

A MEASURE OF THE SOCIAL LICENSE TO OPERATE FOR INFRASTRUCTURE AND EXTRACTIVE PROJECTS

Robert Boutilier, PhD

1 DEFINING THE SOCIAL LICENSE CONSTRUCT

1.1 The importance of assessing the social license

The social license (SL) is a term that is tossed around loosely by politicians, pundits and activists throughout the English-speaking world.¹ Nonetheless, it has a clear, useful, measurable meaning to professionals in community relations, particularly in the extractive industries. The term was first coined by a mining executive named Jim Cooney (Cooney, 2017). He used it as a metaphor to emphasize that the social acceptance of mining is as important as its legal licensing.

The first published attempt to define the social license to operate was probably by Joyce and Thomson (2000). They said, “We propose that a Social Licence to Operate exists when a mineral exploration or mining project is seen as having the approval, the broad acceptance of society to conduct its activities.” They qualified it further, saying, “It can only come from the acceptance granted by your neighbors. Such acceptability must be achieved on many levels, but it must begin with, and be firmly grounded in, the social acceptance of the resource development by local communities.” While not attempting a formal definition, Lassonde (2003) described social license as “... the acceptance and belief by society, and specifically our local communities,

¹ Gerson, J. 2016 April 11. Don't feel bad for Thomas Mulcair. Feel bad for Rachel Notley, *National Post*, available at: <http://tinyurl.com/hbr94oy>

Boyd, T. 2016 April 9. Doing damage to a good brand. *The Australian Financial Review*, available at: <http://tinyurl.com/jtkx7zw>

Crowley, B.L. 2014. When demands for a 'social licence' become an attack on democracy. (Ed.), (Eds), *Inside Policy*. The Macdonald-Laurier Institute, Ottawa, pp. 18-23.

Available at:

<http://www.macdonaldlaurier.ca/files/pdf/201412DECEMBERInsidePolicyFINALwebready.pdf>

Morrison, J. 2014 October 28. Do politicians need a social licence? Available at:

<https://www.thersa.org/discover/publications-and-articles/rsa-comment/2014/10/do-politicians-need-a-social-licence/#>

Murphy, R. 2017 May 19. Notley learns a hard truth about social licence — it's not meant to be granted, ever. That's the point. *National Post*. Available at:

<https://tinyurl.com/ya9c2n43>

in the value creation of our activities, such as we are allowed to access and extract mineral resources.” A report by AccountAbility and Business for Social Responsibility (2004) stated, “Companies are now expected to engage with local communities to obtain a ‘social license,’ an ongoing process of approval from the communities where they operate.” In a survey of Canadian mining industry professionals, Nelsen (2005) found, “Ninety percent of survey respondents defined the Social License to Operate as being intangible (not a piece of paper) and a non-permanent (implying standards and renewal) measure of ongoing community acceptance of a company’s activities.” The common thread in all these definitions is ongoing acceptance or approval by the community for the company’s activities.

Usage of the term ‘social license’ has spread outside the mining industry to such an extent that the qualifier ‘to operate’ is falling into disuse. Morrison (2014), for example, sees it necessary for all organizations to have a social license for their activities, including government and non-government organizations. Raman and Mohr (2014) examined strategies for gaining a social license to do stem cell research. Barreiro-Deymonnaz (2013) reviewed the growing trend for governments to require proponents of construction projects to present evidence of having sought a social license from communities, which amounts to social license seeking becoming a legal license requirement.

Even without legal requirements, the motivation for seeking a social license can be quite high. Henisz, Dorobantu and Nartey (2013) showed that up to 72 percent of the discount that markets place on the net present value of the gold in the ground controlled by gold mining companies can be attributed to conflicts with stakeholders. Franks et al (2014) estimated that delays and lost production at major mining operations cost in the order of USD\$20 million per week. For projects in the early exploration stage the estimate is USD\$10,000 per week. Franks et al suggest that stakeholder conflict is a natural regulator balances costs to communities with costs to companies. This view is congruent with Boutilier’s (2014) observation that concept of the social license presumes that stakeholders have the power and influence, either alone or in coalitions, to either stop projects or impose severe costs upon them.

Given the financial risks alone, it would benefit the extractive industries to have a measure of the level of social license for their projects. Given the social license is changeable across periods of weeks and months, it would be desirable to have a measure that is comparable across time. Given that many extractive companies operated more than one project in more than one country, it would also be desirable to have a measure that allows comparisons across cultures and geographies. The remainder of this paper reports on an attempt to create such a measure.

The general steps in developing a measure of social perceptions are similar to those for measures of psychological characteristics. Briefly, they are (a) defining the construct to be measured, including characteristics of its abundant presence and complete absence, (b) the generation of a pool of items (e.g., questions or agree/disagree statements) as candidate elements of a scale to measure the construct, (c) collection of data, (d) statistical analyses to select the best items for retention based on internal reliability and validity criteria, (e) repetition of the cycle as needed to meet criteria of reliability and validity and (f) validation against external criteria, with further repetitions of the cycle if needed. The structure of this paper follows that process and ends with two additional sections, one on issues in applying and adapting the measure and the other on future directions for improved measures.

