



HANDBOOK FOR SOCIAL LICENCE TO OPERATE in Arctic Industries



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This handbook is designed for industrial actors in the Arctic regions and decision-makers involved in strategic planning for Arctic industrial development. It guides the assessment and implementation of Social Licence to Operate (SLO). The handbook begins with concise recommendations, explores the concept of SLO, and discusses the relevance of these recommendations in the Arctic.

The SLO concept addresses the relationships between local communities and industries such as mining, aquaculture, tourism, and forestry in the Arctic. These industries can have significant local environmental and social impacts while generating substantial benefits beyond the local communities, leading to potential controversies.

The SLO approach aims to gain the acceptance and trust of local communities, which is increasingly important. Failure to achieve this can result in significant costs due to project disruption or termination. The aim is to clarify the understanding and interpretation of the SLO concept and how companies and stakeholders can work to enhance the SLO of an industry.

Originally developed in the mining industry, the ArcticHubs project explores whether the SLO concept can be adapted to other industries like aquaculture, forestry, and tourism. ArcticHubs project has also examined how these industries impact Sami reindeer herder and Greenlandic Inuit hunters and fishermen through SLO activities.

Recommendations

Apply SLO to all Arctic industries. Adapt the SLO models from mining to other industries in the European Arctic, taking into account contextual differences. Adjust SLO approaches to reflect the unique challenges.

Respect indigenous and local rights. Ensure respect for indigenous rights and traditional local practices in all extractive industries.

Implement genuine stakeholder engagement strategies to gain and sustain local acceptance and support. Engage all stakeholders creatively, not routinely.

Strive for a balance between economic benefits and environmental impacts in industry operations.

Recognise the role of reindeer husbandry as a traditional livelihood and seek to reconcile its needs with new activities.

Establish routines for dialogue and relationship building. Arrange meetings, transparent and timely information sharing, communication and personal contact with all relevant stakeholders. Don't just settle for the forms of participation required by law.

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WHAT IS ARCTIC HUBS?

ArcticHubs (2020-2024) is a Horizon EU project that develops tools to promote sustainable development of industrial and cultural hubs in the Arctic.

Hubs are nodes hosting either a combination of economic activities, or one main industry or means of livelihood, where the challenges and impacts facing the Arctic region are tangible and acute.

The Arctic hubs in the project fall into categories of fish farming, forestry, tourism, mining and indigenous cultural hubs. The learning hubs outside the Arctic provide points for comparison with the Arctic cases.

More information: <https://projects.luke.fi/arctichubs/hubs/>.

Pathways to evaluate SLO

The concept of social license to operate originated from the Global Mining Initiatives - GMI - and was introduced in 1998 as a response to the poor reputation of the mining industry (Boutilier & Thomson, 2011). It became clear that obtaining a formal license to operate from the government and complying with regulatory requirements was no longer sufficient (Moffat & Zhang, 2014). While corporate social responsibility (CSR) takes a corporate perspective, SLO operates from a community perspective. Although the term began as a metaphor for the ability of communities to stop industrial projects (Boutilier et al., 2012), it has since evolved with efforts to model and measure SLO. Despite ongoing conceptual debates about the metaphorical nature of the SLO concept (Duncan et al., 2018; Hitch & Barakos, 2021), with the models to measure it, SLO has been seen as a useful management tool in various industries.

Tuulentie et al (2019) point out (Table 1) that CSR and SLO are both conceptualisations of social acceptance with different emphases:

“SLO is a less tangible idea emphasizing social acceptance and the role of local communities. CSR can be seen as a framework in which companies may conduct strategic actions in pursuit of social license and a means by which companies frame their attitudes and strategies towards, and relationships with, stakeholders or communities”.

Different frameworks for SLO assessment (Fig. 1) suggest the factors that influence the level of acceptance and the way in which these factors relate to each other.

