



Putting social license to operate on the map: A social, actuarial and political risk and licensing model (SAP Model)



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ABSTRACT

The social license to operate, as promoted within the fields of corporate social responsibility and impact assessment studies, has entered the business mainstream, especially in the mining and extractives sector. While it is invoked increasingly as a means of claiming legitimacy, the concept remains conflicted, implying that the social license terrain may be more complex and broader than conventional conceptualizations suggest.

In this paper the authors draw attention to a suite of licenses and related risks that shape the issues surrounding mining and extractives companies' quest for a social license to operate. These are captured in a holistic license and risk model, the social, actuarial and political risk and licensing model (SAP Model). Drawing on research from corporate social responsibility and impact assessment studies fields, the paper introduces the SAP Model and suggests how it enables improved exploration of the meaning, intention and probable implications of the various licenses and associated risks facing the mining and extractives sector. In so doing, it contributes a more contextualized understanding of social license to operate, especially for the corporate social responsibility and impact assessment fields of research.

1. Introduction

Recent decades saw the academic fields of corporate social responsibility (CSR) research and impact assessment (IA) studies gain prominence. Both fields have a developing focus on the social license to operate (SLO) concept. Within the CSR realm, the so-called business case for *doing business the right way* has received considerable attention but remains elusive (Crane and Matten, 2007). Research suggests that CSR's business value may lie in its ability to improve firm performance via reputational gains and better competitive advantage (Porter and Kramer, 2011). Although a universal definition of CSR remains debatable, it is generally agreed that 'CSR reflects the social imperatives and social consequences of business success' (Matten and Moon, 2008: 405). This close linkage to business success has arguably been instrumental in attracting business to adopt and institutionalize CSR, especially among multinational corporations (Bondy et al., 2012).

Companies in the global mining and extractives (M & E) sector¹—where social and environmental impacts are common and substantial—have been particularly responsive to the emerging CSR agenda. Research shows that they are alive to the increasing cost of paying

insufficient attention to what were traditionally seen to be non-core areas of business (Davis and Franks, 2014). The perceived role of a social license in protecting M & E companies against conflict-related costs partly explains its popular uptake in the sector (Owen and Kemp, 2013; Prno, 2013). For example, recent M & E-related case studies from around the world demonstrate that SLO is seen as a means of supporting multi-stakeholder engagement in China (Huang et al., 2017), an important component in the debate about deep sea mining off the coast of Papua New Guinea (Filer and Gabriel, 2017) and even as a means to understanding historical opposition to mining projects in Finnish Lapland (Lesser et al., 2016).

Attention to SLO in the global M & E sector reflects emerging situations in a number of impactful industries, such as forestry, agriculture, hazardous waste transport, fishing and wind farms (Lacey et al., 2016, 2014; Hall et al., 2015; Hall, 2014; Prno and Slocumbe, 2014). While this paper uses case examples from M & E projects, it is likely that the discussion and ideas contained within it will prove relevant to a variety of industries in which firms are seeking to perform *beyond compliance* and respond to stakeholder concerns (Gunningham et al., 2004).

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¹ By 'mining and extractives' sector we mean those businesses that extract minerals for commercial production, including the processing and treatment of ore, and those that extract oil and gas.

Much of today's M & E industry is highly, formally regulated and governed by voluntary codes, as well as corporate responsibility commitments, although considerable work remains to be done in less developed countries. These structures include government regulations (e.g., environmental impact assessment (EIA) requirements), industry-based initiatives (e.g., International Council on Mining and Metals Principles for Sustainable Development) and intergovernmental agency commitments (e.g., United Nations Global Compact). M & E firms are progressively expected to meet not only mandated regulatory requirements but also to demonstrate responsible behavior towards the communities in which they operate (Dashwood, 2012). Governments' expectations also stretch beyond regulatory compliance and include concern for companies' contributions to local and national economies and communities.

For many years, these expectations and related activities have been captured under the banner of CSR, sustainable development or similar agendas. Lately, however, the SLO concept has been gaining prominence (Thomson and Boutilier, 2011) and taken a steadily important position in M & E companies' strategies and in communities' relationships with local operators. While definitions vary, a SLO is generally understood to be: "the ongoing acceptance and approval of a [project] by local community members and other stakeholders that can affect its profitability" (Moffat and Zhang, 2014: 61). Requirements for such a license run the gamut from worker safety to cultural sensitivity, and the degree of social license granted by a community may range from withheld/withdrawn through to assimilation of a firm within the community fabric (Thomson and Boutilier, 2011). Communities are also using the term, largely as a means of resistance to unwanted M & E operations in their neighborhoods (Bice, 2014) or as a form of negative governance (Owen and Kemp, 2013).

While both CSR and SLO are described as concepts with staying power and significant potential to influence corporate-community relations and activities (Bice and Moffat, 2014; Prno and Slocombe, 2012), they have also been subject to considerable criticism. For example, the social license rhetoric is seen by some as "an industry response to opposition and a mechanism to ensure the viability of the sector" (Owen and Kemp, 2013: 29). Similarly, within the CSR space the dominant business case logic is regarded as limited to firms merely demonstrating their economic contribution (i.e., employment, taxes, royalties) to stakeholders, treating as implied their social license on the basis of the monetary benefits their operations promise to generate (Brueckner et al., 2014). The overly optimistic assumption of the frictionless convergence of commercial and social interests not only strikes as ideological (Toft, 2015) and reminiscent of the Friedmanite position on CSR (Friedman, 1970), it also risks reducing the SLO and CSR agendas to firms' economic legitimacy. This positioning fails to address the more deep-seated and potentially conflicted issues surrounding business-community relations (Brueckner and Mamun, 2010).

In Australia, the focal point of this paper, cases of conflict between M & E companies and their host communities remain common (Brueckner and Ross, 2010; Pini et al., 2010). Despite improved corporate attention to CSR (Franks et al., 2009) and widespread espousal of the social license in Australia (Bice, 2014), companies' social legitimacy (or that of their operations) continues to be questioned by local communities even where projects and industries garner political support and regulatory approval. Thus, ongoing community opposition attests to a conflicted licensing terrain and raises new questions about the nature of the social license concept and its ability to capture the variety of risks and pressures exerted on M & E firms, affected communities and governments. Australia's long-term economic reliance on the M & E industry, its strong regulatory environment and complex political context—in which State and Commonwealth governments jostle for resource control—make it a rich case for exploration of the contemporary risk and licensing terrain.

Against this background, the argument made here is that a broader

conceptualization of the risk and licensing terrain is needed to fully apprehend the nature and dynamics of contemporary corporate-community-government relations, especially relative to SLO. It is suggested that corporations need to operate beyond compliance, meeting the requirements of actuarial (regulated) licenses, stakeholder expectations (social license to operate) and government agendas (political license to operate). To this end, the paper introduces the SAP Model where social, actuarial and political licenses are understood within a dynamic, comprehensive risk framework (adopted from Haines, 2011) as a means of conceptualizing the new, broader licensing landscape facing the sector. This model facilitates exploration of key issues not just through the corporate lens but also through that of major stakeholders, contributing to scholarly research on SLO and CSR through its exploration of the concepts' power dimensions and politicality and further developing theorizations of dynamic risks, especially social risk.

The SAP Model opens the potential for new analyses of SLO that would allow the license to be better understood within context and in relation to its dynamic interplay, not only with stakeholder relationships or social capital, but with the other main licenses affecting a project's status. Such analyses could contribute to the more rigorous interrogations of SLO certain scholars argue are necessary (Owen, 2016). The SAP Model also presents evaluative opportunities, for example, to explore whether and how a SLO is in tension or alignment with other licenses, or to consider whether social, political or regulatory factors hold greater weight in certain cases.

This paper, therefore, aims to put SLO on the map, to situate it within its broader context of the complementary and competing risks and licenses that shape its operation and influence. The following sections offer illustrative evidence of this situation to explore several central research questions:

- What risks and licenses constitute the contemporary risk and licensing terrain and how do they relate to one another?
- How might the SAP Model help to interrogate the meaning, intersections and probable implications of the various risks and licenses theorized?
- What are the implications of the SAP framework for both SLO and CSR theory and praxis?

The paper commences with a review of recent developments in the theorization of SLO and related discussions about CSR, especially with reference to the frequently downplayed issues of power and politicality. The following section introduces and juxtaposes the suite of social, actuarial and political licenses and places them in Haines' (2011) dynamic risk framework with a view to explain the diverse and often competing concerns and interplay among stakeholder groups. The ensuing discussion focuses on the consequences of this dynamic risk framework for understanding the set of licenses required by today's M & E operations. Consideration is given in closing to opportunities for future research through employing the SAP Model.

