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Challenges that mining companies face in gaining and maintaining a social license to operate in Finnish Lapland

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TITLE PAGE

Title

CHALLENGES THAT MINING COMPANIES FACE IN GAINING AND MAINTAINING
A SOCIAL LICENSE TO OPERATE IN FINNISH LAPLAND

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CHALLENGES THAT MINING COMPANIES FACE IN GAINING AND MAINTAINING A SOCIAL
LICENSE TO OPERATE IN FINNISH LAPLAND

Pamela Lesser, Leena Suopajarvi & Timo Koivurova

ABSTRACT

The Social License to Operate (SLO) concept is significant precisely because it is bringing social issues and local communities to the forefront of the mining discourse. Although the concept of SLO has taken root in Lapland, and there are success stories of its implementation, challenges to gaining and maintaining it still remain. For example, to gain SLO, when speaking about community acceptance, the ‘community’ must be clearly defined, as there may be heterogeneous groups claiming to be ‘locals’, such as out-migrated descendants or summer-cottage owners. Historical experience poses another challenge as residents remember their inability to affect the outcome of large-scale public works projects that exploited natural resources after the Second World War. That history carries over into present situations when new mining projects are proposed. But challenges also provide opportunities for learning and for new solutions, and the good practices espoused by the mining companies reveal an adaptive attitude and a responsiveness to local community concerns.

1. Introduction

The most common definition of a SLO is that it is issued when a mining project is seen as “having the broad, ongoing approval and acceptance of society to conduct its activities” (Prno and Slocombe 2012). As projects are situational and every community-company relationship

1 is different, SLO is highly contextual (Prno 2013). The contextual nature of SLO is clearly seen
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3 in Finnish Lapland, an area abundant in metallic minerals and other resources, dominated by
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5 pristine natural spaces yet also containing both rural and increasingly urban development,
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7 the region finds a growing number of proposed mining projects from both domestic and
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9 foreign operators at its doorstep and companies continue to plan future projects. To give an
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11 example of the current volume of mining in Lapland, in the 2000s, five new mining projects
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13 began the environmental impact assessment process and two of these have already started
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15 production (Kittilä gold mine in 2009 and Kevitsa copper and nickel mine in 2012). Several
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17 companies are in the exploration phase for iron ore and also have plans for opening new
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19 mines, however, due to the present recession, companies are waiting for better times. More
20
21 than half of all Finnish mining operations are located in Lapland, the northernmost county of
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23 Finland covering almost one-third of the country's total land area (Suopajärvi 2015). As a
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25 result, communities find themselves having to grapple with issues arising from this
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27 heightened interest in mining and confronting difficult circumstances such as the need to
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29 reconcile economic interests with social and environmental values.
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41 While mining companies acknowledge the need to observe legal and regulatory
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43 requirements, the concept that SLO embodies, namely that companies need to go above and
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45 beyond this in order to secure a community's ongoing acceptance of a project, is a concept
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47 that has only recently taken root in Finland. Brought by foreign mining companies largely
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49 from Canada, SLO has begun to permeate Lapland, and as communities also are demanding
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51 more sustainable mining projects, we see the concept of SLO now firmly entrenched in
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53 Finland and a regular part of the mining discourse (Koivurova 2015). However, with more
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55 interaction between community and company comes also a more complex relationship that
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in northern Finland is still in the early stages and which proceeds largely on a trial and error
basis. While there have been successful examples of mining companies working with
communities, there are also unsuccessful examples, but nevertheless, we continue to see
communities and companies try and work out solutions amid challenges that can pose
daunting obstacles. It is to these challenges which companies must overcome to gain a
community's acceptance of their project that we turn to in Section 5 and which are the main
focus of the article. Prior to this, the polarizing nature of the SLO nomenclature and the
ambiguities that continue to surround the concept are presented followed by the
methodology used and the case studies that provide the foundation for identifying the
challenges to gaining and maintaining a SLO in Finnish Lapland.

31 **2. SLO – a term praised and vilified**

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The SLO, as a concept, is simultaneously praised and vilified. In terms of the positive
contribution of SLO, even if it did originate as an industry response to criticisms globally of
their environmental and social modes of operating in the 90s, it has also brought to light the
need for a more engaged and long-term relationship with potentially affected communities.
This includes the relationship with indigenous communities as the community acceptance
idea underlying SLO comes very close to indigenous law where the prior and informed
consent of indigenous peoples are required before issuance of permits. SLO implies that a
company has exceeded the requirements of the law, yet even though it is voluntary on the
part of a company, SLO is increasingly gaining legitimacy and becoming an integral part of the
permitting process for mines precisely because companies value the need to obtain and

1 maintain it. According to Bice (2014), many companies have incorporated into their
2 sustainability reports the importance of acquiring a SLO. However, the gap between concept
3 and action is clearly illustrated when she notes that while one company report states the
4 purpose of gaining SLO is to assure communities and governments the company will protect
5 the value of environmental and social resources and that both stakeholders will share in the
6 company's business success, she also notes there are no specific examples of nor criteria for
7 attaining SLO given in this or any of the other sustainability reports that she reviewed.
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18 While the idea of companies needing to work diligently to obtain and maintain a 'social
19 license' from communities throughout the life of a project has, in its relatively short lifespan,
20 gained widespread attention, SLO is still based on a company's voluntary actions and there is
21 no standard as to what those actions should include since they will vary depending on the
22 particular development situation. Indeed, Prno and Slocombe (2012) assert that not all
23 mining contexts will involve SLO as the minimum prerequisite is that broad mining
24 sustainability principles are embraced i.e. communities must believe the social,
25 environmental, and economic benefits of a project outweigh its potential negative effects.
26 Prno and Slocombe (2012) also maintain that even if securing SLO is a goal of both parties, if
27 community-company expectations are irreconcilable, no SLO may be possible.
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49 In critical circles, SLO is described as a cynical attempt by industry to disguise what is in reality
50 a self-preservation mechanism with altruistic behavior that suggests companies now see the
51 light and embrace social sustainability principles. Strands of this can be seen in the following
52 definitions by Moffat and Zhang (2014) and Owen and Kemp (2012), respectively: SLO is the
53 "ongoing acceptance and approval of a mining development by local community members
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1 and other stakeholders that can affect its profitability”, and SLO is “more about reducing overt
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3 opposition to industry than it is about engagement for long-term development.” The use of
4
5 the word ‘license’ also provokes criticism regarding the lack of any legal basis for SLO
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7 (Harrison 2015); yet, both communities and companies appear to be endowing it with a type
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9 of figurative legal force¹ so that SLO is now something many people view as being essential
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11 for and directly tied to a project approval (Bankes 2015).
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18 Perhaps at the core of the different perceptions surrounding SLO is the belief that motive
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20 matters more than behaviour – or not. It is true that SLO emerged as a response by the mining
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22 industry to combat increasingly negative public opinion due to both environmental problems
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24 and the lack of social responsibility. However, even if SLO did not originate as a purely
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26 altruistic endeavor, but rather to increase profits and ensure smoother operations, the end
27
28 result is that in more and more cases, industry is acknowledging they must operate in a more
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30 socially beneficial manner throughout a mine’s lifecycle to ensure that a community does not
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32 stop or hinder a project. Perhaps one of the things that has contributed to the popularization
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34 of the SLO concept is that, at the end of the day, the rationale for why industry is changing its
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36 behaviour matters less than if those changes actually benefit the people who are most
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38 adversely affected.
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49 **3. Methodology**