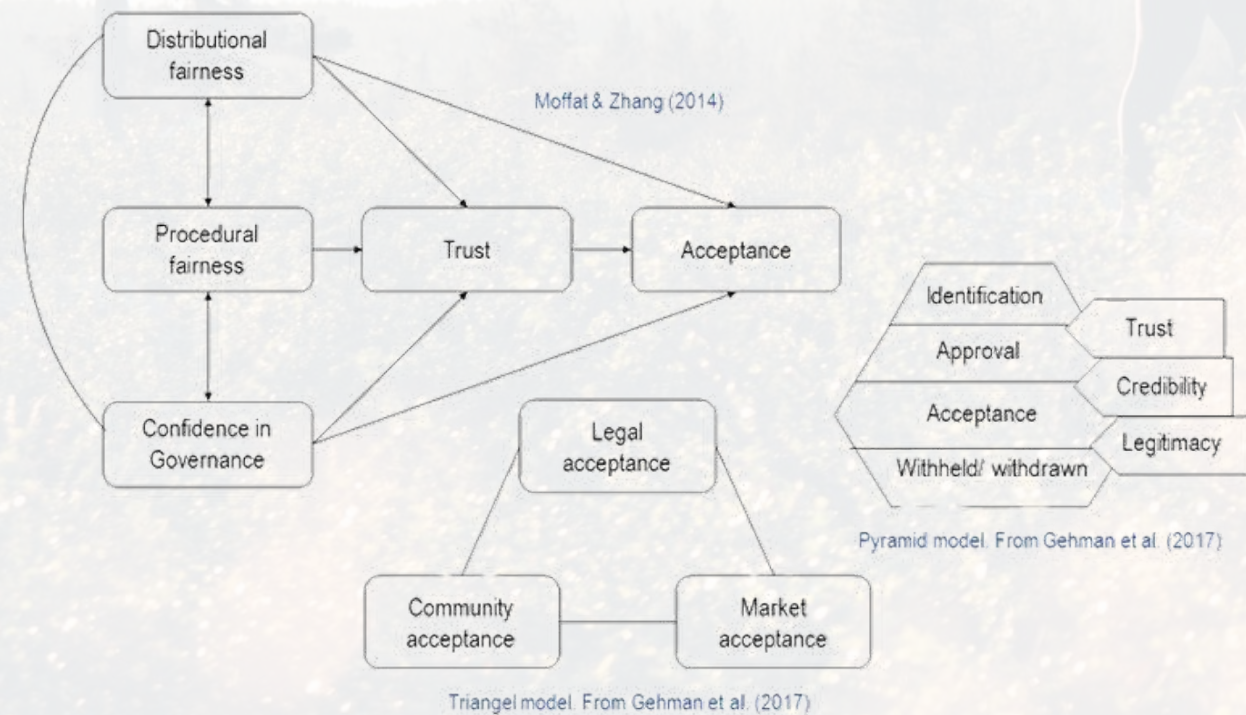


Figure 1. Different frameworks of SLO assessment

Table 1. Comparison table Corporate social responsibility (CSR) and Social license to operate (SLO) (Tuulentie et al., 2019)

	Corporate social responsibility (CSR)	Social license to operate (SLO)
Who are the main actors?	Mining companies – especially global mining industry; interaction with ‘stakeholders’ central (e.g. Dashwood, 2012; Heisler & Markey, 2013).	Communities, mining companies (Prno, 2013).
What?	CSR is a company program and policy; it is about principles, guidelines and frameworks: justification of existence and need to document the performance of the company to the shareholders (Guerin, 2009; Jenkins & Yakovleva, 2006; Ziessler-Korppi, 2013); activities by which companies aim to do well for either the purposes of profit maximization or benefits to society (Holley & Mitcham, 2016).	Emphasis on the need for a less tangible ‘social acceptance’ to avoid ‘non-technical’ risks such as community conflict and workforce protests (Owen & Kemp, 2012; Tarras-Wahlberg et al., 2017). Unofficial community approval and acceptance (Heisler & Markey, 2013).
When?	Started as philanthropy already in the 1930s but has gained more popularity since, especially from the 1990s (Dashwood, 2012; Wirth et al., 2016).	Entered the vocabulary of mining industry practitioners in the late 1990s (Prno, 2013).
Why?	To justify the existence of companies and document their performance through the disclosure of social and environmental information (Jenkins & Yakovleva, 2006); to demonstrate ability to respond to stakeholder concerns by implementing the principles of sustainable development (Guerin, 2009); to address negative reputation because of environmental disasters and social disharmony, pressures by NGO’s and local communities (Dashwood, 2012); to balance the diverse demands of communities, and the imperative to protect the environment, with the need to make a profit (Jenkins & Yakovleva, 2006).	SLO has emerged as an industry response to opposition and a mechanism to ensure the viability of the sector (Owen & Kemp, 2012) since the communities around the world have increasingly come to demand more involvement in decision making for local mining projects (Prno, 2013).
How?	By reporting social and environmental impacts and issues (Jenkins & Yakovleva, 2006).	Community-specific solutions (Prno, 2013); may exist in different forms, from informal relations to more formal, negotiated ‘impact- benefit agreements’ (Black, 2013); more obvious when lost than when present (Wilson, 2016).
Relationship to sustainability and to each other	By 2005, most (of the major mining companies) had started to refer to their stand-alone annual reports on the environment and community relations as “sustainable development” reports. (Dashwood, 2012); a framework in which companies may conduct strategic actions in pursuit of social licence (Holley & Mitcham, 2016).	Social sustainability as a broad frame. SLO has strong links to CSR but unlike CSR demands consent (Holley & Mitcham, 2016) and can be seen as gained, maintained or withdrawn.
Role of local community	For the company, CSR is about balancing the diverse demands of communities, community being one among several stakeholders (Jenkins, 2004).	Acceptance by local community is central (Tarras-Wahlberg et al., 2017); local benefits provision and public participation play a crucial role (Prno, 2013).
Main criticism	Only lip service (Dashwood, 2012) but also that it does not benefit the company (lack of evidence of positive impact) (Melo & Garrido-Morgado, 2012).	Difficult for a community not to grant SLO since its conditions are obscure (Owen & Kemp, 2012).

Pathways to evaluate SLO

Wyatt (2016) proposes a useful framework of pathway elements, recommended measures and indicators (Table 2) that captures most of the elements in the different models. The framework is qualitative and generic, making it applicable to a wide range of industries and sectors. It can be used as a first step in assessing SLOs. The initial assessment can be further developed using quantitative models.

Table 2. The framework used in this handbook includes Wyatt's (2016) five elements of SLO.

