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The social licence to operate: a critical review

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Changing societal expectations have influenced the way industries involved in the development or extraction of natural resources conduct their operations around the world. Increasingly, communities are demanding more involvement in decision-making around such operations, have expectations of receiving a greater share of the benefits from these operations and require assurances that the industries involved are appropriately regulated. The combination of increasing pressures on industry performance and the associated societal acceptance of such operations has been described as the 'social licence to operate'. In many ways, the social licence reflects the evolving nature of the relationships between industries and their communities and other stakeholders. Originally used to describe the social acceptability of mining operations, the term has since been applied to explore the broad acceptance that communities and other stakeholders provide to the activities of the forest, agriculture and energy sectors. This article presents a critical review of the emergence of the concept in industry practice over the last two decades. Recent applied research to measure and model the social licence is also examined to demonstrate how the roles of trust, fairness and governance may underpin the development of more sustainable, trust-based relationships between industry and society.

Introduction

Changing societal expectations over recent decades have fundamentally influenced the way industries involved in the development or extraction of natural resources conduct their operations around the world. Increasingly, communities are demanding more involvement in decision-making around such operations, have expectations of receiving a greater share of the benefits from these operations and require assurances that the industries involved are appropriately regulated (Prno, 2013). This combination of increasing pressures on industry performance and the associated societal acceptance of such resource development and extraction operations has been described as the 'social licence to operate' (SLO).

It is well established that the term, SLO, has been applied and adopted most extensively within the mining industry. The term emerged, in part, as a result of the increasing pressure and scrutiny this industry was coming under in terms of its environmental impacts and social performance. Throughout the 1990s, there was a fundamental shift in the way that environmental and social impacts of this industry were perceived, with highly publicised tailings dam failures, chemical spills and conflicts with communities impacting negatively on the industry's reputation (Schloss, 2002; Thomson and Boutilier, 2011). At the same time, societal values and attitudes towards the natural environment and the industries impacting negatively on it were changing (Joyce and Thomson, 2000). Increasingly, the concerns of society were also being translated into direct action against resource projects at a local level. Such conflict with communities has been shown to have high financial, opportunity and personal costs to mining companies and their personnel (Franks *et al.*, 2014). It also signalled that communities were becoming more active in challenging the nature and fairness of the costs and benefits associated with mining industry developments (International Council on Mining and Metals (ICMM) 2012). Not only had community expectations about the performance of the extractives sector increased over time, so too had the direct involvement of citizens in decision-making about industry development (Harvey and Brereton, 2005). This also meant community relations were now recognised as a strategic part of managing risk and opportunity (Humphreys, 2000), and establishing an SLO.

These shifts in societal values and their impacts on industry are not unique to the mining sector. Since the term was first coined in 1997 (Thomson and Boutilier, 2011), SLO has increasingly been adopted and applied in a range of other industry contexts to describe the changing nature of company-community interactions and the level of acceptance afforded to resource development operations. This includes the adoption of SLO in various energy industries (Boutilier and Black, 2013; Hall et al. 2015), in farming and agriculture (Shepheard and Martin, 2008; Williams and Martin, 2011) and in forestry (Gale, 2012; Wang, 2005; Edwards and Lacey, 2014) as well as the associated pulp- and paper-manufacturing sector (Gunningham et al., 2004). Within the forest sector, there is evidence that the forest industry in North America started using SLO as early as 1999 to describe their projects and the nature of stakeholder relationships in and around their industry (Cashore et al., 2001). However, it was also apparent that very early on in the Downloaded from https://academic.oup.com/forestry/article/89/5/477/2194485 by U.S. Department of Justice user on 16 August 2022

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uptake of the term, it was being used far more extensively by industry stakeholders and there were relatively few instances of it being used or reported in the academic literature. While corporate use of the term has been critiqued as a way of attempting to manage community opposition to development (Owen and Kemp, 2012) or downplay the existence of conflict or tensions (Parsons and Moffat, 2014), there is now an increasing amount of theoretical and empirical research being directed towards understanding the nature and use of SLO (cf. Bice and Moffat, 2014; Parsons *et al.*, 2014; Syn, 2014; Wheeler, 2015; Zhang and Moffat, 2015). This has included examination of its application in a range of industry contexts, and the emerging evidence of its broader adoption by civil society and other stakeholders (cf. Gunningham *et al.*, 2004; Owen and Kemp, 2012; Cater, 2013; Williams and Walton, 2013).

This paper provides a critical review of SLO and its emergence over the last two decades to describe the changing nature of company-community interactions around industries involved in resource development and extraction. Our interest is in examining the shifts in sustainability and civil society participation in two industries – mining and forestry – in order to understand how the concept of social licence might be relevant in these two very different sectors. We then provide a brief review of literature documenting how social licence has been defined in both theory and practice, examine the interaction between social and legal licences that has shaped much of the discourse and understanding of SLO and explore the stakeholder perspectives required to shape an SLO. The purpose of this paper is to challenge some of the assumptions associated with the term, and to examine how it is used, by whom and for what purpose. In this way, we hope to shed light on the term and its potential for useful application in the forest sector, including how the relationships and interactions between industry and society can be modelled and measured in order to understand the mechanisms underpinning SLO and to identify the drivers of socially acceptable resource development.