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54 This article aims to be a commentary on scientific discussions of the SLO. Data from two
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56 research projects, *Sustainable Mining, local communities and environmental regulation in*
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58 *Kolarctic area* (Sumilcere) led by the University of Lapland (January 2013 to December 2014)
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1 and *Testing improvement processes of Finnish environmental impact assessment and the*
2 *modes for application in Arctic Regions of Finland and Russia* (First-In Arctic EIA) led by the
3 Arctic Centre, University of Lapland (February 2013 to March 2015), are used in the text to
4 develop the arguments for the challenges to gaining and maintaining SLO in Finnish Lapland.
5 The text is also, however, based on the observations of the writers who have been following
6 the mining discussion both on the empirical and theoretical levels.
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18 For the Sumilcere project, 30 individual and focus-group interviews were carried out in Kittilä
19 and Kolari during 2013-2014, and a total of 45 people were interviewed. The project's main
20 objective was to reach as many different types of people as possible and hence there were a
21 wide range of informants: schoolchildren, entrepreneurs in different sectors, reindeer
22 herders, local politicians and municipality authorities, people working for the mining
23 companies, as well as housewives and retirees. The data was analyzed using a structured
24 template designed to highlight the empirical findings; e.g. main themes of the interview,
25 negative and positive impacts, and aspects of procedural and contextual social sustainability
26 (see Suopajärvi et al. 2016).
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44 Unlike the Sumilcere project which, among other things, did specifically focus on SLO, the
45 main goal of the First-In Arctic EIA project was to compile private sector EIA best practices in
46 Finnish Lapland. Semi-structured interviews using a prepared questionnaire were performed
47 by phone and in person over a period of two years. The respondents include 12 companies²
48 of which three are (or in the case of Northland 'were' as the company declared bankruptcy in
49 December 2014) mining companies (Gold Fields Arctic Platinum Oy, Agnico Eagle Finland Oy,
50 and Northland Mines Oy), three EIA consultants, two business associations including the
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1 mining-related one (FinnMin – Kaivannaisteollisuus ry), two government agencies and two
2 NGOs. In terms of number of interviews, while not all are affiliated with the mining sector,
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4 out of a total of 29 interviews,³ 20 are either directly with mining companies or involved
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6 discussions about mining projects, Kittilä and Kolari in particular. We did not interview local
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8 villagers individually as the main focus of the project was to gather private sector best
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10 practices from the companies themselves in order to improve their practice of EIA. Although
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12 the questionnaire did not include specific questions on SLO, many best practices in EIA
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14 espoused by the companies, such as engaging early and transparently with communities,
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16 overlap with the some of the more widely accepted practices of SLO. This said, although the
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18 data collection focused on information gained through verbal interviews, the implementation
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20 and success of these practices have not been verified.
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31 On a final methodological note, the authors want to acknowledge that while there are
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33 numerous interviews from both projects, the SLO challenges discussed in the subsequent
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35 section are derived largely from two case studies -- Kittilä and Kolari mines -- and the
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37 conclusions cannot necessarily be extrapolated to all mining projects in Lapland or its
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39 environs.
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46 **4. The case studies**

47 Northern Finland, mining and SLO

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57 The concept of a SLO has been a relative newcomer to Finland with its pre-conditions having
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59 been set once Finland joined the European Economic Area (as then a European Free Trade
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1 Agreement member) in 1995 thus opening its economy up to foreign direct investment. The
2 actual term 'SLO' did not arise in Lapland until the mid- to late- 2000s having emerged in
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4 conjunction with the entrance of foreign mining companies (mainly British and Canadian).
5
6 Although Finland has a long history of mining dating back to the discovery of the copper ore
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8 deposit in Eastern Finland in 1910,⁴ Outokumpu, these earlier projects tended to be State-
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10 owned.⁵ It is only once Finland began to decentralize its economy in the 1980s, including the
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12 mining industry, that private domestic companies began to operate and the role of the private
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14 sector began to slowly become more of a presence. As foreign mining companies only
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16 entered Finnish Lapland in the early 2000s, the expectations surrounding SLO are just
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18 beginning to solidify.
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28 The two cases

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33 As previously mentioned, the interviews from both the Sumilcere and First-In projects that
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35 are used to identify the challenges come from Agnico Eagle's Kittilä mine, a prosperous gold
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37 mine with an expected lifecycle until 2034, and Northland Resources' Hannukainen mining
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39 project in Kolari which was in the permitting phase when the two research projects began,
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41 but declared bankruptcy mid-way through them and before mining operations could
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43 commence. Although unintentional, the situation at Northland provides a unique
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45 opportunity to study the challenges inherent in maintaining SLO for a company in financial
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47 trouble. While both projects initially received SLO from most of their stakeholders, only the
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49 Kittilä mine was able to maintain it.
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1 The Suurikuusikko deposits (or more widely referred to as the Kittilä mine) are located in
2 Lapland about 150 km north of the Arctic Circle and equidistant (at 35 km) from both the
3 center of Kittilä municipality, with approximately 5800 inhabitants, as well as the tourist
4 destination of Levi (Koivurova 2015). Owned and operated by Agnico Eagle, a publicly traded
5 Canadian-owned company with operations in Canada, Finland and Mexico, production began
6 above-ground in 2009, and as of 2012, has been conducted solely underground.⁶ The
7 estimated mine life cycle continues until 2034, which in terms of community relations, means
8 the company must be a good neighbor for decades. Agnico Eagle's sustainable development
9 policy outlines their guiding principles and commitments to protect the health and safety of
10 employees and contractors, as well as the environment and communities impacted by the
11 activities at Kittilä mine.⁷

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31 Agnico Eagle has been held up as a model operator by most, but not all, of the stakeholders
32 affected by the project and continues to operate profitably today. In general, the company
33 is widely praised for its effective stakeholder engagement strategies and has received its SLO
34 for years. This said, there are still challenges, which will be discussed in the next section.

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43 Northland Resources (now bankrupt) was previously headquartered in Luxembourg with
44 operations in northern Finland (Hannukainen) and northern Sweden (Kaunisvaara). Known
45 for its iron-ore resources, open pit mining began at Hannukainen in 1978 with operations
46 continuing until 1988. The mine is located about 100 km north of the Arctic Circle and
47 approximately 25 kilometers from the center of the municipality of Kolari, with a population
48 of 3600 inhabitants. Northland became active at the mine site in 2005 (Koivurova 2015).