Path elements	Examples of possible measures or indicators
Impacts on socio-economic infrastructure	Economic revenue, employment etc Social change, immigration, availability of community services Valorization of knowledge and skills
Impacts on biophysical infrastructure	Management and resilience of wildlife and plant populations Effectiveness of efforts to minimize and mitigate adverse impacts
Effective engagement processes	Quantity and quality of contact Procedural fairness and power equality Interactional trust Inclusive decision-making and governance
Relationship building	Institutional trust Respect Credibility Understanding alternative positions Mutual learning
Respecting, protecting and exercising rights	Recognition and acceptance of rights Respect for indigenous values and knowledge Maintaining access to land and resources Appropriate share of benefits

SLO – Arctic context

SLO studies and practices are context dependent. Therefore, the discussion of the common SLO elements summarised above should be placed in a regional context. The Arctic is a region of high geopolitical importance where many nations and actors seek to establish a presence. This brings large international industrial players to the region, where they meet relatively small local communities. Another challenge is the diversity of the Arctic region and the special legal status of some Arctic regions (e.g. Svalbard).

The interplay between local interests and global forces is therefore an important factor of SLO in this region. Fast-developing new industries such as mining, tourism and aquaculture compete with established industries such as forestry, as well as the most traditional ones such as reindeer herding, fishing and hunting. As nature-based industries are dominant in the Arctic, the newcomers are competing for the same resources, land and seascapes. **Potential conflict between traditional and new nature-based industries** is another important factor for SLO in the Arctic. Operating in a region with **a strong presence of indigenous communities**, both new and established industries need to consider their rights and develop communication and engagement strategies to achieve high levels of SLO.

Assessing and practicing SLO in the Arctic (based on Wyatt's framework)

IMPACTS ON SOCIO-ECONOMIC INFRASTRUCTURE

One of the main problems is the current negative population development in the Arctic region, especially in smaller, rural communities. Regional towns are often developing positively and attracting younger people due to interesting jobs, educational opportunities, better health care and business and trade opportunities. Traditional industries such as fisheries and fish processing, forestry, agriculture, reindeer husbandry, indigenous livelihoods (fishing, gathering, sheep herding and handicrafts) and partly also mining and tourism have a long history in the Arctic, but are struggling to become the key factors in creating resilient societies. New industries such as large-scale tourism and mining are having a major impact on the economy in the Arctic. New opportunities related to green transition and sustainable practices (also in traditional industries) with new technology solutions that reduce environmental impacts can create new jobs and optimism. However, respect for traditional, non-extractive industries is needed. Reindeer husbandry, for example, keeps many remote areas populated and is important for the sense of place.

IMPACTS ON BIOPHYSICAL INFRASTRUCTURE

Environmental impacts are significant on the social acceptability of various industries in the Arctic. These impacts affect nature, which in turn disrupts the traditional activities and lifestyles of local and indigenous peoples, such as the Sami and Inuit, and interferes with their land rights. Reindeer herding in particular is affected by habitat changes caused by mining, forestry, tourism and public infrastructure projects such as roads, power lines and wind turbines.

Conflicts between the interests of industry and the needs of indigenous peoples have been shown to prevent some projects from going ahead, as in the case of the Nussir mine in Norway, forest negotiations between Sveaskog and reindeer herders and the trophy hunting concession in Nuuk, where lack of acceptance has led investors to reconsider their plans for the project.

Another way in which environmental impacts are linked to SLO is through the impact of industrial activities on the welfare of local people. Negative environmental impacts include pollution – an inevitable consequence of any industrial production – as well as the destruction of recreational areas and loss of biodiversity. These impacts on nature deprive local communities of ecosystem services and can affect health and well-being. Biophysical impacts also include overcrowding, littering and trespassing as seen in tourism, pressure on local infrastructure and, in some cases, urbanisation and reduced access to nature. However, the development of infrastructure by local industrial actors also has positive aspects. The extensive network of forest roads improves access to lakes, rivers and recreational areas, including hunting and berry picking, which would otherwise be difficult for most people to reach. SLO is therefore defined as the result of trade-offs between conservation and conversion interests that are unique to each area, industry and community.



Picture 1. A Hurtigruten cruise ship in East Greenland. The nature park is only inhabited by short-term workers on weather stations or military bases, but has a long history of expeditions and trappers from Europe in the last century. Photo: Karl Zinglensen

EFFECTIVE ENGAGEMENT PROCESSES

Engagement can be informal (open house visits, public meetings) or formal (required by law). Certification standards (such as ASC for aquaculture, and FSC and PEFC for forestry) can guide these processes. Some countries require Environmental Impact Assessments (EIA), which include Social Impact Assessments (SIA), as in Finland, to involve stakeholders at an early stage.

In Finland and Norway, municipalities can veto mining projects, as seen in Kautokeino in Norway, where local opposition based on Sami interests stopped a project. In Finland, municipalities have a monopoly on land-use planning and they can decide to zone the area needed for a mine for other uses. In aquaculture, coastal zoning plans balance traditional fisheries with new sites, requiring a strong SLO. Engagement must navigate conflicting interests. Formal dialogues do not always resolve issues effectively. Certification standards ensure community involvement, but minority interests such as reindeer herders or small business tourism often struggle to have their concerns addressed.

In Greenland, the low level of local involvement in tourism and the dominance of foreigners highlight the need for better regulation. The authorities should improve management and involve all parties to achieve mutual SLO.

Effective engagement is critical to achieving a SLO. It involves fair processes and good communication between industry and communities. Recognising who is affected varies by industry and situation.