Sustainability and civil society participation in two industries

The mining and forest industries are highly differentiated, not least by the nature of the commodities under development and the kind of 'extraction' techniques required. It is also clear that while mining raw resources from the earth's surface generally happens only once (and perhaps within a range of up to 100 years), forests are renewable resources with wood products (and other social, economic and environmental goods) extracted multiple times from the same site over many centuries. Mining and forestry also reflect a range of very different ownership, management and regulation regimes around the world. However, in spite of these significant differences, both sectors also share a number of similarities in terms of the recognition and management of the environmental and social impacts of their operations.

In this regard, both industries have been repeatedly confronted with the dissatisfaction of local, national and international civil societies with the social and ecological consequences of their operations, especially since the emergence of social and environmental movements in the 1960s and 1970s (cf. Bandler, 1987; Hutchins and Lester, 2006; Hall *et al.*, 2010; Colvin *et al.*, 2015a). These movements have articulated a demand for consideration of alternative approaches to resource exploitation that take into account diverse local conditions, needs and types of knowledge. In particular, this led to an increased focus on engaging with and incorporating multiple stakeholder views and diverse perspectives on socially and environmentally acceptable approaches to natural resource management. Hence, inclusion of local communities and participation of civil society in the management and regulation of natural resource exploitation have become an essential pillar of sustainable development agendas in both industries (cf. van Tatenhove and Leroy 2003; Koontz, 2006; Wesselink et al. 2011; Giurco and Cooper, 2012; International Council on Mining and Metals (ICMM) 2012; Maier et al., 2014; Moffat et al., 2015), with civil society participation particularly prevalent in environmental and natural resource sectors (Smith and McDonough, 2001; Koontz and Thomas, 2006; Lockwood et al., 2010; Colvin et al., 2015b). Further, this increased concern from communities, governments and other stakeholders about the negative environmental and social impacts of corporate activities has brought increased scrutiny of industry performance (Parsons et al., 2014; Hall and Jeanneret, 2015). In addition, the shift in corporate social responsibility and sustainability approaches has also been driven by the realization that poor environmental practices can significantly affect social perception and reputation, which in turn, can affect financial performance (Azapagic and Perdan, 2000; Dahlsrud, 2008; Leipold et al., under review; Sotirov et al., under review). For those industries involved in intensive resource development, embracing sustainability has brought with it a need to work more closely with stakeholders to maintain a 'social licence to operate' (Solomon et al., 2008; Prno and Slocombe, 2012). In response, specific strategies for addressing Indigenous and local rights have emerged in both sectors. These efforts have ranged from the legally binding regulations developed by governments at the local and national levels, where these industries operate around the world, through to a range of voluntary governance schemes driven by the industries themselves. In the following subsections, we draw on a selection of examples to illustrate how and why these regulatory and voluntary management responses have emerged.

Legally binding or government-led responses

As mining and forestry differ in both the nature of their operations and their impacts, the engagement approaches and responses adopted also vary across the two industries. For example, in forestry, the key management models range from state-owned and state-managed to locally or community-managed forest resources to those that are solely owned and operated by corporate interests. This diversity reflects the various forest ownership structures as well as the multiple functions forests provide. However, in the field of legally binding management responses, forestry can demonstrate a 'long tradition of government ownership and government-led management' (White and Martin, 2002: 2) with government ownership being largely static in the majority of forest countries in the world. Yet, there is a growing recognition of the tenure rights of local communities and Indigenous people in these frameworks (White and Martin, 2002), largely because forests provide an essential source of livelihoods for citizens (Vedeld et al., 2007), employment opportunities and recreational areas for millions of people worldwide. Based on this recognition, concepts like community (based) forestry, participatory/ collaborative/joint forest management as well as participation (in policy and management practice) have a long tradition in debates about forests across the globe. They emerged in response to political and legal struggles of forest-reliant communities over logging on public forest lands, particularly in the tropics (Gray *et al.*, 2001; Baker and Kusel, 2003; Charnley and Poe, 2007; Cheng *et al.*, 2011). For example, one of the earliest state-driven attempts to create an alternative management approach that would maintain residents' livelihoods while restoring forest ecosystem goods and services is the Indian Joint Forest Management programme of the 1970s (Bhattacharyaa *et al.*, 2010). This approach is, however, not unique to forest management in the tropics, and the US also introduced community-based forestry in the 1990s (Baker and Kusel, 2003).

In contrast, in the mining sector, one of the defining elements of legally binding policy and practice tends to be reflected in the nature of agreement-making among government and industry. For example, a key management model widely adopted across the mining sector is the use of Mineral Development Agreements (MDAs). In developing countries in particular, the use of these legally binding agreements defines the relationship between the state and mining companies. They are critical tools for securing benefit for the state over the life of a mining operation, and determining the financial and regulatory principles that will define the mutual rights and responsibilities of each party throughout the mineral development cycle from project design and exploration through operation and finally, decommissioning and rehabilitation (McNamara, 1982; Mining, Minerals and Sustainable Development (MMSD) 2002; Banks, 2003). In developing countries particularly, mineral development may be viewed as a potential pathway to national development and economic well-being. This was evidenced throughout the 1990s in the adoption of a range of new or modified mining policies and legislation in over 75 countries to promote foreign investment and create a more stable regulatory environment (United Nations, 2002). However, there can be a high degree of variation in the negotiation, application and quality of MDAs around the world (Mining, Minerals and Sustainable Development (MMSD) 2002; Gogal et al., 2005; Gibson and O'Faircheallaigh, 2010). While a mining act of a nation tends to be the principal regulatory instrument governing the nature of mineral development and providing the content that shapes MDAs, no countries have identical regulatory frameworks in place (Mining, Minerals and Sustainable Development (MMSD) 2002). Thus, while local administrative and legal frameworks can increase the complexity of agreement-making, it also implies the need for benefit sharing arrangements to be developed in a manner that is responsive to specific local and national contexts. To do this effectively requires an understanding of the drivers of acceptance of resource development among local and national communities (not only those of government and corporate interests, which have dominated MDAs). For both industries, however, high-level arrangements between industry and government need a mechanism for including citizen voice more systematically in processes of negotiation and agreement-making. This is a key aspect of establishing the legitimacy and social acceptance, or the social licence, of these arrangements.

