

Assessing the Legitimacy of Sustainability Standard Programs in
the Mining and Minerals Sector

by

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Author's Declaration

I hereby declare that I am the sole author of this thesis. This is a true copy of the thesis, including any required final revisions, as accepted by my examiners.

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Abstract

This research aims to evaluate the extent to which mining sector sustainability standard programs and their certified entities adopt input legitimacy in their deliberative processes. A framework to assess this was developed based on a literature review, then sustainability standard programs in the mining sector were compared to the framework. Through this study, it was found that many of the analyzed sustainability standard programs have relatively high input legitimacy. However, their certified entities, who, in many cases, make political decisions, are not always required to make those decisions based on democratic processes. Evidence was also found that colonial legacies within the mining industry are insufficiently addressed by sustainability standard programs. In addition, membership of the International Social and Environmental Accreditation and Labelling Alliance is a relatively good predictor of the sustainability standard programs' achievement against the framework. These findings suggest that sustainability standard programs still risk perpetuating the corporate capture of wealth through greenwash, though have mechanisms in place to democratize environmental global governance to a certain extent.

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List of Abbreviations

ASI: Aluminium Stewardship Initiative

CE: Certified entities

CSR: Corporate social responsibility

FSC: Forest Stewardship Council

FTG: FairTrade - Gold Standard

HCV: High conservation value

IRMA: Initiative for Responsible Mining Assurance

ISEAL: International Social and Environmental Accreditation and Labelling Alliance

MSI: Multistakeholder Initiative

NGO: Non-governmental Organization

PCSR: Political corporate social responsibility

RJC: Responsible Jewellery Council

RMI: Responsible Minerals Initiative

RS: ResponsibleSteel

SSP: Sustainability Standard Program

TNC: Trans-national corporation

TSM: Towards Sustainable Mining

1. Introduction

1.1 Background

Non-state market-driven governance has become more a prominent way to manage social and environmental issues on a global scale since the 1980s (Cashore, 2002; Scherer & Palazzo, 2011). However, some argue that global democracy is being threatened as an increasingly large portion of environmental governance is managed by sustainability standard programs (SSPs) (Rhodes & Fleming, 2020). This is because market-based governance, or the form of governance SSPs undertake, is not democratic in the traditional sense (Rhodes & Fleming, 2020). SSPs that certify companies as ‘sustainable’ or ‘responsible’ create standards through consultation with multiple stakeholders. Therefore, SSPs provide an arena for deliberation that applies the needs of the public onto companies by way of standards and certification, or a similar recognition of compliance. This structure presents an opportunity for the legitimization of corporate social responsibility initiatives through democratic processes. Authors such as Mena & Palazzo (2012), Hahn & Weidtmann (2016), and Martens et al., (2019) have explored the ways in which SSPs can be legitimate mechanisms of governance by adopting democratic processes.

For an SSP to have input legitimacy, it needs to be developed based on needs expressed by stakeholders, whereas output legitimacy is when the SSP effectively meets the goals it sets out to accomplish (Mena & Palazzo, 2012). Therefore, to understand the SSPs’ input legitimacy, one must look at the standards development process. This research examines whether the studied SSPs gain their input legitimacy through democratic means, all while considering the structural limitations to achieving democratic legitimacy that exist.

1.2 Statement of Purpose

This research aims to evaluate the extent to which sustainability standard programs (SSPs) and their certified entities in the mining sector gain their input legitimacy through democratic processes, based on Habermasian deliberative democracy. The research aims to produce a framework that assesses legitimacy based on a literature review focused on democratic theory and to provide comparisons between the framework and SSPs in the mining sector.

1.3 Research Questions

- To what extent do sustainability standard programs in the mining sector obtain input legitimacy through democratic processes?
- How can the legitimacy of sustainability standard programs be measured based on deliberative democracy theory?
- Do sustainability standard programs democratize the mining industry?

1.4 Significance of the Problem and Contributions of This Research

Some scholars argue that, theoretically, as environmental governance responsibilities shift from democratic states to SSPs in the Western world, democracy is threatened (Banerjee, 2014; Rhodes & Fleming, 2020). This is because SSPs are governed by the market rather than democratic processes (Banerjee, 2014; Rhodes & Fleming, 2020). It has also been argued that holding SSPs to a democratic ideal can protect democracy (Arenas et al., 2020; Scherer & Palazzo, 2011). SSPs do not usually explicitly aim to be democratic and, due to their voluntary nature, are structured to appeal to companies whose main goal is to maximize profit.

Environmental governance responsibilities are shifting despite these two limiting factors to an SSP's ability to be democratic. In other words, private governance cannot be fully democratic, and yet, it is increasingly relied on as a global environmental governance mechanism. Therefore, investigating to what extent this shift retains democratic principles can avoid greenwashing of environmental governance. In theory, greenwashing would occur if SSPs are allowing certified entities to be falsely recognized as responsible while those certified entities profit from the recognition. In other words, certified entities could ineffectively internalize their negative externalities. Assessing the input legitimacy of SSPs in the mining sector based on whether they display attributes of Habermasian deliberative democracy will help understand how the design of sustainability standards influences accountability.

The main contributions of this research are twofold: first, addressing the gap in the literature investigating the legitimacy of SSPs in the mining industry, and second, creating a framework that measures legitimacy based on deliberative democratic theory.

2. The History of Sustainability Standard Programs

Traditionally, corporations were the subjects of state regulations attempting to correct market failures that cause environmental degradation. Over time, as neoliberalism, globalization and denationalization have arguably come to describe our Western political economy, transnational corporations (TNCs) have become less strictly controlled by any one country, pushing the expansion of market-based governance schemes (Cashore et al., 2004). Neoliberalism privileges free market forces and minimal state intervention, which has arguably caused a shift of sovereignty into the hands of TNCs (Butler, 2015). Although the formal capacity of individual states has not decreased, their capacity to control certain issues, namely market-based and economic issues, has been argued to have shrunk (Scherer & Palazzo, 2011). Several trends have been said to cause the degradation of state authority, including the internationalization of the private sector, states experiencing resource constraints, states relaxing regulations to attract investors, and scrutiny from transnational actors (Cashore et al, 2004). It has been argued that the Westphalian nation-state system is losing its regulatory authority: economic activities can move to states with weak democratic institutions, rule of law, or enforcement, skirting around costly regulations, which can lead to social and environmental issues in those areas (Scherer & Palazzo, 2011).

Governments have been, in some cases, hesitant to regulate environmental harms because of the negative effect it may have on their economic competitiveness. In response, as an attempt to leverage market mechanisms to encourage companies to meet certain social and environmental targets, SSPs emerged (Cashore et al., 2004). SSPs are a type of non-state market-driven governance that govern through various private regulatory or standard-setting initiatives. Some examples of relatively well-known SSPs include the Forest Stewardship Council, the Fair Labor Association, the Global Reporting Initiative, or the Marine Stewardship Council. SSPs are composed of two or more of either corporations, industry, or civil society groups (generally represented by NGOs or humanitarian organizations) (Mena & Palazzo, 2012). What this research refers to as an SSP includes programs that create standards that entities (which are usually companies) can then meet to become certified as ‘responsible,’ ‘sustainable,’ or claim similar characteristics related to social or environmental issues. These organizations can be referred to by many names, including SSPs, multistakeholder initiatives, sustainability certification programs, standards setting and certification organizations, or other similar terms.

Although sustainability organizations exist that fall under this umbrella but do not set standards or certify, this research refers to those SSPs that set standards, certify entities, and rely on market mechanisms for uptake.

Although these SSPs are being relied upon more heavily in the global economy to manage environmental issues, their legitimacy and effectiveness as forms of environmental governance have been questioned, in part because they rely on market mechanisms for companies' compliance and subsequent environmental and social protection (Mena & Palazzo, 2012; Rhodes & Fleming, 2020). Trans-national corporations (TNCs) adopt corporate social responsibility practices to gain a social license to operate, minimize risk, and attract investors, among other reasons. Non-state market-driven governance relies on a company's stakeholders to put enough pressure on the company to willingly adopt corporate social responsibility initiatives. Subsequently, SSPs rely on the companies to see the value in investing into changes to meet standards and have their corporate social responsibility efforts legitimized (Cashore et al., 2004). These standards often include issues in their scope such as community development, public health, social security, or food and water provision (Scherer & Palazzo, 2011). For an SSP to be considered 'legitimate,' it must be able to justify its standards. Mena and Palazzo (2012) argue that SSPs' legitimacy can be split into two types: input and output legitimacy (Mena & Palazzo, 2012). For an SSP to have input legitimacy, the methodology it uses to create its standards must be justifiable and valid, in other words, it must have processes to create the standards that effectively base decisions on the real needs of stakeholders (Mena & Palazzo, 2012). Output legitimacy refers to whether those standards have the real-world outcomes they claim they do. Although this research is mainly focused on input legitimacy, the two are intertwined and rely on each other for complete legitimacy, therefore, they are both included in the framework.

