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Impact Assessment and Project Appraisal

ISSN: 1461-5517 (Print) 1471-5465 (Online) Journal homepage: www.tandfonline.com/journals/tiap20

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To cite this article: Nicholas Bainton & Anthony Kung (2026) The commercial determinants of social impact assessment in the global mining industry, Impact Assessment and Project Appraisal, 44:1, 13-24, DOI: 10.1080/14615517.2025.2608435

To link to this article: https://doi.org/10.1080/14615517.2025.2608435

IMPACT ASSESSMENT AND PROJECT APPRAISAL
2026, VOL. 44, NO. 1, 13–24
https://doi.org/10.1080/14615517.2025.2608435

The commercial determinants of social impact assessment in the global mining industry

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ABSTRACT

Social impact assessment (SIA) is the most widely applied method for identifying and managing the social effects of mining. Yet, SIA almost always occurs under commercial conditions that constrain its potential to serve the public interest. This paper examines the company-commissioned, consultant-led model that dominates SIA practice in the global mining industry. Drawing on document analysis and interviews with practitioners and regulators, we identify how commercial and structural arrangements influence SIA across four phases of the study cycle – commissioning, proposal, implementation, and application. We argue that the dependence of mining companies on consultants, and of consultants on mining contracts, generates a structural conflict of interest that limits the quality and utility of SIA. Using a systems perspective, we identify reinforcing feedback loops between companies, consultants, and regulators that reproduce low capability, poor-quality assessments, and weak oversight. Incremental reforms that improve standards and practice within this model adjust its parameters but not its rules. The dominant model of SIA exemplifies capitalism's capacity to monetise its own critique, where each call for better assessment becomes a new commercial opportunity. Reclaiming SIA as a practice of public value requires transforming its purpose into a mode of shared governance over mining's social dimensions.

ARTICLE HISTORY
Received 4 November 2025
Accepted 18 December 2025

KEYWORDS
Extractive industries; consulting industry; resource governance; systems thinking; social accountability; anti-politics machine

1. Introduction

The global consulting industry is deeply embedded across public and private sectors, shaping decision-making processes from government policy to corporate strategy. Over the last decade, large firms – particularly the so-called 'Big Four' accounting firms – have extended their services into various environmental, social, and governance (ESG) domains. Consulting firms now implant their influence throughout entire value chains and sectors, with activities spanning countries and continents, affecting all levels of society. Critics have argued that the expansion of the consulting industry has hollowed out public and institutional capacities for independent expertise, while concentrating influence in firms driven by commercial incentives (Mazzucato & Collington 2023). In some jurisdictions the practice has become so blatant that it triggered formal inquiries to investigate.[1] Impact assessment is part of this consulting economy. Large firms dominate the market for environmental impact assessment (EIA), and social impact assessment (SIA) has increasingly been captured by this same pattern. In the global mining industry, most SIAs are company-commissioned and consultant-led, raising critical questions about how commercial conditions influence the quality, purpose, and outcomes of a practice that was originally intended to serve the public good.

We begin with the observation that SIA, like other technical services, operates within a specific set of commercial and institutional arrangements. SIA is shaped by the contractual, organisational, and regulatory environments that govern mining projects. These arrangements include not only corporations and consulting firms but also state regulators, international organisations, and civil society actors that collectively influence how impacts are defined, measured, and managed. Despite the ubiquity of these conditions, there has been limited systematic analysis of these commercial determinants. Addressing this gap, our paper investigates the dominant company-commissioned, consultant-led mode of SIA to understand how these structural conditions constrain the practice. We offer this critical analysis as a foundation for re-thinking the possibilities of SIA.

2. Defining the problem: ideal-reality gap

SIA remains the most well-established practice for identifying, understanding, managing, and mitigating the risks of mining to local communities. SIAs have long been required by regulators as part of the project approvals process. Banks and multilateral institutions funding mining projects may also require developers to undertake SIA to demonstrate how they will manage project (investment) risks. Likewise, many mining companies have

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adopted internal standards that require SIAs to be conducted in project feasibility studies, during operations, prior to project expansions or modifications, and in the lead-up to closure.

SIA is described expansively as 'a field of research and practice, a discourse, and a paradigm' (Vanclay and Esteves 2024, 2). The International Association for Impact Assessment (IAIA) defines SIA as 'the process of identifying and managing the social issues of project development, and includes the effective engagement of affected communities in participatory processes of identification, assessment and management of social impacts' (Vanclay et al. 2015, iv). The logic contained in this definition is:

status quo (baseline) + project activities = changes to status quo (impact)

This logic may be applied ex-ante (what impacts will or might arise), or ex-post (what impacts have already arisen). The former has a theoretical commonality with risk assessment, and the latter with evaluation (Mahmoudi et al. 2013; Taylor et al. 2021). This broad definition of social impact means that the potential scope of an SIA may be equally broad. SIA can therefore claim many disciplines and cover many different types of stakeholders. This matters because scoping an SIA is difficult in practice. For example, who has expertise in all relevant disciplines (within a mining company, consulting firm, or regulatory body)? And how can the SIA cover all the potential social issues associated with the project?

This broad conception of SIA is often accompanied by ambitious statements about its purpose. SIA should help to 'achieve better development outcomes for communities', to support better design of projects and policies, and to inform regulatory decision-making (Esteves et al. 2012). Despite the promises of SIA, there are persistent concerns among practitioners, regulators, academics, and even within parts of the mining industry, that SIA is not achieving its intended purpose: that SIAs fail to make an impact and are compromised in practice (Bainton and Burton 2024). In our own research and practice, we have continually found that SIAs in mining are rushed, ill-prepared, inefficient and incorrect, fail to meaningfully include the voices of those who are most affected by mining, and disconnected from operational decision-making.

Concerns around the quality of assessments are a recurrent theme at practitioner conferences, including those held by the IAIA and the Society for Applied Anthropology. In their opening remarks to the latest SIA handbook, Frank Vanclay and Ana Maria Esteves reiterate these observations. Among the many problems confronting the practice of SIA, they note that 'the consultancy firms that undertake SIAs often don't have experienced or qualified staff, leading to inadequate assessments that, typically, are not subject to rigorous review' (Vanclay and Esteves 2024, 3). Further compounding this issue, 'the competitive tendering for SIA work and the lack of established criteria by which to select consultants have led to a race to the bottom', which contributes to the image of SIA as a mere 'box-ticking exercise' (Vanclay and Esteves 2024, 3).