Voluntary or industry-led responses

Alongside these state-driven efforts to gain the support and recognition of local communities in resource development, a range of voluntary approaches have also emerged. These have been partly driven by civil society and partly by the industries themselves. In forestry, ideas of voluntary stewardship and certification emerged out of the highly contested debates about sustainable forestry that were an important pillar of the environmental debates of the 1970s and 1980s, leading up to the 1992 Earth Summit (United Nations, 1992). Based on the increasing awareness of forests as a vital part of the Earth's ecology, NGOs started widespread campaigns against tropical deforestation. In response, the first overarching forest certification body was founded in 1993: the Forest Stewardship Council (Bartley, 2003). Shortly after, several industry aroups launched certification programmes, most prominently the Sustainable Forestry Initiative and the Programme for the Endorsement of Forest Certification. With this, '[f]orest certification was emerging globally as the most advanced case of non-state driven private authority' (Cashore et al., 2004). Yet, the uptake of these schemes remained limited, particularly in the major target countries of the tropics (Pattberg, 2006). The recognition of this limited impact of certification schemes on forest management practices worldwide partly triggered the rise of the concept of legality verification in global forest governance (Leipold and Winkel, forthcoming). Based on the recognition that many forestry operations did not even meet the basic legal obligations of a country, policy schemes like the Forest Law Enforcement and Governance and the European Union's Forest Law Enforcement, Governance and Trade Initiative were developed. These voluntary measures are meant to support the so-called 'producer countries' (mostly in the Global South) to enforce their own forest laws and thus advance their economic development as well as their social and environmental stewardship in the forest sector. As these efforts provided a fertile ground for fusing environmental concerns about deforestation and 'conflict timber' (conflict resources such as conflict timber and conflict minerals are resources that have been extracted in a conflict zone, and sold and produced to finance armed conflict) with economic concerns about unfair competition (from imported illegal 'dumping' timber) and reputational damage (through public boycotts of timber importing companies) in the US, Europe and Australia, both environmental and industry groups pushed for strengthening these initiatives through a new generation of legally binding policies. In this regard, the 2008 amendment of the 'US Lacey Act' was guickly followed by the 'EU Timber Regulation 2010' and the 'Australian Illegal Logging Prohibition Act 2012'. These legally binding measures are designed to target major wood consuming markets (mostly in the Global North) by prohibiting the import of timber harvested in contravention to the laws of the country of origin (Leipold et al., under review). As such, they reflect an evolution from voluntary towards increasingly legally binding responsibilities in the forest sector.

In the mining industry, a number of high-level industry initiatives have emerged over the last 15 years to promote a more integrated approach to sustainability, including the formation of the International Council on Mining and Metals (ICMM) to improve the sustainability performance of the industry. Further to this, a number of significant initiatives on resource governance and sustainable development have been introduced including the Global Reporting Initiative, the Extractive Industries Transparency Initiative and the subsequent development of sustainability indicators and increasing trend in sustainability reporting occurring across the industry (Rankin, 2011; Lacey and Moffat, 2012). All of these high-level initiatives aim to raise the standard of practice in the industry but are, for the most part, voluntarily implemented by the companies that subscribe to them and may not be subject to high levels of scrutiny. Alongside this however, and drawing on the experience of the forest sector, stewardship and certification systems have also started to emerge. For example, increasing social and environmental pressures on the industry have led to the creation of organizations such as the Responsible Jewellery Council to address growing concerns about 'conflict minerals' being used to fund civil wars and other conflicts (Olsson, 2007; Epstein and Yuthas, 2011). The issue of conflict minerals is gaining increasing international attention and in 2010, the United States Conflict Minerals regulations raised the importance of thorough knowledge of the chain of custody. As a result, this regulation has been credited with increasing the awareness and efforts to strengthen supply chain and sustainability of minerals production (Young et al., 2013).

In both sectors, there is evidence of voluntary responses developing into legal requirements. However, there is still significant variation in the implementation of these practices. To date, the forest industry has mostly sought to address changing societal expectations by supporting efforts to improve supply chain management. Efforts focusing on local communities have been driven predominantly by nation states in their role as major owner and manager of the world's forests. Yet, more recently, attempts have been made by large multinational companies to better manage local areas of production. For example, Asia Pulp and Paper has recently been granted authority to manage larger territories in Indonesia so that they can apply a more integrated landscape management approach in cooperation with global NGOs such as the World Wide Fund for Nature (Asia Pulp and Paper, 2014). In these contexts, where the relationships and interactions between companies. communities, and to some extent governments, are changing around resource management, concepts like SLO may have a role to play in shaping how we understand those stakeholder interactions and how decisions about landscape management are reached. In addition, continued efforts to include local communities in forest management and provide them with access to commercial markets (Wiersum et al., 2013) may also be a growing source of conflict between local communities and forestry corporations that needs to be more systematically addressed in the future. In the following sections, we examine the core elements that are associated with SLO and its implementation in order to assess its relevance (or not) to the forest sector.