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When the website of Northland Resources was working, a section on ‘Mining Responsibly’ included a section entitled ‘SLO’ with the stated objective that the company be ‘(...) seen as an integral and beneficial part of the community, and has the support of the various local stakeholders’.⁸ As will be seen in the following section, Northland initially had very proactive stakeholder outreach and engagement strategies, but as its financial situation deteriorated, so did their willingness to continue interacting with the community.

5. Results and discussion: Challenges in gaining and maintaining SLO

Challenge 1: Who is the community authorized to give SLO?

When the SLO is given to the company by local people and the community, who then comprises this ‘community’? Usually communities are described as affected stakeholders, host communities or local residents, but John R. Owen and Deanna Kemp (2013, 33) are critical towards the whole concept of ‘community’. They argue that it is homogenizing diverse stakeholders and different opinions under the same rubric. We agree with this criticism based on our empirical work which shows that many different communities are often present in the vicinity of a mine site and can experience both positive and negative impacts in almost inversely proportionate ways.

For example, in the case of the Kittilä mine, the villagers of Kiistala living in the immediate vicinity of the Kittilä gold mine feel quite disillusioned with the municipality of Kittilä. One reason for this division is the result of the municipality’s decision to settle new mining residents near the Levi ski resort, which is about 35 kilometers from the Kiistala village and

1 the mine. While the residents of the remote Kiistala village expected to have new families
2 moving into the area, which they assumed would create an increase in property values and
3 catalyze the development and maintenance of public and private services, this did not happen
4 as most of the new residents moved closer to the larger municipality of Kittilä. Because none
5 of these expectations came to fruition, the villagers ended up feeling both disappointed and
6 betrayed. The benefits of the mine at the local level are therefore experienced in the Levi
7 region and the municipality center, not in the Kiistala village, whose residents experience only
8 negative environmental impacts e.g. heavy traffic caused by commuting workers, dust, noise
9 and potential water quality problems at the Kittilä mine. Villagers also feel that they have not
10 had, and worse continue not to have, the ability to affect project development because for
11 numerous reasons the municipality strongly supports the mine. These reasons are primarily
12 economic as the authorities warmly welcome the additional tax revenue resulting from the
13 influx of new residents and new economic activity, which in turn provide services that make
14 the community more desirable. Hence, Owen and Kemp's notion (2013, 33) that the idea of
15 social license is that it reflects the voice of a majority in the community and not that of the
16 voices of the most affected, and usually less visible groups, holds true in the case of Kittilä. It
17 is worth noting that Agnico Eagle has not been involved in the decisions about the settlement
18 of mining workers and their families. However, that does not negate the fact that this
19 empirical example is still relevant for the discussion of understanding the definition of
20 'community' in the context of the SLO.

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54 Who the 'community' is clearly varies depending on the specific project and site context. For
55 example, if one looks at the Hannukainen project, whose previous owner was Northland
56 Resources until they declared bankruptcy in December 2014, and now has just been

1 purchased by Tapojärvi Oy, the local community of Kolari is not uniformly supporting the
2 project. In particular there is strong opposition against the mine among tourism
3 entrepreneurs in Ylläs ski resort, located about 10 kilometers from the planned mining site
4 (Jokinen 2016), as they are arguing it is their industry which will be the most negatively
5 impacted if the mine opens. In comparison with the Kiistala villagers in the Kittilä mining case,
6 the argument of the entrepreneurs is much stronger because the municipality is heavily
7 dependent on the tourism industry as it accounts for about half of the revenue stream coming
8 from all of the industries combined in Kolari (Satokangas 2013).
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23 Second, if and when the community is a place-based grouping of people, who are included in
24 this category? In some definitions, community includes more than only geographical
25 positioning and is described as a sharing of not only identity and the interactions of everyday
26 life, but also a sharing of common social and political institutions (Vanclay et al. 2015).
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28 Community can also be described as consisting of “questions of identity, culture, territoriality,
29 and cultures of belonging, inclusion and exclusion” (Howitt 2011, 87). For example, rural
30 Lapland, and municipalities like Kittilä and Kolari, are areas of out-migration that have
31 continued for decades because of the lack of education and employment opportunities
32 (Regional Council of Lapland 2011). In this group of people who have migrated away from
33 Lapland, there may be ones who still identify themselves as ‘locals’, return for holidays to
34 their old home places, are recognized as locals by the permanent residents and are possibly
35 even planning to move back once they have retired. Should they be excluded from the
36 ‘community’ in Lapland? Also, Finnish Lapland is a popular tourist resort area where there
37 are over 30 000 cottages, which often are second homes, as the official residence may be out
38 of the region (Tilastokeskus 2016). Are these second-home owners to be considered locals?
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2 These examples suggest that the idea of 'community' may be better replaced with the
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4 concept of stakeholders or stakeholder networks as suggested by Robert G. Boutilier and Ian
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6 Thomson (2011, 2-3). In the planned mining projects in Finnish Lapland in the 2010s, the
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8 understanding of the stakeholders has been extended to cover also e.g. cottage owners and
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10 tourists in environmental impact assessment reports (e.g. Northland Mines Ltd. 2013; Yara
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12 Finland Ltd. 2009). All of these groups have some kind of local interest in the planned mining
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14 area, whereas for Boutilier and Thomson (2011, 2-3) stakeholders are also e.g. investors or
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16 international human right activists. But then it can be asked, if SLO is given by all kinds of
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18 stakeholders without any bond to the place-specific mining project, has the concept of social
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20 license any specific meaning? The importance of the SLO as a tool for mining developments
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22 lies in the fact that it stresses the social dimension of extractive industries development (Prno
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24 2013, 577). It is evident that the majority of negative environmental impacts and sometimes
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26 also negative social impacts are experienced by the local people and communities living near
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28 the mining projects (e.g. Hajkowicz et al. 2011; Lockie et al. 2009; Parsons et al. 2014; Tiainen
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30 et al. 2014). For example, negative environmental impacts are quite local although impacts
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32 may be realized in water systems or by the traffic also in the larger area. Bringing in the
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34 concept of environmental justice, defined as the fair share of benefits and burdens (Nygren
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36 2014), the concerns of these local people and communities must be given special weight and
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38 be taken seriously.
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54 One suggestion for a theoretical definition of SLO in order to keep the concept valid for local
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56 perspectives is to follow Jason Prno's definition that (2013, 577) SLO is always context-specific
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58 and "local communities are often a key arbiter in the process by virtue of their proximity to
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1 projects, sensitivity to effects, and ability to affect project outcomes". Hence community
2 could be defined (1) as host communities and local residents living near the mining project
3 and (2) as groups that are affected by the project or (3) groups that have an influence on the
4 development of the project at the local level. It is important to note that these groups may
5 overlap, but not necessarily and the identification of these different groups is necessary when
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Challenge 2: Is SLO gained only by the present-day perspective or do history and past experiences matter?