As stated earlier, SSPs are either formally made up of, or heavily influenced by corporate actors. The standards need to appeal to companies who are voluntarily following these rules, which implies that the needs of the companies are of inherently higher importance when the standards are being developed, since their willing adoption of the standards is what allows the standard to exist in the first place (Hussain & Moriarty, 2018; Wagner & Seele, 2017). This poses a risk that companies, due to their disproportionate power in the development of sustainability standards, essentially create their own rules to address sustainability issues, despite their fiduciary duty that would prevent them from being effective decision-makers regarding

these issues (Banerjee, 2014). ‘Political corporate social responsibility,’ or PCSR, is when companies take their corporate social responsibility initiatives to a level where they are involved in political issues through rulemaking with regards to environmental or social issues (Rhodes & Fleming, 2020; Scherer & Palazzo, 2011). Companies may engage in PCSR to secure their own legitimacy, evade criticism, or avoid harsher mandatory regulations (Rhodes & Fleming, 2020; Scherer & Palazzo, 2011). Political activities that corporations may be involved in include activities “in which people organize collectively to regulate or transform some aspects of their shared social conditions, along with the communicative activities in which they try to persuade one another to join such collective actions or decide what direction they wish to take” (Young, 2004, p.377). In making decisions for the collective, corporations should have a limited say in what those decisions are, given that their motivations are biased towards their self-interest (Banerjee, 2014). Although that limit is difficult to define, the theory holds that there must be sufficient input from other stakeholders for political decisions that SSPs or corporations make to be legitimate (Martens et al., 2019).

The blurred line between public and private governance and the debate regarding the responsibilities either side holds is not new. Companies have been voluntarily addressing social or environmental issues and using economic means to advance political agendas since before the industrial revolution (Djelic & Etchantchu, 2017). During the industrial revolution, there was criticism of company owners for the conditions within their workplaces (Djelic & Etchantchu, 2017). In response, some companies adopted a ‘paternalistic’ approach to the issues: the owners had a responsibility to their workers reminiscent of the social obligation of a father at the time (Djelic & Etchantchu, 2017). The ‘paternal’ role the company owner took on meant that they had a responsibility to care for their employees, as well as a responsibility to eliminate scrutiny of the firm by becoming socially and politically involved (Djelic & Etchantchu, 2017). Although this approach implied ensuring workers’ wellbeing, it was driven by owners’ efforts to gain uncontested power (Djelic & Etchantchu, 2017). Current approaches to CSR have a different ideological framing, but arguably hold some of the same underlying connotations. Companies who are involved in making the rules that the SSPs uphold are making political decisions (along with other stakeholder counterparts), and then subsequently following these rules to secure their own legitimacy. In the end, the company is arguably looking to reduce the contestation of their

power. Effective corporate citizenship, on the other hand, retains people's agency to make the decisions that are best for themselves (Iankova, 2008)

If we are to increasingly rely on private governance to address the needs of the environment and society, this paper argues that their legitimacy should be increasingly scrutinized, and the agency of non-corporate actors should be defended.

3. The Mining Sector

This research is specifically interested in the input legitimacy of SSPs in the mining sector. Minerals and metals are necessary for basic human needs and social development but have gained recent attention for their crucial role in the transition to a carbon neutral economy. Although minerals, metals, and associated mining are necessary for carbon neutrality and basic human rights, their extraction negatively impacts the environment and society, as well. Mining is, for example, harmful through its greenhouse gas emissions (contributing to climate change), removing natural areas from mine sites, being associated with human rights abuses, and polluting the environment (Haddaway et al., 2019). Although there is tremendous wealth generation associated with mining and mineral processing, the global mining industry has also been criticized for causing an increase in foreign debt, poverty, and income inequality in the Global South by funneling mining profits to the Global North, despite hopes of the opposite by those in mining communities (Brisbois et al., 2021). There are clear trade-offs and governance improvements to be made in the mining industry.

While SSPs and the ways that they manage trade-offs have been examined through research much more extensively in other economic sectors such as agriculture, forestry, and fisheries, they have not been examined as in-depth within the mining industry. SSPs in the mining sector are also generally created more recently than those in other sectors and are growing rapidly. Consequently, whether these tools achieve what they are meant to achieve should be monitored, especially since they have been heavily criticized in other sectors.

Contrary to common rhetoric, most metals are not ‘running out’ due to their finite nature, at least not in the near future. Metal reserves, or the amount of materials confirmed as economically available for extraction, have generally not decreased over time in relation to their extraction, meaning we are not necessarily facing a physical lack of these resources (Jowitt et al., 2020). Critical materials are materials that are crucial to human development, face supply risks, and are not easily substitutable (Final list of critical materials, 2022). Critical materials to the US include aluminum, cobalt, lithium, and tin, which face supply risks for a variety of reasons (Final list of critical materials, 2022). Critical materials are different for every country since their scarcity or supply risks vary by country. Mineral scarcity is rooted most significantly in the increased difficulty and cost of extraction over time, as well as with ineffective governance as resource extraction is often associated with geopolitical conflict (Ayuk, 2020; Jowitt et al.,

2020). One example of a governance risk lies in the fact that 95% of rare earth elements were supplied from China in 2015, and China therefore has control over these elements which are fundamental to the world's economy. They are key to electronics, medicine, and energy production, to name a few (Klinger, 2017). There are risks associated with ineffective governance of metals extraction, such as the volatility of prices, discrepancies between the officially recognized rights to minerals and the needs and rights of local communities, inadequate environmental harm reduction, socio-political and geopolitical risks at multiple scales, corruption, the squandering of mineral-related profits, tax evasion, and a lack of transparency (Ayuk, 2020; Christmann, 2021). All these problems are occurring while the demand for critical materials is projected to increase between two-fold and six-fold by 2040 (International Energy Agency, 2021). Therefore, there is a need for more effective governance in the mining sector, whether that be through private or public means.

Governance of the mining sector presents many unique challenges. In addition to the large amount of control that China has on the global supply of rare earth metals and the carbon transition dilemma, the mining sector is particularly subject to reinforcing post-colonial relationships between the Global North and the Global South. The colonial era was characterized by primitive accumulation, where (mainly) European countries would go to foreign countries and secure resources from them at very low cost to bring back to their 'mother country' (Butler, 2015). It is widely agreed that our current Western political economy is neoliberal, and though neoliberalism presents a distinct and novel set of principles driving economic and political decisions, there are clear comparisons that can be drawn between the colonial era and our neoliberal era, especially in the mining sector (Butler, 2015). Globally, racialized individuals continue to do the bulk of the most dangerous and poorest-paid work (Butler, 2015). Additionally, when mining companies receive licenses for large tracts of land where they are to extract, they often displace local populations with minimal compensation (Butler, 2015). Colonialism and imperialism are about "material and economic matters - in particular, it is about access to, control of, and profit from the land, resources, and labour of dominated peoples" (Butler, 2015, p. 36). Mining companies access, control, and profit from land, resources, and the labour of peoples in the Global South, whether we consider them to be 'dominated' or not. Butler (2015) argues that the Canadian mining industry is a modern colonialist project (although state regulations have a very important role in this argument). These colonial parallels that continue to

exist in the mining industry suggest that we need to be conscientious of how the industry is governed, so as not to reinforce post-colonial issues. For this reason, the framework developed in this research examines whether the SSPs have a special group that represents Indigenous groups.

The mining industry in many countries is led by the state through a state-owned company or a partnership between the state and a multinational mining company. This facet of the mining industry creates barriers to the implementation of non-state market-driven governance: states are less prone to change due to market forces, meaning SSPs in the mining industry may have stronger opposition to adoption as compared to other sectors. This has implications for the overall change that can be made in the sector through non-state market-based governance.

4. Market-Based Governance and Democracy

4.0.1 Introduction

Market-based methods of addressing social and environmental issues have been argued to be effective and reliable forms of governance since they are less costly than hard law regulation (Garriga & Melé, 2004). This argument strikes as an oxymoron when considering the argument that socioeconomic systems driving the market are the systems that are driving environmental degradation (Djelic & Etchanchu, 2017; Rhodes & Fleming, 2020). Scholars are concerned that having global environmental governance rely on SSPs - which are dependent on current socio-economic systems – could be considered greenwashing due to two issues. The first issue is that despite the calls for systemic change from academics in the sustainability space, SSPs are argued to only be making incremental changes (Banerjee, 2014; Blythe et al., 2018). The second is that SSPs regulate by using market mechanisms and fill in the space where national governments are not formally regulating and are therefore taking on a role that was once held to a standard of democracy in the Western world. Because SSPs are not generally held to a standard of democracy, but they are governing global environmental and social issues, it is argued to be a threat to democracy as the expectation of a population being represented in political decision-making theoretically decreases. Expecting companies to regulate in global governance instead of a democratic population concentrates power over our socio-economic systems into these companies (Hahn & Weidtmann, 2016; Rhodes & Fleming, 2020).

Market-based mechanisms of governance such as SSPs, which are generally not aiming to be democratic, are taking on a governmental role by creating (soft) regulations that protect people and the planet. Soft law lies on the other end of a continuum with hard law, with both sides holding distinct features. Hard law generally involves criminal prosecution or economic sanctions for failures to comply with forced rules, which (usually) rely on state resources (Kirton & Trebilcock, 2004). Conversely, soft laws generally consist of voluntary certifications or eco-labelling schemes (Kirton & Trebilcock, 2004). If soft laws are being increasingly relied on to address social and environmental issues, it could be argued that their implementing bodies (SSPs) should be held to a democratic ideal, just as Western governments often are (Hahn & Weidtmann, 2016; Martens et al., 2019; Scherer & Palazzo, 2011).