Industries need SLO from different stakeholders, including local citizens, cabin owners, reindeer herders, hunters and fishermen, or even visitors such as tourists. This diversity challenges the definition of "local people". Reindeer herders often cross municipal boundaries, making it difficult for them to participate in local dialogues. They may not have voting rights in mining areas, but their traditional lands are protected by law.

RELATIONSHIP BUILDING

Relationship building refers to institutional trust, respect, credibility, mutual learning and understanding of alternative positions in company-community relations. Much of the trust is based on past experience and the industry's ability to understand the needs of local communities and how to operate in an Arctic context.

In mining, there are some illustrative examples. The previous Australian-owned mine in the Varangerfjord hub had several challenges in gaining local trust, while the Canadian company Agnico Eagle Ltd. in Kittilä has a good reputation to bring with it when it enters the Varangerfjord hub. However, this always depends on the context. In Kittilä, negotiations with the reindeer herders went quite well, and the tourist resort is far enough away from the mine. The open house approach mentioned above also helps to build trust.

RELATIONSHIP BUILDING

The work of **aquaculture** companies in building relationships in Norway is observed in the form of reporting and regular meetings with stakeholders. However, these efforts are often seen as formal and linked to legal licensing and compliance with existing requirements. Rather, it is mediated through public hearings on coastal zone planning and other management activities. As contact is perceived differently by different stakeholders, this raises the issue of trust. The **effectiveness of communication** is therefore difficult to measure. The role of communication with industry may be less visible as aquaculture is often one of many actors in the area (along with fisheries, oil/gas, tourism, agriculture, other industries). Direct contact between industries does not necessarily take place.

In **forestry**, local communities may have different expectations depending on whether the forest is managed by a private individual(s), a private company or a public enterprise or authority. Forest owners can be large or small, and private ownership can include state, municipal or church-owned enterprises, which also affects relationships. An example of relationship building in forestry is the Metsähallitus participatory planning system in Finnish state-owned forests, where a large group of shareholders is involved in the planning process.

The Änök case in Sweden and the Hammastunturi case in Finland suggest that local communities expect **a higher degree of consideration** from state-owned companies or larger forest commons or other enterprises. The Hammastunturi case in Finland arose from a disagreement between reindeer herders and the forest industry. The local common forest (jointly owned forest unit) planned to log, but the logging did not take place because the forest companies were not willing to buy timber from this conflict area.

This also illustrates the exponential increase in complexity when larger areas, ownership groups or local communities are combined with certification criteria or other global or top-down management methods. In Sweden, the decision of the Supreme Administrative Court in the Änök case in 2014 led to the prevention of final felling on the basis of an appeal by an environmental organisation. This proved to be a turning point in terms of influencing decisions on forest use rights, and highlights **the issue of the local perspective** in terms of SLO.

The requirements for the right of appeal presuppose that the third party is a nationally recognised ENGO (environmental non-governmental organisation), but it does not have to be locally based. This further complicates the question of how to assess SLO.

RESPECTING, PROTECTING AND EXERCISING RIGHTS

As justice is a key concept in SLO, the issue of respecting and exercising the rights of different interest groups is central to industrial development in the Arctic. Many of the hubs considered here are located in the homelands of the Sami and Inuit. **Indigenous peoples' land rights are often at the centre of debates** about mining, forestry, aquaculture and tourism projects in most of the hubs, and largely determine the level of SLO.

Arctic indigenous peoples themselves have become more active and effective in defending their rights. A communication strategy aimed at relevant stakeholders and efforts to increase visibility and awareness are proving fruitful, especially in the context of mining and forestry. Examples include the Nussir case and Sveaskog in Norrbotten. In this work, the Sami and Inuit emphasise their right to carry out traditional activities such as reindeer husbandry, hunting and fishing, rather than their right to compensation.

Respecting, protecting and exercising rights means recognising and accepting rights and international treaties, respecting indigenous values and knowledge, maintaining access to land and resources and receiving appropriate benefits. The mines studied in Gällivare, Kvalsund/Kautokeino and Varangerfjord are located in the Sami homeland with reindeer herders as rights holders, but different national laws regulate consultation obligations and practices. Awareness of the need to respect indigenous rights is in the spotlight as the loss of the SLO has implications for future mining development.

With regard to tourism in Nuuk, there are concerns that the tourism industry's use of land and fjord areas may be prioritised and weighted over the indigenous peoples' use of nature for traditional activities. In such cases, elements of traditional Inuit culture will be neglected and, in the worst case, abandoned and lost. There is a need for public dialogue on how ILO Convention 169 on the rights of indigenous peoples - Greenland's Inuit - should be understood and respected when decisions are made about the use of natural resources, and when Inuit ways of life are affected by changes in the use of natural resources. Failure to respect rights is obviously detrimental to achieving or maintaining SLO.

In forest hubs, many local people (including indigenous people) also own the land, which puts them in a strong position with regard to their rights. However, other local people also use forest land for recreation and other purposes on the basis of public access rights. In addition, the heterogeneity of legal systems and institutions among the nodes remains high, making the issue of rights site-specific.



Arctic examples of regulatory frameworks supporting SLO

Although achieving a high level of SLO is primarily the responsibility of the industry or individual company, confidence in governance is an important factor in acceptance. Therefore, governing bodies need to create a regulatory environment in which industries are managed in the best interests of communities. Regulatory mechanisms must ensure that a fair share of the benefits remain in the community, that environmental impacts are kept to an acceptable level, and that local stakeholders, including indigenous communities, are involved. The coexistence of traditional and new industries is also managed by the authorities.