2. Conflicted SLO/CSR theory and praxis

The term *social license to operate* was coined in 1997 by ex-Placer Dome executive Jim Cooney. The idea's wide acceptance in today's M & E industry and beyond (see, for example, Hall et al., 2015; Lacey et al., 2014; Williams et al., 2007) led Cooney to quip recently that he wished he had trademarked the term (Leyne, 2014). While social licenses remain a metaphorical device (Bice, 2014), SLO expertise is increasingly being sought within industry to assist with the measurement and monitoring of firms' social licenses (Prno and Slocombe, 2012). In recent years, growing and intensifying business-community conflicts over industrial development have resulted in project proponents, communities and governments placing greater emphasis on the "power, role and expectations" of social licenses (Bice and Moffat, 2014: 257). This situation has also catalyzed research into social license

issuance and governance, and the various procedural aspects of social licensing (Moffat and Zhang, 2014). While still a nascent concept, SLO has become an ubiquitous and extensively used means through which firms seek legitimacy by showing concern for social and environmental issues (Aguilera et al., 2007) but without the pressures of binding regulation (Owen and Kemp, 2013).

Whilst recognizing the pitfalls of regulating social licenses, the very notion of a social license providing company or project legitimacy in the absence of compliance pressures (Wilburn and Wilburn, 2011) has also attracted critique (Owen and Kemp, 2013). For example, the generation of the term from within the M&E industry, and proponents' tendencies to lay claims to a social license without adequate stakeholder consultation and with limited reference to licensing criteria or brokerage are found to be problematic (Bice, 2014; Parsons and Moffat, 2014). While the industry's acknowledgement of the importance of obtaining and retaining a social license is welcomed, it is also criticized due to the largely naïve (or expedient) treatment of the inherent complexities associated with social licensing relating to the 'issuance' of a social license and attendant questions about informed consent, stakeholder inclusion and power relations (Solomon et al., 2008). As the SLO field remains theoretically and conceptually underdeveloped in this regard (Owen et al., 2013), industry practices often assume the form of a cost–benefit or offset approach to community relations, which rests on the assumption that adequate compensations can be made for adverse industry impacts (Harvey and Bice, 2014). Yet, especially for a sector that understands itself as a “development industry that creates new social possibilities” (Cutifani, 2013: 5), it is important for resource companies to engage with the local and social intricacies of their host communities (Owen and Kemp, 2013) and to establish relationships built on trust. Instead of employing a risk- and reputation-driven approach that prioritizes social issues primarily as a means of realizing business benefits (e.g., minimal project delays) and merely responds to the business case of securing a social license, firms need to develop an understanding of local contexts and the needs and aspirations of local people, demonstrating that *they are listening and keeping their promises* (Boutillier, 2009). As suggested by Black (2013): 19 “benefits like bringing new jobs to a region [...] are often cited by companies as if this were enough to establish a social license. It's not.”

Discussions of SLO, in practice and in the research literature, are often couched within the context of firms' social performance via CSR. While CSR is important to SLO, it is still limited in its ability to capture the complexity of the environment in which SLO operates. It is worth taking a moment briefly to review CSR here to demonstrate its contributions and limitations related to understanding the contemporary risk and licensing terrain for M & E companies. In contrast to SLO, early CSR discourse dates back to the early years of the twentieth century, emerging as a counterweight to the corporate profit *leitmotif* and market libertarianism. By the 1950s, it had evolved into an altruistic and moral concept, while still remaining on the margins of academic debate and business practice. Only in recent decades has CSR shaken its image as a subversive doctrine (Lee, 2008) and surfaced as a widely accepted basis for business success (Idemudia, 2009). The now prominent business case for CSR (Schreck, 2011), which translates firms' attention to their social and environmental management obligations into business benefits (Porter and Kramer, 2006, 2007) is underpinned by a win-win ideology that is purported to overcome the profits–ethics dualism. Accordingly, companies can be profitable whilst contributing to the welfare of communities in which they operate (Banerjee, 2007), a notion supported by research focused on the—albeit often tenuous—links between firms' positive financial and economic performance and their CSR strategies (Orlitzky, 2005). Although certain studies indicate that CSR may not improve financial performance (Hadani and Schuler, 2013), a business case logic remains prominent.

Not only does CSR provide corporate capitalism with a ‘friendlier face’ (Doane and Abasta-Vilaplana, 2005: 23), it is also presented as a

concept that is both ‘rational’ (Dean, 2010: 18) and ‘ideationally neutral’ (Blowfield and Dolan, 2008: 2). Yet, the very form and meaning of CSR remains highly contested, and CSR theory is far from being unified or coherent (Crane et al., 2007). Also, much mainstream CSR scholarship does not acknowledge the complex, ideologically charged and politically contested nature of CSR (Idemudia, 2010). The impact of contextual factors on CSR practice is a case in point with a growing body of literature pointing to marked differences in CSR governance and practice in different country and industry contexts (Geppert et al., 2006; Turkina et al., 2015). In Australia's M & E context, for example, a number of industry–community conflicts surrounding resource development projects speak to the impact of the political environment on CSR practice, showing how a political pro-development climate can affect the nature and extent of resource companies' CSR strategies (Brueckner and Mamun, 2010). Despite a growing awareness of how firms' social and political contexts affect corporate choices (Matten and Moon, 2008) and shape their willingness to commit to, and operationalize CSR, considerations such as these rarely feature in the mainstream CSR debate (Bice, 2015a).

While it is beyond the scope of this paper to engage with the varied and substantial CSR literature, it is worthwhile noting that the CSR literature that draws upon new Institutional theory is particularly fruitful for examining the intersections between CSR and SLO. Such literature understands CSR as implicit or explicit, as influenced by social norms and pressures, and as motivated by a complex web of social mechanisms (Bice, 2015a). For example, even the brief review above speaks to a so-called *decoupling* (after Meyer and Rowan, 1977: 340) between SLO and CSR principles and practices (Bice, 2015b) with both fields at risk of being self-referential (Owen and Kemp, 2013: 31) and self-declaratory (Morrison, 2014: 141). While both SLO and CSR highlight the importance of a genuine engagement with the social dimension of business and of espousing social concern, this engagement remains largely limited to the narrow logic of the business case of self-defined responsible practice; an attempt at socializing the economic mind-set of business (after Banerjee, 2006) without challenging its fundamental values (Blowfield, 2005).

Thus, in this paper there is a call for a shift away from the narrow focus in the SLO and CSR fields and for greater attention to be paid to the impact of broader contextual factors, including regulation and politics, as well as the structural and ideological influences that shape, define and limit the SLO and CSR agendas (following Wesley, 2014). Such a reorientation might require a renewed focus on the *social* within SLO and CSR theorizing with greater emphasis on how, by whom and on what/whose terms various competing stakeholder interests are balanced and addressed. The SAP Model introduced below is intended as a vehicle for the explication and enhancement of these conflicted aspects of SLO and CSR, and for better capturing the complex risk and licensing environment in which SLO exists.

3. Introducing the SAP model

The social, actuarial and political risk and licensing model (SAP model) offers a conceptual means of exploring more deeply the complexities and interrelations highlighted in the paper's opening sections. It is helpful to provide a brief overview of the SAP Model here, before detailing the theory and structure behind it. Fig. 1, below, illustrates the key relationships and interactions that constitute the SAP Model. The diagram represents the wheel of influences and interactions between complex and competing groups and interests, all rotating around a dynamic but central ‘public interest’. Key stakeholder groups in society influence one another and their interactions flow through and are affected by experiences and perceptions of political, social and actuarial risks. Stakeholders' interactions with these risks, in turn, influence the granting or withholding of three related licenses—social, actuarial and political—as defined in the following sections. In theory, these licenses both protect and represent

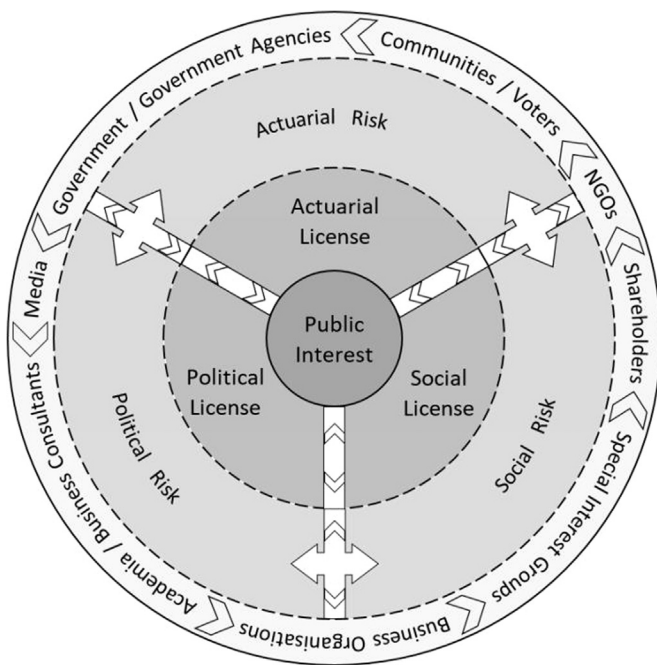


Fig. 1. The SAP model (Adapted from Haines (2009, 2011) and Morrison (2014)).

the public interest, which is informed by these interactions to consequently feedback to stakeholders. In an ideal situation, stakeholders' concerns about each type of risk would be considered and attended to, all licenses would be granted and upheld and, as a result, the public interest would be served. In reality, not only is the public interest changeable, multi-faced and notoriously difficult to define (Newman and Clarke, 2009), it is rare that all three licenses would be in balance or treated equally to achieve such equilibrium.

