts of the case companies and associations related to CSR and related responsibilities contribute to sustainable development as such, or rather, are they meant to do so only from a company/association point of view? Here, it might be important to look at the actual drivers that originally motivated businesses to practice CSR. Keeping in mind that motivations, in this case, might be context specific, Rodriguez-Gomez et al.<sup>109</sup> distinguished five general objectives or purposes of CSR. First, research argues that CSR is a marketing tool that improves corporate image and reputation, and legitimizes company performance. This refers to the seeking of community acceptance, or the “social license to operate”, a license without which a company would face conflicts with the community in addition to the daily management of organizational activities.<sup>110</sup> Second, CSR might bolster competitive advantage through reducing business risks and associated costs when it comes to operational activities. Research concludes that better environmental performance improves corporate efficiency.<sup>111</sup> This is supported by Xie et al.,<sup>112</sup> who

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<sup>107</sup> Amel-Zadeh & Serafeim (2018).

<sup>108</sup> Shah & Saraogi (2020).

<sup>109</sup> Rodriguez-Gomez et al. (2020).

<sup>110</sup> Rodriguez-Gomez et al. (2020).

<sup>111</sup> Rodriguez-Gomez et al. (2020).







emphasized increased corporate efficiency as a result of corporate ESG disclosure. Similarly, CSR (and ESG) disclosure might prevent negative impacts on profitability and risks associated with consumer boycotts, low employee commitment, and supplier-related scandals.<sup>113,114</sup> Third, CSR improves stakeholder relations by building increased trust between the company and its stakeholders. Here, publishing CSR information (mostly regarding social and environmental matters) allows communication with various stakeholders, sending signals to the market, from which responses are received.<sup>115</sup> Related to the second and third points, a fourth CSR objective is to meet various stakeholder demands and benefit wider society while simultaneously achieving improved financial performance. This implies that a company's financial and economic interests are dependent on its environmental and social performance.<sup>116</sup> Similarly, Friede et al.<sup>117</sup> showed that including ESG indicators and investments have a positive effect on corporate financial performance as well.<sup>118</sup>

Finally, the fifth objective of practicing CSR is to achieve long-term sustainability. Here CSR is integrated into the core business strategy and actions, allowing the management of all triple bottom line dimensions.<sup>119</sup> Regarding this, Ashrafi et al. (2018) understand the relationship between CSR (as a holistic approach incorporating the whole triple bottom line) and sustainable development according to a scale that distinguishes between the long- and short-term benefits to society stemming from certain CSR practices. The longer lasting a company's CSR benefits are for society, the more its CSR practices contribute to sustainable development, which is assigned the highest value on the scale.<sup>120</sup> Ashrafi et al. (2018) further assigned pollution control a low value on the scale and source control a high value.

However, the question of how much the present results can ultimately be linked to long-term sustainability, or only to specific types of sustainability performance, is beyond the scope of this research. An answer in this context would need a new research concept to confirm how much the industries' responsibilities contribute to sustainable development or, according to Ashrafi et al. (2018), where on the scale of short- to long-term benefits can CSR responsibilities and practices (e.g., certifications) be located. This would include various

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<sup>112</sup> Xie et al. (2019).

<sup>113</sup> Rodriguez-Gomez et al. (2020).

<sup>114</sup> Nirino et al. (2021).

<sup>115</sup> Rodriguez-Gomez et al. (2020).

<sup>116</sup> Rodriguez-Gomez et al. (2020).

<sup>117</sup> Friede et al. (2015).

<sup>118</sup> Friede et al. (2015).

<sup>119</sup> Rodriguez-Gomez et al. (2020).

<sup>120</sup> Ashrafi et al. (2018).







perspectives and processes. For example, research by Kraus et al. (2020)<sup>121</sup> shows that CSR has no direct significant influence on environmental performance, but is positively associated with environmental strategy and green innovation. These concepts, however, do significantly improve environmental performance.<sup>122</sup> Such developments and the relationship between CSR results and the actual achievement of sustainable development merit further research.

Fifth, all companies refer to and consider the impacts of climate change on their operations. The focus is mainly on the negative impacts of climate change and the associated global warming. However, some industries (i.e., aquaculture, forestry, and mining) see climate change as a “catalyst”, possibly benefitting the companies and their economic situations. Only tourism sees climate change as an entirely negative phenomenon. Research resources ought to be allocated for linking the possible catalytic impacts of climate change described by the companies to their industrial operations in the European Arctic, in order to map their implications.

Sixth, there is a further dominant tendency among the case companies/associations to express their corporate responsibilities according to the 17 SDGs. In doing so, most companies distribute the individual SDGs among various self-defined responsibilities regarding the associated sustainability dimensions; however, some companies also structure responsibilities according to specific SDGs. Here, few emphasise specific impact-goals on which a company exercises especially positive influence. As SDGs incorporate multiple beneficial factors, when considering their precise nature and universality, a question remains as to whether the SDGs will eventually constitute a new norm within CSR and sustainability reporting and planning. As SDGs are a rather new instrument, the effects of SDG-oriented planning and reporting, and of integrating the CSR–sustainability nexus, ought to be further considered and explored. An overarching question is whether or not the SDGs will gradually overtake the Global Reporting Initiative (GRI) and ESG reporting schemes.

As discussed at the beginning of this section, most companies have fully integrated the sustainability concept into their reporting content and refer to it very frequently. This might be related to the increasing prominence of the SDGs and their association with the universal concept of “sustainability”. A summary of all SDGs that the analysed companies claim to address is presented in Table 6, in the end of this report. All case companies in all four studied industries claim to contribute positively to goal 13 – climate action, and all companies except

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<sup>121</sup> Kraus et al. (2020).

<sup>122</sup> Kraus et al. (2020).





one claim to contribute to goals 8 – decent work and economic growth and 12 – responsible consumption and reproduction. The goals least contributed to are goals 1 – no poverty and 10 – reduced inequalities, as only two companies claim to address them; only these two companies, Agnico Eagle and Svenska Cellulosa Aktiebolaget, claim to address all 17 SDGs.



**Table 6. SDGs addressed by all analysed companies.**

	(1) No poverty	(2) Zero hunger	(3) Good health and well-being	(4) Quality education	(5) Gender equality	(6) Clean water and sanitation	(7) Affordable and clean energy	(8) Decent work and economic growth	(9) Industry, innovation and infrastructure	(10) Reduced inequalities	(11) Sustainable cities and communities	(12) Responsible consumption and reproduction	(13) Climate action	(14) Life below water	(15) Life on land	(16) Peace, justice and strong institutions	(17) Partnership for the goals
AQUACULTURE	Bakkafrost		✓		✓	✓	✓	✓	✓			✓	✓	✓	✓		✓
	Grieg Seafood			✓	✓	✓		✓	✓			✓	✓	✓	✓	✓	✓
	Lerøy		✓	✓				✓				✓	✓	✓			✓
	Norway Royal Salmon		✓	✓				✓				✓	✓	✓			
FORESTRY	SCA	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Stora Enso											✓	✓		✓		
	Sveaskog					✓	✓	✓	✓		✓	✓	✓		✓		
MINING	Metsä Group					✓	✓	✓	✓			✓	✓		✓		
	AEM	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	LKAB					✓	✓	✓	✓		✓		✓		✓		✓
	PhosAgro		✓	✓	✓		✓	✓	✓		✓	✓	✓		✓		✓
TOURISM	Store Norske						✓	✓			✓	✓	✓				✓
	Hurtigruten				✓	✓		✓	✓		✓	✓	✓	✓		✓	



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