1.2 Objective impacts versus perceptions of the relationship

The social license construct differs from other assessments of corporate social performance (CSP) like the KLD (Griffin and Mahon, 1997; Sharfman, 1996) or the reporting schemes like the GRI (www.globalreporting.org/). It focuses on stakeholder perceptions of the relationship rather than lists of third party assessment of impacts. This represents a fundamentally different set of starting assumption in two respects

First, focusing on more on perceptions of the relationship than on perceptions of the impacts puts the weighting of impacts in the hands of the stakeholder. The assumption in the concept is that if stakeholders see the impacts as bad, the relationship will be viewed negatively as well. Therefore, the subjectively weighted importance and valence of all the impacts gets summarized in the stakeholders' views of the relationship. Looking directly at the perceptions of the quality of the relationship avoids the necessity of companies having to second guess what is important to the stakeholders. Rather than having third party experts decide what weights the stakeholders ought to be putting on the impacts, it just lets stakeholders synthesize the whole experience for themselves in an overall evaluation. It summarizes all the experience of all aspects of the company's activities into an 'accept/reject' rating. Therefore, by focusing on perceptions of relations, rather than objective measures of impacts, the social license gets to the point of what is important to companies much more quickly and without all the guesswork about proximate and underlying issues that Franks et al (2014) showed would be needed with a focus on impacts.

Second, the focus on stakeholders' perceptions says something different about power relations. Objectively measured impacts, like for example particles for million in an effluent stream, would be the best approach if there were an impartial regulator with unquestioned legitimacy who could use such data to decide if the project should or should not go ahead. In other words, where government has real legitimacy and sovereignty, measurements of impacts would determine the legal license and the social license would be irrelevant. The reality, however, is that such respect for government is scarce. The Edelman Trust Barometer (www.edelman.com/global-results/) and the GlobeScan Radar Surveys (www.globescan.com/) have shown declining trust in government since tracking began at the turn of the century. Moreover, there is evidence that the 'crisis of trust' is eroding faith in democracy itself in developed liberal democracies (Foa and Mounk, 2017). In the developing world, where most mining projects are located, the reach of the state often becomes tentative in remote areas (Holtermann, 2012), which makes it difficult to enforce the conditions of a legal license. Therefore, the social license becomes the governance mechanism by default. When stakeholders' perceptions of the relationship with the company are paramount, it is the stakeholders who decide what is important and what can be ignored. That is as it should be because, in the absence of high trust in government, it is the stakeholders who have the power to either stop the project or let it proceed. The decision to make stakeholders' perceptions primary in measuring the social license reflects an acknowledgement that their power to control what happens in their locales is often greater than that of companies or remote governments.

The focus on perceptions of relationships raises the probability of measuring the social license in a way that reflects exactly what matters to stakeholders in each specific case while preserving the quality of comparability across cultures and time periods.

1.3 From metaphor to measurable dimension

This section describes the conceptualization of the construct in a way that clarified what was to be measured while keeping the focus on elements that are comparable across time and culture.

Thomson and Joyce (2008) took Cooney's metaphor and developed levels that describe the top and the bottom of the dimension. Thomson and Boutilier (2011) refined that to the point where content was sufficient to guide item generation.

2 THE DEVELOPMENT OF THE MEASURES

2.1 Selecting declarative statements

2.1.1 Iterative process of selection

This section describes the process of creating a pool of declarative statements to be used as input to the winnowing process of developing a measure of stakeholder perceptions. We began using larger numbers of items in the early research contracts and then iteratively narrowed down the set.

From 2009 to 2012, a set of 26 agree/disagree declarative statements were developed from the theoretical elements of the Thomson and Joyce expansion of the social license concept. They included items about legitimacy, credibility and trust as well as straightforward declarations endorsing the levels identified by Thomson and Joyce (i.e., "My organization accepts the project", "My organization supports the project."). The item pool also included several statements based on the perceptions of stakeholders that Thomson and Joyce had observed as characterizing different levels of the social license, including some negatively keyed statements. These were worded so that agreement meant a lower social license score (e.g., "The company hides information from us"). In addition, items related to perceptions of distributive and procedural fairness were included based on measures that had proven useful in distinguishing lower from higher support levels in a number of controversial projects to which the authors acted as consultants.

The pool of statements was presented to stakeholders in an agree/disagree format using a 5-point rating scale ranging from disagree strongly to agree strongly. The interviewees were stakeholders at mining projects in Australia, Bolivia, and Mexico.

2.1.2 Item elimination – negatively worded items

The negatively worded statements confused stakeholders so much that they frequently gave the opposite response from what they meant. During the interviews, clarifying the match between their numeric responses and their true sentiments took up as much time as all the other agree/disagree questions combined. Even with that care, a few seemed to have slipped by the interviewers. Therefore, to insure accurate responding, all the statements are positively worded.

2.1.3 The clarification of ‘credibility’

A factor analysis was performed on a small set of interviews that had no missing data. The analysis easily identified statements associated with a withdrawn social license and with a full trust social license. However, distinguishing acceptance from approval was more difficult. In 2011, more data was collected. It was based on interviews with stakeholders of a mine in Latin America immediately before and after the occupation of the mine by nearby villagers. Another factor analysis was performed. In that analysis, the fairness and justice declarations suggested by Leeora Black (www.accsr.com.au) sorted themselves into a distinct factor. In terms of a Guttman (1950) scale, the factor was equal to another factor that had statements dealing with good communications and relationships. The findings were superimposed on the original model and used to interpret the credibility criterion as requiring both good relations and communications (labelled ‘social capital’) as well as a just and balanced fit with the existing socio-economic system (labelled ‘social contract’) (Boutilier, Black & Thomson, 2012). The four factor solution was used to select a condensed set of only 15 statements that measured each factor relatively distinctively without too much loading on the other factors. Leeora Black included the four factor model in her book on the social licence to operate (Black, 2013).