The following sections explore the social, actuarial and political licenses central to the SAP Model, extending a similar approach taken by Morrison (2014) and embedding these in the dynamic risk framework developed by Haines, (2011, 2009). In doing so, critical risk and license considerations are combined to explore how these are addressed and weighted by key stakeholders, illuminating the tensions inherent in the contemporary licensing and operating terrain and capturing the meaning, intention and probable implications of the various risks and licenses at play.

3.1. Social license to operate

Social licenses are not formally issued and thus cannot be seen as tangible contracts or documents (Franks and Cohen, 2012). Instead, they are better understood as a form of social acceptance or approval of companies through their trust building engagements with stakeholders (Moffat and Zhang, 2014) and their meeting of local community expectations, as well as those of the wider society and other constituents (Gunningham et al., 2004). This forms the basis for the legitimacy of a company or a project (Black, 2013). According to Morrison (2014), legitimacy, trust and consent are preconditions for the existence of social licenses (see, Fig. 2), which are also affected by contextual factors such as the creation of wider societal benefits, the sharing of knowledge and relinquishing of power and providing transparency and accountability, as well as minimizing and adequately compensating for adverse impacts. Fig. 2, for instance, illustrates the complex considerations at work within SLO and helps to reveal the intricate layers of concerns implicit in the SAP Model.

The corporate quest for a social license centers on relationship building with stakeholders and thus differs from philanthropic spending and investments in communities (Morrison, 2014). Thus, the 'issuance' of a social license often necessitates that companies go

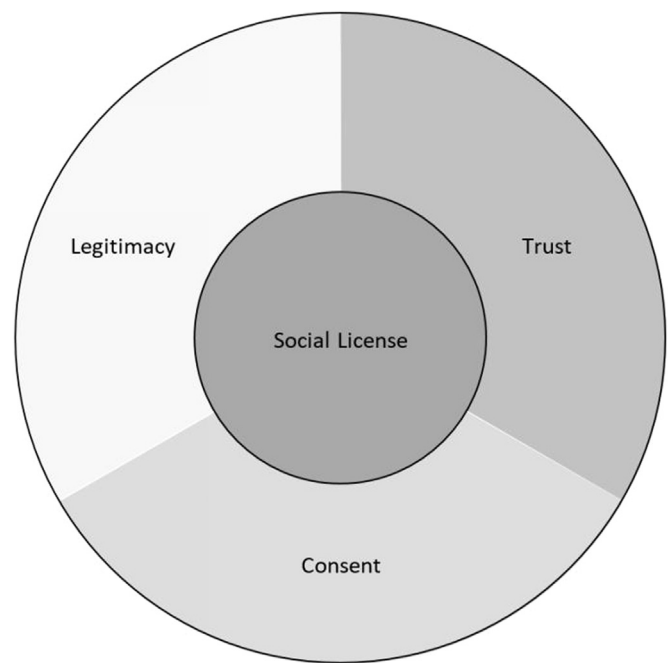


Fig. 2. The social license and its building blocks (Adapted from Morrison, 2014: 20).

beyond mandatory, regulatory compliance (Gunningham et al., 2004) to address growing societal expectations that stretch to the political and social realms. The wide uptake of this broader CSR agenda is said to be evident in the M & E sector despite the constraining character of CSR on company activities (Dashwood, 2012). However, certain CSR and social license related activities may be seen as stretching M & E companies beyond appropriate roles in communities and even exonerating governments of traditional responsibilities. For example, Harvey and Bice (2014) write about the challenges and 'role creep' that can occur for companies, governments and community members when companies directly fund or deliver welfare programs, such as health and education, or unilaterally construct civic infrastructure. Then again, the adoption of an enlightened SLO and CSR rhetoric can also be seen as a form of *discursive regulation* (Bridge and McManus, 2000) and as a way of minimizing regulatory impositions by government (Parsons et al., 2014).

3.2. Actuarial (legal) license to operate

Most organization types require legal or actuarial licenses granted by a government authority so as to be able to operate lawfully (Morrison, 2014). These licenses refer to permits and approvals enshrined in regulation, stipulating minimum standards and requirements to be met by organizations and rules of conduct to be followed. Examples include environmental licenses, emission permits, project approvals or occupational health and safety standards.

It is important to remember that certain concerns which are today encompassed by actuarial licenses—at least in the Australian case—were once largely unregulated. In the 1960s, the attainment of high levels of economic prosperity in developed countries with unrestricted access to resources was largely unhindered by regulation. However, the side effects of economic activity triggered concern in light of increasingly visible impacts on social and environmental wellbeing (e.g., air and water pollution, hazardous waste) (Eckersley, 1998) and gave rise to policies that sought to impose constraints on industry. Since the 1970s, legal compliance pressure on business has increased, especially in high impact industries, such as the M & E sector, where governments in numerous countries have started to regulate more closely the planning, operation and closure of mines.

In this sense, actuarial licenses can be reflective of social licenses

(or, at least aspects of SLOs), for they give legal standing to common societal concerns such as process or product safety, emission controls or working conditions. Regulation in this sense can be seen as a means of reducing friction between economic and social interests (Bridge and McManus, 2000) and correcting markets failing to achieve public interest (Bomsel et al., 1996). The regulatory space, however, is highly contested. The forces of globalization, the rise of corporate power, the pervasive fear of government failure and the shrinking role of the state challenge regulation and its effectiveness, as will be explored (Scherer and Palazzo, 2011; Matten and Crane, 2005). Further, regulators also need to find a balance between social and economic demands. Within this knotty situation, they are simultaneously answerable to the public, media, and non-government organizations (NGOs), as well as the business community and special interest groups (Morrison, 2014). Thus, there are considerable political risks and trade-offs involved in policy formulation. In Australia's M & E sector, in particular, there is considerable tension between demands to protect social and cultural values and community health and wellbeing, on the one hand, and pressure to cut 'red' and 'green' tape as a means of fast-tracking resource development approvals and maintaining industry competitiveness, on the other (Australian Government, 2015).

Such tensions are exemplified by ongoing conflicts in Australia, for example, where many communities are withholding a social license from the country's nascent 'unconventional' gas industry. In Western Australia (WA) alone, over 60 local councils have in recent years proactively withdrawn a social license from the industry prior to the development of local gas resources. In other parts of the country, communities have declared themselves 'gas-field free' in an attempt to prevent the establishment and expansion of gas wells and hydraulic fracturing (fracking) processes (Gasfield Free Northern Rivers, 2015; Conservation Council of Western Australia, 2014a, 2014b; Hadji and Sweeney, 2014). Such community opposition is occurring despite these projects and industries garnering political support and even receiving regulatory approval, affirming Harvey's view (cited in Morrison, 2014: 15), that "a piece of paper from a government authority is often not enough for an activity to proceed". To illustrate, despite holding coal seam gas (CSG) extraction licenses, Australian gas major AGL recently reported an AU\$435 million asset impairment when it was unable to advance its New South Wales CSG projects that were the sites of intense community protest (AGL, 2015). Situations such as these highlight the significance of a social license and help explain industry investments in beyond-compliance measures.

3.3. Political license to operate

Recent research asserts that the SLO concept is no longer adequate to explain the competing interests, values and agendas influencing M & E firms' behaviors in relation to their social and environmental impacts and choices (Brueckner et al., 2014). Such concern has led to theorizing about the real-existence of a political license to operate (PLO). Based on an in-depth study on the sustainability of mining in WA, Brueckner et al. (2014) found that the state's developmentalist policy agenda (after Kellow and Niemeyer, 1999) overran social license concerns, with the WA government prizing and sanctioning economic legitimacy (after Boutilier and Thomson, 2011) over other concerns. In the face of localized community agitation against mining interests, both the mining industry and the government were seen to place greater emphasis on the resource sector's contribution to the state's economic agenda. In other words, local concerns were traded off against the industry's contribution to investment, employment creation and royalty payments. As a result, the PLO issued by the WA state government to mining interests was found to have subordinated and masked the very social and environmental impacts that would normally affect the perception of an earned social license. Perceived weaknesses in state regulation, monitoring and enforcement (Chandler, 2014; Roche and Mudd, 2014) served to compound what Bice (2013: 138) calls "crises of

identity and sustainability"; the communities most affected by resource development and thus most likely to benefit from a social license seemed also to be "often forgotten, frequently misunderstood, and [...] comparatively less researched".