All of this points to diverging narratives about SIA: an expansive and positive conception of what SIA could be, versus a sceptical realism about the state of practice. This ideal-reality gap is a problem because SIA remains the most accepted and widely practiced form of social science within the sector for identifying and minimising harm to people. There is a need for deeper analysis of these issues.

3. Gaps in the literature

Research on SIA in the extractive industries is extensive, spanning methodological innovation, emerging practices, and state-of-the-art guidance (e.g. Kemp and Vanclay 2013; Götzmann and Bainton 2021; O'Faircheallaigh 2017; Esteves et al. 2012; Vanclay and Esteves 2024). This body of work also connects SIA, corporate responsibility, and social performance (e.g. Bice 2015; Joyce et al. 2018; Mancini and Sala 2018), while case studies have documented how SIAs play out on the ground (e.g. Aguilar-Støen and Hirsch 2017; Roche et al. 2021). There is also emerging literature on Indigenous-led and community-controlled SIA as a corrective to company-controlled SIA (e.g. Lawrence and Larsen 2017; O'Faircheallaigh 2017). This is an important development, although in practice the vast majority of SIA remains commercially procured.

Despite this breadth, the literature is still largely focussed on practice refinement and normative improvement. Much less attention has been paid to the underlying commercial arrangements that organise SIA as a purchased technical service. Consequently, existing scholarship does not fully explain why SIAs routinely fall short in practice, nor how commercial incentives shape the production of social knowledge within mining projects. This gap is significant given that consultant-led, company-commissioned SIA has been the dominant global model for over 50 years (Vanclay and Burdge 1995, 34) and therefore central to understanding recurring shortcomings in quality, independence, and utility – and the possibilities for change.

A parallel critical literature has examined the politics and ethics of applied research in extractive contexts (e.g. Howitt 2005; Baines et al. 2013; Bainton and Owen 2019), highlighting issues such as corporate capture, compromised expertise, and the moral hazards surrounding consultancy work (e.g. Macintyre 2001; Burton 2014). Similar concerns have been explored more thoroughly in the EIA field, where scholars have

analysed how consulting firms mediate power relations between companies, communities, and regulators, often reinforcing conflicts of interest and producing depoliticised outputs (Li 2009, 2015; Dougherty 2019). These insights have not been systematically extended to SIA, even though it operates through comparable commercial, institutional, and contractual arrangements. We address that gap by foregrounding the commercial conditions that shape SIA practice and by analysing how these conditions systematically constrain the capacity of SIA to generate socially meaningful knowledge in the public interest.

4. Research framework: the commercial phases of SIA

This research aims to reveal the reality of SIA practice, rather than provide a normative perspective on what it should be. We focus on company-commissioned, consultant-led SIA, proceeding on the question: How does the commercial nature of this model affect practice and outcomes?

Within the mining industry, SIA usually falls within the remit of a company's social or 'communities' function, often referred to as 'social performance' (Kemp and Owen 2018; Esteves and Moreira 2021). SIAs may be conducted at any point in the mine lifecycle. It is ordinarily performed under a professional services contract between a company and a consulting firm (or individual consultants). Seen from this perspective, SIA can be conceptualised as a commercial procurement process that encompasses, but extends beyond, the narrower conception of SIA as an applied research process.

This broader commercial process typically has four phases (Figure 1). It begins with contractual negotiations between the mining company and prospective consultants, whereby the company issues terms of reference for the SIA (*commissioning* phase), against which prospective consultants submit proposals outlining the work they would undertake (*proposal* phase). The selected consultant then *implements* the work – that is, they conduct the SIA study as specified in the contract, producing an SIA report as the primary output of the process. Finally, the company may use the SIA for a wide variety of purposes (*receive and apply* phase), including regulatory approval, supporting project financing, developing social impact management plans (SIMPs),[2] and demonstrating compliance with corporate social performance standards.

4.1. Research methods

This archetypical four-phase process provided a framework for the research, conducted in three steps. First, we reviewed 30 publicly available mining-sector SIA reports (English-language only). This was not intended to be a systematic review but a sensitisation exercise which informed research design.

Second, we conducted semi-structured interviews with some 45 participants.[3] The interview protocol sought insights across the four phases. All interviewees were practitioners with significant career experience in SIA. The majority (approximately four-fifths) were working as SIA consultants or as social performance practitioners within the mining sector. The remainder were academics in the SIA field (who also had practical experience commissioning and/or conducting SIA), and practitioners working in other extractive industries (principally oil and gas). Many had careers spanning various roles and commented from multiple perspectives. Participants employed in the mining industry were all based in large and mid-tier firms, although some also had experience working for junior firms. Some participants provided regulatory perspectives (having previously worked in such roles). Collectively, participants spoke to their experiences across North America, Central and South America, Africa, Australia, Europe, Southeast Asia, and the Pacific region.

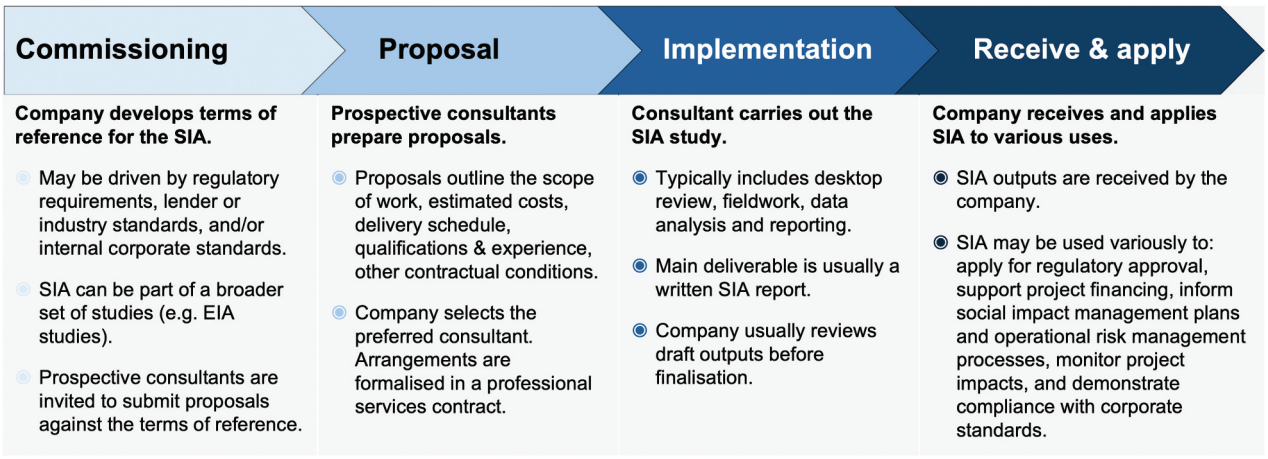

Figure 1. The four phases of a commercial SIA process in mining.