Fair sharing of benefits is regulated through taxes and subsidies, as well as through ownership structure. Regulators may also require companies to contribute directly to the local community, for example by using local buyers and suppliers. Coexistence between different industries and stakeholder groups means that economic activities do not undermine each other's profitability. The planning process is a key element in achieving mutually beneficial coexistence.

In terms of environmental regulation, there is a wide range of international and national laws and regulations and local applications that can contribute to more responsible operations. Protected areas can be established. Land use and zoning are key areas of regulation in this regard, along with environmental impact assessment policies. Monitoring and reporting requirements can be developed. Involvement of local stakeholders is important and can be achieved through the use of local ecological knowledge and citizen science.

Involvement of local stakeholders and good communication are also needed in decision-making about industrial development. Here, national laws can be complemented by local regulations and by organising channels for communication and feedback. Municipalities often play a central role in this process. An organisation of local representatives with a mandate to negotiate with companies can be one solution. Indigenous peoples often have such representatives.

As it is difficult to provide general guidance on regulation in such a diverse context, the following chapters provide some examples of practice from the project.

FAIR CONTRIBUTION OF BENEFITS AND COEXISTENCE

Regulatory mechanisms	Examples and insights from the ArcticHubs project
Local authorities can require companies to take measures to ensure stable jobs and local settlement, and to use local suppliers.	When the Australian mining company Northern Iron began operations in Sør-Varanger, the National Labour Inspectorate and the municipality of Sør-Varanger demanded a more active plan to secure a permanent settlement.
Governments and local authorities can set up compensation mechanisms when industrial policies have negative consequences for some stakeholders.	<p>The Norwegian government has prepared for the closure of mining on Svalbard by supporting growth in research and education and investment in tourism to replace mining jobs.</p> <p>As a compensation and in agreement with the local council, the Swedish state-owned mining company Malmberget is building new facilities such as schools, sports facilities, and recreational buildings. Individual families will receive benefits and compensation for relocation.</p> <p>The Swedish authorities are compensating reindeer herders for animals lost in accidents on the roads built around the mines.</p>
Regulation of ownership can ensure local anchoring	<p>In Sweden, the ownership of forest land and processing industries is distributed among many actors and scales, but with a strong local anchorage.</p> <p>A large proportion of the inhabitants of local rural communities in Finland and Sweden are connected to forestry either through forest ownership or through their profession and work. In Finland, even state-owned forests are locally anchored through the participatory planning of Metsähallitus.</p>
Regulations can set clear priorities between industries and interests	<p>The forestry sector in Sweden has maintained its position as a strong sectoral interest in the national planning system. The concept of "ongoing land use" has legal significance, as it means that where forestry takes place, the disturbance to forestry from all other sectors must be justified.</p> <p>The forest landscape is a multiple-use landscape. Finland and Sweden belong to the category of countries with a moderate degree of freedom of decision for the owner, because of the extensive "everyone's right", which includes public access to forests.</p>
Special regulations clarifying the rights and obligations of the parties when industry and indigenous peoples' livelihoods interact.	<p>Under the Swedish Reindeer Husbandry Act, a Sami whonis a member of an RHC has the right to use land and water within the reindeernusbandry area to support himself and his reindeer.</p> <p>In Finland, in the case of state-owned forests, the authorities are obliged to negotiate with reindeer husbandry cooperatives in cases where the planned measures have a significant impact on reindeer husbandry.</p>
Regulations should ensure access of all stakeholders to the industry.	Local Inuit in Nuuk are calling for good framework conditions, e.g. in the form of loan opportunities for Greenlanders in order to create locally owned tourist industries.
Authorities can facilitate planning and coordination	<p>In Nuuk, a desire for a well-coordinated and jointly organized tourism industry has been expressed. As one measure, the Greenland's Department of Business and Tourism, in cooperation with Visit Greenland has initiated a regional seminar on cross-cutting planning of cruise tourism.</p> <p>In Kolari (Finland), the impacts of the mine have been perceived as negative to tourism as the mine is located only 9 km away from the tourism resort while tourism companies have addressed that it should be at least 45 km distance.</p>

ENVIRONMENTAL REGULATIONS AND REPORTING

Regulatory mechanisms	Examples and insights from the ArcticHubs project
Allocation of space to the industries that minimizes environmental impact	In Iceland, aquaculture in open sea-cages is currently only allowed in the Westfjords and East Fjords. The reason for this is to try to avoid further interaction with the wild salmon as most of the big wild salmon rivers can be found elsewhere in the country.
Reporting and certification requirements	In Norway, large aquaculture companies are subjects to Corporate Social Responsibility (CSR) and Sustainability reporting. Lerøy Aurora are certified by BRC-, GlobalGap- and ASC standards.
Setting clear priorities and environmental goals	The guiding principles of the current Swedish forest policy, introduced in 1993, imply that the environmental objective is explicitly considered to be of equal importance to the former production objective. In practice, it means that two goals are balanced in day-to-day forest management and forest owners are expected to promote and protect different environmental values including voluntarily setting aside valuable biotopes.
Balance between voluntary and obligatory reporting and coordination	In Swedish forestry, the prevailing philosophy within the authority are voluntariness and counselling, and only a few forestry operations, such as final felling require notification or authorization from the Forestry Agency.
Setting principles for responsible practices	The Sami Parliament of Finland has created a document called Principles for Responsible and Ethically Sustainable Sami Tourism.
Local authorities should be proactive in setting frameworks for sustainable practices	<p>In the Westfjords, Iceland, it was suggested that the cruise industry should engage with local communities on their terms. It was emphasised that the responsibility for planning and management should be in the hands of the locals rather than the visitors.</p> <p>Similar views were expressed in the ArcticHubs study in Nuuk, Greenland, where respondents point to a widespread desire for authorities to use more regulatory mechanisms and mitigation measures to limit the negative impacts of the tourism industry. This concern is exacerbated by the fact that there is currently no monitoring of the increase in tourism activities.</p>