The second challenge is related to the idea that SLO is gained with good company performance. Specifically, Kieren Moffat and Airong Zhang's (2014) sophisticated quantitative study shows that ensuring procedural fairness and utilizing a genuine collaborative approach (meaning the quality of contact the mining company has with the local residents) are main factors in maintaining the SLO in the longer term. This probably is the case, but obtaining the SLO in the early phases of a project entails factors beyond the company's control. For example, Finnish Lapland has historically been known as a resource region (Franks et al. 2013, 640) on the periphery of Finland where economic activity and employment were based on natural resource exploitation for the purposes of national development in the decades after the Second World War.

Lapland is a county of forests: 98 percent of land-area is identified as forest and most of it is owned by the State. After the Second World War, especially in the 1950s and 1960s, Lappish

1 forests have been very intensively utilized for clear-cut logging. At the end of the 1990s,
2 logging was estimated to total around five million cubic meters (Massa 1994, 231) and almost
3 four million cubic meters in Lapland in 2013 (total in Finland around 56 million) (Mäki-Hakola
4 & Toivonen 2002; Mäki-Simola 2014). Because logging has involved such large swaths of land,
5 and given the land use intensity that other uses in Lapland require, the sustainability of the
6 forestry sector and reconciliation with reindeer-herding and nature-based tourism has been
7 questioned. Finnish sociologist Ilmo Massa, who has written his doctoral thesis about
8 environmental history in Lapland, argues (1994, 234) that forestry in Lapland has been one of
9 the most destructive industries in Finland's environmental history. However, while
10 historically forestry in Lapland has been viewed in this light, in more recent years
11 Metsähallitus has developed more sustainable management models. Alongside forestry,
12 Finnish Lapland has also been a region of hydropower production after the Second World War
13 since harnessing the river Kemijoki started in the end of the 1940s. Construction is still
14 continuing to this day. It has been one of the largest hydropower projects in Europe, with
15 almost 20 power plants and two large reservoirs. Almost half of the county belongs to the
16 water system of the river Kemijoki (55 000 square kilometers), which had been one of the
17 most important salmon rivers in Europe bringing a strong fishing culture of trade and wealth
18 to the Laplanders living by the riverside (Suopajärvi 2003).

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49 During the years of intensive hydropower construction in the 1950s and 1960s, work was
50 provided for thousands of men, but once construction activity decreased, the workforce has
51 also diminished. Employment in the forestry sector has also decreased since the 1980s
52 because of the mechanization of the logging work. Hence, although natural resource
53 exploitation has induced economic well-being for the region in previous decades, as a result
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1 of technological advances in combination with a decreasing workforce, the benefits have not
2 been sustainable. Today Finnish Lapland, and especially rural Lapland, is still considered on
3 the 'periphery' of Finland and is suffering from high unemployment, out-migration and an
4 increasing number of elderly people – all serious social problems and future challenges for
5 small rural municipalities in Lapland (see Suopajarvi 2003; 2015). The opponents of the
6 mining projects in Kittilä and Kolari question whether mining will provide a better future for
7 the localities in the long term and argue they would be better served to favor more lasting
8 and continuous employment such as tourism, which has been continuously developing in the
9 area, and also reindeer herding, a traditional livelihood that has survived until the present
10 day (see also Heikkinen et al. 2013; Wilson & Stammler 2016).

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28 *Challenge 3: Is it only company performance that matters?*
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32 In developed countries like Finland, mining is already a heavily regulated sector of industry
33 and the global trend is that legal regulation of the sector will increase (Prno & Slocombe 2012:
34 350). In 2014, tens of legal regulations were identified in Finland that regulate things like
35 environmental performance, occupational safety, neighbour relations and procedures for
36 environmental impact assessment, mining-related land use planning and formal mining
37 licensing procedures (Koivurova et al. 2015; Kokko et al. 2015). With respect to SLO, we can
38 only say that the relevant question is how legal regulation and an administrative framework
39 affect the gaining of a SLO in a single mining project. According to Jason Prno & D. Scott
40 Slocombe (2012, 347) this is still uncharted territory: “[However,] the role governance and
41 institutional arrangements play in shaping SLO processes and outcomes have not yet been
42 explicitly considered in the literature”. Also Emma Wilson and Florian Stammler (2016, 2)

1 remind us that, in practice, obtaining the SLO does not depend solely on company
2 performance and that SLO may also be influenced by e.g. governance regime and legal
3 frameworks for land rights and decision making. Based on our empirical studies, this theme
4 is truly relevant when discussing the SLO in Finnish Lapland.
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12 It should be noted that those who are against or critical towards mining also have doubts
13 about both the permitting process and project operations when it comes to monitoring the
14 impacts of the mine. The main theme embedded in the criticism is that both industry and the
15 Finnish authorities consider the economic benefits to be more important than the local
16 environment. These findings are supported by a survey conducted in both Kittilä and Kolari
17 which found that roughly 65 per cent of those who are negative towards mining projects think
18 that the monitoring of environmental impacts is insufficient. Of those who are positive
19 toward mining, only 12 per cent have similar doubts (Kunnari 2013.) In addition, a national
20 level survey in Finland showed that trust in authorities and national legislation is related to
21 the acceptance of mining and plays a role in the development of the SLO (Litmanen et al.
22 2016, Jartti et al. 2014).
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44 In terms of losing SLO, one project in particular can be considered a worse-case example -
45 Talvivaara in Kainuu (Eastern Finland). The mine has experienced serious, ongoing
46 environmental problems, and as a result, the Talvivaara project has to date proven
47 economically unprofitable and its future is still in question. There has been a great deal of
48 media coverage not only about the specific environmental problems, but also concerning the
49 role of the monitoring authorities. It appears that when local people are evaluating the SLO
50 for one mining project, they simultaneously evaluate the legitimacy of the entire chain of
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1 actors involved in the project, including the authorities involved in the decision making (see
2 Heikkilä et al. 2013).
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7 Maintaining the SLO: Challenges in Lapland
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12 *Challenge 4 : Ensuring an equal distribution of benefits among different communities and*
13 *interest groups.*
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20 As highlighted in Challenge 1, in the case of the Kittilä mine, there are many ‘communities’
21 affected by the project. If we speak solely in geographical terms, then a very clear picture
22 emerges that the impacts and benefits of a project are not distributed evenly. The villagers
23 of Kiistala have borne the brunt of the mine’s negative environmental impacts without
24 reaping the rewards of the project’s economic benefits, which have gone to Kittilä and Levi.
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33 In addition to experiencing negative outcomes, such as an increase in dust, noise, traffic, and
34 potential water quality problems, what compounded the problem for the residents in Kiistala
35 is that when they went to complain to Agnico Eagle, the liaison in the company they were
36 assigned to had left and there was no one else they could directly contact. Thus, the initial
37 grievance mechanisms did not function properly as the turnover of employees complicated
38 ongoing communication with residents. To address this problem, the company subsequently
39 established a group of local people from different institutions and villages to improve
40 interaction and coordination. This had the result of creating a larger network on which the
41 villagers could rely to help with solving issues arising from the mining project. It also provided
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1 confidence that someone in the company could always be reached. (See also Koivurova et al.
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7 It is interesting to note that early on, Agnico Eagle did make a concerted effort to assure the
8 tourism industry in Levi that the mine would bring many positive benefits to the area without
9 harming the nature on which tourism there depends. Perhaps the most consistent and
10 significant tension with the mining industry in Lapland is with the tourism sector, given that
11 it is all nature-based. Agnico Eagle's website has a dedicated section to expanding the
12 cooperation between the tourism industry in Levi and the Kittilä mine. The website states
13 that Levi has been a considerable attraction in the recruitment of personnel for the Kittilä
14 mine and workers associated with the mine use the services of Levi.⁹ The synergies between
15 the two sectors offer a broad range of jobs in Kittilä making it easier for families to settle in
16 the area for the long term. As a result, the tax base has also increased and is more diversified,
17 which has enabled the municipality to develop more social services and infrastructure. A 2013
18 article published by Euromines provides numbers for this increase - approximately 90% of the
19 mine employees come from Lapland and over 50 % live permanently in Kittilä, many of whom
20 have moved from other locations with their families.¹⁰
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45 When it comes to ensuring the application of equitable benefits to interest groups, in Lapland,
46 the most well-organized of these are the reindeer herders who belong to the Reindeer
47 Herders' Association. They have taken the initiative in concrete terms to assert what they
48 want from the mining companies. For example, the Association has been the first
49 organization to begin negotiating a compensation agreement with Agnico Eagle, however, to
50 date there is no official confirmation that one has been signed. The reindeer herders are very
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1 proactive in protecting their interests and the foreign mining companies also seem to
2 welcome this. According to our interviews, it is the foreign mining companies who engage in
3 much more public outreach with the herders and at an earlier stage in the process. They have
4 also proven to be more amenable than the national Finnish companies to working with the
5 Association to solve the potential impacts to grazing land and migration routes.
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15 Another issue that was discussed in Challenge 1, e.g. that SLO only represents the most vocal
16 and well organized groups, carries over to this challenge as well. Communities and interest
17 groups who are concerned about the potential effects of a given project, unhappy with the
18 actual impacts, or feel they are entitled to more benefits, must be well organized and vocal.
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Friedman and Miles assert that 'Stakeholders become salient to managers when they possess attributes of power, legitimacy and urgency of claim... The strength of stakeholder relationships is also governed by the degree to which stakeholder interests are compatible with corporate objectives, and whether their relationship with the company is necessary for corporate goals to be achieved' (Friedman and Miles 2002 quoted in Prno and Slocombe 2012, 353).