2.1.4 Moffat and Zhang’s confirmation

Moffat and Zhang (2013) found support for elements of the four factor framework in a study of stakeholders of a coal seam gas project in Australia. They surveyed over a hundred stakeholders twice, one year apart. The interviews included measures of project acceptance (i.e., social license), trust in the company, quality of contact with company personnel (i.e., pleasantness), quantity of contact, impacts on social infrastructure (e.g., medical, health, housing), and perceived fairness of the process (i.e., whether the company listens, allows participation in decisions, responds to concerns). Their path analysis found that all the statistically significant influence on project acceptance was mediated through trust. Trust, in turn, was most influenced by perceived procedural fairness (beta 0.44), contact quality (beta 0.40), and impacts on social infrastructure (beta -0.20, lower perceived impacts associated with higher trust). The influence of the quantity of contact was not significant.

Moffat and Zhang’s results corroborate the four factor framework of Boutilier Black and Thomson (2012) insofar as their measures of contact quality and perceived procedural fairness captured perceptions of the two credibility related factors: social capital and social contract and showed them to be significantly related to trust. However, their finding that only trust was directly related to project acceptance suggested that Boutilier et al’s ‘pyramid’ should not have social capital and social contract superimposed on the yellow acceptance zone directly. Rather, trust should somehow be represented as mediating the relationship. Subsequent analyses based on much more data support this hypothesis.

2.1.5 Convergence on a 15 item set

The set of 15 declarations identified by 2012 was used in a flurry of international studies from 2012 to 2015. These included mines in the Brazil, Democratic Republic of the Congo, Ghana, Guinea, Mali, Mexico, Tanzania, and the United States. Factor analyses performed upon the

addition of each new set of interviews started to show all 15 items loading on one big factor that was tentatively labelled as legitimacy/trust.

3 NORMS BASED ON AN INTERNATIONAL DATABASE

3.1 Evolution of the international database

The 15 statements could not be applied without changes in all cases. Instead they were treated as prototypes worded ideally for an operating mine or energy project. For exploration projects, for example, they needed to be modified. For example, for a mineral exploration project, the verb tenses need modification and some of the questions about experiences need to be reworded as expectations. Section 5.1.1 shows the currently preferred wording of the set for exploration projects.

To create greater comparability across the versions of the scales he divided the resulting ranges of scores for each project into sextile scores. That is, the bottom one sixth of scores were placed in the lowest sextile and given a score of 1. The second lowest one-sixth were all given a score 2, and so forth. Each sextile was then given a verbal label to indicate the level of social license it represented.

3.2 International comparisons of social license means

Since the first social license related agree/disagree statements were piloted in 2001 up to the end of 2015, social license scores have been calculated from 2,152 interviews in Australia, Bolivia, Brazil, DRC, Ghana, Guinea, Mali, Mexico, PNG, Tanzania, and the USA. When the scores are averaged, the resulting mean comes out to 3.39 out of five with a standard deviation of 0.96. Figure 3-1 shows how the scores are distributed across the five points of the agree/disagree scale.² The histogram has a bar for every 0.1 scale point. The colours of the bars correspond to the sextiles shown in Figure 3-2. Sextiles are groupings of the scores into six equal categories each comprising 16.67 percent of all the scores.

² The five points of the scale are labelled as follows: 1 = strongly disagree, 2 = disagree, 3 = equally agree and disagree, ambivalent, 4 = agree, 5 = strongly agree

Figure 3-1 Histogram of 2,152 social license scores collected in 11 countries and 9 languages

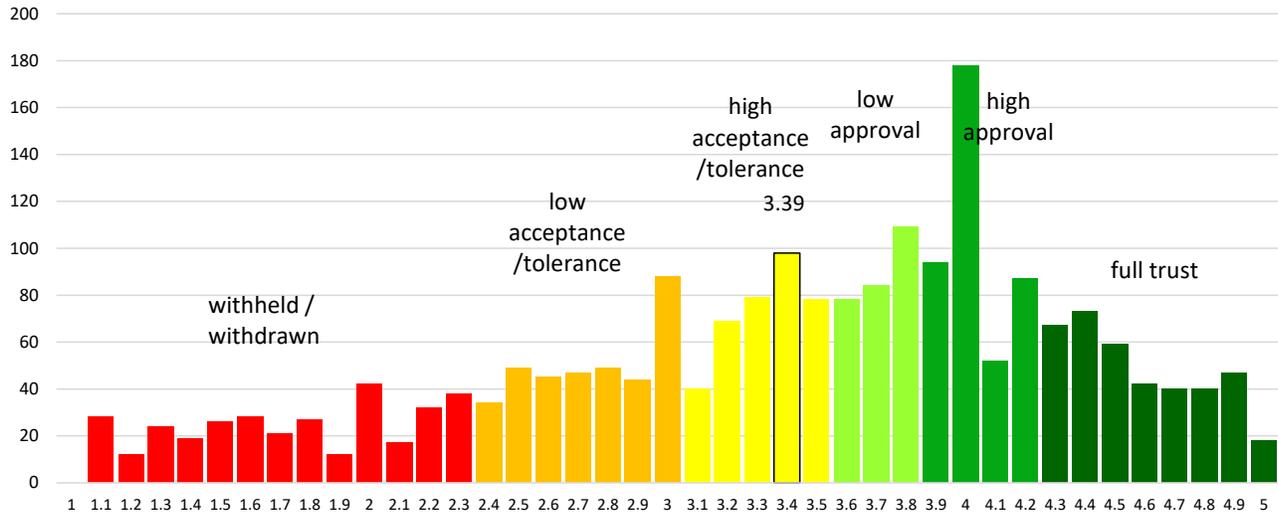


Figure 3-2 Scale points designating the brackets among six equal groupings (i.e., sextiles) of social license scores based on 2,152 international interviews.