Based on the above findings Brueckner et al. (2014): 315 defined the PLO as "a politically derived license representing government approval of, and support for, an industry based on its contribution to a state's economic development agenda". For the purposes of the SAP Model introduced in this paper, however, a broadening of this perspective is needed. Here, PLO must also be more widely understood as a license applicable to the legitimacy of government. More generally, a political license might be thought of as both a license to govern and an authority given by government to an organization to undertake a particular activity (Morrison, 2014). Firms' economic contributions may certainly be a factor in the issuance of a PLO. However, their contribution to the public interest also matters since political licenses often speak to social license aspects. While in authoritarian regimes a political license may be all that matters (Morrison, 2014), in democratic settings political decision-making ought to be aligned with broader societal interests, as misalignment can otherwise translate into political risks and voter backlash.

To illustrate, around 2011 there was considerable public disquiet in WA about one resource company's very public reversal on a promise reached between it, the WA State Government and the local Shire of Ashburton for the company to invest AUD\$250 million in the form of infrastructure, facilities and services in the town of Onslow. The commitment was generally positively received and was expected to boost the town's population from 667 people (Australian Bureau of Statistics, 2013) to about 2000 permanent residents by 2022; growth that was seen as positive by the community (DSD Department of State Development, Government of WA, 2014). But following direct renegotiations between the company and the State Government only, the company gained approval to house workers outside of Onslow and contested the original \$250 million investment commitment. This backtracking on agreements made during the early project development stage put the project and the company's SLO under strong scrutiny, with the local community noting that, while the workers would now be housed outside of town, the accommodation would still impact negatively on the town's water, power and waste management resources without the anticipated economic benefits derived from workers being located in town (Shire of Ashburton, 2014). In this case, a strong PLO between the State Government and the developer appears to have overrun the process transparency, impact mitigation and benefits to community related to SLO.

3.4. Risk and regulation

The widespread acceptance of SLO and the increasing influence of PLO points to the tight interlacing of voluntary and mandatory regulation for impactful industries. These interactions are so critical, they have been the subject of much scholarly scrutiny in the resources policy literature. Researchers concerned about these interactions, for instance, illuminate the politicized norms influencing corporate behavior (Dashwood, 2007), explore the interrelations of state policies and non-state actors and their programs (Gulbrandsen, 2014), and examine the role of disclosure and transparency (Haufler, 2010). An entire field of literature debates the most appropriate voluntary/mandatory regulatory mix or suggests improvements to regulatory practice. The SAP Model demonstrates that the connections between regulation, risks and licenses cannot be ignored, and aims to extend and enrich these literatures. While a full discussion is beyond the scope of the paper, it is helpful to outline core debates before connecting social, actuarial and political licenses with their commensurate risks.

There is currently a global trend for governments to pare back regulation with a view not to deregulate, but to create 'good regulation' (Aguilera et al., 2007). This movement can be seen in the development

of new regulatory tools and improved regulatory efficiencies (Haines, 2011) and in widespread post-Global Financial Crisis efforts to avoid regulatory capture, wherein regulators become too close to regulated entities, compromising enforcement (OECD, 2013). It is also reflective of shifts in attitudes about what regulation can and cannot achieve for businesses and communities (Haines, 2011). It represents decreasing government control over multinational corporations that themselves have become more active political actors (Scherer and Palazzo, 2011), a circumstance that has partly influenced the proliferation of transnational governance initiatives, especially in the M & E industry. From a business perspective, previously accepted arguments that business gains from regulation have largely been replaced by a neoliberal deferral to the market (Grabosky, 2013) and a sense that “regulation can be counterproductive” (Haines, 2011: 17). Alternatively, scholars like Christine Parker (2002) argue that it is the changing nature of the corporation and the institutionalization of responsibility that drives increased corporate self-regulation. Still others assert that communities empowered with new media skills and the ability to hold corporations to account result in progressively stringent expectations and standards, especially in hazardous or highly impactful industries (Braithwaite, 2008).

In Australia, for example, the acceptance of the SLO in the M & E industry is strongly linked with desires to reduce red and green tape while simultaneously promoting best practice. The tape cutting agenda is one fully supported by peak industry bodies, including the Minerals Council of Australia (MCA Minerals Council of Australia, 2014) and the Australian Petroleum Production and Exploration Association (APPEA Australian Petroleum Production and Exploration Association, 2014). The Commonwealth Government's Productivity Commission recently launched a cutting red tape website and is pushing a ‘one-stop-shop’ for environmental licenses and a broad red tape cutting agenda (Australian Government, 2015). Meanwhile, the Chief's Scientist's Office explicitly links M & E industry activities with the national economy, environment and community benefit in its Science and Research Priorities for the Nation (Chubb, 2015), underlining the importance of achieving an effective and efficient regulatory mix.

The push for tape cutting, combined with the other drivers highlighted above, has contributed to an acceptance of governance beyond government; a situation where good regulation is not necessarily government-derived or mandatory and where voluntary or self-imposed regulations proliferate (Vogel, 2008) and firms seek to perform beyond compliance (Gunningham et al., 2004). This environment supports acceptance of social and political licenses as legitimate regulatory mechanisms. The criteria for good regulation, then, do not include enshrinement in legislation, but regimes marked by the qualities of: accessibility, accountability, consistency, transparency, being well-targeted at the concern in question, effectiveness in reducing risk and enforceability (Haines, 2011). The paper proposes that a dynamic risk perspective offers a helpful and pertinent means of understanding the increasing acceptance of governance mechanisms, especially the social and political licenses to operate.

Growing acceptance of voluntary governance arrangements also demonstrates the progressively critical role that stakeholders beyond corporations and government play in how social and political licenses are conceptualized and their related risks perceived. Indeed, community support for or objection to industries or projects is heavily informed by particular stakeholders' perceptions of risk (Haines, 2011, 2009). As Haines argues, the ways in which individuals perceive risk and harbor desires for regulation relate directly to their judgments about the types of risk and their potential impacts and benefits, especially those which are most hazardous or even fatal. Thus, particular stakeholders' values, priority concerns, risk perceptions and tolerance, and regulation (here via licensing) intersect. Attention to perceptions of risk enables the conceptualization of the full spectrum of risk types whilst avoiding being reductionist and preventing the weighting of one stakeholder group's risks over another (e.g., actuarial

concerns vs. social concerns).

4. Connecting social, actuarial and political licenses and risks

Risk itself is a contested term, stretched in disparate directions by competing ontologies (Rosa, 1998). Social scientists generally agree that risks are “determinable, calculable uncertainties” (Beck, 1995: 77), but which cannot necessarily be “reduced to the following of scientific rules and procedures” (Rosa, 1998: 20). As such, risk is political in nature (Sapolsky, 1990). It is also dynamic and not irreducible to any one type. This does not mean, however, that risk is wholly subjective. Instead, as Haines (2011:32) suggests, “it is not only possible but necessary to measure and compare across the spectrum of risks facing society at any one time in order to prioritize resources”. Identifying the various types of risk through the SAP Model helps to pinpoint and tease out competing interests or purposes which inform conflict or cooperation around select issues or industries; here, the M & E industry. In so doing, the following section addresses the second research question to demonstrate how the SAP Model facilitates a weighing up of impacts and benefits. The SAP Model also clarifies the troika of licenses necessary for the successful operations of contemporary M & E firms. The Model presents “three independent yet intersecting ideal types of risk” (Haines, 2011: 34), and the ensuing discussion explores how these diverse risk types correspond with actuarial, social and political licenses.

4.1. Actuarial risk

Actuarial risk is perhaps the most widely applied conceptualization of risk, particularly among corporations in relation to auditing and corporate governance. It is traditionally associated with “physical or financial threat” (Haines, 2011: 34) where there is a “reality of harm” (Haines, 2011: 36). It is also commonly associated with business risk (Graetz and Franks, 2015). Here, risk most often equates to an expected loss, with measurable severity and predictability (Aven and Renn, 2009). The International Standards Organization (2009) captures this perspective succinctly when it defines risk as the effect of uncertainty on objectives. It is this approach to actuarial risk as that which can be anticipated, built into scenarios, tested and (theoretically) prevented or mitigated that results in it being the type of risk most commonly regulated. In the Australian M & E industry, actuarial risk is thereby closely associated with exploration or project licenses awarded by government.