Challenge 5: Maintaining SLO in the face of pessimism.

Under this challenge, two scenarios are considered, one from the Hannukainen mining project in Kolari and one from Kittilä. The first scenario concerns the Kolari mine and asks the following question: how did the company's behaviour change as their financial difficulties grew worse? The second scenario involves two leaks detected in the tailing pond of the Kittilä

1 mine and looks at whether maintaining SLO in the face of environmental problems that
2 appear to have been prevented from becoming more widespread is an issue in Lapland.
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7 First scenario
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10 By definition, a globalized economy implies interlinkages and this includes commodity prices
11 such as iron-ore. The fluctuating nature of the mining industry is one aspect that makes the
12 maintenance of a SLO difficult, especially if a project has not already been firmly established,
13 as can be seen in the case of Northland Mines (a division of Northland Resources) and their
14 proposed Hannukainen project in Kolari, Finland. First becoming active in the Kolari area in
15 2005, even though mining had occurred in the Hannukainen site under different ownership,
16 from 1978 to 1988, Northland Mines never started construction because they declared
17 bankruptcy in December 2014.
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33 According to interviews for both the Sumilcere and First-In Arctic EIA projects, from the very
34 beginning, Northland Mines engaged the community in dialogue and sought to foster a
35 positive relationship. Prior to bankruptcy, they integrated the social license concept directly
36 into their management standards of safety and environment and the company's Sustainable
37 Development Policy.¹¹ When their website was operational, the term 'SLO' was used and the
38 company clearly wanted to be an integral part of the community and to obtain the support
39 of local stakeholders. Examples of the strategies employed to gain SLO include not only a
40 continuous running dialogue with the community, but also financial support through youth-
41 work and various sports and cultural activities, as well as an updated website with news and
42 information. However, once financial troubles set in, the company's behaviour also began to
43 change. There was a noticeable decrease in outreach and transparency with the
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1 communities, the company started to miss their stated milestones and failed to adhere to a
2 project timeline, and personnel turnover increased which created an atmosphere of greater
3 uncertainty. All of these factors led to the conclusion by locals that the future of Northland
4 was uncertain and therefore they could not plan their own personal futures. It was the
5 perception of their own individual unknown futures that caused the withdrawal of SLO (see
6 also Koivurova et al. 2015).
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18 Second scenario

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20 The second scenario asks whether SLO can be maintained when there are environmental
21 problems that appear to have been solved? In October 2015, Agnico Eagle experienced two
22 leaks in the tailing pond of the Kittilä gold mine. In connection with this, increased levels of
23 sulfate concentrations in the nearby Seuru River had been reported, however, there has been
24 no additional public reporting to date of the effects, if any, the increased levels have had.
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26 According to the Centre for Economic Development, Transport and the Environment (ELY
27 Centre) in Lapland, the company did continue to draw additional water samples from the
28 Seuru River, including groundwater samples, and it appears damages were quite limited as
29 the leak was small and controlled quickly. The authors have not conducted interviews with
30 the residents who live in proximity to the Seuru River, but to date there has been no public
31 outcry, and no indication the company has compensated the residents for any damages. To
32 answer the question posed above, it does appear that if a minor environmental problem is
33 handled quickly and sufficiently in Lapland, there will be little to no public outcry and the
34 company can still maintain its present level of SLO.
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1 These issues also mirror those in Challenge 2, which raises the question is SLO gained only by
2 the present-day perspective of people and communities or do historical experiences matter?
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4 Whether or not the bankruptcy of Northland Resources and the leak at Kittilä gold mine will
5 influence local perceptions toward future mining projects in Lapland remains to be seen. If
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7 local people bring their memory of historical exploitation to present day projects, then it is
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9 not unforeseeable that future mining projects will have a more difficult time in gaining their
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11 SLO.
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21 *Challenge 6: Will SLO evolve beyond community acceptance into a real tool for Lapland?*
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26 The trend is clearly in the direction for SLO to become more entrenched in the lexicon of
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28 Lapland's natural resource projects, and perhaps more importantly, to become
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30 operationalized. There are a number of reasons supporting this continuing trend, which
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32 span everything from the law to communities learning from one another.
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38 In terms of international law, there have been new developments regarding the duties of
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40 multi-national corporations to respect human rights in their development activities. These
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42 responsibilities have been outlined by John Ruggie through the UN Guiding Principles on
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44 Business and Human Rights, and their relevance for indigenous rights has been identified by
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46 the UN Special Rapporteur on Indigenous Rights (Anaya 2013). This has placed more direct
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48 responsibility on resource companies to address the rights of indigenous peoples, including
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50 the requirement for Free Prior and Informed Consent (FPIC) prescribed in the United Nations
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52 Declaration on the Rights of Indigenous Peoples (Article 32(2)).¹² While neither the proposed
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54 Hannukainen mine in Kolari nor the Kittilä mine are located in the areas of the Sami
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Homeland, and thus do not formally trigger FPIC, the need to respect human rights can be generalized to all local communities in Lapland where it is viewed as a code of conduct, rather than a legal requirement, which should be followed by companies.