FACILITATION OF GOOD COMMUNICATION AND ENGAGEMENT

Regulatory mechanisms	Examples and insights from the ArcticHubs project
Guidelines for community-company relations in the planning systems	Finland is the only country where a Social Impact Assessment (SIA) is included in the EIA process (Suopajarvi, 2013), which can partly explain better incentives for early involvement and transparent processes.
Compliance with the external legislation (EU)	Some municipalities in the Eigersund in Norway have granted dispensations to aquaculture farmers for establishment, even when not fully compliant with the EU water directive. This approach, coupled with an increasing focus on fish welfare issues in the industry, has led to significant polarisation among citizens.
The role of municipalities and stakeholders	<p>In Norway, the role of municipalities is strong in mining projects as the Planning and Building Act provides the municipal council the power to veto. A Swedish company, Arctic Gold, tried to reopen a gold mine in Biedjovagge around 2010, in the indigenous core area of Kautokeino. This process never came to the stage of conducting EIA studies as the Municipal Council rejected three times to accept a plan for further development. In this case, the Municipal Council acted on behalf of the Sami population, particularly the reindeer herders, who would lose important land and whose traditional livelihoods would be threatened.</p> <p>In Finland, the role of municipalities in mining projects is significant, like in Norway, since they have a monopoly in land use planning and the plans are needed e.g. for mining projects according to the current mining law.</p> <p>In Sweden, the role of municipalities in mining projects is important during the mining permit process. However, the municipality is not directly involved in the final decision.</p>
Ensure the involvement of all stakeholders	<p>In Norway, reindeer herders do not have a voice in democratic decision-making in the mining municipalities if they are registered in another municipality. A new Norwegian Mining Act is expected to be adopted in 2024, also with substantial changes to strengthen the position of reindeer herding and Sami interests.</p> <p>In a focus group meeting in aquaculture and tourism hub in Westfjords in Iceland, held in 2021, it became clear that inhabitants want to have something to say about how the industries develop in the communities, but there is no platform to do so.</p> <p>The participants in the study of tourism in Westfjords were unanimous that the information provided to cruise ship passengers about the local community was not good, citing inaccuracies and a lack of dialogue. They stressed the importance of accurate information to enhance tourists' respect for the visited community and emphasised the need for improved communication.</p>
Facilitate indigenous people involvement	<p>NGOs protecting Sami rights are actively involved in hearings regarding communal coastal planning and other relevant processes. The Sami Parliament of Norway and local organisations communicate clearly their position towards the development of salmon farming. The main concern is the area use and environmental impacts affecting traditional activities.</p> <p>In Sweden, the reindeer herding communities (RHC) are heavily affected by forestry. Based on their legal and customary rights to use land and water in support of them and their reindeer, they can, through the consultancy process withdraw the SLO on certain objects, typically planned final felling areas. With the introduction of forest certification systems, the formal consideration to reindeer husbandry has to some extent been strengthened.</p> <p>The PPGIS (Public Participation GIS) study on tourism in Nuuk, Greenland, documented a widespread perception that the management practices of the municipality's land and planning authorities were not acceptable. Information to the public was limited and stakeholder involvement, particularly of Inuit hunters and fishermen, was inadequate.</p>

Case studies from the ArcticHubs project

In this chapter, the cases of the ArcticHubs are analysed using Wyatt's (2016) elementary criteria and, in the case of forestry, Thomson & Boutilier's (2011) pyramid model. Forestry differs from the other industries in that it was the main industry in only two hubs, and is therefore analysed slightly differently.

MINING CASE

	Varangerfjord	Kautokeino-Kvalsund	Svalbard	Kittilä	Gällivare
Impact on socio-economic infrastructure	High impact on employment when in production	Possible high if realised in the future	Historically high; Closure minimal	High	High
Impact of biophysical infrastructure	Low – fear of sea pollution; Waste rock changes landscapes	Low – fear of sea pollution (Nussir) and landfills	Earlier high; Present low; Restoration project	Medium – fears of river and lake pollution	High, especially the expansion plans of the mine
Effective engagement process	Strong trust for the state-owned company; Minor engagement when Australian-owned	Nussir: limited to zoning plan period, after Arctic Gold: lack of cultural knowledge	Limited possibility for local communities to influence state policy	Good	Good in terms of compensation and “social transformation”; Bad in terms of Indigenous peoples
Relationship building and trust	High when state-owned; Only partly when Australian-owned	Divided Kvalsund community; Lack of trust in Kautokeino	Some distrust with lack of democratic channels	Good	Good towards non-Sámi; Lack of trust among the Sámi population
Respecting and exercising the rights of Indigenous peoples	Not very relevant, but some effect during the open-pit period	Challenged	Not relevant	Not very relevant but reindeer herding has to be considered	Criticized