The third step was presenting interim results for critical comment in a focus group workshop with SIA practitioners at the IAIA's annual conference in 2023. This provided an opportunity to pressure-test preliminary conclusions. This workshop was attended by approximately 20 individuals, with representation from consulting, industry, and academia.

5. Findings across four phases

We report candid practitioner perspectives from the interviews and focus group workshop, to understand how commercial factors condition SIA practice and outcomes. Quotations are drawn from research participants, and our findings are organised by phase.

5.1. Commissioning phase

The terms of reference that initiate and structure an SIA arise from mining company decisions. They specify the work to be done, expected outcomes, and deliverables, and may be called a scope of work, specifications, or a request for tenders, proposals, or quotes. A company may issue an open tender to the market, a closed tender to selected consultants, or sole-source the work to a known consultant or consortium. In some cases, the scope is co-developed between the company and consultants, and occasionally with other stakeholders.

The terms of reference set the starting conditions for the SIA. A key influence is the motivation for commissioning the SIA. Interviewees observed that, where SIAs are commissioned primarily for regulatory approvals, terms of reference are often generic, reflecting justifiably generic regulatory guidelines intended to cover a multitude of project types. The resultant SIAs were described as 'tick-box', 'checklist', 'compliance-focused', and 'schedule-driven' where 'the output drives the work, not the outcome.' Producing an SIA document becomes the main objective, rather than the knowledge it contains: 'you get your licence, and you put the SIA on the top shelf.' This also reflects the baseline quality companies seek. As one executive put it, 'If the SIA does not meet regulatory approval, then what is the point of doing it?'

Internal business structures also influence how SIAs are scoped. A social performance manager explained how the project approvals team commissioned an initial SIA for regulatory purposes, after which responsibility for managing social impacts passed to the site operations team: 'we do not design the SIA that we will ultimately use. A lot of knowledge is lost in the transition between teams – the approvals team takes their files with them when they leave.' She saw this not as commercially efficient but rather a problem-solving style: 'big business manages liability by hiring someone to set up a team, and these teams are not necessarily well integrated.' This has important implications for use, as site teams are often 'less connected' to SIAs they have 'inherited' from the approvals team.

Site teams can and do commission SIAs for purposes other than regulatory approval. Increasingly, mining companies have internal standards requiring SIAs to be updated every few years. These SIAs are compliance-driven, but likely commissioned by the same business unit that ultimately uses them. Even so, staff turnover influences continuity of knowledge across successive SIAs, as large companies often encourage staff to change roles after 3–5 years to gain a 'more rounded understanding of the business.' The SIA may still be 'inherited' on an individual level, disconnecting the knowledge generated by the SIA and the practitioner tasked to apply it. By contrast, SIAs commissioned to understand specific social impacts or business risks are motivated by a need to gather knowledge. Interviewees saw these SIAs as encouraging the greatest level of 'buy-in' from the company with better application of findings.

Decisions around the purpose of an SIA are strongly influenced by internal SIA capability. Who prepares the terms of reference matters a great deal. When SIAs are commissioned at the asset level, they are often scoped by a site-based social performance officer, below manager level, who has: constrained capacity because they are busy 'putting out fires'; limited disciplinary expertise in relevant social sciences; and little experience conducting or overseeing SIAs or comparable studies. Highly skilled practitioners can sometimes overcome this by advocating for social performance, persuading company leaders to invest in SIA, or securing additional capability to inform the terms of reference.

Smaller mining companies generally have lower social performance capability and are strongly compliance-driven. One illustrative example involved a large project in a complex Southeast Asian jurisdiction where the on-site social performance manager was an environmental scientist with no social performance experience. This led to a 'cookie-cutter approach', applying a North American environmental model (ineffectively) to social performance in Southeast Asia. Another senior manager recalled a due diligence process ahead of a corporate acquisition where the target company outsourced its social performance function to 'the absolute cheapest consultant' to undertake an SIA. The result was an SIA of unusably poor quality.

In the worst cases, terms of reference are simply lifted from previous studies or derived from guidance documents. 'Copy-and-paste', 'template' and 'cookie-cutter' terms of reference appear commonplace. Generic terms of reference are likely to lead to generic study designs and findings, limiting the usefulness of SIAs for operational decision-making and impact

management. By contrast, SIAs scoped to answer specific questions can yield better information. As one senior manager explained:

> To produce the best SIA, you need to understand exactly what you need from an SIA. Sometimes, though, you know there's a gap in your understanding of social impacts, but you don't know what the gap is – so you simply say, 'I'll do an SIA'.

Generic SIAs therefore partly reflect limited practitioner capability to articulate the specific questions the assessment should address.

Budget is another determining factor, often determining the scope rather than the other way around. Budgets may be based on amounts spent for comparable studies, funds rolled over from the previous financial year, or money that must be spent before it is redistributed. In profitable years more may be available; in lean years SIA funding is harder to justify, reflecting the value placed on SIA within the business. One practitioner quipped that when working out the budget it was sometimes just a 'thumb suck'. Overall, budgets rarely reflect a detailed understanding of what the SIA needs to achieve or the complexity of the study context.

At mine sites, the scope and budget for an SIA are usually approved by the general manager. Their appreciation of SIA's value strongly shapes the budget and subsequent activities. General managers who prioritise production are less likely to support a robust SIA process. Those who have 'felt the pain' of community outrage were reportedly more willing to invest and engage with scoping and findings because they see the link between data and problem-solving. This points to a systemic problem: if managers must personally experience difficult challenges before investing in SIA, then harm to communities becomes a precondition for better practice.

5.2. Proposal phase

Once a company has issued terms of reference, prospective consultants are invited to submit proposals (equivalently: bids, quotes, tenders). Proposals outline the work the consultant intends to undertake, estimated fees, delivery timeframes, qualifications and experience, and other contractual conditions. The company then selects a consultant based on the proposal, with or without further negotiation. The proposal is critical because it essentially amounts to a contractual promise to carry out the SIA as specified. Even if there is room to vary the contract, this stage is where the SIA design is broadly articulated and committed to.