The concept of ‘voting with your wallet’ suggests that consumers encourage or discourage corporate behaviour based on their purchasing decisions (Buchanan, 1954). Although

there is conceptual overlap with soft law regulation, there is an important distinction between the concepts. ‘Voting with your wallet’ relies on consumers to display values through their purchasing decisions, whereas, arguably, a legitimate SSP utilizes democratic processes in the development of their standards to ensure the standards meet the needs of the many instead of a small group of powerful people.

One may argue that market-based mechanisms of governance are, in a way, democratic, since people’s preferences, values, and needs are shown in the market through their purchasing behavior (Becchetti, 2012). If someone did not agree with the practices of a company, they could buy from another, more ethical one. However, these principles rarely match reality, especially in the mining industry. Mining TNCs and specific countries have relative monopolies on products, meaning that consumers have little choice but to accept their practices as they are. Additionally, in the case of the metals supply chain, the materials go through significant changes and become mixed in small amounts with other materials to make a final good. Metals are, therefore, relatively difficult for consumers (or wholesale buyers of materials) to trace back to their source. There is also a very significant difference between a consumer vote and a political vote. Consumer votes are unequal: some stakeholders with large buying power, such as investment bankers or manufacturers, have the capital to make responsible investment decisions and hold their downstream suppliers accountable. However, those with less capital have a weaker financial ‘vote’, namely people who live near mine sites, communities who were displaced because of a mining project, or the environment itself. Political votes, on the other hand, are theoretically equal. They are based on the premise that each citizen gets one vote, no matter their net worth. Of course, political systems never work perfectly, either. This research is not addressing ‘voting with your wallet’, but rather the political power of the people through deliberation within SSPs.

4.0.2 Corporations and Global Governance

There is a paradox in the literature where many authors argue that TNCs and other corporations cannot be involved in democratic decision-making or environmental governance in general, while they simultaneously must be involved in the case of private governance (Barlow, 2021). Whether they are the most effective method of governance or not, private governance through standards and certifications is a growing method of global governance. What is examined in this research is not whether corporations should or should not be involved, but rather whether they

are held accountable to the real needs of people and the planet. Although this accountability may not ever reach full, true, perfect democracy, the framework developed in this research based on Habermas' deliberative democracy is used as a theoretical ideal that SSPs should strive towards. There is no expectation that SSPs will ever be perfectly democratic or ever could be, seeing as they face structural barriers to doing so.

4.1 Habermasian Deliberative Democracy and Its Application to Sustainability Standard Programs

Democratic states are usually governed by a representative democracy with regular elections, votes, and the fair possibility that a running party will lose (Alvarez et al., 1996). These traditional forms of democratic legitimacy are not applicable to SSPs because of the structural differences between a nation-state and an SSP. These structural differences include:

- Nation-states' populations are determined by territorial boundaries or citizenship, whereas SSPs' affected stakeholders are fluid and change depending on the actors joining or exiting the program (Hahn & Weidtmann, 2016; Martens et al., 2019).
- Nation-states make a wide range of rules that apply within their territorial boundaries, whereas SSPs create rules for select issues that transcend territorial boundaries (Martens et al., 2019).

Habermasian deliberative democracy theorizes that political decisions can be made through conversation, since rational participants will eventually be able to come to consensus (Habermas, 1996). Deliberative democracy posits that decisions must have a reason, and that reason can be challenged by others. Benhabib (1996, p.70) defines the features of a deliberative process as:

1. "Participation in such deliberation is governed by the norms of equality and symmetry; all have the same chance to initiate speech acts, to question, interrogate, and to open debate;
2. All have the right to question the assigned topics of conversation;
3. All have the right to initiate reflexive arguments about the very rules of the discourse procedure and the way in which they are applied or carried out. There are no *prima facie* rules limiting the agenda or the conversation, nor the identity of the participants, as long

as each excluded person or group can justifiably show that they are relevantly affected by the proposed norm under question.”

This is the theory of democracy that is most applied to SSPs in the literature since it is flexible and, with some adaptation from Habermas’ original theorization, fits the structure of SSPs (see: Hahn & Weidtmann, 2016; Martens et al., 2019; Mena & Palazzo, 2012). Deliberative democracy does not rely on those forms of legitimacy but, rather, on inclusion of affected parties in decision-making processes, meaning, legitimacy is gained incrementally as more people affected by the decisions in question participate in the making of those decisions (Dryzek, 2011; Habermas, 1994, 1996, 2003). Martens et al. (2019) argue that Habermasian deliberative democracy requires these people affected by the decisions, or the demos, to be defined. They argue that the demos are composed of (1) the authors of the standards, (2) the addressees of the standards, and (3) all otherwise affected stakeholders (Martens et al., 2019). Even if all those affected are identified, it must be acknowledged that political participation by all is unrealistic (Habermas, 1998). Therefore, deliberative democracy focuses instead on providing the meaningful opportunity for citizens to engage in public decision-making (Habermas, 1998). Although it has been most applied to assess the democratic qualities of SSPs, there have also been important criticisms of the concept.

4.2 Caveats and Issues With Using a Framework of Deliberative Democracy to Assess Sustainability Standard Programs Input Legitimacy

4.2.1 Introduction

This study aims to assess the legitimacy of SSPs by examining to what extent their traits include processes considered democratic under Habermas’ conception of deliberative democracy. Although democracy is an important starting point for assessing the input legitimacy of SSPs, there are limitations to the use of the concept. These include, first, that companies can choose the SSPs they are certified with while those who are experiencing the social and environmental impacts the standards aim to address do not choose the certification that affects them. Second, Habermasian deliberative democracy assumes away power imbalances, third, deliberative democracy ignores colonial contexts, and fourth, Habermasian deliberative democracy is based on consensus, which has been argued to overlook agonism.

4.2.2 Sustainability Standard Programs Are Voluntary for Companies, but Forced on Others

SSPs are built specifically to appeal to companies and attract them to follow their standards. The standards are voluntary for companies, and there are competing standards that each company may choose between. This presents a structural issue where, no matter how well the SSPs attempt to cultivate their input legitimacy through democratic means, the CEs will always be the final decision makers regarding whether the SSPs meet their goals or not. This is because the CEs are the ones deciding whether and how to implement the standards. Companies typically follow these standards to secure a social license to operate. SSPs are aiming to create rules that strike a balance between being relaxed enough that companies willingly adopt the practices, and strict enough to be seen as legitimate. SSPs are not trying to take the place of governments, they are simply acting as negotiating forums between different players. The more influential the stakeholder is on the companies' social licenses to operate, the more impact they will have on the certification (Dahl, 1999). It is difficult to see how SSPs can redistribute governing power into the hands of the governed when they are structurally designed to center around companies' needs. This is especially true when many sustainability certifications come from industry groups that are dominated by industry interests, in which case, these certifications have questionable input legitimacy (Martens et al. 2019; Pies et al., 2013). Decision makers within companies are generally not trained in international development, politics, or governance. Company decision-makers are aiming to maximize their profits long-term (Banerjee, 2014). This arguably makes a company, or even an industry association, unsuitable to be making political decisions in an attempt to solve social and environmental problems (Banerjee, 2014). The companies decide what level of responsibility they take on, while those at the whim of companies' operations are subject to whichever standard the company has adopted, whether it be a 'democratic' one, one that greenwashes, or none at all. There is little opportunity for local people to 'vote out' the standards a company is following, which is a tenet of a non-democratic governance structure (Alvarez et al., 1996).

4.2.3 Deliberative Democracy Assumes Away Power Imbalances

Habermas' deliberative democracy rests on the assumption that those deliberating do not have significant power asymmetries, which reduces its applicability to situations where large,

wealthy companies are negotiating with smallholders, the financially poor, racialized, or Indigenous people (including their representatives) (Banerjee, 2022). Habermas' (2001) theory assumes it is being applied to situations with no coercive power between deliberators, but this is clearly not the case in SSP deliberations. This democratic framework, therefore, does not transfer perfectly to mining sector SSPs (Banerjee, 2022). Although Habermas does not intend for his theory to apply to SSPs, Martens et al. (2019) argue that it is still an applicable concept as long as the SSP's governed population is outlined and re-specifying some elements of Habermas' work, both of which are done in the framework developed in this research. If a major global approach to addressing inequity is through SSPs, and the approach to legitimizing SSPs does not adequately consider inequity, it would not come as a surprise that SSPs do not adequately address North-South inequalities. These caveats pose a real structural limitation to the democratic potential of an SSP.

4.2.4 The Colonial Context

Habermas' deliberative democracy has been criticized for inadequately addressing colonialism in applications such as this research because it was not meant to be used in situations where people are agonistically situated and therefore, does not adequately account for the needs of marginalized stakeholders (Banerjee, 2022; Habermas, 2001). This poses a limitation to the use of Habermasian deliberative democracy in this research as the primary theoretical framework, since it is not meant to take into consideration the very pertinent colonial issues that exist in the mining industry. Habermasian deliberative democracy assumes a shared worldview and is a-historical, overlooking colonial legacies and the impact they have on relationships between resource extraction companies and Indigenous communities (Banerjee, 2022). Non-state, market-driven governance assumes a universalized Western notion of property where states can grant access to land, which is legitimized by SSP standards certifying these activities as 'responsible' (Banerjee, 2022). Habermasian deliberative democracy rests on an assumption of 'rationality' - that 'rational' actors can come to consensus, but rationality is a Western concept that can simultaneously erase alternative worldviews and perspectives while justifying this as being 'rational' (Banerjee, 2022). To attempt to make up for this limitation of Habermasian deliberative democracy's application to SSPs in this research, some of the framework criteria are focused on the interactions between CEs and communities, though much of these interactions are not possible to study with the methods in this research.