AQUACULTURE CASE

	Varangerfjord	Eigersund	Suðuroy	Westfjords
Impact on socio-economic infrastructure	Not very significant due to permitted production capacity, total of around 50 jobs related to aquaculture. Potential 200 jobs if capacity is increased, current annual purchase of 50 million in South Varanger municipality.	The dominance of salmon farming as the main aquaculture activity is reflected in the Magma Geopark region. It's gross sales for about 1 billion Norwegian Kroner. In total, the aquaculture industry employs about 50 people in production and about the same number in ancillary businesses.	According to Statistics Faroe Islands, about 100 people are employed in the aquaculture industry in Suðuroy, including fish processing.	The two companies employ around 190 people, most of whom live in the area and the majority of whom are men. The impact on infrastructure is great, as the growth in production and employment has been very rapid in recent years.
Impact of biophysical infrastructure	Could have impact: sealice, pollution, wild salmon stocks, sustainability issues	The high density of salmon biomass per square kilometre primarily affects wild salmon and sea trout due to sea lice, genetic dilution. There is also a lack of knowledge about the effects on non-target species associated with the use of antifouling chemicals.	The large production volumes of salmon result in large amounts of feed inputs and waste from the fish pens, and escapes. In addition, chemical inputs used in production and for pathogen and parasite control have been discharged into the fjords.	Have had impact; sea lice, escapes affect wild salmon stocks, pollution and other sustainability issues.
Effective engagement process	Quite high. Many public meetings during the last three years from Lerøy Aurora. The last three years an intermunicipal coastal zone process has been conducted with a formal hearing process.	The main aquaculture industry are organised in the business cluster: “Innakva klynge”. Through the cluster the aquaculture industries perform active effective engagement plans and process.	Companies largely engage with national and local authorities to get farming permissions and licences.	Not high, few meetings held and only when something negative happens; such as sea lice epidemic and escapes from cages.
Relationship building and trust	Transparency, showroom for the public – aquaculture production (new), seminars, sponsorships, local purchases have high priority, trainee program.	The main aquaculture farmer industry, MOWI, is working actively to build trust with locals. Examples are donations to sports activity or local actions. Debates with local population on controversial topics.	Aquaculture companies in the Faroes generally provide sponsorships for sporting events and local sports teams.	Aquaculture was welcomed in the communities and trust towards the companies were in place. Recent negative incidents can reduce trust.
Respecting and exercising the rights of Indigenous peoples	Dialogue with especially fisheries stakeholders, local society and municipality politicians, Sea Sami rightsholders, the Sami Parliament.	MOWI and other farmers are regularly inspected by the public authorities in charge to monitor if the management is in line with the regulation. After every inspection a public available report is released showing eventually criticism that need to be followed up.	The aquaculture industry in the Faroes and in Suðuroy largely regulates itself when it comes to dialogue, management and engagement.	Dialogue with fisheries companies in the communities, some with local communities, not so much with inhabitants.