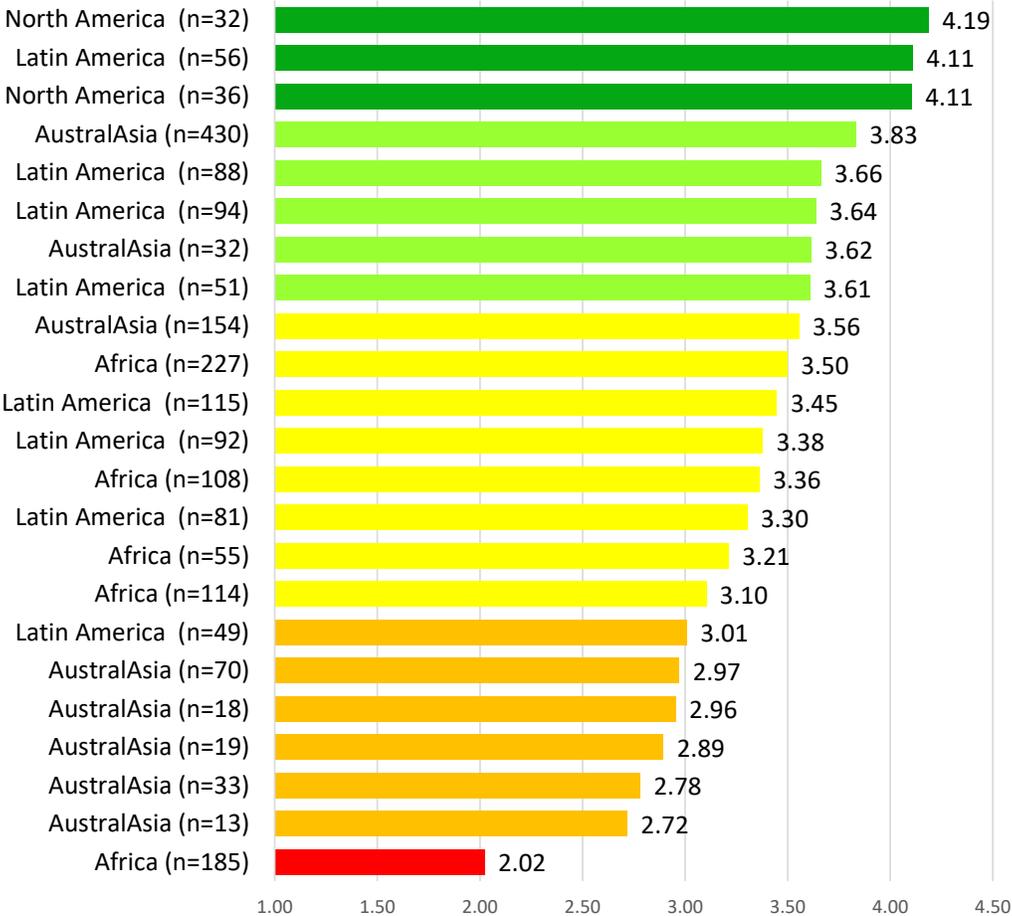
sextile 1/6 th	lower bracket	upper bracket	range and verbal label
6	4.30	5.00	>4.3 to 5.00 = full trust
5	3.93	4.30	>3.93 to 4.3 = high approval
4	3.56	3.93	>3.56 to 3.93 = low approval
3	3.08	3.56	>3.08 to 3.56 = high acceptance/tolerance
2	2.40	3.08	>2.4 to 3.08 = low acceptance/tolerance
1	1.00	2.40	1.00 to 2.40 = withheld/withdrawn

The median average for all scores was 3.56. It happened to fall on the border between low approval (i.e., the third sextile) and high acceptance (the fourth sextile). The most frequently occurring single score by tenths of scale points (i.e., the mode) was 4.0. The distribution was skewed slightly towards the agree side of the scale (-0.56), which is typical for agree/disagree questions on topics of social perception.

Figure 3-3 shows the social license scores from 23 different studies at a total of 54 mines and energy projects in four geographic zones. Four of the projects were not yet in operation. The colours of the bars indicate the sextile into which the social license fell. The numbers of stakeholders (*n*) in the censuses ranged from a low of 13 at very remote project to a high of 430 in an operation spread across several sites in one country. The mean *n* was 94 and the median *n* was 70. The project that happened to fall closest to the mean average social license score (3.39) was one from Latin America (mean = 3.38). Only one project had a social license in the lowest (red) sextile. None had an average social license score in the top sextile (dark green).