Defining SLO

There is no agreed definition of SLO in the literature. In many ways, the intangible nature of the term has been part of its appeal, and in some cases, it has been opportunistically used to serve the particular objectives and goals of companies, activists and governments (Bice and Moffat, 2014). However, in broadest terms, SLO tends to be regarded as the ongoing acceptance or approval of an operation by those local community stakeholders who are affected by it (Joyce and Thomson, 2000; Kurlander, 2001; Nelsen and Scoble, 2006; Parker *et al.*, 2008; Thomson and Joyce, 2008; Thomson and Boutilier, 2011; Moffat and Zhang, 2014) and those stakeholders who can affect its profitability (Graafland, 2002). As Joyce and Thomson argue (2000: 52), '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.' According to Gunningham et al. (2004), SLO is best understood as a set of demands and expectations, held by local stakeholders and broader civil society, for how a business should operate. This focus on expectations resonates with Harvey's (2011) view that SLO is a process of industry 'fitting in and adapting to the prevailing social norms'. What these various points demonstrate is that society is now very concerned about the way resources are developed and used and any practices that are deemed to be lacking (or unacceptable) are not likely to gain an SLO. The SLO of an industry or an operation therefore appears to be rooted in the beliefs and perceptions a local community and other stakeholders hold and, as such, an SLO can only be granted by that community and their associated stakeholders (Boutilier and Thomson, 2011; Parsons et al., 2014).

More may be gained from work that has explored how a social licence may be attained. Warhurst (2001) relates the process of community 'granting' a social licence to the establishment of meaningful partnerships between operations, communities and government based on a variety of factors that build trust between stakeholders. These factors may include the level of knowledge and confidence stakeholders have in each other, their predictability or perceived reliability and the expectation the company will meet the needs of local communities, which may be based on past performance or taking a 'leap of faith' (Möllering, 2006; Harvey and Bice, 2014). Gunningham et al.'s (2004) account speaks to what may underpin this partnership, suggesting that a social licence is essentially a set of demands and expectations for how a business will operate held by multiple local stakeholders and broader civil society. These expectations can be shaped by the extent to which local livelihoods are tied to an operation or industry, with increased dependence on an operation leading to greater acceptance of negative impacts (Gunningham et al., 2004). Burke (1999) suggested that companies may also have expectations of communities, although these may be less clearly or explicitly articulated. Finally, and importantly, Salzmann et al. (2006: 5) write that the likelihood of holding a social licence will depend on 'the degree of match between stakeholders' individual expectations of corporate behaviour and companies' actual behaviour.

Further to this, SLO has frequently been described as representing the unwritten social contract that exists between companies and communities (Minerals Council of Australia (MCA) 2005; Brown and Fraser, 2006; Idemudia, 2007; Lacey and Lamont, 2014), in that it is intangible and unwritten and cannot be granted by formal civil, political or legal authorities (Franks and Cohen 2012). Nelsen (2006) suggests that SLO has the connotation of being both tangible and intangible in its very nature; tangible because the level of disapproval or opposition being expressed by a community can be powerfully felt, and there are many examples where such opposition has delayed and even stopped operations progressing, but also intangible in that SLO is not formalized like the legal licences that are issued to companies by governments in order to monitor and manage their environmental activities. According to Thomson and Boutilier (2011), SLO remains intangible in this way unless efforts are made to measure and document the changing nature of community beliefs and perceptions around an industry or an operation. What is commonly accepted, however, is that SLO is a dynamic and changing reflection of the quality and strength of the relationship between an industry and a community of stakeholders. In this regard, Brown and Fraser (2006: 108) have recognized the importance of industry being able to respond to the changing nature of societal approval and acceptance, arguing that 'business must have regard for evolving social attitudes and expectations if it is to maintain its "social licence". Nelsen (2006: 161) also emphasizes that 'SLO must be flexible and be able to accommodate different social paradigms as cultures and society evolve'.

In contrast, however, some industry commentators (e.g. Shepard, 2008) reject the intangibility present in these descriptions of what a social licence represents and even the role of communities in granting it. Rather, Shepard (2008) advocates a 'technically sound and legally defensible' approach, in which the values and beliefs of stakeholders and vested interests are documented within an existing legislated social and environmental impact assessment process. This account explicitly rejects the role of community and other stakeholders in approving or directly shaping a project's development and considers legislative frameworks the most useful vehicle for securing 'the social license that governments, agencies, and companies need to proceed with developing and operating the mine in an environmentally responsible way' (Shepard, 2008). In some ways, this legal reading of SLO has been explored in perceived overlaps with the impact assessment requirements of industry development (Bice and Moffat, 2014), and in the emergence of the term in the formal instruments of government (COAG Energy Council, 2013). More recently, the emergence of the term, SLO, in some regulatory frameworks in Australia has started to make establishing 'community confidence' in best practice environmental management a required aspect of stakeholder engagement around major resource projects (Government of South Australia, 2014). For example, the Government of South Australia (2014) argues that such 'community confidence will only be gained where industry and the community work together cooperatively and openly in good faith to develop and achieve mutually acceptable outcomes'. However, while community confidence and trust in institutions may be closely related to achieving an SLO, they are also guite distinct concepts in practice. In this regard, Cook and Gronke (2005) clearly demonstrate that the measures of trust and confidence are empirically distinct highlighting the risk of conflating the two as a measure of SLO (cf. Zhang et al., 2015). However, an increased use of the term by government raises the question as to the changing nature of conditions that companies may be required to meet. This implies that not only the process but also the outcomes of stakeholder engagement and the realization of mutually acceptable outcomes may become critical to securing legal permissions. It also reflects a return to the 'legally defensible approach' raised by Shepard (2008).