For example, experience, data and comparability between operation sites facilitate the creation of reliable risk frequency and probability scenarios concerning a proposed mine's environmental impact. This allows companies to anticipate and analyze acceptable risks and to make decisions about the environmental risks they are willing to bear, the risks which are acceptable under relevant regulation, and the resources and procedures that must be in place to prevent or mitigate particular risks to meet requirements and achieve project licensing. These considerations also acknowledge the importance of local conditions to prevent environmental damage. This is reflected in the close relationship between environmental impact assessment (EIA)—a risk and benefit assessment of operations—and the regulation of EIA in disparate locations globally (Morgan, 2012). In line with actuarial risk's focus on probability and frequency, attention to actuarial risks through regulated EIA and incorporation into international law and global lending standards (e.g., The Equator Principles) reflects the perception of environmental or human rights risks as posing real but identifiable harm which can be predicted, measured and mitigated.

Through its close relationship to regulation, actuarial risk is positioned as a kind of threshold risk, a line beyond which firms enter the legal realm of ‘corporate irresponsibility’ (Jones et al., 2009). It captures those issues—most commonly environmental and financial—

that must be addressed in order to achieve minimum, government-based approvals for project operation. But as the contemporary governance environment described above suggests, attention to actuarial risk and related actuarial licensing is no longer sufficient to support successful M&E operations. Nor is it suggested that attention to actuarial risks, as they are defined here, is sufficient to cover off all risks associated with a project; hence, the consideration of social and political risks.

4.2. Social risk

Socio-cultural risk (here, social risk) is most often presented in contrast, but also as a necessary complement to, actuarial risk. It is variously described as “a situation or event where something of human value (including humans themselves) is at stake and where the outcome is uncertain” (Rosa cited in Aven and Renn, 2009: 1) or as “events or behaviors identified as a threat to social order by a particular community at a particular time” (Haines, 2011: 43). The key to social risk is that it values *perceptions* about potential risks or hazards, thereby validating community concerns in a way actuarial risk cannot. While usually more value-laden, moral or emotional than those risks classed as actuarial, social risks are not inherently irrational. Social risks are sincerely experienced by individuals and communities as signs of danger and allow community members to signal their concerns for the broader society in which they live (Douglas, 1992). Thus, attention to social risks may become an important means of performing citizenship, especially in terms of articulating or protecting the public interest (see, Fig. 1), and of demonstrating belonging in society, revealing “an emotional as much as an intellectual logic” (Haines, 2011: 44).

For M&E operations, social risks demonstrate the complex interweaving of those issues (e.g., environmental impacts) which can be measured objectively and managed via actuarial risk assessment and the—oftentimes varying—community perceptions and concerns (Black, 2013), which may be more difficult to pin down but are felt just as strongly. As the Integrated Risk Governance Council (2005) explains, “both the ‘factual’ (i.e., actuarial) and the ‘socio-cultural’ dimension of risk need to be considered if risk governance is to produce adequate decisions and results” (12). Or, as Haines (2011: 45) describes it, “[communities’] interdependence is center stage and with that [their] interaction with government and other sources of authority are critical”. This positioning speaks directly to the role of governance and the relevance of the social license. When linked to social risk and when understood as being in dynamic play with actuarial and political risks (and their related licenses), as suggested in the SAP Model, the granting of a social license signifies an appropriate level of attention to, and action against, social risks.

It is important to note that the conceptualization of social risk embraced here is in contrast to traditional understandings of social risk in the M&E industry, wherein social risk has been commonly defined as “the risk(s) to businesses/operations arising from interactions with, and the actions of, host communities” (Graetz and Franks, 2015: 2). Graetz and Franks (2015), for instance, have demonstrated the importance of teasing out social risk from business risk (i.e., actuarial) to avoid negative impacts for business and communities, especially in the M&E industry. It is equally important, therefore, that social risks are attended to through regulatory or governance mechanisms that acknowledge their uniqueness. In the absence of regulation, the social license has an important role to play here. Yet, even where attention is paid to social and actuarial licensing requirements, political pressures introduce a third type of risk, one which may play a particularly decisive role where actuarial risks can be addressed but social risks remain concerning.

4.3. Political risk

Political risk comprises two major, sometimes competing concerns.

First, it relates to the risk faced by an elected government of losing legitimacy and the commensurate political capital and authority which such legitimacy delivers (Haines, 2011). Legitimacy-related political risks extend far deeper than the ‘legitimation crises’ (Habermas, 1979) linked to re-election or concern with the 24-h news cycle, although these may be of immediate concern to governments at high-risk. Political risks hold the potential to undermine government’s legitimacy, with the worst-case situations resulting in conflict and even violence. Secondly, political risk relates to the economic responsibilities and accordant risks governments face via their responsibility to ensure appropriate resources to support the public interest.

In political risk, a tight interweaving of economic drivers and requirements—both local and global—can be seen, highlighting the ways in which economic performance may influence a government’s legitimacy in the eyes of its constituents. Political risk is particularly thorny where economic pressures may encourage policy decisions, which—while promoting economic prosperity—fail to acknowledge or trade-off identified social or actuarial risks. The M&E industry in Australia again provides a salient example and demonstrates the ways in which political risks affect a government’s political license. In June 2010, following a heated public debate with the M&E industry over the federal Labor government’s proposed Resources Superprofits Tax, Prime Minister Kevin Rudd was ousted by his deputy, Julia Gillard. While more complex than a stoush over taxes, the influence of the M&E industry in Australia—the sector is regularly credited as the reason Australia survived the GFC—played a major role in undermining Rudd’s political legitimacy (Chubb, 2014). Following another change in leadership in June 2013 and election of a Liberal-National coalition government later that year, a leading Australian economist warned that the federal government’s short-term focus on the economic component of political risk brings their legitimacy into question, as difficult, long-term policy decisions are being avoided. Thus, the competing pressures of political risk relate directly to a government’s PLO. Or, as Douglas (1992) explains, the public holds a desire to account for political risk, which is reflected in a more basic desire for order and the normative constraints commensurate to that desire.

5. Connecting risks and licenses

In this section, the connections between risks and licenses are interrogated further to show how those captured in the SAP Model are not only related but also in tension with one another. Indeed, they may even be competing, depending on perspectives, agendas and the power of various stakeholders related to different types of risk. Throughout this discussion, the paper points to the implications of the SAP Model for SLO and CSR theory and practice, and to potential research agendas.

Public interest, understood here in terms of public welfare (Ho, 2013), is central to all three licenses. In the ideal type of risk and licensing arrangements presented in the SAP Model, risks are addressed and licenses granted in such a way as to balance the three areas of consideration. The ideal governance aims of each—social, actuarial and political—licensing regime is to reflect and uphold the public interest, which for purposes of the model is held to be both identifiable and agreed. While this may be seen as a theoretical ideal applicable only to representative democracies, it bears note that conflict arising over any of the three licenses, as illustrated by Australian M&E industry examples below, generally entails perceptions of compromised public interest with direct bearing on all three risk domains.

Social, actuarial and political risks arise in part out of the tensions between the social, actuarial and political licenses displayed towards the center of the model (see, Fig. 1), suggesting the three licenses are not only connected and interdependent (Morrison, 2014) but also in friction with one another. In the Western Australian M&E sector, for example, the state government’s economic agenda effectively outweighed communities’ withholding of a social license from various M

& E projects, privileging the government's political license (Brueckner et al., 2014). Here, the political license won out by overriding social license concerns. In other situations where political licenses are dominant, political or commercial interests may instead attempt to leverage the social license to bolster their position.

Assertions about a social license, however, are quite different to using it successfully to support one's position. The mere claim of a SLO is open to challenges and can translate into considerable risks for those declaring to have it. For example, conflict erupting over coal seam gas (CSG) developments in Victoria and New South Wales in recent years saw public opposition to the supposed issuance of both social and political licenses. Public protest prompted these two states to impose temporary moratoria on hydraulic fracturing operations and related exploration. These suspensions were placed by both state governments even though in many of the conflict areas actuarial licenses were obtained by the respective industry proponents (Grudnoff, 2014; Organ, 2014). In other words, challenges to social and political licenses can override actuarial licenses. In New South Wales and Victoria growing social and political risks arguably triggered this. Social risk, on the one hand, centered on public perceptions of unacceptable harm to human and environmental health and concerns about land rights or impacts on other industries (Hoare and Rose, 2011). On the other hand, political risk grew due to increasingly widespread public opposition to the CSG industry, comprising of unlikely, albeit powerful, allies such as farmers, conservationists and traditional land owners (Kuch et al., 2013; Walker, 2012).

At other times, actuarial licenses can trump both political and social licenses. Independent assessments carried out by statutory bodies, for example, under Environmental Protection Legislation can run counter to both political and/or social interests (Hasham, 2014; Towie, 2013). Here, ministerial powers generally allow for the potential side-lining of adverse findings and determinations by an EPA. Not only are the findings supporting certain actuarial licenses subjective, the rules and regulations are themselves subject to change, as was the case in an ongoing conflict over coal mining in the Hunter Valley in New South Wales. There, the industry-community stand-off prompted a series of changes to rules governing project approvals (Hannam and Nicholls, 2015), acerbating conflict between interested stakeholder groups.