4.2.5 Habermasian or Agonistic Deliberative Democracy?

Scholars such as Mena & Palazzo (2012), Hahn & Weidtmann (2016) and Martens et al. (2019) find that a Habermasian theory of deliberative democracy is an effective starting point to assess the democratic qualities of an SSP, but Habermas views deliberations as a space where rational actors can come to consensus regarding decisions. This theoretical perspective can overlook important conflicts in land negotiations (Rhodes & Fleming, 2020). Agonism, on the other hand, embraces the conflict inherent in political decisions (Dawkins, 2021; Mouffe, 1999). In the case of the mining industry, or any industry that involves large, powerful companies having rights to extract on lands often previously held by Indigenous peoples, a lack of conflict could suggest that those in disagreement are being silenced or that there have not been adequate means for dissenting voices to express themselves (Banerjee, 2022). This is especially true in situations where there are conflicting worldviews and simple negotiations cannot reconcile the difference in fundamental assumptions and values about the world (Banerjee, 2022). Acknowledging the possibility that consensus may not be reached may be a more realistic approach to governing TNCs (Dawkins, 2021).

4.3 Why Assess the Legitimacy of Sustainability Standard Programs From a Democratic Perspective?

4.3.1 Introduction

There are four main reasons the legitimacy of SSPs should be analyzed from a democratic perspective. The first reason is that they should be held accountable as international rule-makers since they are setting standards in global governance. The second reason is that SSPs risk allowing companies to self-regulate without accountability (risking greenwash) and therefore they should counter that risk by prioritizing a democratic ideal for maintaining their legitimacy. The third reason is that aiming for SSPs to increase their democratic qualities can create opportunity to address north-south inequalities in the global economy. The fourth reason is that SSPs can expand the opportunity for a plurality of stakeholders to shape the rules influencing corporate behavior.

4.3.2 Matching Expectations for Rule-Makers

The legitimacy of SSPs should be investigated because they are adopting the political responsibilities that would have traditionally considered the responsibility of the state, which is (in many parts of the world) held to a democratic ideal (Scherer & Palazzo, 2011). Democratic governments gain their legitimacy through democratic processes. If SSPs are taking on responsibilities that would have traditionally been that of those governments, SSPs should theoretically also gain their legitimacy through the same underlying democratic theory as those governments (Rhodes & Fleming, 2020; Scherer & Palazzo, 2011).

4.3.3 Countering Corporate Greenwash

SSPs are voluntary and market-based, meaning they rely on companies to adopt their standards based on the companies' perception of the certification's value. SSPs are aiming to protect people and the planet through their standards, but with standards that need to be appealing to companies, there is an inherent imbalance of power. The more a company has influence on an SSP's rules, the more likely those rules are to advance profit-oriented agendas and becoming greenwash. This is because companies' management teams are aiming to maximize profit. Companies whose missions are not to solve social and environmental issues are argued to be structurally incapable of addressing political and social needs (Banerjee, 2014). SSPs can act as the fair and qualified guide for companies to understand how they can meet social needs. When profit-motivated companies are able to make political decisions without effective accountability mechanisms, the more they can gain power and wealth without properly internalizing their externalities (Rhodes & Fleming, 2020). Holding SSPs and the companies they are certifying to a standard of legitimacy helps eliminate the risk of greenwash (Rhodes & Fleming, 2020).

4.3.4 Equalizing North-South Inequalities

Scholars have found that North-South inequities were not addressed by a range of studied SSPs in the agricultural sector (Clapp & Thistlethwaite, 2014; Partzsch et al., 2021). A fundamental problem within sustainable development is inequity: with mineral resources being increasingly costly to mine, they need to be distributed equally for long-term economic and social well-being (Martins, 2015). If SSPs are found to inadequately address North-South inequities, it could point to a lack of input from those in the Global South and suggests that there

is a need for future SSPs to better include Southern voices in the creation of these standards (Banerjee, 2022; Partzsch et al., 2021).

4.4 How to Reconcile the Opportunities and Barriers for Applying a Democratic Ideal to SSPs?

There are limitations to the extent to which SSPs can meet a democratic ideal but holding them to this ideal has been found in the literature to be an effective way of measuring their legitimacy (Hahn & Weidtmann, 2016; Martens et al., 2019; Mena & Palazzo, 2012). Democracy is an ideal that can be strived towards, though no governance scheme will ever be perfectly democratic. A governed population can arguably never have perfect control over their own governance, though democracy is a useful conceptual goal since it prioritizes equality and social needs. SSPs are organizations that aim to hold companies accountable for their social and environmental impacts by creating standards based on consultations, which means they do still hold some democratic potential.

Holding SSPs to a democratic ideal is an effective way of measuring their legitimacy and accountability, but it is critical to understand that SSPs will never be perfectly democratic and no matter how much they effectively use consultations and stakeholder inclusion to create the standards, they remain limited in their ability to be a democratic mechanism of governance due to their nature. This limitation does not discount the usefulness of democratic concepts for measuring their legitimacy (Barlow, 2021).

4.5 Conclusion

SSPs have the potential to be arenas of political deliberation that democratize corporate activities for those that follow the standards, but they also have the potential to perpetuate corporate seizure of power and allow companies to infiltrate the political sphere in a way that is beneficial to their profit margin, but not to the public. Assessing the democratic qualities of SSPs can clarify to what extent the SSPs are democratizing mining governance or perpetuating corporate power. The democratic input legitimacy of SSPs has scarcely been studied, and especially insufficiently in the minerals and mining sector.

5. Methods

5.1 Overview

The research informing this paper broadly involved (1) a review of relevant literature, (2) the development of a framework aiming to measure the legitimacy of SSPs in the mining sector, and (3) a primary document analysis comparing the framework to SSPs in the mining sector.

To develop the framework, trends and key concepts were pulled from the literature and listed. This list was then shortened based on data availability, measurability of criteria, and to reduce redundancies. The framework was tested by applying it to a well-established SSP in the mining industry (The Aluminium Stewardship Initiative), which revealed additional criteria to remove for the reasons mentioned above.

Once the framework was found to apply to the SSPs and did not have redundant criteria, the framework was applied to seven more SSPs in the mining industry, making a total of eight. It was also applied to the Forest Stewardship Council to see how it would compare to the ‘gold standard’ SSP (Loconto & Fouilleux, 2014), as well as compared to the criteria used in the International Social and Environmental Accreditation and Labelling (ISEAL) Alliance standard-setting code of good practice for setting social and environmental standards. It was compared to the ISEAL code because this is a commonly used meta-standard that legitimizes SSPs. The ISEAL code comparison demonstrates where the framework developed in this research aligns with the code and where they diverge in their criteria. The impacts of ISEAL certification were analyzed alongside the criteria.

The findings within the framework were examined to pull out areas where SSPs were meeting the criteria and areas where they were not. The framework is outlined in [Appendix B](#).

5.2 Theoretical Perspective

This research adopts a constructivist approach in that we assume knowledge is constructed: the framework is a subjective interpretation of literature, and the ways in which the SSP information relates to the framework are subjective. The research is an attempt to make sense of the world and create meaning.

Habermas’ theory of deliberative democracy is the philosophical foundation for the research, meaning, the framework is testing what qualities of deliberative democracy the SSPs possess. The research assumes that deliberative democracy is a suitable goal for addressing the

needs of people in mining communities, though a shortfall of this assumption is that mining companies often exist in countries that are not democratic and interact with societies that have different societal methodologies for governing and decision-making for the collective. This shortfall is to be acknowledged, but Habermasian deliberative democracy was chosen as the theoretical framework despite its shortfalls because of its flexibility in its application to governance systems without formal voting or other formal democratic structures and its use in past research examining the legitimacy of SSPs.

5.3 Literature Review & Deriving the Framework

A literature review was conducted to explore the topics of voluntary SSPs, non-state market-driven governance, and how SSPs fit into the broader context of global governance. These topics led to literature concerning the opportunities and barriers that exist for SSPs to advance or hinder democracy on a global scale. These topics were then addressed in the literature until saturation was reached. From the literature, key relevant arguments were pulled and amalgamated into a list of criteria that would measure the democratic legitimacy of SSPs. Through an iterative process, redundant criteria were excluded as well as those which were not possible to measure through primary document analysis. At key points, second opinions were sought which added some criteria as the literature was interpreted in a variety of ways. The SSPs are compared to the framework on a three-category scale. Where the SSP partially met the criterion, it was explained in the Excel file. The scale is:

- The SSP does meet the criterion
- The SSP partially meets the criterion
- The SSP does not meet the criterion

5.4 Data Collection & Application to the Framework

The data collected consisted of webpages, documents available on the SSP websites, and information published on standardsmap.org. Standardsmap.org is a tool launched by the International Trade Center, in partnership with the United Nations and provides information about SSPs. A comprehensive scan of each SSP's website was conducted, using search functions as needed to find relevant information to the framework. As the relevant information was found, the webpage/document was uploaded to Nvivo and filed under the appropriate SSP. Documents included in the research are those that were deemed by the researcher to answer the questions

outlined in the framework, and those excluded were those that were deemed to contain irrelevant information.