Generally, the frequencies in each sextile support the arrowhead shape of Boutilier and Thomson’s pyramid model of the social license. The 23 studies used to produce Figure 3-3 quite naturally under-represent the number of projects with a lost social licence because, owing to financial losses, those projects do not generally commission consulting studies of their social license. Indeed, they are more likely to have discontinued operations completely.

Figure 3-3 Overall social license scores obtained from 23 different studies, classified by four geographic zones, coloured by sextile



4 VALIDATION OF THE SOCIAL LICENSE MEASURE

4.1 One big factor

Using the data accumulated by the end of 2015, a factor analysis was performed on the database of social license scores using the 15 items from the 2011 measure. The analysis used the prime factor method with all cases with missing data removed (remaining n = 556). It produced one

major factor with an eigenvalue meeting the Kaiser criterion. However, the second factor was strong enough to permit a varimax rotation. With the rotation, the eigenvalue for the first factor was 7.757 and 0.457 for the second factor. The Cronbach's alpha was 0.943. In ordinary language, this means that the 15 items measure one and the same thing. As a set, they are internally consistent.

An attempt was then made to pare down the set of statements to only those that measured the first factor best and without redundancy. Two statements had betas below 0.5 on the first factor. They were dropped from the social license measurement set. Another factor analysis was performed on the remaining 13 statements. Only one factor emerged so no rotation was possible (n = 562, eigenvalue: 7.313, Cronbach's Alpha: 0.943). The statement that loaded the least on the factor was one of a pair that were worded very similarly. The two statements were "[Company] is concerned about our interests" (beta loading 0.659) and "[Company] takes account of our interests" (beta loading 0.794). Their original purpose was to provide a reliability check but the factor analysis proved that the internal consistency was indeed high enough. The one with the lower beta (i.e., 'concerned about interests') was dropped. That left a dozen statements.

With the remaining dozen statements, only one factor emerged and therefore there was no rotation performed. The eigenvalue was 6.877 with a valid n of 572 and a Cronbach's Alpha of 0.941. All of the loadings were at 0.68 or higher. The current dozen statements are shown in Table 4-1 with their factor loadings (i.e., beta weights). These can be used, unmodified, to measure the social license of a mining operation as granted by stakeholder group leaders who have had direct dealings with the mine. Sections 5.1 and 5.2 offers modifications of the statements for other circumstances.

Table 4-1 Current set of 12 statements that measure the social license to operate, with factor loadings

Statement	Beta weight (factor loading)
[Company] shares information on matters that affect us	0.858
[Company] contributes to regional well-being	0.828
[Company] takes account of our interests	0.795
[Company] respects our way of doing things	0.791
We're satisfied with our relation with [Company].	0.747
We have similar vision for future as [Company].	0.741
[Company] treats everyone fairly	0.739
We can gain from a relationship with [Company].	0.738
[Company] listen to us	0.734
The presence of [Company] is a benefit	0.731
[Company] gives more help to those who it affects more	0.682
[Company] shares decision-making on matters that affect us	0.680

4.2 Validation against praise/criticism ratio

The aforementioned analyses showed that the 12 declarative statements in Table 4-1 Current set of 12 statements

that measure the social license to operate,

with factor loadings Table 4-1 all measure the same thing. In statistical language, they indicate the *reliability* of the scale. However, they do not guarantee that the statements measure the right thing. Additional analyses are needed to show that the one thing they all measure is indeed the level of social license granted. In statistical language, we would like evidence of the *validity* of the scale. The validity of the scale can be established by taking another independent measure of the social license and seeing if it correlates with the scores produced by the scale in Table 4-1.

A multi-year tracking study conducted by Boutilier at a mine in Latin America included an independent measure of the social license derived from the open ended comments of stakeholder group leaders. Creating this independent measure required developing and applying a standardized coding frame for the open-ended responses. The coding frame had two parts. The largest set of codes dealt with the content of the comments. For example, the global categories were things like water, pollution, comments on communication, and infrastructure. The second set of codes focused on the intent or ‘voice’ of the comment. Each comment was simultaneously coded as a criticism of the mining company, a criticism of another party, praise for the mining company, praise for another party, a factual observation, a suggestion for the mining company, a general suggestion, a statement of need, and so forth.