The consulting model influences who prepares the proposal. Unlike sole traders and boutique firms, in large consultancies, the most experienced SIA practitioners rarely design the SIA and write the proposal. Principal consultants are frequently overburdened, 'spread across 15 different projects at once'. Moreover, consultancies are not paid to write proposals, so the main work is often assigned to more junior consultants whose labour costs the firm less. To compensate for inexperience, junior staff may be directed to use past proposals as templates, opening the door to copy-paste drafting. Reflecting on their early career, one consultant said, 'I was told that the previous proposal, which had been signed off by the principal, was "approved text", so I mostly just copied that. I didn't know what I was doing!' Another bemoaned, 'Ctrl-C and Ctrl-V are catchphrases here – just put in the latest buzzwords for the proposal.'

When SIAs are scoped alongside environmental studies, the social part of the proposal might not even be written by an SIA practitioner. Sometimes the SIA component is 'an afterthought', 'tacked onto' the EIA, and written by 'whoever was available' regardless of disciplinary expertise. One consultant recalled their 'chronically busy' manager instructing them to 'reach for the nearest available environmental consultant' to prepare the SIA proposal as part of the SIA team.

Since proposal writing is a 'speculative investment', some are 'thrown in' with minimal effort. High-value contracts may warrant greater effort. Sole-sourced contracts have a high likelihood of selection, which can encourage either greater effort (as costs are likely to be recouped) or less effort (without competition, design work can be deferred to billable stages). Effort may also be influenced by 'arbitrary but important' factors, like how busy staff are at the time or whether the firm has 'other work in the pipeline.' When companies set short response deadlines, proposal-writing is necessarily hasty.

Pricing dynamics exert great influence on SIA design at the proposal stage. Consultants typically charge fees based on time spent on the work ('billable hours'). A consultant's hourly rate is set to yield a profit for the consultancy after deducting salary and overhead costs. More senior consultants command higher rates, reflecting both greater experience and higher salary cost to the firm. In a proposal, consultants seek to maximise billable hours while keeping costs competitive. The client's budget for the SIA is often undisclosed. As one consultant stated, 'If the client won't tell me, I try to guess what it will take to win the contract. Then I design the SIA to match that price.' Some companies have pre-existing relationships with certain consultancies ('go-to firms'), who can benchmark their proposal pricing against what they charged before.

Cost-sensitive clients can 'create a race to the bottom', obliging consultants to compete primarily on price. Cost-cutting tactics include deliberately underestimating the total time required to complete the SIA,

substituting in-depth research methods for 'quick and dirty' data collection, and allocating the work to the most junior (i.e. cheapest) consultants capable of carrying it out (a practice known as 'leveraging': Maister 1997). Such tactics may improve the chance of winning the contract but at the expense of SIA quality, as discussed in the next section.

These pricing dynamics filter into study design in less obvious ways. One consultant described how pressure to meet billable targets meant they could not advocate for better SIA practice within the firm:

> I wanted to argue for better approaches to SIA, but I remember finally receiving an email from the Big Boss (who was not an SIA practitioner), which said, 'Just do your job.' It was very confronting for me. I didn't take it further because I didn't have the time or energy. … Consulting is a 24/7 stress. I needed to make sure I hit my billable targets. [My partner, children and I are immigrants], and if I lose this job, we might have to leave this country. So, I didn't make a fuss.

This illustrates commercial constraints that discourage consultants from instituting improvements, further curtailing SIA's potential.

Selection criteria also shape outcomes. Contracts are commonly awarded based on expertise, track record, and the technical and financial merits of the proposal. Less tangible factors like reputation are influential, especially where companies lack internal capability to discern a quality proposal. 'Big name' firms may succeed because their brand generates confidence, even where SIA expertise is limited or their reputation is built on engineering services. Conversely, some highly experienced SIA practitioners have been 'blacklisted' based on perceptions that they are too critical or 'not willing to toe the company line.' In both cases, selection is based on perceived attributes rather than substantive competence.

When the SIA is just one component in a larger set of studies, a weak SIA proposal may go unnoticed because it is camouflaged against the other components. A consultancy's strong environmental service offering could, in the eyes of the selector, compensate for its poor SIA capabilities. Rather than insisting on a better SIA consultant, companies often prefer the convenience of a 'one-stop shop' for all required services.

Finally, selection decisions are sometimes 'based on who was already in the system'. Managers may find it easier to award the contract to a vendor already registered and approved by procurement. In these cases, the SIA process is fully subjected to commercial determinants.

5.3. Implementation phase

Once selected and contracted, the consultant commences the SIA study. This usually begins with desktop review, followed by primary data gathering, including engagement with affected communities and project stakeholders. The primary output is usually a written report that describes the study design, summarises findings, and presents recommendations for managing and mitigating risks and maximising opportunities. Draft reports are reviewed by the company and sometimes by independent experts or public institutions, and there may be further engagement with communities to confirm findings and recommendations. Implementation is heavily constrained by conditions set in the commissioning and proposal phases, even where contracts can be varied to expand or reduce the scope.

Again, who implements the SIA matters a great deal. Proposals normally list the SIA team, but business contingencies (such as staff availability) can result in substitutions to the proposed team and thus to skill-sets and competency. There is a consensus that the most senior consultants spend the least amount of time in the field, being too expensive to commit weeks in the field, and required to oversee multiple projects from the office. One consultant quipped, 'As soon as the project starts, the person with 35 years' experience disappears! Maybe they show up for a few key meetings.' The absence of senior expertise on-the-ground has numerous flow-on effects, including the choice of methods.

Although the methodological toolkit for SIA is expansive, in practice there is a heavy reliance on a stock set of instruments and approaches. Quantitative surveys are often preferred as a 'fast way of collecting data' and reflect the view that 'if you can't measure it, you can't manage it', along with the perception that 'figures create a greater "impression" over long prose without the "headline".' Survey instruments can be 'inspired' (copied or adapted) from previous projects and are thought to be easily administered by junior consultants and local enumerators without close supervision, and therefore more cost-effective. The consequence is that cheaper methods are prioritised over qualitative approaches which yield richer insights but demand more time and expertise, such as in-depth interviews and participant observation. More experimental or advanced methods – such as yarning (or regional variants like Talanoa or Tok Stori), community-led SIA, trauma-informed assessment, or community visioning – are even less likely to be used. As one consultant remarked, 'Senior consultants don't want to upset bosses. Anything unfamiliar gets vetoed.'

A common complaint is the lack of time for fieldwork, resulting in rushed data collection, data gaps, or poor-quality data that cannot be used. This can arise from budget constraints, inexperience, or field schedules that fail to match social complexity. Fieldwork may also be subject to company-imposed constraints: some places or stakeholders may be declared off-limits for political or security reasons, or safety protocols may restrict activities to daylight hours. These

constraints affect whose voices are represented in the SIA.