Information was retrieved from SSPs self-published websites and standardsmap.org between September 2022 and January 2023.

Below is a list of the SSP websites and a link to their home pages, as well as standardsmap.org

General Information	https://www.standardsmap.org/en/identify
Aluminium Stewardship Initiative	https://aluminium-stewardship.org/
Fair Stone	https://www.en.fairstone.org/
FairTrade: Gold Standard	https://www.fairtrade.net/standard/gold
Initiative for Responsible Mining Assurance	https://responsiblemining.net/
ResponsibleSteel	https://www.responsiblesteel.org/
Responsible Jewellery Council	https://www.responsiblejewellery.com/
Responsible Minerals Initiative	https://www.responsiblemineralsinitiative.org/
Towards Sustainable Mining	https://mining.ca/towards-sustainable-mining/

Table 1: List of SSPs analyzed and links to their websites

These SSPs were chosen because they are all voluntary SSPs in the minerals and mining sector that consist of more than one stakeholder group. The number of SSPs analyzed was mainly limited by time constraints. Some SSPs were included with the aim of getting a wider range of types of SSPs. The FairTrade - Gold Standard was chosen because it applies to artisanal and small-scale mining, whereas most mining SSPs apply to large mining companies. The Responsible Jewellery Council applies to supply chains rather than specific companies, and the Responsible Minerals Initiative is more of a business-led initiative rather than a typical multi-stakeholder initiative. ResponsibleSteel recognizes the Aluminium Stewardship Initiative (ASI) and the Initiative for Responsible Mining Assurance (IRMA). Towards Sustainable Mining was chosen because it was recently featured as a supported initiative in the Government of Canada's (2022) *The Canadian Critical Minerals Strategy: From Exploration to Recycling: Powering the*

Green and Digital Economy for Canada and the World and is therefore predicted to have an important influence on the Canadian mining industry in the context of sustainability.

See Appendix A for descriptive attributes of each SSP examined.

ISEAL and the Forest Stewardship Council were compared against the framework for reference. The ISEAL code of good practice for setting social and environmental standards was compared against the framework to understand what SSPs had to do in relation to the framework if they followed the ISEAL code. The FSC was compared because it is often touted as a well-governed, legitimate SSP and it was therefore examined to see how the SSPs in the mining sector compared to it.

Forest Stewardship Council	https://fsc.org/en
ISEAL code of good practice for setting social and environmental standards	https://www.isealalliance.org/get-involved/resources/iseal-codes-good-practice

Table 2: Programs analyzed that were not mining sector SSPs and links to their websites

In Nvivo, documents were classified under their SSP names. Each relevant sentence or paragraph within the file was then ‘coded’ or associated with a criterion in the framework, which had been inputted into Nvivo. Depending on the information the SSP offered, the data was then interpreted as either meeting, not meeting, or partially meeting the criterion in the framework, which was tracked in a spreadsheet. Once all the criteria had been associated with data (other than those where there was no data available), the data was reviewed to ensure consistency across the SSPs.

To determine whether SSPs had similar levels of legitimacy than others or if they had significantly different levels of legitimacy, points were assigned as follows:

1 point	The SSP does meet the criterion
0.5 points	The SSP partially meets the criterion
0 points	The SSP does not meet the criterion OR there is no data available OR the criterion does not apply

Table 3: Points code for comparing SSPs’ achievement against the framework

Because the criteria all represent different aspects of legitimacy, the sum of the SSP points are not comparable, but the sum is used to see what SSPs meet significantly more or significantly

fewer criteria than others. To do so, ranges were created: if an SSP scored less than 15 points against the framework, then it was given a score of 'C', if it scored between 15 and 25 points against the framework, it was given a score of 'B', and if it scored more than 25 points, the SSP was given an 'A'. If SSPs are in the same category, it does not mean they scored equally, rather the scoring system is used to provide a general comparison between significantly different SSPs.

6. Limitations

The first limitation of this research is that the methods chosen removed some qualitative detail since the comparison between the SSPs and the framework was done using a three-category scale with assigned points. Only assigning one of three options to the SSPs' traits can take away some nuance and detail but allows for less complex generalized analysis.

The second limitation is that the criteria in the framework have varied weights that are not captured in the analysis since all the criteria are treated as an equal measure of legitimacy. Some criteria impose a higher threshold of legitimacy than others, which is not clearly reflected in the framework. For example, the criteria measuring whether the SSP requires the certified entities to engage with stakeholders in a “transformational” way imposes a higher threshold of accountability than the criterion measuring whether the SSPs have enforcement to handle non-compliance by certified entities. To attempt to account for this while still being able to broadly compare the legitimacy of different SSPs, the achievements against the framework were categorized into three groups: those that met many criteria, those that met a relatively mid-range number of criteria, and those that met relatively few criteria.

The third limitation is that the methods of analysis used could not capture all the information that the literature suggests is important to measure the legitimacy of an SSP, since it would have required in vivo data collection. It was also based on a narrow definition of legitimacy based on one theoretical framework. A more comprehensive exploration of their legitimacy based on multiple theoretical frameworks may reveal different results. The data collection was also limited to SSPs' self-published information on their websites, which may have introduced bias into the findings. There was no triangulation between what the SSPs publish about what they do and what truly occurs. In other words, this research assumes that the SSPs publish accurate information about their programs.

The fourth limitation is that the research is looking at the potential for effective inclusion of stakeholders, not how effective the SSPs are at meeting sustainability goals. The findings could possibly be generalized to the governance of SSPs and CEs, but not to their outcomes.

The fifth limitation is that deliberative democracy has been criticized as being insufficient when applied to non-Western cultures. It was still used as the theoretical underpinning of the research because of its flexible nature and its previous use in similar research, but it should be

made clear that there may be other theoretical underpinnings that may better take colonial contexts and Indigenous ways of knowing into account.

The sixth limitation is that the interpretation of the literature and the ways in which the SSPs match up to the framework were done by one researcher, so the methods lack redundancy and there is a risk of personal bias being reflected in the findings.

7. Development of the framework

7.1 Justifications for the Framework Criteria and How They Arose From the Literature

In this section, the sources and justifications for why certain criteria are included in the framework are outlined. The framework is structured into two categories, containing numbered lists which are then subdivided into indexed lists using letters. The first category contains inclusion criteria for the SSPs. The second category are the criteria which are compared to the SSP documents. The framework examines SSPs at two different levels: one being the SSPs themselves, meaning their governance and oversight, the second being the certified entities. The certified entities have their own governance, their own oversight, and their own processes. The term ‘certified entities’ is used to include alternative types of organizations that may seek certification by the SSPs in the analysis, though the research does focus on for-profit companies.

7.1.2 Inclusion Criteria (Category 1)

These criteria were added to ensure the relevancy of the SSPs and to scope the research. These are descriptive criteria that are not meant to measure their legitimacy based on Habermasian deliberative democracy theory, but rather to ensure the SSPs being analyzed are within the scope of the study. The study was scoped to include SSPs that are composed of at least two stakeholder groups and that certify entities in the minerals and mining sector.

The criteria in category 1 were:

- 1. Does the SSP have a board or committee that represents more than 1 stakeholder group?**
- 2. Does the SSP certify or set standards for certified entities as ‘responsible’, ‘sustainable’, ‘fair’, "stewardship" etc.**
- 3. Does the SSP certify mining companies, mined products, or supply chains in the mining industry, focusing on this industry (not general product certifications)**

7.1.3 Measures of Input Legitimacy (Category 2)

Below, findings from the literature review are stated along with the criteria in the framework that were developed based on those findings. They are grouped by the 8 major measures of legitimacy the framework examines: (1) there is evidence of consultation with varied groups of stakeholders; (2) there is fair inclusion of stakeholders in the development of the standard; (3)

the standards ensure that certified entities have legitimate stakeholder engagement in order to meet the standard (where applicable); (4) there is output legitimacy; (5) there are strong governance arrangements; (6) conflicts are well-managed; (7) power inequalities are accounted for; (8) the SSP is transparent.

1. There is evidence of consultation with varied groups of stakeholders

This criterion is meant to measure whether the SSP has engaged with all relevant stakeholders. It is meant to encompass all affected stakeholders of the SSP, without prescribing specific groups as being relevant, since this would change depending on the SSP. The three chosen are meant to encompass (1) the standards addressees, (2) those who represent other perspectives, and (3) whether the standard allows anybody from the public to provide input into the standard. Martens et al. (2019, p.1129) state “Stakeholder discussions should be open to all” [in the context of providing suggestions to improve the Equator Principles].