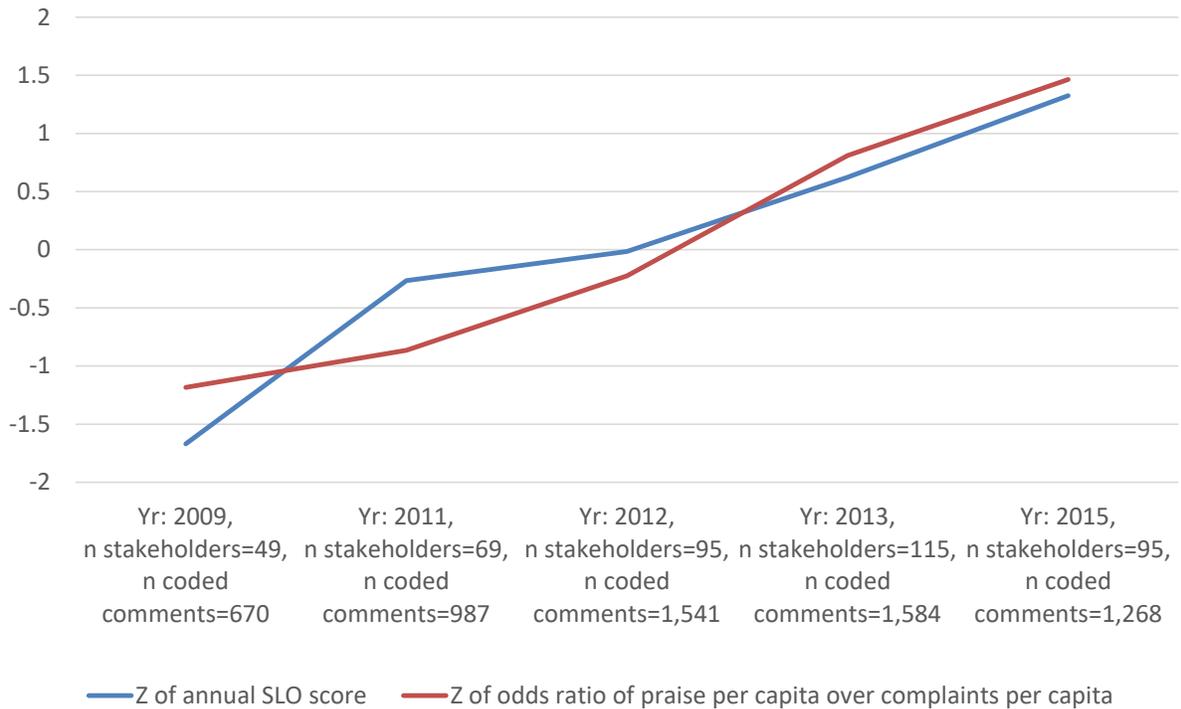
The quantitative ratings of the social license using the 15 agree/disagree statements³ would receive validation if they were correlated with the sentiments expressed in the open-ended verbal comments indicating approval or disapproval. To that end, the ‘voice’ codes indicating criticism of the company and praise for the company were combined in an odds ratio of the per capita mention frequency for each of those two categories in each of the five years of the study (i.e., categories 1 and 5 respectively in Table 4-2). The odds ratio was expressed as the per capita frequency of praise comments over criticism comments. Higher numbers therefore indicate more acceptance or approval for the operation. To make the qualitative odds ratios graphable on the same scale as the quantitative social license scores, both sets of five scores were converted to z scores, which express their distance from their own mean in standard deviation units. Figure 4-1 shows the results. The qualitative measure of approval correlated significantly with the quantitative measure of approval at $r = 0.92$ ($df = 4$, two-tailed $p < 0.02$). This strongly suggests that the 12 statements in Table 4-1 not only measure reliably but also measure validly.

³ This multi-year study used the 15 statements from which the 12 were later derived.

Table 4-2 The second coding frame applied to open ended comments

CODING FOR VOICE OF COMMENT		
code #	voice / intent of comment	
01	complaint with company / negative impact of company	queja sobre la empresa / impacto negativo de la empresa
02	other complaints / negative impact of another	quejas sobre otras / impacto negativo otro
03	observation about company	observación sobre la empresa
04	another observation or about another actor	observación otra
05	praise for company / company positive impact	elogio sobre la empresa / impacto positivo de la empresa
06	compliment for another / positive impact of other	elogio otro / impacto positivo otro
07	request of company (explicitly)	solicitud a empresa (explícitamente)
08	request (without saying to whom) / desire / need	solicitud a quienquiera / deseo / necesidad
09	proposal/suggestion to company	propuesta a la empresa
10	proposal to another actor / what should happen	propuesta otra / lo que debería suceder
11	contribution, given already or potential	contribución dado o potencial

Figure 4-1 Five year trends in standardized average rated social license scores and odds ratios of compliments to complaints in open-ended verbal comments



The findings shown in Figure 4-1 should be treated as encouraging early indicators. To improve confidence in the validity of the quantitative measures, future studies should look at more mines, in different cultures, with more refinements to the qualitative coding procedures. Chapter 5 deals with a different type of validation. It validation from proving that the strategies that the quantitative measures suggest produce the business results desired.

5 FACTORS TO CONSIDER IN USING THE MEASURE

In this section issues are discussed related to adapting and using the measure at different stages of the project lifecycle and with different methods for weighting the perceptions of stakeholders.

5.1 Adaptation to exploration, planning and closure stages

5.1.1 Prior to project construction or operation

These have not yet been factor analysed. So far there have been too few exploration projects to do the analyses. These were used at a proposed mine site in Mexico in 2015.

Q.1	Our community/organization ⁴ believes that mining ⁵ would be a positive direction for the future.	1	2	3	4	5	DK
Q.2	As of now, the proposed project has met its commitments to our community/organization.	1	2	3	4	5	DK
Q.3	We believe that project ⁶ management will take the initiative to inform us about things that could affect our community/organization.	1	2	3	4	5	DK
Q.4	We are satisfied with the relationship we have with the proposed project.	1	2	3	4	5	DK
Q.5	Our community/organization and the management of the proposed project have a similar vision for the future of this region/state/country.	1	2	3	4	5	DK
Q.6	Our community/organization believes that a mine would bring more benefits than problems for us.	1	2	3	4	5	DK
Q.7	Our community/organization wants mining in this region.	1	2	3	4	5	DK
Q.8	The management of the proposed project is concerned about the interests of our community/organization.	1	2	3	4	5	DK
Q.1	We in our community/organization know that we can believe what the management of the proposed project says.	1	2	3	4	5	DK
Q.9	The management of the proposed project respects our way of life/doing things. ⁷	1	2	3	4	5	DK

⁴ Proper names can be substituted for the generic ‘community/organization’

⁵ The word ‘mining’ can be changed to suit the nature of the project. For example, if it is an electrical transmission line, the word can be changed to ‘energy transmission projects’ or something similar.