National legislation also provides an impetus to further SLO. For example, Finland's new Mining Act, passed in 2011, provides protections for Sami peoples and local communities beyond the public consultation requirements of the EIA process (Koivurova and Stepien 2008; Koivurova et al. 2015). As seen in the interviews conducted for the First-In Arctic EIA project, companies have provided examples of good practices they employ as part of the EIA process and many of these can also be classified under the SLO heading; for example, the need for frequent (and transparent) dialogue with stakeholders, having and maintaining respect for local customs, businesses and traditional livelihoods (reindeer husbandry), sponsoring community activities, forming cooperation groups, and creating synergies with the tourism sector and municipalities. There are also methodological tools being developed for the EIA process that can be utilized for implementing SLO. For example, according to Agnico Eagle, they are developing the ability to comprehensively map all potential stakeholders and to measure the effectiveness of social impact mitigation strategies over time.¹³ Through legislation such as EIA, one can therefore see the potential for SLO to, at least indirectly, be operationalized. This said, the limits of EIA must also be noted. As the EIA regulatory procedure is predictive and occurs during a project's planning phase only, operationalizing SLO through EIA is limited to the early stages and cannot be ongoing throughout the life span of a mine. There are, however, subsequent mining-related permitting and licensing processes as well as requirements for their future monitoring that could allow for the continued incorporation of SLO.

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3 Compensation mechanisms, such as those with reindeer herders, are becoming more
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5 widespread. While economic compensation is often crucial for overcoming direct economic
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7 losses, different instruments may be needed in order to obtain wider social acceptability, such
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9 as those that address livelihood diversification and improvement (Impact and Benefit
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11 Agreements) and in-kind compensation of lost nature values and outdoor recreational
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13 possibilities (Ecological Compensation Mechanisms).¹⁴
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21 Finally, communities and interest groups sharing experiences is another contributing factor
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23 to SLO becoming more concretized. There are examples, for instance, of reindeer herders in
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25 Sweden speaking to reindeer herders in Finland about their experiences with compensation
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27 agreements.¹⁵
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31 32 33 **Conclusions** 34 35 36

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38 Finnish Lapland has its own unique characteristics that offer opportunities and pose
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40 challenges for companies who wish to gain a SLO. For example, if SLO is a bilateral
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42 relationship between company and community, then the fact that the community is a key
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44 actor and yet also remains undefined is, at the very least, problematic if SLO is to progress as
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46 a useful tool. History, be it decades in the past or more recently, is a contributing factor that
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48 subtly shapes peoples' attitudes regarding the potential for mining projects to both positively
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50 and negatively affect a community. While the large public-works projects built in Lapland
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52 post World War II were not concerned with public acceptance, times have changed and this
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54 has become important to all companies who want to mine in the region.
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2 In Finnish Lapland, the SLO is clearly gaining traction as a concept, but if SLO is both a goal
3 and a set of rules – e.g. the expectations local communities and mining companies have
4 toward one another which are negotiated throughout the mining lifecycle (Prno and
5 Slocombe, 2012) - then SLO as a ‘set of rules’ in Finland still has a ways to develop. As most
6 relevant laws only provide the framework for officials to think about their application and
7 implementation, the operationalization of SLO can lead to the ideal implementation of
8 already existing legal rules.
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23 Slowly we are seeing the emergence of tools created for other regulatory processes, such as
24 EIA, that can also be used by companies to gain SLO. Monetary compensation agreements
25 are one type of tool, and these are becoming more commonly used now in advance dispute
26 resolution. With the increasing interest in mining activities in Lapland, there will inevitably
27 be more projects and more of a need to balance competing interests. Concrete SLO tools will
28 need to be developed to safeguard local communities and indigenous peoples who, in
29 particular, may be adversely affected by a project but are not considered to represent the
30 ‘majority voice’. While financial benefits accrue to mining companies, benefits are not
31 guaranteed to those who are impacted by mining activities, and operationalizing SLO is one
32 way to level the playing field and ensure communities benefit too.
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51 While challenges in gaining and maintaining the SLO in Lapland remain on the conceptual and
52 practical levels, it is only with the continuing development of the SLO concept itself that these
53 challenges can be clarified and then overcome. The future trajectory of SLO in Finnish Lapland
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1 is clearly in the direction of it becoming a more important component in the development of
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3 extractive projects, as it holds true potential for reconciling difficult conflicts.
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11 12 **REFERENCES**

13
14
15
16
17
18 Anaya J (2013) Guidelines on Business and Human Rights. UN Doc. A/HRC/24/41
19
20

21
22
23 Arctic Centre, University of Lapland (2012-2014) Testing Improvement Processes of Finnish
24
25 Environmental Impact Assessments and the Modes for Application in Arctic Regions of Finland
26
27 and Russia. Project financed by and in partnership with Tekes
28
29
30

31
32
33
34 Bankes N (2015) The Social License to Operate: Mind the Gap. University of Calgary Faculty
35
36 of Law Blog on Developments in Alberta Law
37
38
39

40
41 Bice S (2014) What Gives You a Social License? An Exploration of the Social License to Operate
42
43 in the Australian Mining Industry. Resources 3, pp. 62-80
44
45
46
47

48
49 Boutilier R, Thomson I (2011) Modelling and measuring the social license to operate: fruits of
50
51 a dialogue between theory and practice.
52
53 [54 http://sociallicense.com/publications/Modelling%20and%20Measuring%20the%20SLO.pdf](http://sociallicense.com/publications/Modelling%20and%20Measuring%20the%20SLO.pdf).
55
56

57 Accessed on 9 May 2016
58
59
60
61
62
63
64
65

1 Business Council of British Columbia. Rethinking Social License to Operate – A Concept in
2 Search of Definition and Boundaries. Environment and Energy Bulletin 7 (2)
3

4
5
6
7 Business for Social Responsibility (2003). The Social License to Operate
8
9

10
11
12 Minerals Council of Australia (2005) Enduring Value - The Australian Minerals Industry
13 Framework for Sustainable Development
14
15

16
17
18
19
20 Franks D, Brereton D, Moran C (2013) The cumulative dimensions of impact in resource
21 region. Resources Policy 38 pp. 640-647
22
23