While SIAs are notionally meant to address risks to communities, the SIA process itself can impact people. Ethical concerns arise across the entire process, including SIA design, field methods, community engagement, and data use. A prominent critique is that SIAs are 'extractive': they extract information from people to benefit companies. In sensitive and conflict-ridden environments, the SIA process can put lives at risk.

Although academics and practitioners have written about SIA ethics and the IAIA has published principles for ethical practice (Vanclay et al. 2013), few SIAs explicitly reference ethics frameworks. In our document review, only two studies contained statements about ethical frameworks guiding study design, both in Australia and drawing on the National Statement on Ethical Conduct in Human Research. Reference does not guarantee compliance, and adherence remains difficult to assess. Practitioners reported wide variability in how research ethics are considered in privately commissioned SIAs. Some suggested ethics are ignored because SIA is not seen as research per se but as an instrumental data-gathering exercise for corporate or regulatory purposes. Mining companies are more familiar with managing environmental studies, where the corporate scientific paradigm often neglects research ethics. It is likely SIA is viewed through this same corporate study lens. Moreover, commissioning companies rarely ask consultants to demonstrate compliance with ethics frameworks, because ethical due diligence translates into additional cost. Regulatory requirements also vary widely between countries. Even at the sub-national level, in countries like Australia, SIA guidelines differ in their emphasis on research ethics.

Unsurprisingly, practitioners based at universities or familiar with university protocols are more attuned to designing and conducting SIAs to avoid harm, especially when working with Indigenous communities. Some consultants say they try to uphold their own 'moral standards', but how this works in practice is unclear. These differences can affect the methods used, the level of meaningful community participation, and the potential for SIAs to harm vulnerable groups. Lack of attention to ethics often reflects the driver for the SIA (compliance, rather than enhancing community self-determination).

The standard SIA output is a report delivered to the company. These documents can be hundreds of pages long, with quantitative datasets and descriptive text. This default format locks data into static forms, which, as we discuss in the next section, shapes how SIAs are used. Like proposal writing, junior and intermediate consultants do most of the writing, as senior SIA consultants are too busy and expensive. One way of managing workloads is to rely on preapproved material:

> The response to manage senior people's workloads is to develop standardised text. So sometimes you'll take text from a massively complex SIA … then bang it onto a little solar farm in the middle of nowhere.

The combination of time pressure, lack of senior input, and reliance on standardised text across the SIA process contributes to the genericism already noted.

Once the report is drafted, it must be reviewed internally before being delivered to the client. This provides an opportunity to improve the SIA, but time constraints and limited expert input again have material consequences. In one illustrative example, a senior consultant said, 'I don't know what's going on … I haven't been to site … but it's due tomorrow and if I sign it off, I get to go home.'

The review process can also generate various forms of censoring. Consultants may consciously revise work so it is not rejected by the company or even conceal sensitive findings that might jeopardise future contracts. Likewise, company management often 'soften the language', 'make [the findings] less alarmist', and present the project and mining-led development in a more positive light, especially for project approvals. Editing intensity depends on how critical the findings are, company maturity, and willingness to acknowledge difficult issues. As one manager noted, it can also reflect the belief that 'SIAs are too subjective and not objective enough'.

The final step in this phase is to develop recommendations, often produced last and under time pressure. Censoring can again be an issue, especially when recommendations highlight performance gaps and SIAs are publicly available. As one industry insider put it, 'recommendations are not suggestions, they are nooses around the company to do it … control the knowledge and you control the bank' (i.e. loan conditions). If no resources are included to co-develop recommendations with the teams and stakeholders responsible for implementation, the likelihood of action is further reduced.

5.4. Receive and apply phase

Once produced, SIA outputs are delivered to the company. Ordinarily this is straightforward, but there are cases where companies refuse to accept the outputs or receive them and immediately bury them. The SIA process then comes to a halt, and the question of application becomes redundant. Such moments expose a corporate culture of strategic or wilful ignorance (Lawrence and O'Faircheallaigh 2022).

Mining companies may use SIA outputs for different purposes. They might submit the SIA to external

audiences, such as regulators for project approvals, or financial institutions to meet lender requirements (e.g. the Equator Principles or International Finance Corporation Performance Standards). The report may also be made public, voluntarily or as part of a regulatory consultation process.

Few interviewees discussed the role of the regulator, save mentioning that regulatory requirements influence the terms of reference. After all, the principal role of regulators is reviewing SIA documents (Parsons 2024). Until the SIA report is produced, the regulator has nothing to review. As a result, the SIA process is essentially invisible to the state until this final phase. In other words, the SIA process is another mining domain where the state mostly maintains an 'absent presence' (Bainton and Skrzypek 2021). This is a significant observation. It implies that the vast majority of the SIA process – which is subject to a multitude of commercial forces – occurs largely as a private interaction between company and consultant, outside the purview of the regulator until the process is all but over.

The SIA may also be applied to purposes internal to the company. Findings can inform social management plans and monitoring and evaluation programs. In many cases, however, these plans and programs are treated as contractual deliverables separate from the SIA, increasing the potential for disconnect and reducing the likelihood that SIAs will support collaborative planning and management with other stakeholders.

Social performance capability, and earlier decisions in scoping, proposal and implementation phases, directly influence application. There is a strong relationship between the SIA's driver and its use. When SIAs are produced for compliance, site teams have fewer incentives to engage with findings and apply recommendations. When SIAs are driven by inquiry to understand specific issues, uptake tends to improve. When geared towards empowering local communities, application is thought to be greatest. In all cases, application depends on the level of corporate engagement and investment in SIA development and implementation.

Practitioners regularly observe a disconnect between corporate study teams and site-level teams, particularly at new projects when SIAs are undertaken before site teams are established. Operational plans may later be developed with little regard for the SIA. Even when site social performance teams use the SIA, other functional units may not be aware of it or its relevance. This is problematic because many issues, impacts and recommendations cut across functional domains. For example, managing project-induced in-migration also requires input from security, environment, and human resources functions, among others.

Site-level capability and capacity directly influence application. If site teams are geared primarily towards community relations or external communications, they may lack the technical skills to interpret and apply SIA findings. Where social performance management is not data-driven but reactive and opinion-based, SIAs are unlikely to inform day-to-day decisions. Site teams are often under intense time pressure and caught in competing demands; many practitioners report they simply do not have time to digest a large report and translate findings into business decisions. Similar remarks were made by practitioners working in corporate social performance teams, and in regulatory agencies.