⁶ If the project is well known among stakeholders by a proper name, then the proper name can be used instead of the generic ‘project’ or ‘proposed project’.

⁷ In traditional or indigenous communities, this could refer to traditional institutions or authorities but do not confuse this with legal agreements or contracts.

Q.10	Our community/organization sees mineral exploration as a valuable part of the regional economy.	1	2	3	4	5	DK
Q.11	Our community/organization needs the collaboration of the proposed project in order to reach our most important goals.	1	2	3	4	5	DK
Q.12	We believe that the management of the proposed project will treat everyone fairly.	1	2	3	4	5	DK
Q.13	The proposed project listens to our community/organization.	1	2	3	4	5	DK
Q.14	Our community/organization and the management of the proposed project have a mutually beneficial working relationship.	1	2	3	4	5	DK

This additional question is intended to provoke open ended comments (but is not counted in calculating the social license score) ...

Q.15	The people in our community/organization speak well of the proposed project						
------	---	--	--	--	--	--	--

5.1.2 In preparation for project closure

Here the questions are more oriented towards a summative evaluation of the project and the relationship with project management. Some attention should be paid to the comparison between what we have or experience since the closure and what we would have or would experience if the project had never been built. In other words, are we better off for it having been here?

5.2 Adaptation for stakeholders with little relationship

Some stakeholders have no direct relationship with the project management and may not be affected by the project themselves. These would include journalists, government regulators, and distant monitoring bodies. As monitoring parties, they view the project from what they see as the interests of ‘the people’. It is important to change the voice of the statements for these stakeholders in order to avoid misunderstandings or a superabundance of “don’t know” responses.

Q.1	Our citizens ⁸ are very satisfied with the relationship between the project ⁹ and our region/state/country.	1	2	3	4	5	DK
Q.2	The people and the management of the Project have a similar vision for the future development of this region/state/country.	1	2	3	4	5	DK

⁸ Throughout you can substitute the demonym (e.g., Haligonians, Nova Scotians, Canadians) for phrases like ‘the people’ or ‘citizens’.

⁹ The same modifications and substitutions can be made as noted in Section 5.1.1.

Q. 3	With the cooperation of the management of the Project, the people can reach their most important goals.	1	2	3	4	5	DK
Q. 4	The project management listens to the people/citizens.	1	2	3	4	5	DK
Q. 5	[REMINDE THE INTERVIEWEE THAT THEY CAN ANSWER "DON'T KNOW".] The Project management does what it says it will do in relations with the region/state/country.	1	2	3	4	5	DK
Q. 6	The Project management openly shares information relevant to the interests of the people/citizens.	1	2	3	4	5	DK
Q. 7	The region/state/country can gain from a relationship with the Project.	1	2	3	4	5	DK
Q. 8	In the long run, the project makes a contribution to the well-being of the whole region/state/country.	1	2	3	4	5	DK
Q. 9	[REMINDE THE INTERVIEWEE THAT THEY CAN ANSWER "DON'T KNOW".] Management of the project gives more help to those who it affect more.	1	2	3	4	5	DK
Q. 10	The presence of the project is a benefit to the people/citizens.	1	2	3	4	5	DK
Q. 11	La Minera San Cristóbal toma en cuenta los intereses de los bolivianos.	1	2	3	4	5	DK
Q. 12	The project shares decision-making with the people/citizens in matters that affect the region/state/country.	1	2	3	4	5	DK
Q. 13	[REMINDE THE INTERVIEWEE THAT THEY CAN ANSWER "DON'T KNOW".] The management of the project treats everyone fairly.	1	2	3	4	5	DK
Q. 14	The management of the project respect the people's/citizens' way of life/doing things.	1	2	3	4	5	DK
Q. 15	The management of the project is concerned about the interests of the people/citizens.	1	2	3	4	5	DK

This additional question is meant to provoke open ended comments (but is not counted in calculating the social license score) ...

Q. 16	Our people/citizens speak well of the project.	1	2	3	4	5	DK
-------	--	---	---	---	---	---	----

5.3 Weighting: Whose social license counts?

5.3.1 Pointless controversies over ignoring stakeholders

The statements to measure the social license are intended to be presented to spokespersons for all stakeholder groups. Stakeholders are defined as groups that are affected by the mine or that can have an impact upon the mine. To keep the number of stakeholder to a reasonable size, we eliminate those who do not perceive their imposed or received impact to be big enough to bother doing an interview. Further, companies usually want to deal with only two or three key stakeholders at a time. Sometimes they express this as a desire reduce the number of stakeholders. What they should say, however, is that they want to develop a stakeholder strategy that involves only two or three stakeholders. The point is that companies cannot decide who their stakeholders are but they can decide which ones to they want to work with in strategic initiatives. This may seem like a semantic quibble, but unfortunately, in a controversial situation the sloppy use of the term ‘stakeholder’ can produce accusations of the company ignoring stakeholders. To summarize, the stakeholders decide who they are but the company decides which ones it wants to involve in strategic initiatives.