24
25
26
27
28 Gunningham N, Kagan R, Thornton, D (2004) Social License and Environmental Protection:
29 Why Businesses Go Beyond Compliance, Law & Social Inquiry 29 (2): 307-341
30
31

32
33
34
35
36 Hajkowicz S, Heyenga S, Moffat K (2011) The relationship between mining and socio-
37 economic well-being in Australia's regions. Resources Policy 36 pp. 30-38
38
39

40
41
42
43 Harrison, R (2015) Lecture entitled Social License to Operate: The Good, the Bad, and the
44 Ominous. University of Alberta
45
46

47
48
49
50
51 Heikkinen H et al. (2013) Challenges in acquiring a social license to mine in the globalizing
52 Arctic. Polar Record doi: 10.107/S0032247413000843
53
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56
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58
59
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61
62
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Howitt, R (2011) Theoretical foundations. In: Vanclay F, Esteves, AM (eds.) New developments in social impact assessment. Conceptual and methodological advances. Edward Elgar Publishing, Cheltenham, Gloucester UK, pp. 78-95

Jartti T, Rantala E, Litmanen T (2014) Sosiaalisen toimiluvan ehdot ja rajat. Uudenmaan, Pohjois-Karjalan, Kainuun ja Lapin maakuntien asukkaiden näkemykset kaivannaistoiminnan hyväksyttävyydestä. [Preconditions and Limits of the Social License to Operate: Views of Residents of Uusimaa, North Karelia, Kainuu and Lapland on the Acceptability of Mining] SoPhi, Jyväskylä

Jokinen M (2016) Nature-based tourism meets mining industry. Win-win situation or unhappy arranged marriage? Presentation in a workshop entitled 'Social sciences research on mining and sustainability in the North' for the Interreg Nord project *Sustainable mining in the Northernmost Europe – Lessons learned and practices developed*. Haparanda, Sweden

Koivurova T, and Stepien A (2008) Reforming Mining Law in a Changing World with Special Reference to Finland. *Juridica Lapponica* (34)

Koivurova T et al. (2015) Legal Protection of Sami Traditional Livelihoods from the Adverse Impacts of Mining: A Comparison of the Level of Protection Enjoyed by Sami in Their Four Home States. *Arctic Review on Law and Politics* 6 (1): 11-51

Koivurova T et al. (2015) Social license to operate: a relevant term in Northern European mining? *Polar Geography* 38 (3): 1-33

1
2
3 Kokko K et al. (2014) Sound Mining in the North - A Guide to Environmental Regulation and
4
5 Best Practices Supporting Social Sustainability.

6
7 [https://lauda.ulapland.fi/bitstream/handle/10024/59503/Sound%20minig%20in%20the%20](https://lauda.ulapland.fi/bitstream/handle/10024/59503/Sound%20minig%20in%20the%20North.pdf?sequence=2)
8 [North.pdf?sequence=2](https://lauda.ulapland.fi/bitstream/handle/10024/59503/Sound%20minig%20in%20the%20North.pdf?sequence=2). Accessed on May 24, 2016
9

10
11
12
13
14
15 Kokko K et al. (2015) Sustainable mining, local communities and environmental regulation.
16
17 Barents Studies 2 (1) 51-81

18
19
20
21
22
23 Kunnari M (2013) Kaivoksiin suhtautuminen paikallisyhteisöissä. Different Land-Use Activities
24
25 and Local Communities (final seminar in Rovaniemi).
26
27 <http://www.ulapland.fi/loader.aspx?id=5dcbb527-e1ee-475e-b223-e44c3b93352f>. Accessed
28
29 on May 26, 2016
30
31

32
33
34
35
36 Litmanen T, Jartti T, Rantala E (2015) Refining the preconditions of a social license to operate
37
38 (SLO): reflections on citizens' attitudes towards mining in two Finnish regions. The Extractive
39
40 Industries and Society. <http://dx.doi.org/10.1016/j.exis.2016.04.003>. Accessed on May 27,
41
42
43 2016
44

45
46
47
48
49 Lockie S et al. (2009) Coal mining and the resource community cycle: A longitudinal
50
51 assessment of the social impacts of Coppabella coal mine. Environmental Impact Assessment
52
53 Review 29, pp. 330-339
54
55
56
57
58
59
60
61
62
63
64
65

1 Massa I (1994) Pohjoinen luonnonvalloitus. Suunistus ympäristöhistoriaan Lapissa ja
2 Suomessa. [Northern conquest of nature. Orienteering to the environmental history of
3 Finland and Lapland]. Gaudeamus Helsinki
4
5
6

7
8
9
10 Moffat K, Zhang A (2014) The paths to social license to operate: An integrative model
11 explaining community acceptance of mining. Resources Policy 39, pp. 61-70
12
13
14

15
16
17 Mäki-Hakola M, Toivonen R (2002) Metsäsektorin merkitys aluetalouksissa. Maakunnat
18 vertailussa. [The role of the forest sector in regional economies in Finland. With English
19 abstract] Pellervo Economic Research Institute. Working Papers 60. [http://ptt.fi/wp-](http://ptt.fi/wp-content/uploads/2013/04/tp60_09080610.pdf)
20 [content/uploads/2013/04/tp60_09080610.pdf](http://ptt.fi/wp-content/uploads/2013/04/tp60_09080610.pdf). Accessed on May 26, 2016
21
22
23
24
25

26
27
28
29
30 Mäki-Simola E (2014) Metsätilastotiedote Teollisuuspuun hakkuut alueittain 2013
31 Metsäntutkimuslaitos. <http://www.metla.fi/metinfo/tilasto/julkaisut/mtt/2014/hakpoi13.pdf>
32
33
34
35
36
37
38
39
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1000

Northland Mines Ltd. (2013) Hannukainen mining project. Environmental impact assessment
report. [http://www.ymparisto.fi/download/noname/%7B86117285-9C83-4FC0-A656-
EDDB47A66853%7D/77577](http://www.ymparisto.fi/download/noname/%7B86117285-9C83-4FC0-A656-EDDB47A66853%7D/77577). Accessed on May 27, 2016

1 Nygren A (2014) Eco-imperialism and environmental justice. In: Lockie S, Sonnenfeld D, Fisher
2 D (eds.) Routledge international handbook of social and environmental change. Routledge,
3 Abingdon, Oxon, New York pp. 58-69
4
5
6

7
8
9
10 Owen J, Kemp D (2012) Social license and mining: A critical perspective. Resources Policy 38,
11 pp. 29-35
12
13
14

15
16
17
18 Parsons R, Lacey J, Moffat K (2014) Maintaining legitimacy of a contested practice: How the
19 minerals industry understands its 'social license to operate'. Resources Policy 41, pp. 83-90
20
21
22

23
24
25
26 Prno J, Slocombe, S (2012) Exploring the origins of 'social license to operate' in the mining
27 sector: Perspectives from governance and sustainability theories. Resources Policy 37, pp.
28 346-357
29
30
31