As noted, the typical output is a lengthy report. When SIA findings are delivered solely as static, text-heavy documents, their practical value is diminished. Without interactive datasets, project teams cannot integrate social information into the digital platforms they use, such as geospatial tools or emergency-planning systems. The absence of mappable data on households, schools, clinics, shops and other community assets, for instance, makes it impossible for hydrology and engineering teams to model evacuation routes or assess exposure in the event of a tailings dam breach. Yet mining SIAs rarely scope interactive data formats. This likely reflects practitioner inexperience, entrenched consulting practices, and pricing templates that prioritise reports over usable data. Whatever the cause, format shapes use: social information that cannot be integrated into operational systems is far less likely to influence decisions. Producing a robust SIA report is therefore insufficient; equal attention must be paid to the receiving environment and to ensuring that SIA data can be operationalised.

6. Discussion: beyond parameter changes

The preceding analysis of the four phases of the SIA process reveals a pattern that is more than the sum of its parts. Across commissioning, proposal, implementation, and application, we see consistent incentives that reward compliance, efficiency, and the appearance of rigour, rather than the production of socially meaningful knowledge. These findings point to a systemic problem that cannot be reduced to poor individual practice or isolated corporate behaviour. What emerges is a structural configuration in which commercial dependence, limited capability, and managerial logics interact to produce predictable forms of compromise.

To understand why this pattern persists, we must look beyond the procedural details of SIA to the broader political economy that sustains it. Here we draw together insights from four authors rarely put into conversation: Mariana Mazzucato and Rosie Collington's critique of the consulting economy, Donella Meadows' systems framework, and the anthropologist James Ferguson and his idea of an 'anti-politics machine' (Ferguson 1994; Meadows 1999;

Mazzucato and Collington 2023). Together they illuminate the nature of the structural conflict of interest at the heart of company-commissioned, consultant-led SIA. These perspectives help to explain not only how the SIA system reproduces itself, but also how it internalises critique and converts it into commercial value.

By mapping out the phases of the SIA process, we can see how it functions as a system. This systems view reveals how decisions and incentives in one phase cascade through others, producing self-reinforcing feedback loops that normalise poor quality, low-value outcomes. One loop, for example, concerns poor-quality SIAs: those that are generically scoped, under-resourced, and disconnected from operational decision-making. The weak evidentiary base of these assessments makes it harder for social performance practitioners to justify greater investment in future SIAs, which further entrenches low quality. A second loop concerns dependency: mining companies depend on consultants for legitimacy and technical expertise, while consultants depend on companies for contracts. Both sides therefore have incentives to preserve the status quo. This cycle reinforces a model that continually reproduces technically adequate but politically unthreatening outputs, which results in a form procedural legitimacy that stabilises extraction rather than challenges it.

A third feedback loop involves state regulators, who are nominally tasked with ensuring the independence and quality of SIA but often lack the technical capacity, resources, or political autonomy to do so. In many jurisdictions, regulatory agencies are underfunded, rely on industry-generated knowledge, or face political pressure to expedite project approvals. Regulators more often have expertise in environmental science, with limited social science research capability. As a result, some regulators simply accept company-commissioned SIAs at face value or fail to challenge their underlying assumptions. Regulators with resources may commission their own independent review of an SIA, but this only perpetuates the problem of consultant dependency. Further, our findings suggest that even well-resourced regulators are systemically excluded from the crucial phases when the SIA is scoped, designed and carried out. Weak oversight further reinforces company and consultant dependency, since poor-quality or compromised SIAs routinely pass regulatory scrutiny. Over time, regulatory incapacity becomes both a cause and a symptom of system inertia: because regulators seldom reject substandard work, there is little incentive for companies or consultants to raise the bar. And because regulators depend on industry information to perform their duties, their own capacity to detect compromised assessments remains stunted – a feedback loop of epistemic dependency that mirrors the corporate one of dependency on consultants.

These interlocking loops, of low quality, professional dependency, and weak regulation, form the operating logic of the dominant SIA model. They perpetuate a system that produces the appearance of due diligence while systematically constraining the generation of knowledge in the public interest, or at least the interest of affected communities. This structural configuration aligns with Mazzucato and Collington's analysis of the global consulting industry (Mazzucato and Collington 2023). They show how consulting firms have become symptoms and agents of a hollowed-out political economy, one in which both public and private institutions have outsourced expertise and decision-making capacity. In this economy, consultants sell the appearance of independent authority while monetising uncertainty and dependency. Consulting, in their view, has become a confidence game. Essentially, it profits by diagnosing and managing the very crises it helps to perpetuate.

The parallels with company-commissioned, consultant-led SIA are striking. As we have seen, consultants derive legitimacy from claims to independence and technical objectivity, yet their business model relies on maintaining the confidence and contracts of mining companies. This creates what Mazzucato and Collington call an infantilisation of capability as companies come to rely on external experts rather than develop their own. The SIA system thus mirrors the dynamics of the broader consulting economy: the outsourcing of epistemic labour, the commodification of critique, and the displacement of accountability.

We recognise that a good deal has already been written about how to improve SIA practice and social performance more broadly (see for example, Owen and Kemp 2017; Joyce et al. 2018; Vanclay and Hanna 2019; Esteves and Moreira 2021; Vanclay and Esteves 2024). We do not disagree with these suggestions. However, when viewed through a systems lens, the reforms most often proposed to improve SIA – practitioner certification, professional development pathways, the use of robust ethics frameworks, better scoping, improved corporate capability, increased regulatory resourcing, among others – resemble what Meadows called parameter adjustments (Meadows 1999). They change inputs but not the rules. They are incremental interventions that make the system work better without changing what it is for. The structural rules – commercial commissioning, consultant dependency, and the primacy of extractive corporate goals – remain intact.

To move beyond parameter change requires asking a deeper question: what is the goal of SIA in mining? Formally, it is to identify and manage social impacts, inform project design, and meet regulatory requirements. But in practice, these goals are nested within the broader paradigm of extractive capitalism, which assumes the desirability, necessity, and inevitability of

continuous extraction. As long as SIA is subordinated to this paradigm, its emancipatory potential will be limited.