These accounts provide insights into the key elements of a social licence and how these elements may relate to each other in practice. Specifically, the social licence may be seen as an inclusive concept, bringing together local and distal communities of interest, government and industry as partners in an ongoing and informal relationship based on mutual trust among the parties. This partnership has the explicit purpose of meeting the needs of these stakeholders, achieving instrumental and less tangible outcomes for community and industry, in particular. The relationship is also conceptualized as a vehicle to mitigate and manage the inevitable impacts of large-scale resource development and extraction, with the alignment of expectations and experiences of development impacts a key indicator for and driver of community

satisfaction and acceptance. In turn, ensuring the community's needs are met allows companies to conduct their activities relatively unencumbered. While Shepard's (2008) account may reflect a hard industry-centric position, it does serve to emphasize the critical role of government in setting out the formal legislative frameworks within which informal relationships among the different stakeholders in resource development projects are established and maintained.

Exploring the relationship between social and legal licences

The social licence term presents as a social analogue for a legal or formal licence. This undoubtedly has intuitive appeal for industries accustomed to meeting the conditions of formal licensing or permitting processes, and it may be this common language which accounts for its broad usage among industry stakeholders. The language of SLO perhaps gained initial appeal within industry because it mirrored the language of the legal licences used by many companies engaged in resource development activities that have a clear environmental impact. The metaphor is not perfect, however, and while the social and formal licences cannot be understood in exactly the same terms (Del Pino, 2003), an examination of their relationship to each other is illustrative. A legal licence is issued by a governing authority, whereas a social licence is perceived as something that must be earned from a community of stakeholders. Although regulation may provide an indication of the minimum standard of behaviour that will be expected of an operation, regulatory approval does not necessarily equate to social approval of that same activity. Thus, an SLO is clearly not a static concept but reflects the changing strength and quality of the level of acceptance and approval granted by a community.

Thus, legal and social licences speak to what is acceptable behaviour by companies from quite different perspectives. Where the terms of a legal licence are located in the legislation of the relevant jurisdiction, the terms of a social licence are located in the values, expectations and perceptions of a broad set of stakeholders. Therefore, social licence remains intangible unless these qualities are measured or quantified (Nelsen and Scoble, 2006; Thomson and Boutilier, 2011). The discussions of the social licence construct have mainly focused on the relationship between resource development operations and communities, or networks, of stakeholders (Thomson and Boutilier, 2011). For the most part, this has focused on those interactions at a local level (Lacey et al., 2012; Moffat and Zhang, 2014); however increasingly, SLO is also being considered at national and international scales (Zhang and Moffat, 2015; Zhang et al., 2015). This shifts the focus from the nature of the interactions between single operations and their local communities (i.e. the direct site of impact) to assessing whether companies or even entire industries are deemed acceptable to the broader public of citizens and stakeholders (e.g. Moffat et al., 2014a, b; 2015). This implies that SLO is no longer solely located or relevant at the local scale but may also need to be considered at a variety of spatial scales in keeping with the range of stakeholder perspectives that are relevant or influencing the situation at any given time. As the scope of stakeholder interests around a given issue continues to increase, questions have been raised about whether the positions and views of those most directly impacted should be given more weight in decision-making. It is increasingly recognized that there is a need

to understand SLO at multiple scales simultaneously, as just as local issues can be affected by distal stakeholders, so too can localized issues impact on the reputation of industries at the national and international scales (Morrison, 2014; Zhang et al., 2015). This may have important implications for the forest sector with the changing nature of local and national interactions among stakeholders, particularly with efforts aimed at providing market access to local communities. Further, there is also a critical temporal difference between these types of licence, with a formal permit generally granted at the beginning of an operation and continuing throughout its life so long as its conditions are met. The social licence, in contrast, is described as being impermanent, subject to continual evaluation and renewal by local community members and other stakeholders based on the activities of the operation (Parker et al., 2004; Nelsen and Scoble, 2006) and how they meet the needs of community members and other stakeholders (Kurlander, 2001; Salzmann et al., 2006).

The most critical difference, however, is that while a legal licence is granted by a regulating authority or government, the social licence is ostensibly granted by the 'community' (Lacey et al., 2012; Thomson and Boutilier, 2011). Thus, while a government can define and enforce detailed legislative requirements for a mining licence, a social licence is a much more contestable construct. In some cases, this has allowed industry considerable leverage in shaping what constitutes this 'licence' and their part in establishing and keeping it. This raises a number of questions, not least what constitutes a community, who within it may grant and take away a social licence, and who is involved in shaping what constitutes community acceptance. Gunningham et al. (2004) and others (Solomon et al., 2008) suggest that much of the power of communities lies in their ability to impact negatively on the reputation of companies. By eroding this store of reputational capital through negative publicity, product boycotts and high profile legal challenges, for example, communities may reduce the flexibility of companies to operate in political and requlatory contexts, and thereby reduce their competitiveness. Threat to a company's reputation, brands and profit is a key driver for investing in attaining a social licence (Salzmann et al., 2006; Solomon et al., 2008; Moffat et al., 2015). For these reasons, it is also often regarded as an 'essential complement to a regulatory licence to mine' (Solomon et al., 2008: 142).