The cast of stakeholders weighing into debates about social, actuarial and political licenses shown in the outer circle of the SAP Model (see, Fig. 1) can be vast and varied, depending on the context and issue domain. While governments, communities and private sector actors are generally prominent in such debates, license negotiations or contestations frequently also involve the media, research organizations, lobby groups and NGOs. In certain contexts, the stakeholder network could even be widened to include actors at an international level, supranational law-makers and standard setting organizations, as well as the investment community and social and environmental movements. Such a broad array of stakeholders, for example, can be found in the intensifying conflict over proposed coal mining operations in Queensland's Galileo Basin and associated infrastructure developments. In this context, the size of the stakeholder network is determined by the local, regional and global ramifications of the project related to its climate change impacts, associated risks to the World Heritage-listed Great Barrier Reef, traditional land rights and local community concerns, as well as international finance and foreign corporate interests (Robertson, 2015; Taylor, 2015).

With different stakeholder groups representing segmented interests and operating from different power bases, as shown previously, license negotiations are prone to be highly complex and political in nature. This point speaks directly to their close connection to the dynamic risk framework. Government and industry interests, for instance, may pursue development goals and prize economic values (e.g., CSG or coal in Australia), while community stakeholders may hold different value sets arguing for social justice, environmental sustainability or Indigenous rights (Solomon et al., 2008). Independent expertise is

often called upon to either diffuse tensions or to bolster positions held within licensing debates, frequently leading to the politicization of science and expert knowledge in the competing claims arena (Jasanoff, 1986). The media can often, even unwittingly, act as an echo chamber for conflicts and inform, as well as frame, public perceptions. In doing so, they may act politically or become politicized (Herman and Chomsky, 2002).

Overall, it is this power-laden interplay of competing demands and interests that determines the level and kinds of risk that license stakeholders face, compounded by the competing risks the licenses themselves carry. This was shown earlier in relation to political risks and the need for the careful balancing of a government's political legitimacy and its economic responsibilities. The SAP Model thus sheds more light on a highly dynamic licensing and risk environment in which complex stakeholder arrangements and often colliding stakeholder interests necessitate the negotiation of multiple licenses and risk types in order to achieve an outcome that is in the public interest.

6. Discussion and future research agendas

This paper takes the growing prevalence of SLO among multinational corporations, especially in the Australian M & E industry, as its launching point. It demonstrates that attention to SLO must be considered within a broader, dynamic framework comprising the holistic risks and licenses required for successful M & E operations, as captured by the SAP Model, introduced here. The SAP Model provides an overview of the wider, conflicted risk and licensing terrain facing many contemporary firms. Examples from the Australian M & E industry show each license in context with its corresponding risks for different license stakeholders and illustrate how this multitude of interests shapes the risk profiles of actors, their choices and behaviors and, ultimately, licensing outcomes.

This paper conceptually establishes the SAP Model but is unavoidably limited in its ability to apply the model or take up many of the important questions its application will generate. Necessarily, much is left unanswered but an important agenda for future research is being set out. The SAP Model could be applied to give expression to the different motivations of license stakeholders and to explicate the inherent tensions between them. By making visible the generally complex stakeholder arrangements, underlying drivers and associated power dynamics, the SAP Model has a descriptive as well as predictive character. Indeed, an understanding of actors' motivations, their risk profiles and relative power can assist in projecting outcomes in licensing negotiations. The SAP Model could be combined with strategic action frameworks (Johanson and Mattsson, 1992), for example, to interrogate the ways in which the different licenses are used to jockey for position and advance outcomes desired by particular stakeholder groups.

The SAP Model also helps to highlight the double-edged nature of licenses themselves, showing how licenses subject to stakeholder constellations and power dynamics can translate into risks which themselves are varied. Its central focus on the public interest also encourages a recalibration of what is largely a corporate risk perspective within mainstream theory, emphasizing the centrality of the *social* in the licensing space. Finally, while examples focused on here are in the M & E industry, the SAP Model is likely to have broad sector application, especially for impactful industries. Overall, further research would help to develop deeper insights into the nature and workings of complex licensing which is central to contextualizing and improving understanding of the SLO and CSR enterprise. In this regard, the SAP Model provides a solid platform for further research.