The criteria developed based on these findings are:

- a. Does consultation occur with potential certified entities ex. Companies, suppliers, manufacturers, etc.?**
- b. Does consultation occur with NGOs, environmental organizations, and other groups representing civil interests?**
- c. Does consultation occur with the public, meaning anybody can present feedback to the authors of the standards?**

2. There is fair inclusion of stakeholders in the development of the standard

This criterion aims to assess the effectiveness of the program structure at including the three categories of stakeholders outlined by Martens et al (2019): the authors of the standards, the addressees of the standards, and all those otherwise affected. Martens et al. (2019) argue that it is impossible to have every individual stakeholder represent their opinion, especially if many are unaware of the standard’s relation to themselves or have not been exposed to the concept of democracy. Stakeholders also have power imbalances between them. Large companies have access to resources that environmental or civil groups may not have. Without specific resources provided to them, it risks undermining the democratic legitimacy of the program. To resolve issues of power inequality and access to resources, the representation of each stakeholder viewpoint should be proportionate to the affected population with that viewpoint. One example

of how this can be done is by identifying relevant stakeholders and categorizing them into chambers with equal voting power. During discussion between these varied stakeholders, consensus is ideal, though allowing equal voting power between different interest groups can make room for unresolvable conflict and representative decisions to be made.

Linz (1994) argues that for a democracy to remain a democracy, there must be a limit to how long a certain person can serve, since a limitless rule would be a characteristic of an oligarchy. Therefore, a limit to how long SSP standards authors can remain in their position would increase the legitimacy of the SSP. Deliberative democracy requires deliberation for reasoned decisions to be made (Habermas, 1996): reviews for the standard should include consultations to meet the principles of deliberative democracy.

The criteria developed based on these findings are:

- a. Are there mechanisms in place to ensure that varied stakeholder interests are proportionately considered during standards development? Ex. Chambers for interests with equal voting power (like FSC), or another structure that manages stakeholder percentages in?**
 - b. Are there resources in place to include stakeholders that would otherwise not be able to participate, i.e. funding?**
 - c. Does the SSP have a requirement for a maximum interval between standard reviews?**
 - d. Does the standard review require additional consultation?**
- 3. The standards ensure that certified entities have legitimate stakeholder engagement in order to meet the standard (where applicable)**

Martens et al. (2019) argue that all stakeholder perspectives relevant to the governing group in question should be able to provide feedback. Certified entities should therefore do their due diligence to ensure the input of all relevant stakeholders is sought out. For a certified entity (CE) to be able to seek out that feedback, they need to have a clear stakeholder mapping procedure to provide them with an understanding of who is included within their ‘governed’ population (Martens et al., 2019). Mining has been a vehicle for wealth movement from the Global South to the Global North, therefore, ensuring long-term and culturally sensitive benefits for their mapped stakeholders is key to avoiding social issues associated with mining (Brisbois et al., 2021).

Martens et al., (2019) express that the Equator principles would benefit from continuous and ongoing dialogue, which aligns with the principles of deliberative democracy. Ideally, the CEs have ongoing dialogue with their stakeholders. Deliberative democracy supports treating a population as free and self-governing autonomous agents, not as objects of legislation (Gutmann & Thompson, 2004).

Bowen et al. (2010) developed a framework that describes different levels of engagement between CEs and their stakeholders. Transactional engagement involves one-way communication and a passive stance towards communities, transitional engagement involves two-way communication and interactive collaboration but no transfer of decision-making authority, while transformational engagement involves two-way communication, community empowerment, and transfers decision-making power. This framework helps describe the extent to which CEs are expected to include stakeholder feedback into their plans and processes. The criteria that were developed based on these findings are:

- a. Does the SSP have a stakeholder mapping procedure that they and the certified entity must follow to ensure consultations encompass all possible stakeholder perspectives?**
- b. Is stakeholder engagement considered to be transactional, transitional, or transformational?**
- c. How often do organizations following the standard need to engage with civil and environmental stakeholders?**
- d. Does the SSP state that the certified entities must use democratic processes during stakeholder engagement?**
- e. When standards require certified entities to make decisions for mining communities, is there a requirement that the company respect cultural heritage and create long-term benefits for those communities?**

4. There is output legitimacy

Output legitimacy refers to whether the SSP achieves the goals it really sets out to achieve. To ensure this is the case, they must include assurance mechanisms to verify that CEs are, in fact, making the changes and conducting their business in the way that they say they do. Assurance also includes repercussions when a CE does not comply with the standards. To ensure that the

assurance mechanisms are credible, they should be done by independent parties.

The criteria developed to measure these are:

- a. Are there audits or checks to ensure that certified entities are meeting the requirements of the standard?**
- b. Does the SSP have enforcement to handle non-compliance by the certified entity?**
- c. Are audits of the certified entities done by parties independent from those entities?**

5. There are strong governance arrangements

The governance arrangements examined relate to procedural documentation, the structure of the governing body, and the meta-standards the SSPs follow. Martens et al. (2019) argue that an SSP requires a constitution to have effective governance and to foster learning over time. It should outline the procedures for its amendment to avoid deviations from pre-approved procedures and the identity of the SSP (Martens et al., 2019). Legitimacy also requires the ability to change the governing body (Alvarez et al., 1996; Mena & Palazzo, 2012). Martens et al. (2019) also argue that internal audit systems improve legitimacy.

ISEAL is an organization that aims to ensure SSPs in the mining sector (and others) are legitimate. Following the industry standard for good standard-setting processes improves input and output legitimacy.

Since corporations are said to be unable to make political decisions, it is important to understand the corporate concentration within the standards' authorship (Banerjee, 2014; Scherer & Palazzo, 2011).

The criteria developed based on these findings are:

- a. Does the SSP have a constitution or similar 'rulebook' that determines the purpose, structure, and limits of the organization?**
- b. Does the constitutional document outline rules and procedures for its amendment?**
- c. Can the authors of the standard can be amended over time through voting procedures or otherwise?**
- d. Are there limits or requirements on how long members of the board can serve?**
- e. Does the standard comply with the ISEAL code of practice for setting social and environmental standards?**

- f. Are there annual internal audits of the SSP management system?**
- g. Is the SSP's board of directors a multistakeholder group (not an industry association)?**

6. Conflicts are well-managed

Typically, deliberative democracy posits that consensus can be reached through effective deliberation. Dawkins (2019) argues that requiring consensus can erase the reality of power dynamics and consensus should instead be a measure that agreements come closer to or farther from. This is to avoid co-optation of less powerful actors due to a requirement of agreement. Effective deliberation also includes a mechanism to handle grievances with that deliberative process (Banerjee, 2022).

These findings justified the following criteria in the framework:

- a. Do the authors of the standard strive to reach consensus during decision-making in relation to standards development?**
- b. Do the standards require that certified entities strive for consensus during their private consultations with stakeholders?**
- c. Is there a process outlined for handling grievances, including grievances with the discussion process itself?**

7. Power inequalities are accounted for

Power inequalities can cause ineffective deliberations (Banerjee, 2022). Inequalities can be rooted in a variety of stakeholder attributes including access to language, access to resources, where the stakeholder is from, or what organization or cause they represent. If the standards are published in different languages, a wider variety of stakeholders will be able to participate easily, demonstrating increased inclusivity.

Due to the nature of the mining industry, many companies are in a position where they are conducting activities on Indigenous territory. Because of the prevalence of relationships between Indigenous populations and certified entities in the mining industry, there is a need for these relationships to be specifically addressed (Banerjee, 2022). Banerjee (2022) argues that traditional conceptions of deliberative democracy do not adequately account for colonial histories and power imbalances. Understanding the extent to which the SSP attempts to

specifically account for Indigenous people's needs and rights can provide insight into whether the SSP has addressed the colonial legacies that exist within the mining industry and attempted to repair relationships between mining communities and mining companies in the Global North (Banerjee, 2022). Consultations should also be culturally appropriate and enforce internationally agreed-upon human rights to effectively equalize power imbalances (Banerjee, 2022). The ecological protection of lands is a key tenet of sustainability, therefore, whether SSPs protect areas of high conservation value protecting HCVs is an indicator of the ecological protection offered by the SSP. This criterion was adapted to match Standardsmap.org to have consistent data collection, although it only measures one way that SSPs can protect ecologically significant areas.

These findings have produced the following criteria:

- a. Are the standards published in multiple languages?**
- b. Are certified entities required to offer translation services when consulting with communities?**
- c. Are certified entities required to offer translation services when consulting with communities?**
- d. Does the SSP have a special group to address Indigenous relations during the consultation process?**
- e. Does the standard require that members or participants commit to legal compliance, ILO core conventions, Free Prior and Informed Consent, and maintain High Conservation Values (HCVs)?**

8. The SSP is transparent

Transparency is key for an SSP to gain legitimacy (Mena and Palazzo, 2012). Deliberations are the foundation of deliberative democracy, therefore, the types and qualities of deliberations that are occurring during standards development would be valuable data to measure the legitimacy of standard-setting programs. Although for research purposes, this information is important, if the SSPs are transparent about their deliberations, it may hinder their ability to speak freely, therefore, not meeting this criterion does not mean less democratic legitimacy for the SSP, simply that there is less data available to measure the democratic legitimacy. Mena and Palazzo

(2012) argue that disclosing decisions in relation to stakeholder feedback, governance structures and procedures, the identities of the standards authors, the SSPs' financial information, and audit reports for the certified entities is required to secure legitimacy.