Who defines the terms of a social licence?

The promise of the social licence construct appears to be that it characterizes a mutually beneficial relational state between stakeholders, who are involved in or affected by resource development, built on mutual trust and agreement. Yet, the operationalization of this construct and its disjointed and problematic treatment in the (limited but growing) literature has undermined its potential to date. For example, the mining industry has a complex relationship with the term. On the one hand, industry leaders have strongly and explicitly endorsed the concept (e.g. Kurlander, 2001), whereas organizational communication has remained ambiguous and ambivalent on the other. A recent discourse analysis of sustainability reporting by ICMM member companies found industry actors to be circumspect at best when discussing the topic in formal communication (Parsons and Moffat, 2014). This study analysed the use of the term 'SLO' (or variants) in the 62 available sustainability reports published by ICMM members between 2006 and 2009. Companies generally conceived the social licence to be a tangible asset or commodity, with intrinsic value that made it worth 'gaining and maintaining'. Overwhelmingly, however, companies did not speak to who was involved in gaining a social licence, what they did to secure it (i.e. company behaviour or strategies) and with whom it was secured (i.e. community). In this context then, the social licence is constructed in concrete terms but in a way that makes it very difficult to discern what a company has actually done (or is doing) to secure such a valuable commodity.

In a direct survey of mining industry views on social licence, Nelsen and Scoble (2006) canvassed attendees of a Canadian mining conference. In line with definitions of the construct, Nelsen and Scoble (2006) reported that 90 per cent of respondents described a social licence as being intangible and an impermanent measure of community acceptance for a mining project. Despite this, the majority of participants indicated that a (very tangible) 'letter of support from the community' would indicate their operation had a social licence (Nelsen and Scoble, 2006). Moreover, 'maintaining a positive corporate reputation' was rated the most influential factor in gaining a social licence, with 'educating local stakeholders about the project' close behind. 'Going beyond legal and regulatory compliance' was rated 13th. These views are also reflected in the tools employed to explore and understand what attributes are perceived to underpin an SLO. For example, case study work has been published advocating for the use of organizational development and strategic planning tools such as 360° feedback tools (Phillips, 2008) and 'situational analysis' methods (Nelsen and Scoble, 2006) including assessments of political, economic, social and technological data (i.e. a 'PEST' analysis) and strengths, weaknesses, opportunities and threats (i.e. a 'SWOT' analysis) to an operation.

Taken together, mining industry conceptualizations of the social licence construct have at times seemed inconsistent and reflecting a desire to exert control over the relationship with project stakeholders through traditional and transactional organizational frameworks (e.g. reputation management, information gathering and provision, strategic planning tools). Organizational behaviours required to attain a social licence are framed as extensions of usual business practices (e.g. Parker et al., 2004;2008), and organizational communication around the construct and industry's role in securing a social licence has been ambiguous and vague (Parsons and Moffat, 2014). Discourse and literature written from the perspective of industry can be seen to constrain the voice of communities, minimize or exclude it in discussions of what constitutes a social licence, and how a company may attain one (e.g. Nelsen and Scoble, 2006; Phillips, 2008). For a construct where 'the degree of match between stakeholders' individual expectations of corporate behavior and companies' actual behavior' (Salzmann et al., 2006: 5) may reflect the likelihood of holding a social licence, excluding community from the discussion about what constitutes its terms is highly problematic.

Community perspectives and legitimacy

Even where community is explicitly involved in consultation processes around new or existing resource development, the potential for mismatched expectations among the many stakeholders in these operations is high (Bice, 2013). For example, in a study of mining-affected communities in Australia, Cheney *et al.* (2001)

found that local communities felt marginalized in what was perceived to be a pre-determined development trajectory defined together by state government and mining companies. Community members also reflected that companies and communities had distinctly different worldviews and held different value sets. This is even more likely in the context of Indigenous peoples on whose land resource development is taking place (Banerjee, 2000; O'Faircheallaigh and Corbett, 2005), particularly where a stakeholder approach which involves 'providing a seat at the table' may reduce a radically distinct and prior historical claim to one among a series of other interests to be traded off, effectively limiting the possibility of SLO with key cultural and community groups. This difference in worldview between companies, communities and government may lead to fundamental misalignment of expectations regarding the terms of their relationship with each other and how a social licence may be developed (Thomson and Joyce, 2006). While Nelsen and Scoble (2006) see the route to gaining a social licence through maintaining positive corporate reputation and educating local stakeholders about a project, Thomson and Joyce (2006) point out that community members, in their experience, were more often concerned about whether they were respected, listened to, and whether they would be allowed to participate in the development of an operation. These criteria represent the procedural fairness in those companycommunity interactions but these differences bear out the powerlessness that Cheney et al. (2001) observed among community members and reflect a more general disconnect between a key company driver to 'make a deal' and that of community to establish a relationship (Joyce and Thomson, 2000). The importance of procedural fairness in public participation has been widely documented in the forest sector (Tabbush, 2004; Loxton et al., 2014).