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References

- AGL, 2015. Upstream gas review results in impairments of circa \$435 million after tax FY15 underlying profit guidance unchanged. ASX, (6 July) (<http://www.agl.com.au/about-agl/media-centre/article-list/2015/july/upstream-gas-review-results>).
- Aguilera, R.V., Rupp, D.E., Williams, C.A., Ganapathi, J., 2007. Putting the S back in corporate social responsibility: a multi-level theory of social change in organizations. *Acad. Manag. Rev.* 32 (3), 836–863.
- Australian Bureau of Statistics, 2013. *Census QuickStats: All People Usual Residents: Western Australia*, available from: (http://www.censusdata.abs.gov.au/census_services/getproduct/census/2011/quickstat/540057280), viewed on 13/9/2015.
- Australian Government, 2015. Cutting red tape, available from: (<https://cuttingredtape.gov.au>). (accessed 21 May 2015).
- APPEA Australian Petroleum Production and Exploration Association, 2014. Red tape repeal day. (accessed 21 May 2015), (http://www.appea.com.au/media_release/red-tape-repeal-day/).
- Aven, T., Renn, O., 2009. On risk defined as an event where the outcome is uncertain. *J. Risk Res.* 12 (1), 1–11.
- Banerjee, S.B., 2007. Corporate Social Responsibility: The Good, the Bad and the Ugly. Edward Elgar, Cheltenham, UK.
- Banerjee, S.B., 2006. The problem with corporate social responsibility. In: Clegg, S., Rhodes, C. (Eds.), *Management Ethics: What is to be done?*. Palgrave, New York, 55–76.
- Beck, U., 1995. *Ecological Politics in an Age of Risk*. Polity Press, Cambridge.
- Bice, S., 2015a. Bridging corporate social responsibility and social impact assessment. *Impact Assess. Proj. Apprais.* 33 (2), 160–166.
- Bice, S., 2015b. Corporate social responsibility as institution: a social mechanisms framework. *J. Bus. Ethics*, 1–18.
- Bice, S., 2014. What gives you a social license? An exploration of the social license to operate in the Australian mining industry. *Resources* 3 (1), 62–80.
- Bice, S., Moffat, K., 2014. Social license to operate and impact assessment. *Impact Assess. Proj. Apprais.* 32 (4), 257–262.
- Black, L., 2013. *The Social License to Operate: Your Management Framework for Complex Times*. Do Sustainability, Oxford.
- Blowfield, M., 2005. Corporate social responsibility - the failing discipline and why it matters for international relations. *Int. Relat.* 19 (2), 173–191.
- Blowfield, M., Dolan, C.S., 2008. Stewards of virtue? The ethical dilemma of CSR in African agriculture. *Dev. Change* 39 (1), 1–23.
- Bomsel, O., Börkey, P., Glachant, M., Lévêque, F., 1996. Is there room for environmental self-regulation in the mining sector? *Resour. Policy* 22 (1–2), 79–86.
- Bondy, K., Moon, J., Matten, D., 2012. An institution of corporate social responsibility (CSR) in multi-national corporations (MNCs): form and implications. *J. Bus. Ethics* 111 (2), 281–299.
- Boutiller, R., 2009. *Stakeholder Politics: Social Capital, Sustainable Development and the Corporation*. Stanford University Press, Stanford.
- Boutiller, R.G., Thomson, I., 2011. Modelling and measuring the social license to operate: fruits of a dialogue between theory and practice. Accessed 5 May, <http://sociallicense.com/publications/Modelling and Measuring the SLO.pdf>.
- Braithwaite, J., 2008. *Regulatory Capitalism: How it Works, Ideas for Making it Work Better*. Edward Elgar, Cheltenham.
- Bridge, G., McManus, P., 2000. Sticks and stones: environmental narratives and discursive regulation in the forestry and mining sectors. *Antipode* 32 (1), 10–47.
- Brueckner, M., Durey, A., Pforr, C., Mayes, R., 2014. The civic virtue of developmentalism: on the mining industry's political license to develop Western Australia. *Impact Assess. Proj. Apprais.* 32 (4), 315–326.
- Brueckner, M., Mamun, M.A., 2010. Living downwind from CSR: a community perspective on corporate practice. *Bus. Ethics: A Eur. Rev.* 19 (4), 326–348.
- Brueckner, M., Ross, D., 2010. Under corporate skies: a struggle between people, place and profit. Fremantle Press, Perth.
- Chandler, L., 2014. Regulating the resource juggernaut. In: Brueckner, M., Durey, A., Mayes, R., Pforr, C. (Eds.), *Resource curse or cure? On the Sustainability of Development in Western Australia*. Springer, Heidelberg, 165–177.
- Chubb, I., 2015. *The science and research priorities and practical research challenges*. Canberra.
- Chubb, P., 2014. *Power Failure. The Inside Story of Climate Politics Under Rudd and Gillard*. Collingwood, Vic: Black Inc., Agenda.
- Conservation Council of Western Australia, 2014a. "Industry and investors warned gas fracking will not be welcome in Southwest. Media Release." 14 October. (<http://ccwa.org.au/media/industry-and-investors-warned-gas-fracking-will-not-be-welcome-southwest-sthsh.QHR7wsvI.dpuf>).
- Conservation Council of Western Australia, 2014b. "Mid West local residents tell Norwest at company AGM: fracking not welcome on the Turquoise Coast. Media Release." 27 November. (<http://ccwa.org.au/media/mid-west-local-residents-tell-norwest-company-agm-fracking-not-welcome-turquoise-coast?Page=2-sthsh.W4JmYIiw.dpuf>).
- Crane, A., Matten, D., 2007. Corporate social responsibility as a field of scholarship. In: Crane, Andrew, Matten, Dirk (Eds.), *Corporate social responsibility Volumes I, II & III*. Sage, London.
- Cutifani, M., 2013. Mining's contribution to sustainable development. *Afr. Min. Indaba* 2013 4–7 (<http://www.icmm.com/document/5043>).
- Dashwood, H.S., 2012. *The Rise of Global Corporate Social Responsibility: Mining and the Spread of Global norms*. Cambridge University Press, Cambridge, UK.
- Dashwood, H.S., 2007. Canadian mining companies and corporate social responsibility: weighing the impact of global norms. *Can. J. Political Sci.* 40 (1), 129–156.
- Davis, R., Franks, D., 2014. *Costs of company-community conflict in the extractive sector. Corporate Social Responsibility Initiative Report No. 66*. Cambridge, MA.
- Dean, M., 2010. *Governmentality: Power and Rule in Modern Society*. Sage Publications, London.
- DSD Department of State Development, Government of WA, 2014. 'Massive Community Investment Benefits Onslow', available from: (<http://www.dsd.wa.gov.au/news-media/news-detail/2014/12/09/Massive-community-investment-benefits-Onslow>). (accessed 20 August 2015).
- Doane, D., Abasta-Vilaplana, N., 2005. The Myth of CSR. The problem with assuming that companies can do well while also doing good is that markets don't really work that way. *Stanf. Social. Innov. Rev.* 3 (3), 23–29.
- Douglas, M., 1992. *Risk and Blame: Essays in Cultural Theory*. Routledge, London.
- Eckersley, R., 1998. *Measuring Progress: Is Life Getting Better?*. CSIRO Publishing, Collingwood, Victoria.
- Filer, C., Gabriel, J., 2017. How could Nautilus Minerals get a social licence to operate the world's first deep sea mine? *Mar. Policy*.
- Franks, D., Fidler, C., Brereton, D., Vancley, F., Clark, P., 2009. Leading practice strategies for addressing the social impacts of resource developments. Briefing paper for the Department of Employment, Economic Development and Innovation, Queensland Government. Brisbane.
- Franks, D.M., Cohen, T., 2012. Social license in design: constructive technology assessment within a mineral research and development institution. *Technol. Forecast. Social. Change* 79 (7), 1229–1240.
- Friedman, M., 1970. The social responsibility of business is to increase its profits. *New York Mag.*, 13th Sept., 122–126.
- Gasfield Free Northern Rivers, 2015. Gasfield free communities., (accessed 17 March 2016), (<http://csgfreenorthernrivers.org/csg-free-communities/>).
- Geppert, M., Matten, D., Walgenbach, P., 2006. Transnational institution building and the multinational corporation: an emerging field of research. *Human. Relat.* 59 (11), 1451–1465.
- Grabosky, P., 2013. "beyond responsive regulation: the expanding role of non-state actors in the regulatory process." *Regul. Gov.* 7 (1), 114–123.
- Graetz, G., Franks, D.M., 2015. Conceptualising social risk and business risk associated with private sector development projects. *J. Risk Res.* 19 (5), 1–21.
- Grudnoff, M., 2014. *Fracking the future: busting industry myths about coal seam gas*. Canberra.
- Gunningham, N.A., Kagan, R.A., Thornton, D., 2004. Social license and environment protection: Why businesses go beyond compliance. *Law Social. Inq.* 29 (2), 307–341.
- Gulbrandsen, L.H., 2014. Dynamic Governance interactions: evolutionary Effects of state responses to non-state certification programs. *Regul. Gov.* 8, 74–92.
- Habermas, J., 1979. *Legitimation Crisis*. Heinemann, London.
- Hadani, M., Schuler, D.A., 2013. 'In search of El Dorado: the elusive financial returns on corporate political investments'. *Strateg. Manag. J.* 34, 165–181.
- Hadji, R., Sweeney, P., 2014. Greenough says no fracking. *Guardian* 15.
- Haines, F., 2011. *The Paradox of Regulation: What Regulation Can Achieve and What it Cannot*. Edward Elgar Publishing, Cheltenham.
- Haines, F., 2009. Vanquishing the Enemy or Civilizing the Neighbour? Controlling the Risks from Hazardous Industries. *Soc. Leg. Stud.* 18, 397–415.
- Hall, N.L., 2014. Can the 'Social Licence to Operate' Concept Enhance Engagement and Increase Acceptance of Renewable Energy? A Case Study of Wind Farms in Australia. *Social. Epistemol.: A J. Knowl., Cult., Policy* 28 (3–4), 219–238.
- Hall, N., Lacey, J., Carr-Cornish, S., Dowd, A.-M., 2015. Social license to operate: understanding how a concept has been translated into practice in energy industries. *J. Clean. Prod.* 86, 301–310.
- Hannam, P., Nicholls, S., 2015. Planning rule change gives hope to Bulga, other communities facing big mines. *Syd. Morning Herald*. (<http://www.smh.com.au/environment/planning-rule-change-gives-hope-to-bulga-other-communities-facing-big-mines-20150706-gi6bvh.html>).
- Harvey, B., Bice, S., 2014. Social impact assessment, social development programmes and social license to operate: tensions and contradictions in intent and practice in the extractive sector. *Impact Assess. Proj. Apprais.* 32 (4), 327–335.
- Hasham, N., 2014. Coal seam gas concerns 'valid', says EPA chief. *Syd. Morning Herald*. 13 (<http://www.smh.com.au/nsw/coal-seam-gas-concerns-valid-says-epa-chief-20141013-115913.html>).
- Haufier, V., 2010. Disclosure as governance: the extractive industries transparency initiative and resource management in the developing world. *Glob. Environ. Polit.* 10 (3), 53–73.
- Herman, E.S., Chomsky, N., 2002. *Manufacturing Consent the Political Economy of the Mass Media*. Pantheon Books, New York.
- Ho, L.S., 2013. *Public Policy and the Public Interest*. Routledge, Abingdon, Oxon.
- Hoare, R., Rose, S., 2011. *Waste Manag. Environ.* 22 (5), 38.
- Huang, X., Fayssse, N., Ren, X., 2017. A multi-stakeholder platform involving a mining company and neighbouring villages in China: back to development issues. *Resour. Policy* 51 (1), 243–250.
- Idemudia, U., 2009. Oil extraction and poverty reduction in the niger Delta: a critical examination of partnership initiatives. *J. Bus. Ethics* 90 (1), 91–116.
- Idemudia, U., 2010. Rethinking the role of corporate social responsibility in the Nigerian oil conflict: the limits of CSR. *J. Int. Dev.* 22 (7), 833–845.
- Integrated Risk Governance Council, 2005. *White paper on risk governance. Towards*