32
33
34
35
36 Prno, J (2013) An analysis of factors leading to the establishment of a social license to operate
37 in the mining industry. Resources Policy 38, pp. 577-590
38
39
40

41
42
43
44 Regional Council of Lapland (2011) Väestömuutokset Lapin maakunnassa 1951-2011
45 [Population changes in the county of Lapland 1951-2011]
46 [http://www.lappi.fi/lapinliitto/c/document_library/get_file?folderId=52584&name=DLFE-](http://www.lappi.fi/lapinliitto/c/document_library/get_file?folderId=52584&name=DLFE-7502.pdf)
47 [7502.pdf](http://www.lappi.fi/lapinliitto/c/document_library/get_file?folderId=52584&name=DLFE-7502.pdf). Accessed on May 9, 2016
48
49
50
51

52
53
54
55
56
57 Satokangas P (2013) Matkailulla maakunta menestyy. Matkailun tulo- ja työllisyysvaikutukset
58 12 lappilaisessa kunnassa vuonna 2011. [The study on economic impacts of tourism in 12
59
60
61
62
63
64
65

municipalities in Lapland in 2011.] <https://luc.finna.fi/ulapland/Record/juolukka.346395>.

Accessed on May 26, 2016

Suopajärvi L (2003) Competing Industries and Contested Nature in Finnish Lapland after the Second World War. In: Möller F, Pehkonen S, Encountering the North. Ashgate pp. 203-220

Suopajärvi, L (2015) The right to mine? Discourse analysis of the social impact assessments of mining projects in Finnish Lapland in 2000s. Barents Studies 1:3 pp. 36-54

Suopajärvi L, Lesser P (2015) Presentation at the Raw Materials University Days conference in Rovaniemi, Finland. November 1-2, 2015

[Suopajärvi L, Poelzer GA, Ejdemo T, Klyuchnikova E, Korchak E, Nygaard V \(2016\) Social sustainability in northern mining communities: A study of the European North and Northwest Russia. Resources Policy 47:61-68](#)

Tiainen H, Sairinen R, Novikov V (2014) Mining in the Chatkal Valley in Kyrgyzstan – Challenge of social sustainability. Resources Policy 39, pp. 80-87

Tilastokeskus (2016) Kesämökki (2014) http://www.stat.fi/til/rakke/2014/rakke_2014_2015-05-28_kat_001_fi.html. Accessed on April 26, 2016

Vanclay F, Esteves AM, Aucamp I, Franks D (2012) Social Impact Assessment: Guidance for assessing and managing the social impacts of projects. International Association for Impact

1 Assessment. http://www.iaia.org/uploads/pdf/SIA_Guidance_Document_IAIA.pdf. Accessed
2 on April 26, 2016
3

4
5
6
7 Wilson E, Stammler F (2016) Beyond extractivism and alternative cosmologies: Arctic
8 communities and extractive industries in uncertain times. *The Extractive Industries and*
9 *Society* 3, pp. 1-8
10
11
12
13

14
15
16
17 Yara Finland Ltd (2009) Sokli mining project. Environmental impact assessment report.
18
19
20 <http://www.ymparisto.fi/fi->
21 [FI/Asiointi luvat ja ymparistovaikutusten arviointi/Ymparistovaikutusten arviointi/YVAha](http://www.ymparisto.fi/fi-)
22 [nkkeet/Soklin kaivoshanke Savukoski](http://www.ymparisto.fi/fi-). Accessed on May 27, 2016
23
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36 NOTES

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40 ¹ While there may be no legal foundation for SLO, there is an interesting parallel to
41 indigenous law and its FPIC, which can perhaps serve as a model for the future integration
42 of SLO into legislation.
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44 ² The companies include Lapland Hotels, Ahma Environment Group, Kemijoki Oy, Gold Fields
45 Arctic Platinum Oy, Innopower Ltd., wpd, Taalaeritehdas, Yllaksen Matkailu Ltd., Arctia
46 Shipping Ltd., Vapo Oy, Agnico Eagle Finland Oy, Northland Mines Oy; the EIA consultants
47 include Pöyry Finland Oy, Sito Ltd., and Ramboll Ltd.; the business associations include the
48 Reindeer Herders' Association and FinnMin – Kaivannaisteollisuus ry; the government
49 officials include ELY Centre Lapland and Municipality of Kittilä; and finally the NGOs are the
50 Finnish Nature Conservancy and Kemi-Tornion lintuharrastajat Xenus ry.
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52 ³ A total of 14 companies, seven (7) EIA consultants, one (1) business association, two (2)
53 government officials and five (5) NGOs were consulted.
54

55 ⁴ <http://www.outokumpu.com/en/company/history/Pages/default.aspx> (Accessed June 12,
56 2016).
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58 ⁵ <http://www.outokumpu.com/en/company/history/Pages/default.aspx> (Accessed June 12,
59 2016).
60
61
62
63
64
65

1 ⁶ [http://www.agnicoeagle.com/en/operations/northern-](http://www.agnicoeagle.com/en/operations/northern-operations/kittila/pages/default.aspx)
2 [operations/kittila/pages/default.aspx](http://www.agnicoeagle.com/en/operations/kittila/pages/default.aspx) (Accessed June 12, 2016).

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4 ⁷ <http://www.agnicoeagle.com/en/Sustainability/Pages/Our-Approach.aspx> (Accessed on
5 October 17).

6 ⁸ Research obtained from the Tekes First-In EIA project as Northland Resources was one of
7 the companies interviewed numerous times for the project.

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9 ⁹ <http://www.agnicoeagle.fi/en/media/newsreleases/Pages/expanding-co-operation.aspx>
10 (Accessed June 1, 2016).

11 ¹⁰ [http://www.euromines.org/news/newsletters/1-2013/kittila-mine-important-player-](http://www.euromines.org/news/newsletters/1-2013/kittila-mine-important-player-development-finnish-lapland)
12 [development-finnish-lapland](http://www.euromines.org/news/newsletters/1-2013/kittila-mine-important-player-development-finnish-lapland) (Accessed June 1, 2016).

13 ¹¹ Tekes interview with Northland Resources on August 15, 2013.

14 ¹² 1. Indigenous peoples have the right to determine and develop priorities and strategies
15 for the development or use of their lands or territories and other resources. 2. States shall
16 consult and cooperate in good faith with the indigenous peoples concerned through their
17 own representative institutions in order to obtain their free and informed consent prior to
18 the approval of any project affecting their lands or territories and other resources,
19 particularly in connection with the development, utilization or exploitation of mineral, water
20 or other resources. 3. States shall provide effective mechanisms for just and fair redress for
21 any such activities, and appropriate measures shall be taken to mitigate adverse
22 environmental, economic, social, cultural or spiritual impact.

23 ¹³ Interview with Agnico Eagle on August 7, 2013.

24 ¹⁴ Email exchange with Pellervo Economic Research, September 2015.

25 ¹⁵ Interview with the Reindeer Herders' Association May 4, 2013.
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