While intuitively the concept of an SLO imbues a community of stakeholders with power to withhold permission for an operation to commence or continue using reputational levers or appealing to organizational CSR principles, the reality may be somewhat different. In reality, this power may be blunted through the types of tools and methods used to understand and articulate the social licence (e.g. Nelsen and Scoble, 2006; Phillips, 2008), the organizational frameworks through which the construct is imagined and interpreted (e.g. Parker et al., 2004, 2008), and the language used by industry to describe how different actors engage with each other to develop it (Owen and Kemp, 2012; Lacey and Lamont, 2014; Parsons and Moffat, 2014). Even when all key stakeholders are explicitly invited into a conversation regarding the nature and shape of future resource development, asymmetric power relations between parties, and differences in value sets, worldviews and perspectives are still likely to create opportunity for mistrust and conflict. As Swain and Tait (2007) observe, creating and sustaining trust among parties with conflicting goals and with deeply different underlying values remains one of the major challenges of effective participatory processes, and this equally relates to the engagement and dialogue that underpins an SLO.

Who is a legitimate partner in the social licence to operate?

As noted earlier, it is evident in many discussions of the social licence construct that the relationship is often assumed to describe or infer interactions at the local or operational level. In this understanding of SLO, it is the operation that needs to gain a social licence rather than the company, and it is the local community

that has the (almost exclusive) legitimacy to provide it. However, this emphasis ignores the contextual reality, and definitional emphasis (e.g. Warhurst, 2001), that government and its institutions, in particular, play an influential role in establishing the platform from which a relationship based on mutual trust between stakeholders may be built. It also excludes other non-local actors being considered as legitimate voices in the development of a social licence, potentially reducing the diversity of opinion, resources and knowledge available to low-power groups in particular (i.e. community) in establishing realistic expectations of other parties to the development (e.g. the company, government) and assessing actions against them.

Increasingly however, obtaining and maintaining an SLO of a mining project is no longer limited to the localized nature of the interaction between a company and a local community. In this regard, there is now ample research demonstrating that the SLO of mining projects at the local and regional scales can be affected by what happens at national or even international scales (Hood, 1995; Haarstad and Floysand, 2007; Kirsch, 2007; Prno and Slocombe, 2012). Even at the national level, the benefits and negative impacts associated with mining frequently dominate the national conversations and policy-making processes. For example, Zhang and Moffat (2015) investigated how people evaluate the benefits and negative impacts of mining, and how this evaluation, in turn, affects the extent to which citizens are willing to support mining activities in Australia. Similarly at the international scale, acceptance of mining is highly context dependent. Different socioeconomic and political systems under which mining developments take place significantly influence how mining is viewed by citizens, which in turn influences local conditions for acceptance of a mining operation (Zhang et al., 2015). In many cases, both mining and forest companies are multinational operations with interests and activities around the world, equally affected by these local and global shifts.

Thus, favouring a narrow definition of the legitimate partners in a social licence neglects the organizational reality in a modern and globalized world. Policy developed centrally by multinational companies tends to be applied in local contexts, shaping the tools, approaches and attitudes of those organizational members responsible for building relationships with local stakeholders and shaping their expectations. Decisions regarding organizational investment in new and existing operations are almost universally made in locations far removed from the local context. Indeed, for most companies engaged in resource development, it is the views of their shareholders, that most amorphous and geographically dispersed set of stakeholders, that provide the ultimate word on how and where an organization conducts its activities. Community actions that threaten or restrict operations are by extension of material interest to this group (i.e. Graafland, 2002). These are realities that apply equally to mining and forestry operations.

This is not to say that everyone with a passing interest should have a seat at the metaphorical table where the terms of a social licence are hammered out, but to suggest that a social licence is not the exclusive domain of fence-line community members and operational managers. Local actors are closest to the operational reality of resource development, but this does not make the concerns of society expressed through government legislation or more directly towards companies less legitimate in the context of what makes an operation, or the industry more broadly,

'acceptable'. The views of operational managers about the importance of building trust with their communities are likewise only part of the social licence story; the decision to sell or downsize an operation may be made on another continent yet may fundamentally change the views of local community members regarding the current operation or any future similar activities. As such, limiting the legitimate partners in a social licence to local actors fails to recognize the complex set of relationships that influence how resource development takes place and potentially disadvantages those local stakeholders without global resources to draw upon in representing their interests. As research in the forestry field demonstrates, even where there are sophisticated regulatory schemes for securing sustainable management and local welfare in place, recognizing local stakeholders as legitimate voices remains a difficult, yet crucial task for the equitable regulation of resource development (cf. Lesniewska and McDermott, 2014; McDermott et al., 2015).

Can SLO be measured?

Given the dominant focus on the intangible nature of SLO, the idea of quantitatively measuring and documenting it has been contested. Some in industry see SLO becoming a key performance indicator that will underpin the quality of stakeholder relations in the future (cf. Lacey *et al.*, 2012 for mining industry views), whereas others have suggested the concept will always remain too difficult to measure (Owen and Kemp, 2012). In the mining context however, there is already evidence that the drivers of SLO at the local operational level as well as at national and international scales can be systematically modelled and measured by conducting large-scale surveys of citizen attitudes (Moffat and Zhang, 2014; Zhang and Moffat, 2015; Zhang *et al.*, 2015).