- an integrative approach. Geneva.
- International Standards Organization, 2009. *Risk management vocabulary*. Geneva.
- Jasanoff, S., 1986. Risk management and political culture. A comparative study of science in the policy context, social research perspectives. Occasional reports on current topics. New York: Russell Sage Foundation.
- Jones, B., Bowd, R., Tench, R., 2009. Corporate irresponsibility and corporate social responsibility: competing realities. *Social. Responsib. J.* 5 (3), 300–310.
- Kellow, A., Niemeyer, S., 1999. The development of environmental administration in Queensland and Western Australia: why are they different? *Aust. J. Political Sci.* 34 (2), 205–222.
- Kuch, D., Ellem, G., Bahnisch, M., Webb, S., 2013. *Social license and communications report*. Newcastle.
- Lacey, J., Moffat, K., Zhang, A., Ashworth, A., 2016. Earning a social licence for alternative transport fuels. In: Clark, R., Thomson, M. (Eds.), *Transport Fuels from Australia's Gas Resources*. University of New South Wales Press Ltd, Sydney.
- Lacey, J., Moffat, K., Zhang, A., Ashworth, P., 2014. Earning a social license for alternative transport fuels. In: Clark, Robert, Thomson, Mark (Eds.), *Transport fuels from Australia's Gas Resources*. UNSW Press, Sydney, 207–281.
- Lee, M.D.P., 2008. A review of the theories of corporate social responsibility: its evolutionary path and the road ahead. *Int. J. Manag. Rev.* 10 (1), 53–73.
- Lesser, P., Suopajarvi, L., Koivurova, T., 2016. Challenges that mining companies face in gaining and maintaining a social license to operate in Finnish Lapland. *Mineral. Econ.*, 1–11.
- Leyne, L., 2014. 'Social license' comes home to roost. *Colonist 18* (<http://www.timescolonist.com/opinion/columnists/les-leyne-social-license-comes-home-to-roost-1.1135452>).
- Matten, D., Crane, A., 2005. Corporate citizenship: towards an extended theoretical conceptualization. *Acad. Manag. Rev.* 30, 166–179.
- Matten, D., Moon, J., 2008. 'Implicit' and 'explicit' CSR: a conceptual framework for a comparative understanding of corporate social responsibility. *Acad. Manag. Rev.* 33 (2), 404–424.
- Johanson, J., Mattsson, L.G., 1992. "Network positions and strategic action: an analytical framework." Axelsson and Easton (eds) *Industrial Networks: A new view of reality*: 205–217. London: Routledge.
- Meyer, J., Rowan, B., 1977. Institutionalized organizations: formal structure as myth and ceremony. *Am. J. Sociol.* 83 (2), 340–363.
- MCA Minerals Council of Australia, 2014. Red tape reduction - A great first step. Accessed 21 May, (http://www.minerals.org.au/news/red_tape_reduction_a_great_first_step).
- Moffat, K., Zhang, A., 2014. The paths to social license to operate: an integrative model explaining community acceptance of mining. *Resour. Policy* 39, 61–70.
- Morgan, R.K., 2012. Environmental impact assessment: the state of the art. *Impact Assess. Proj. Apprais.* 30 (1), 5–14.
- Morrison, J., 2014. *The Social License: How to Keep your Organization Legitimate*. Palgrave Macmillan, Basingstoke.
- Newman, J., Clarke, J., 2009. *Publics, Politics and Power: Remaking the Public in Public Services*. Sage, Los Angeles.
- OECD, 2013. Public consultation on best practice principles for improving regulatory enforcement and inspections: Draft report submitted for publication to the public for comments. Paris.
- Organ, M., 2014. New tactics see coal seam gas protests gain the upper hand. *Conversation* 28, 1–4.
- Orlitzky, M., 2005. Payoffs to social and environmental performance. *J. Invest.* 14 (3), 48–52.
- Owen, J.R., 2016. Social license and the fear of Mineras Interruptus. *Geoforum* 77, 102–105.
- Owen, J.R., Kemp, D., 2013. Social license and mining: a critical perspective. *Resour. Policy* 38 (1), 29–35.
- Parker, C., 2002. *The Open Corporation: Effective Self-regulation and Democracy*. Cambridge University Press, Cambridge; Port Melbourne.
- Parsons, R., Lacey, J., Moffat, K., 2014. Maintaining legitimacy of a contested practice: how the minerals industry understands its 'social license to operate'. *Resour. Policy* 41, 83–90.
- Parsons, R., Moffat, K., 2014. Constructing the meaning of social license. *Social. Epistemol.* 28 (3–4), 340–363.
- Pini, B., Mayes, R., McDonald, P., 2010. The emotional geography of a mine closure: a study of the Ravensthorpe nickel mine in Western Australia. *Social. Cult. Geogr.* 11 (6), 559–574.
- Porter, M., Kramer, M., 2011. Creating shared value. *Harv. Bus. Rev.*, 62–77.
- Porter, M.E., Kramer, M.R., 2007. Strategy and society: the link between competitive advantage and corporate social responsibility - response. *Harv. Bus. Rev.* 85 (6), 136–137.
- Porter, M.E., Kramer, M.R., 2006. Strategy and society: the link between competitive advantage and corporate social responsibility. *HBR Spotlight. Harv. Bus. Rev.* 84 (12), 78–92.
- Prno, J., 2013. An analysis of factors leading to the establishment of a social license to operate in the mining industry. *Resour. Policy* 38, 577–590.
- Prno, J., Slocombe, D.S., 2014. A Systems-Based Conceptual Framework for Assessing the Determinants of a Social License to Operate in the Mining Industry. *Environ. Manag.* 53, 672–689.
- Prno, J., Slocombe, D.S., 2012. Exploring the origins of 'social license to operate' in the mining sector: perspectives from governance and sustainability theories. *Resour. Policy* 37 (3), 346–357.
- Robertson, J., 2015. Adani's Carmichael mine: damage far outweighs benefits, lawyer claims. *Guardian 14* (<http://www.theguardian.com/australia-news/2015/may/14/adanis-carmichael-mine-damage-far-outweighs-benefits-lawyer-claims>).
- Roche, C., Mudd, G., 2014. An overview of mining and the environment in Western Australia. In: Brueckner, M., Durey, A., Mayes, R., Pforr, C. (Eds.), *Resource curse or cure? On the sustainability of development in Western Australia*. Springer, Heidelberg, 179–194.
- Rosa, E.A., 1998. Metatheoretical foundations for post-normal risk. *J. Risk Res.* 1 (1), 15–44.
- Sapolsky, H.M., 1990. The politics of risk. *Daedalus*, 83–96.
- Scherer, A.G., Palazzo, G., 2011. The new political role of business in a globalized world: a review of a new perspective on CSR and its implications for the firm, governance, and democracy. *J. Manag. Stud.* 48 (4), 899–931.
- Schreck, P., 2011. Reviewing the business case for corporate social responsibility: new evidence and analysis. *J. Bus. Ethics* 103 (2), 167–188.
- Shire of Ashburton, 2014. *Chevron Corporation/Shire of Ashburton Memorandum of Understanding*, available from: (http://www.ashburton.wa.gov.au/library/file/Agenda%20Item%2018_1%20Chevron%20Corporation%20%20Shire%20of%20Ashburton%20Memorandum%20of%20Understanding.pdf). (accessed 2 June 2015).
- Solomon, F., Katz, E., Lovel, R., 2008. Social dimensions of mining: research, policy and practice challenges for the minerals industry in Australia. *Resour. Policy* 33 (3), 142–149.
- Taylor, L., 2015. Federal court asked to overturn Adani mine approval due to impact on Great barrier reef. *Guardian 14* (<http://www.theguardian.com/environment/2015/jan/14/federal-court-asked-to-overturn-adani-mine-approval-impact-great-barrier-reef>).
- Thomson, I., Boutilier, R.G., 2011. The social license to operate. In: Darling, P. (Ed.), *SME Mining Engineering Handbook*. Society for Mining, Metallurgy and Exploration: Littleton, CO, 1779–1796.
- Toft, K.H., 2015. Liberal CSR and new Marxist criticism. In: Idowu, Samuel O., Strue Frederiksen, Claus, Yüksel Mermod, Asli, Juul Nielsen, Morten Ebe (Eds.), *Corporate Social Responsibility and Governance*. Springer International Publishing, 303–316.
- Towie, N., 2013. Green light for Roe Hwy angers conservation groups. *WA Today Com. au 13* (<http://www.watoday.com.au/wa-news/green-light-for-roe-hwy-angers-conservation-groups-20130913-2tpmy.html>).
- Turkina, N., Neville, B., Bice, S., 2015. "Rediscovering divergence in developing countries' CSR." In *CSR in Developing Countries: A Development-Oriented Approach*, eds Dima Jamali, Charlotte Karam and Michael Blowfield. Leeds: Greenleaf.
- Vogel, D., 2008. Private global business regulation. *Annu. Rev. Political Sci.* 11 (1), 261–282.
- Walker, C., 2012. Coal, gas and coal seam gas. *Chain React.* 115, 12–15.
- Wesley, A., 2014. "The socio-political construction and experience of corporate social responsibility (CSR): An investigation into the conflict surrounding the James Price Point LNG precinct, Kimberley, Western Australia." PhD, School of Management, Curtin University, Perth.
- Wilburn, K., Wilburn, R., 2011. Achieving social license to operate using stakeholder theory. *J. Bus. Ethics* 4, 3–16.
- Williams, P., Gill, A., Ponsford, I., 2007. Corporate social responsibility at tourism destinations: toward a social license to operate. *Tour. Rev. Int.* 2, 133–144.