This is where Ferguson's concept of an anti-politics machine becomes instructive. By the late 20th Century, scholars were interrogating the political economy of the global aid and development sector. Ferguson showed how development interventions in Southern Africa transformed deeply political struggles into technical problems to be managed by experts, thereby depoliticising structural inequalities. Development projects which failed on their own terms could be redefined as successes on which new projects could be modelled, reproducing the political economy of the sector. The same logic operates in company-commissioned SIA. The consultant-led model converts complex political conflicts – over land, sovereignty, livelihoods, human rights, and recognition – into technical and procedural matters of risk, compliance, and management. By translating political questions into managerial language, SIA functions as a depoliticising apparatus. It transforms contestation into data, dissent into deliverables. Issues and impacts that are not captured in these SIAs gain less traction and can be more easily ignored by companies and regulators. Paraphrasing Fergusson, SIAs can have the conceptual or ideological effect of depoliticising extractive impacts and their foundational inequalities (such as colonial dispossession) and their enabling conditions (such as corporate-friendly legislation and regulation) that helps extractive capitalism to flourish. Social impacts are thus reduced to technical, financial, managerial, and legal dimensions, suspending the real politics from even the most politically sensitive mining operations.

At worst, this mode of practice operates as a technology of legitimation, rubber-stamping projects and neutralising contestation rather than empowering affected communities. All too often SIA is expected to smooth the path for extractive projects and mutes the voices of those most marginal. In this way, SIA becomes a kind of anti-politics technology for the extractive economy: it produces the appearance of rational governance while obscuring the underlying relations of power and dispossession that sustain mining.

Bringing these perspectives together clarifies the systemic contradiction at the heart of contemporary SIA in mining. Mazzucato and Collington show how consulting monetises dependency; Ferguson reveals how technocratic practice depoliticises struggle; and Meadows reminds us that tinkering within such a system will not alter its goals. Together, they help explain why SIA remains structurally incapable of achieving its aspirational purpose in the global mining industry. It is a system that not only absorbs critique but converts it into a new source of value. SIA has become a commercial product that commodifies the social consequences of extraction, and, increasingly, the demand for its own reform.

7. Conclusion

Viewing SIA as a system exposes both the leverage points for change and the deeper rules that sustain its dysfunction. We recognise that by this stage some readers will be looking for 'best practice' solutions. The reforms most readily available – such as building internal corporate SIA capability, funding preliminary scoping studies to inform the SIA scope of works, establishing joint oversight bodies, strengthening ethics frameworks, co-designing scopes of work, or enhancing regulatory capability – are necessary but insufficient. These are incremental fixes that improve the workings of the existing model without altering its structural dependence on commercial contracting or its embeddedness within the extractive economy. They may help SIA function better on its own terms, but they do not change what SIA is being asked to do, or the system within which it is asked to perform.

Our analysis demonstrates that the problems are systemic and cannot be solved by any single actor. Even community-led SIA requires a regulatory home to have impact. Three broad directions therefore remain open. First, incremental 'within-system' improvements can and should be made, several of which we have identified. Second, a research agenda is needed to illuminate unresolved questions, including the role of regulators within commercialised assessment systems, the institutional conditions required to support community-led SIA, and the implications of generative AI for impact assessment. On this last point, we recognise that AI offers opportunities to analyse increasingly complex extractive scenarios. However, commercial pressures risk accelerating uncritical reliance on AI-generated material, further weakening evidentiary standards in consultant-led SIA. Third, and most importantly, any meaningful transformation requires a paradigm shift: dismantling the commercial model that subordinates social analysis to extractive imperatives.

Our research shows that many practitioners are personally committed to 'doing good', yet they work within commercial logics that routinely compromise this aim. We include ourselves within this group, as this paper was partly motivated by our own frustration from working within this paradigm. In the end, consultants and the firms they represent are not disinterested technocrats contributing to the public good, but actors within a wider system of resource governance that sustains an extractive

economy. Consultant-led SIA is not a neutral tool for social understanding. It is part of a wider political economy in which expertise is commodified, dependency is cultivated, and accountability is outsourced. As we have shown, this model mirrors the consulting economy's broader confidence trick: it appears to generate independent knowledge while profiting from the very problems it helps entrench. SIA also operates as an anti-politics technology, translating political claims into technical risks, converting contestation into procedural tasks, and reframing dispossession as a management problem. In doing so, SIA exemplifies capitalism's capacity to monetise its own critique. Each call for better assessment generates new consultancy markets, reinforcing the dependencies it claims to resolve.

Our intention in offering this critique is not to abandon SIA but to reclaim its purpose. To serve the public good, SIA must be re-envisioned not as a compliance tool but as a mode of shared governance over extractive impacts; one that redistributes epistemic authority and decision-making power to affected communities. Achieving this requires confronting the deeper political economy of consulting and extraction, rather than simply repairing symptoms. Only then can SIA fulfil its emancipatory promise: to generate knowledge that protects people and places, rather than the business of mining.

Notes

1. In Australia this took the form of a Senate Inquiry in 2023 after PwC, one of the 'Big Four' firms, was embroiled in a series of scandals involving the use of confidential government information for financial gain. The other firms being EY, Deloitte and KPMG. Whereas Boston Consulting Group, McKinsey, and Bain & Company are often referred to as the 'Big Three' strategy companies. Around the globe we find comparable consulting scandals. For an overview of some of these scandals see Carton (2024).
2. As a management plan, the SIMP converts the findings of the SIA into a set of actions. The SIMP may be negotiated as part of the same contract as the SIA, or it may be the subject of a later contract. Regardless, the SIMP is almost always a separate contractual deliverable subsequent to the SIA, and as such is included in the *receive and apply* phase of this framework.
3. Research ethics was attained from the University of Queensland (2022/HE001150).

Acknowledgments

We are thankful for comments on earlier versions provided by our colleagues Deanna Kemp and John Owen, and two anonymous reviewers. All mistakes are our own. Seed funding for the initial research behind this paper was provided by Rio Tinto under the research partnership agreement between the University of Queensland's Centre for Social Responsibility in Mining and Rio Tinto.

Disclosure statement

No potential conflict of interest was reported by the author(s).

Funding

The work was supported by the University of Queensland and Rio Tinto Research Partnership.

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References

Aguilar-Støen M, Hirsch C. 2017. Bottom-up responses to environmental and social impact assessments: a case study from Guatemala. Environ Impact Assess Rev. 62:225–232. https://doi.org/10.1016/j.eiar.2016.08.003

Baines JT, Taylor CN, Vanclay F. 2013. Social impact assessment and ethical research principles: ethical professional practice in impact assessment part ii. Impact Assess And Project Appraisal. 31(4):254–260. https://doi.org/10.1080/14615517.2013.850306

Bainton N, Burton J. 2024. The use of social impact assessment in mining projects. In: Vanclay F, Esteves AM, editors. Handbook of social impact assessment and management. Edward Elgar Publishing. p 81–96.