At the local operational level, for example, Moffat and Zhang (2014) developed an integrative model to understand the paths to community acceptance of mining operations. Their analysis revealed that building trust with local communities is crucial for mining companies to obtain and maintain an SLO. This trust is fundamentally shaped by the contact quality and procedural fairness through which mining companies deal with communities, as well as mining operation's negative impact on social infrastructure. As such, the research did not only highlight the importance of trust but also identified the strongest predictors of trust from the perspective of community members. The research highlights the importance of fair treatment and high-quality engagement of companies with communities, alongside the mitigation of operational impacts, in securing and holding an SLO. The value of measuring SLO in these contexts also allows for consistent and robust benchmarking of social performance across time as an operation develops. This also allows mining companies to understand the separate and proportional influence that operational impacts and community engagement activities have on the level of trust in companies, and the resulting acceptance and approval of their operations.

Similarly, large-scale survey research at the national scale assessing citizen attitudes towards the mining industry (as opposed to localized impacts) has also revealed the key predictors of trust in the mining industry, and in turn, the drivers of societal acceptance of the industry. Figure 1 illustrates an empirically validated model of SLO that highlights procedural fairness, distributional fairness and confidence in governance as the key predictors of trust, and in turn acceptance (or SLO) of the industry (Zhang *et al.*, 2015). This model was developed based on over 13,000 citizen responses testing attitudes to the mining sector collected in Australia, Chile and China over 2 years.

Research like this demonstrates the power of quantitative methods when applied to large and systematic datasets, in particular for teasing apart the complexity of the manifold relationships between resource development industries and society more broadly. It also demonstrates the capacity to understand and model the nuance that exists within those relationships, as well as measure and benchmark changes over time. Consistent and well-defined measures will help assist industry, communities and governments to understand what constitutes a social licence and what supports relationships between these stakeholders leading to better outcomes for all parties. The model developed by Zhang et al. (2015) demonstrates that societies with different social, cultural and political backgrounds may have different views on what is most important in determining trust and, in turn, acceptance of mining activities. This can be reflected at the national scale in the high-level differences between the drivers of trust and acceptance that exist in Australia, Chile and China. Alternatively, such data can also reveal the differences that exist amona communities within these nations, such as variations in the perceptions of communities living alongside mining operations and those of urban communities, for example. Such a model of social licence can help us to understand the strengths in these relationships and also the weaknesses. By modelling the critical elements of SLO, it can be determined what is needed in order to ensure how fairer processes can be prioritized, how industry and government can work more effectively to promote fair sharing of the benefits of resource development for citizens, or even how governance of the industry can be improved. There is no reason why similar concerns could not be explored in determining the SLO of the forest industry around the world - from local through to national and even international scales of operation.

In the earlier section on Sustainability and Civil Society Participation in Two Industries, we briefly summarized how these two very different resource development sectors – forestry and mining – have developed two quite distinct approaches in the pursuit of societal acceptance of their operations, i.e. the social



Figure 1 Model of social licence to operate predicting trust in and acceptance of mining. The arrows indicate significant predictive relationships between elements, which may be positive or negative. The strength of these predictive relationships often varies between contexts but the elements themselves have been found to remain unchanged across highly variable contexts.

licence to operate. One approach has sought direct acceptance by specific local communities, e.g. through greater participation or co-management with local people as well as reforms of tenure and use rights. The other approach has been for industries and governments to pursue a more diffuse acceptance of these industries through efforts to achieve transparency in their global supply chains, e.g. by promulgating certification schemes or legality verification regulations. In the forestry sector, both approaches emerged as a result of societal pressures and the reputational concerns of the industries in question, which in turn encouraged those industries to actively engage in policy development at the national and international scales (cf. Leipold et al., under review: Sotirov et al., under review). Hence, measuring and potentially modelling societal acceptance of forest and land management practices could be of vital importance to the forest industry and policymakers. It may also provide a useful tool for establishing baseline assessments and ongoing evaluations of the pathways and activities required to achieving an enduring social licence in this industry.

Conclusion

It is recognized that SLO is still an emergent concept in the forest sector. However, the power of the social licence construct to move beyond rhetorical device to affect real change will determine its future. As with constructs such as FPIC (Mahanty and McDermott, 2013), the utility of the social licence construct depends on the extent to which stakeholders in resource development adopt the principles that describe and underpin it. There is a very real danger that social licence to operate will come to mean everything and nothing, with academics, community engagement practitioners, companies, politicians, NGOs and community aroups all using the term to speak to an impossibly diverse set of concepts or as justification for whatever (community oriented or interested) action is taken in resource development contexts. While there is a risk that various interest groups (industry, government or communities) might choose to seize upon the term to meet their own political objectives and goals (Bice and Moffat, 2014), there is perhaps also potential to think about SLO as a way of building consensus among diverse perspectives, particularly in terms of building trust and fairness in stakeholder relations.

Thus, we argue that the term also holds a degree of promise in that it provides a route to developing dialogue between stakeholders involved in or affected by resource developments in a number of ways. First, this may include making explicit the relationship between the actions of a company and the relational consequences with a community (i.e. the business case for doing better). Key to this is developing an understanding of how the relationships between key definitional elements operate, and how the (mis)match of community expectations and experiences relates to the subsequent acceptance and approval of resource development operations. This is particularly relevant in forestry where the renewable nature of the resource also means that operations continue over much longer time periods, and with many generations of stakeholders. Second, there is real value in understanding the mechanisms underpinning SLO, and the way they operate. This includes the central role of trust in these relationships and what might be required to build genuine trust between stakeholders. It also includes understanding exactly how procedural fairness, the distribution of benefits from forestry and citizen confidence in governance of the industry can contribute to greater trust and acceptance of how the world's critical forest resources are managed.

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