5.3.2 Network analyses to prioritize stakeholders

Mitchell, Agle and Wood (1997) proposed that managers prioritize their stakeholders using an intuitive typology that can be described as the Venn diagram created by three perceived stakeholder attributes: power, urgency, and legitimacy. Managers’ misperceptions of these attributes can explain why they sometimes prioritize the wrong stakeholders. Unfortunately, others have misread Mitchell et al and leapt to the conclusion that this typology was meant to show how a manager should prioritize stakeholders. To the extent that managers usually get it right, this misapplication of the typology may be helpful. However, there are less subjective methods that can be used.

When the interviews with a stakeholder group spokesperson includes questions about the group’s relations with other stakeholder groups, a matrix of relationships can be created which can then be turned into a social network graph. The stakeholder who are more central in the graph generally have more influence. Strategic initiatives may focus on those stakeholders, or may instead focus on those who can influence those groups. Indeed, when social license scores and qualitative issues are taken into account, the most strategic initiatives may involve marginal groups. A full discussion of the strategy development process is beyond the scope of this paper but is dealt with at length by Boutilier (2011).

6 FUTURE MEASUREMENT POSSIBILITIES

The measure described here provides a good starting point for extensions into other industries, for assessments from texts available in traditional and electronic media, and for modelling the level of social license that would result from one initiative versus another. The main insight that should not be lost is that stakeholders can summarize how they feel about the project when they describe their perceptions of their relationship with the company.

7 REFERENCES

- AccountAbility, Business for Social Responsibility, 2004. *Business and Economic Development: Mining Sector Report*. AccountAbility and Business for Social Responsibility, London and San Francisco.
- Barreiro-Deymonnaz, R., 2013. Social licensing in the construction industry: Community and government interests. *Construction Law International* 8(1), 22-29.
- Black, L., 2013. The social license to operate: Your management framework for complex times. Do Sustainability, London.
- Boutilier, R. G. 2011. *A Stakeholder Approach to Issues Management*. New York, NY: Business Expert Press.
- Boutilier, R.G., 2014. Frequently asked questions about the social licence to operate. *Impact Assessment and Project Appraisal* 32(4), 263-272.
- Boutilier, R.G., Black, L., Thomson, I., 2012. From metaphor to management tool: How the social license to operate can stabilise the socio-political environment for business. International Mine Management 2012, Carlton, Victoria, Australia, 20th November, 2012. Australian Institute of Mining and Metallurgy, pp. 227-237.
- Cooney, J. 2017. Reflections on the 20th anniversary of the term 'social licence'. *Journal of Energy & Natural Resources Law*, 35(2), 197-200.
- Foa, R. S., Mounk, Y. 2017. The signs of deconsolidation. *Journal of Democracy* 28(1), 5-15.
- Franks, D.M., Davis, R., Bebbington, A., Ali, S.H., Kemp, D., Scurrah, M., 2014. Conflict translates environmental and social risk into business costs. *Proceedings of the National Academy of Sciences* <http://www.pnas.org/cgi/doi/10.1073/pnas.1405135111>, 1-6.
- Griffin, J. J., Mahon, J. F. 1997. The corporate social performance and corporate financial performance debate: 25 years of incomparable research. *Business & Society* 36(1), 5-31.
- Guttman, L., 1950. The basis for scalogram analysis. in *The American Soldier*, edited by Stouffer. New York: Wiley.
- Henisz, W. J., Dorobantu, S., Nartey, L. 2013. Spinning gold: The financial returns to external stakeholder engagement. *Strategic Management Journal* 35(12), 1727-1748.
- Holtermann, H. 2012. Explaining the development-civil war relationship. *Conflict Management and Peace Science* 29(1), 56-78.
- Joyce, S., Thomson, I., 2000. Earning a social licence to operate: Social acceptability and resource development in Latin America. *The Canadian Mining and Metallurgical Bulletin* 93(1037), 49-52.
- Lassonde, P., 2003. How to earn your social licence. *Mining Review* Summer, 7-13.

- Mitchell, R. K., Agle, B. R., Wood, D. J. 1997. Toward a theory of stakeholder identification and salience: Defining the principle of who and what really counts. *Academy of Management Review* 22(4), 853-886.
- Moffat, K., Zhang, A., 2014. The paths to social licence to operate: An integrative model explaining community acceptance of mining. *Resources Policy* 39, 61-70.
- Morrison, J., 2014. *The Social License: How to Keep Your Organization Legitimate*. Palgrave Macmillan, London.
- Nelsen, J., 2005. Social license to operate: Industry survey. Mineral Exploration Roundup Conference, Vancouver, 24 - 27 January 2005. BC and Yukon Chamber of Mines.
- Raman, S., Mohr, A., 2014. A social licence for science: Capturing the public or co-constructing research? *Social Epistemology* 28(3-4), 258-276.
- Sharfman, M. P. 1996. The construct validity of the Kinder, Lydenberg & Domini social performance ratings data. *Journal of Business Ethics* 15(3), 287-296.
- Thomson, I., Boutilier, R. G. 2011. Social license to operate. In P. Darling (Ed.), *SME Mining Engineering Handbook* (pp. 1779-1796). Littleton, CO: Society for Mining, Metallurgy and Exploration.
- Thomson, I., Joyce, S. 2008. The social licence to operate: what it is and why it seems so hard to obtain. Paper presented at the 2008 Prospectors and Developers Association of Canada Convention, March 3, Toronto.