Bainton N, Owen JR. 2019. Zones of entanglement: researching mining arenas in Melanesia and beyond. The Extractive Industries And Soc. 6(3):767–774. https://doi.org/10.1016/j.exis.2018.08.012

Bainton N, Skrzypek E, Eds. 2021. The absent presence of the state in large-scale resource extraction projects. ANU Press.

Bice S. 2015. Bridging corporate social responsibility and social impact assessment. Impact Assessment and Project Appraisal. 33 (2) 160–166.

Burton J. 2014. Agency and the 'avatar' narrative at the Porgera gold mine, Papua New Guinea. J de la Société des Océanistes. 138(138–139):37–52. https://doi.org/10.4000/jso.7118

Carton G. 2024 Oct 9. What France's 'McKinsey gate' scandal revealed about the four major types of consulting's conflicts of interests. *The conversation*. https://theconversation.com/what-frances-mckinsey-gate-scandal-revealed-about-the-four-major-types-of-consultings-conflicts-of-interests-240829

Dougherty ML. 2019. Boom times for technocrats? How environmental consulting companies shape mining governance. The Extractive Industries And Soc. 6 (2):443–453. https://doi.org/10.1016/j.exis.2019.01.007

Esteves AM, Franks DM, Vanclay F. 2012. Social impact assessment: the state of the art. Impact Assess And Project Appraisal. 30(1):34–42. https://doi.org/10.1080/14615517.2012.660356

Esteves AM, Moreira S. 2021. Developing social performance professionals in the extractive industries. The Extractive Industries And Soc. 8(4):100964. https://doi.org/10.1016/j.exis.2021.100964

Ferguson J. 1994. The anti-politics machine: "development," depoliticization, and bureaucratic power in Lesotho. University of Minnesota Press.

Götzmann N, Bainton N. 2021. Embedding gender-responsive approaches in impact assessment and management. Impact Assess And Project Appraisal. 39(3):171–182. https://doi.org/10.1080/14615517.2021.1904721

Howitt R. 2005. The importance of process in social impact assessment: ethics, methods and process for cross-cultural engagement. Ethics, Place Environ. 8(2):209–221. https://doi.org/10.1080/13668790500237336

Joyce S, Sairinen R, Vanclay F. 2018. Using social impact assessment to achieve better outcomes for communities and mining companies. In: Lodhia SK editor. Mining and sustainable development. Routledge; pp 65–86.

Kemp D, Owen JR. 2018. The industrial ethic, corporate refusal and the demise of the social function in mining. Sustain Devel. 26(5):491–500. https://doi.org/10.1002/sd.1894

Kemp D, Vanclay F. 2013. Human rights and impact assessment: clarifying the connections in practice. Impact Assess And Project Appraisal. 31(2):86–96. https://doi.org/10.1080/14615517.2013.782978

Lawrence R, Larsen RK. 2017. The politics of planning: assessing the impacts of mining on Sami lands. Third World Q. 38(5):1164–1180. https://doi.org/10.1080/01436597.2016.1257909

Lawrence R, O'Faircheallaigh C. 2022. Ignorance as strategy: 'shadow places' and the social impacts of the Ranger uranium mine. Environ Impact Assess Rev. 93:106723. https://doi.org/10.1016/j.eiar.2021.106723

Li F. 2009. Documenting accountability: environmental impact assessment in a Peruvian mining project. Polar: Political And Legal Anthropol Rev. 32(2):218–236. https://doi.org/10.1111/j.1555-2934.2009.01042.x

Li F. 2015. Unearthing conflict: corporate mining, activism, and expertise in Peru. Duke University Press.

Macintyre M. 2001. Taking care of culture: consultancy, anthropology and gender issues. Soc Anal: The Int J Soc And Cult Pract. 45(2):108–119.

Mahmoudi H, Renn O, Vanclay F, Hoffmann V, Karami E. 2013. A framework for combining social impact assessment and risk assessment. Environ Impact Assess Rev. 43:1–8. https://doi.org/10.1016/j.eiar.2013.05.003

Maister DH. 1997. Managing the professional service firm. Simon & Schuster.

Mancini L, Sala S. 2018. Social impact assessment in the mining sector: review and comparison of indicators frameworks. Resour Policy. 57:98–111. https://doi.org/10.1016/j.resourpol.2018.02.002

Mazzucato M, Collington R. 2023. The big con: how the consulting industry weakens our businesses, infantilizes our governments and warps our economies. Penguin Books.

Meadows D. 1999. Leverage points: places to intervene in a system. The Sustainability Institute.

O'Faircheallaigh C. 2017. Shaping projects, shaping impacts: community-controlled impact assessments and negotiated agreements. Third World Q. 38(5):1181–1197. https://doi.org/10.1080/01436597.2017.1279539

Owen JR, Kemp D. 2017. Extractive relations: countervailing power and the global mining industry. Routledge.

Parsons R. 2024. Social impact assessment for project regulatory processes. In: Vanclay F, Esteves AM, editors. Handbook of social impact assessment and management. Edward Elgar Publishing; pp 158–176.

Roche C, Brueckner M, Walim N, Sindana H, John E. 2021. Understanding why impact assessment fails; a case study of theory and practice from Wafi-Golpu, Papua New Guinea. Environ Impact Assess Rev. 89:106582. https://doi.org/10.1016/j.eiar.2021.106582

Taylor CN, Mackay M, Perkins HC. 2021. Social impact assessment and (realist) evaluation: meeting of the methods. Impact Assess And Project Appraisal. 39(6):450–462. https://doi.org/10.1080/14615517.2021.1928425

Vanclay F et al. 2015. Social impact assessment: guidance for assessing and managing the social impacts of projects. International Association for Impact Assessment.

Vanclay F, Baines JT, Taylor CN. 2013. Principles for ethical research involving humans: ethical professional practice in impact assessment part i. Impact Assess And Project Appraisal. 31(4):243–253. https://doi.org/10.1080/14615517.2013.850307

Vanclay F, Burdge R. 1995. Social impact assessment. In: Vanclay F, Bronstein DA, editors. Environmental and social impact assessment. Wiley. pp 301–326.

Vanclay F, Esteves AM. 2024. Setting the scene for good social impact assessment and management. In: Vanclay F, Esteves AM, editors. Handbook of social impact assessment and management. Edward Elgar Publishing. pp 2–15.

Vanclay F, Hanna P. 2019. Conceptualizing company response to community protest: principles to achieve a social license to operate. Land. 8(6):101. https://doi.org/10.3390/land8060101