Based on these findings, the following criteria were developed:

- a. Does the SSP disclose decision-making deliberations?**
- b. Does the SSP disclose decisions (in relation to stakeholder feedback) once they are made?**
- c. Does the SSP disclose their governance structure and procedures?**
- d. Does the SSP disclose the identities, backgrounds, roles, and responsibilities of the standard authors?**
- e. Does the SSP have financial transparency?**
- f. Does the SSP require the certified entities to publish audit reports?**

7.2 Criteria That Arose From the Literature but Were Not Included in the Framework

After creating a list of criteria based on the literature review, some criteria were not included in the final version of the framework. Many of these were not included due to a lack of data availability. The criteria that were not included are outlined and discussed in this section.

The first criterion that was excluded from the original framework was the inclusion criterion:

“does the SSP make ‘political’ decisions, or in other words, do the standards affect stakeholders outside of the company, including the environment?” This was deemed to be an unnecessary inclusion criterion since, first, it was difficult to find data that supported or denied the criterion, namely due to the vague and theoretical nature of it. The second reason is that Scherer and Palazzo (2011), citing Matten and Crane (2005) argue that some multinational corporations have begun to take on a political role in that they, among other actions, “fulfil the functions of protecting, enabling, and implementing citizenship rights.” This argument is not referring specifically to multinational corporations that are following sustainability standards, but sustainability standards certify companies as ‘responsible’ or ‘sustainable,’ meaning the

companies are taking on a responsibility to society and the environment and therefore by definition become involved in citizenship rights.

The original framework also aimed to analyze the composition of stakeholders included in the engagement process to better understand the extent to which corporate vs civil vs environmental interests are being accounted for in the standard-setting process. There were also multiple criteria that investigated the impact that different stakeholders had on the final version of the standard. The first barrier to understanding the composition of stakeholders in the engagement process was data unavailability. SSPs do not generally publish their decisions in relation to stakeholder feedback, and often when comments are published many of them are anonymous. There were also no direct links between the engagement process and the final standards, therefore, there was no way to analyze the impacts that different stakeholders had on the standards. One proxy measurement for this that remained in the framework was the analysis of the governance structure and whether there are governance mechanisms to ensure equal say between different types of stakeholders.

There were criteria that measured the level of conflict occurring during engagement, the impact that conflict had on the final version of the standard, and whether conflict was avoided or accepted in the standard. For the reasons listed above, meaning a lack of data specific to the engagement events/inputs themselves, these criteria were not possible to answer.

There were criteria that aimed to measure to what extent the SSPs are working to decolonize the minerals and mining sector, based on the work of Banerjee (2022). Although fostering mutually beneficial relationships with Indigenous groups was included in many of the SSPs, decolonization is a theoretical step further which was not addressed by any of the SSPs. Some criteria remain that measure the level of inclusion of Indigenous perspectives included in the SSPs (criteria 7). This point is expanded on in the discussion section.

SSPs in other industries are often criticized for perpetuating a form of regulatory capitalism where the larger firms outcompete the smaller ones because they are able to meet the requirements set out by the SSPs but smaller firms are not. A criterion measuring whether the SSP makes an effort to include smaller firms was deemed unnecessary due to the large proportion of materials being produced by large companies rather than artisanal and small-scale miners.

8. Findings

The major findings of this research are, first, that SSPs fared well against the framework, but they do not expect their certified entities to achieve legitimacy through democratic processes of the same rigour. The next finding was that certified entities were rarely required to follow clear stakeholder mapping procedures, meaning, they do not clearly outline their affected stakeholders. The third major finding is that many SSPs did not have specific groups within their organizational structure which address the needs of Indigenous people.

8.1 Specific Framework Results

In this section, the ways in which the SSPs compare to the framework are presented.

8.1.2 Category 1: Inclusion Criteria

The first category of criteria in the framework are simply used as inclusion criteria. The first criteria examines whether the SSP is governed by more than one interest group, or else it would not be considered a multi-stakeholder initiative, which is what the literature review was scoped to examine, meaning some concepts may not apply if the organization being examined is not governed by more than one stakeholder group. The different SSPs had different governance structures, but they all included stakeholders with a variety of interests. The next criterion checks whether the SSPs certify the CEs as some version of responsible, sustainable, fair, or a similar certification, since this research is scoped to sustainability standards, excluding those that are focused on material or physical design standards. Since this research addresses SSPs in the metals and mining industry, the criteria tests for whether the SSP applies to the mining industry.

8.1.3 Category 2: Measures of Input Legitimacy

1. (a, b, & c) - There is evidence of consultation with varied groups of stakeholders

All the SSPs analyzed except for Fair Stone do consult with a variety of stakeholders. They consult with all three sub-criteria of stakeholders in the framework, meaning they consult with those who would potentially follow the standards (i.e. companies, suppliers, manufacturers), groups representing civil interests (i.e. NGOs, environmental groups), and they have open consultations with the public.

Fair Stone is the exception since it is the only SSP that does not deliberately include these three categories of stakeholders. Instead of consulting with representative groups, Fair Stone

consults with ‘experts.’ Although these experts may be experienced in their field, Fair Stone stands out as an SSP that does not bring supply chain actors, NGOs, or civil society into their decision-making processes.

2. There is fair inclusion of stakeholders in the development of the standard

Overall, most SSPs make an effort to include as many stakeholders as possible. RMI stands out as having very little evidence indicating, through the framework criteria, they fairly include all stakeholders in the development of their standard. ASI, FTG, RJC, IRMA, and ResponsibleSteel all scored similarly well in this category of the framework.

a. Are there mechanisms that ensure that varied stakeholder interests equally considered during standards development? Ex. Chambers for interests with equal voting power (like FSC), or another structure that manages stakeholder percentages in discussion

Sub-criteria (a) assesses whether the SSP has a governance structure that ensures that different interests are considered equally during decision-making processes, which all the SSPs analyzed have except for Fair Stone and the Responsible Minerals Initiative. Although every SSP has a slightly different governance structure, this criterion analyzed the governing group which is most equivalent to the ‘standards authors.’ Fair Stone and the Responsible Mining Initiative both have a board of directors that come to decisions through a voting process, but these boards are not sectioned into interest groups in order to gain balanced representation.

The ASI is governed by a multi-stakeholder standards committee where 50% of the committee are non-industry stakeholders, meaning they represent civil and Indigenous interests. ASI also aims to balance industry interests between upstream and downstream suppliers. Their structure is as follows: six committee members represent ‘Production and Transformation’, six members represent ‘Industrial Users’ and 10 representatives from civil society members and two representatives from the Indigenous people’s Advisory Forum. The breakdown can be visualized in figure 1:

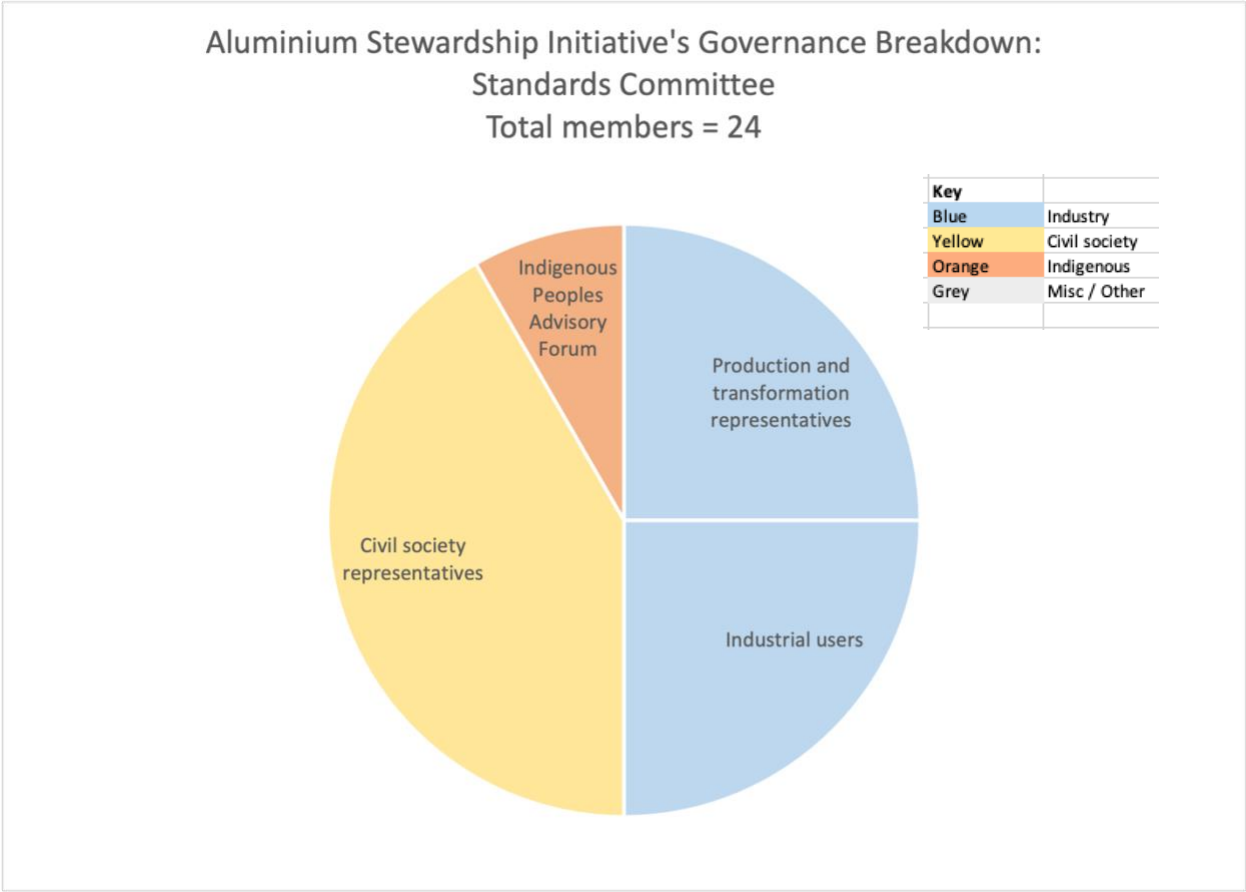


Figure 1: The Aluminium Stewardship Initiative’s Governance Breakdown: Standards Committee

Fair Stone, according to Standards Map (2022), does have a voting system to maintain a balanced representation of stakeholder interests, but there is no evidence on their website that they have split their board of directors into categories. They do state that none of their board members have a commercial interest in the natural stone business.