Case studies from the ArcticHubs project

FORESTRY CASE

Path elements	Forestry in general	Forestry in specific sites	Rotation (even-aged) forestry	Clearcutting a on specific sites
Impact on socio-economic infrastructure	Many local residents in Lapland, Norrbotten, Västerbotten and Styria are forest owners and/or work in the forestry value chain, and for them SLO is not only accepted, but even valued. For some, e.g. members of forest owners' associations and forest contractors, it is part of their identity.	Increasingly intensive forestry in the reindeer winter grazing areas in Norrbotten and Västerbotten increases the costs and workload for the reindeer herding communities (RHCs) and thus reduces SLO. In Norrbotten, the RHCs have not approved Sveaskog's final felling plans.	In Finland and Sweden, it is the mainstream management practice because it provides higher yields and more cost-effective harvesting. It is therefore accepted and approved by forest resource-dependent communities.	In a few cases, such as the recreational forest in Dalasjö, the villagers felt that the planned final felling of 19 hectares would have a negative impact on their livelihoods and indicated that they would withdraw from SLO if the company went ahead with its plans.
Impact of biophysical infrastructure	SLO is defined as the result of a trade-off between conservation and conversion interests, i.e. forestry reduces biodiversity through harvesting and an extensive network of forest roads, while increasing access to lakes, rivers and places of recreational interest, including hunting and berry picking, that would otherwise be difficult for most people to reach. Most of the forest is certified to either FSC or PEFC standards.	Public and private forest owners have set aside significant areas of old-growth forest with high biodiversity, mainly in inland Lapland, Norrbotten and Västerbotten, sometimes voluntarily and as part of certification schemes (PEFC and FSC), sometimes because of logging conflicts and the closure of the timber market to compensation markets and protection.	NGOs may have strong local roots, but often do not, and their main aim is to change mainstream forestry practice, meaning that they do not accept certain management practices, such as clear-cutting, and that forests of high ecological value should be left unmanaged.	Logging by clearcutting has an immediate and dramatic impact on the environment of the site, and where a site also has other specific values for local people, as in Dalasjö, Sweden and Hammastunturi, Finland, planned logging has been abandoned. In Austria, the law prohibits logging in sensitive and protected areas. The Forest Act is very restrictive in these cases.
Effective engagement process	Metsähallitus' participatory planning in state-owned forests in Finnish Lapland includes natural resource and landscape ecological planning involving shareholder groups. PEFC Austria - National forest management standards are developed by local stakeholders (i.e. forest associations, forest owners).	Large forest owners are required by law to consult with reindeer herding communities (RHCs) or involve them in the planning process as part of the FCS, but the effectiveness of the process is often questioned by RHCs.		In Dalasjö, Sweden, the forest company followed the FSC guidelines for engagement with the local community.
Relationship building and trust	The economic and logistical interdependence between local forest owners, industry and contractors means that all partners have an interest in maintaining good relations. Misbehaviour hinders business. Forest Dialogue - a participatory process aimed at involving all relevant stakeholders in important forest issues in order to find solutions and compromises to conflicts arising from different interests and uses of forest functions and services.	In Finnish Lapland, the conflict threatens the trust between forest owners and FSC certification, as the High Conservation Value (HCV) status of some areas prevents timber from being sold outside FSC (due to the HCV mix practice).	Locals identify with the 'green heart' image of Styria, Austria, known for forestry and timber production, so local people have a solid understanding of forestry operations and there are relatively few conflicts between stakeholders.	In Dalasjö, Sweden, against the wishes of the local community, the forestry company did not go ahead with a plan to clear-cut the area, which would likely have affected their ability to source timber from local forest owners.
Respecting and exercising the rights of Indigenous peoples	In Sweden and Finland the public right of access (everyone's right) is undisputed. In Austria there is no public right of access, but there is a growing demand for a 'right of free access to nature'. In fact, it is not allowed to enter the forest, but only on foot. Mountain biking is strictly forbidden, but people are not aware of this.	In 2023, the Swedish state-owned company Sveaskog announced that it had failed in the consultation process with the RHCs and would therefore reduce the level of final felling by 45% in the county of Norrbotten, thus respecting the position of the local RHCs. In Lapland, the Finnish state-owned company Metsähallitus has a 20-year pact with the RHCs. In Mariensee, Austria, the demands of the local population and tourists to enjoy nature put a lot of pressure on the forestry companies, and since there is no interest in disputes, the companies have compromised to maintain good relations while still allowing forestry operations and recreational trails.	The far-reaching consequences of the Änok ruling for forestry in Sweden are perceived by many forest-dependent communities and forest owners as a violation of their property rights. In Inari (in the Sami homeland) the situation regarding forestry is very conflictual. Reindeer herders are against logging, and NGOs claim that most of the logging is taking place in high conservation value forests, which has led to major timber suppliers not buying timber from the area. The Finnish state isn't buying the forest for protection, as there are already large protected areas in Lapland. As a result, local forest owners (including Sami people) don't get any income from their forest property, and the municipality can't use local wood in its power plant.	In the wake of the Änok judgement, the proportion of rejected applications for final felling in mountainous forests has increased from 20-40% of the area to 75% of the area.

Case studies from the ArcticHubs project

TOURISM CASE

Path elements	Inari	Westfjords	Varangerfjord	Nuuk	Mining-tourism nexus in Finnish Lapland
Impact on socio-economic infrastructure	Tourism has a strong positive impact on the local economy, but in some cases has a negative impact on Sami livelihoods and everyday life.	Predominantly positive impact of cruise ships tourism on the local economy.	Tourism has significant spill-over effects. Generally positive attitudes towards tourism, with the exception of cruises.	There is a trade-off between the need for foreign investment and local anchoring of tourism business.	The example of Kittilä shows that the two industries can coexist and shape the economic structure of a municipality. Both are equally important in terms of income and jobs.
Impact of biophysical infrastructure	Negative attitudes to some forms of tourism, such as hunting and dog-sledding.	The majority of ArcticHubs study respondents do not see the current number of large cruisers as a problem. However, it may have a negative impact in the future if no limits and regulations are introduced.	In some areas, overtourism is becoming a problem for the environment, infrastructure and the daily lives of local people. Illegal fishing tourism damages the SLO.	The lack of regulatory mechanisms for licensing tourism activities is a concern. There is a need to protect the environment and the various users of nature.	Land use issues often arise when a new mine is opened near a tourist destination, as it changes the landscape and causes noise and dust pollution. SLO can be achieved if the industries are geographically separated.
Effective engagement process	Many tourism development projects have involved local people, but more could be done.	Economic concerns overshadow collaborative planning, leading to varying levels of acceptance among the various stakeholders of cruise tourism.		Current practices for involving local stakeholders are criticised. Inuit hunters and fishers are able to identify the areas where their lack of acceptance of a tourism development initiative that affects their way of life is evident.	In Kolari and Kuusamo, Finland, the proximity of mining projects seems to be distracting the tourism industry and its activities. The involvement of the tourism industry is felt to be insufficient.
Relationship building and trust		Due to the poor information flow, relationship building is challenging.		Due to the lack of communication platforms, relationship building is challenging.	Risks for the tourism industry prevents from building trust.
Respecting and exercising the rights of Indigenous peoples	Representation of Sami culture in tourism is a concern.	Visitors express a willingness to obey local rules, but the authorities should take the initiative.			



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LINKS

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PHOTOS

Cover: Lapland material bank | Eeva Mäkinen

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