The Initiative for Responsible Mining Assurance’s board of directors is made up of 13 members which are split into seven categories: the mining industry, downstream purchasers, NGOs, affected communities, organized labour, investment and finance, and other. Each of these membership categories have two members included, except for ‘other’ which has one representative. This is visualized in figure 2.

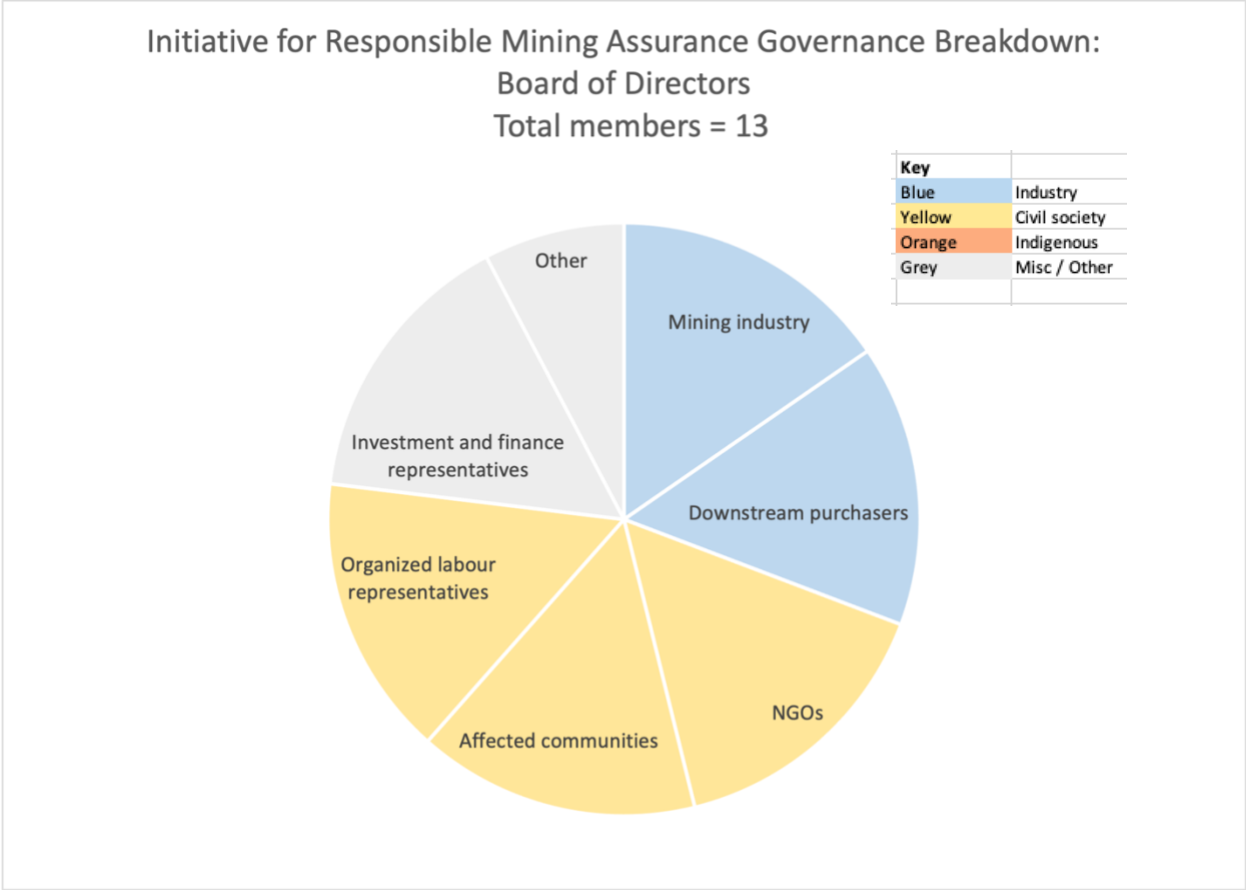


Figure 2: Initiative for Responsible Mining Assurance Governance Breakdown: Board of Directors

ResponsibleSteel has nine board members separated into three main categories: civil society, business, and independent members. There are three of each business and civil society members, one independent chair, and two independent board members appointed by elected board members. These are visualized in figure 3.

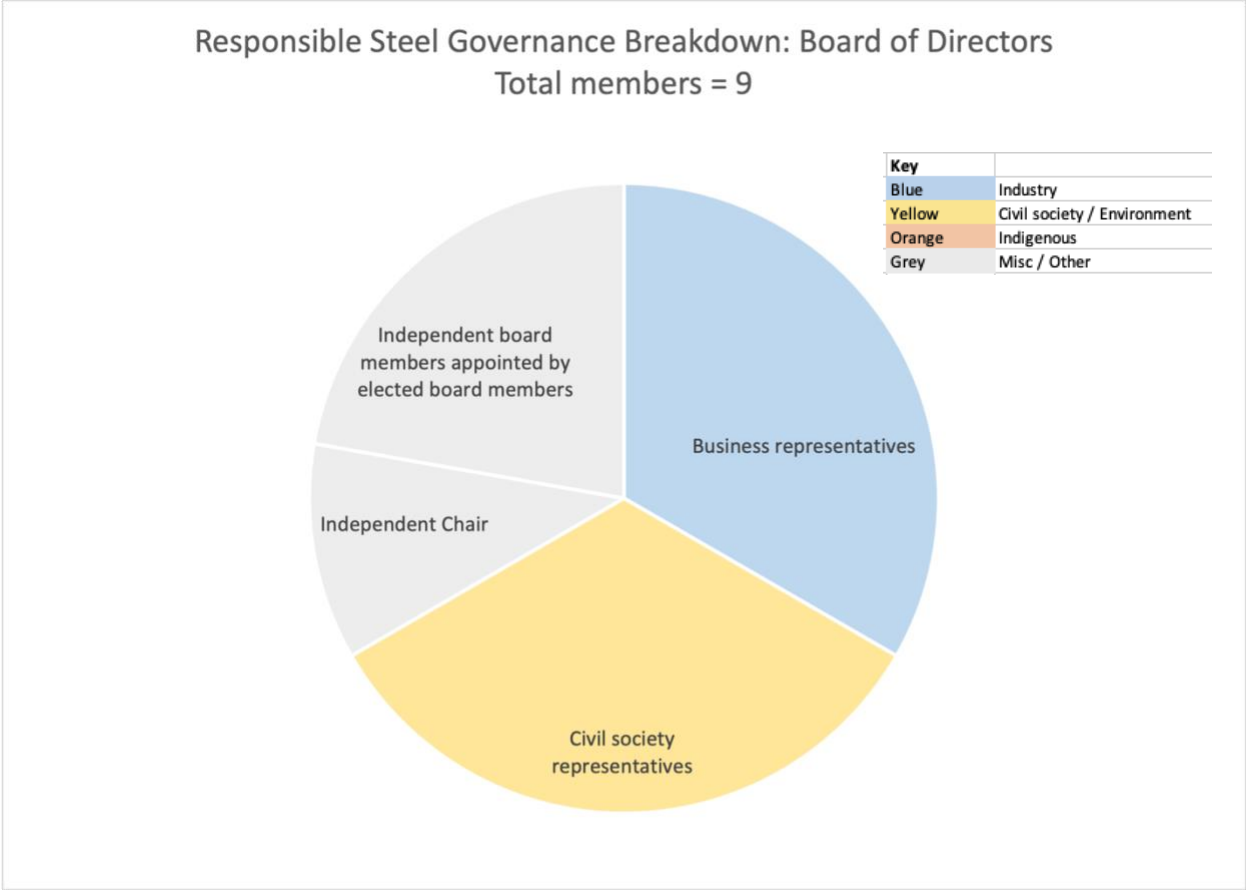


Figure 3: ResponsibleSteel Governance Breakdown: Board of Directors

The FairTrade - Gold Standard has a general assembly with delegates from different countries rather than a board of directors representing specific stakeholder interests like the other SSPs. Delegates have voting rights and, although they represent members, they are not bound by instructions by the members.

The Responsible Jewellery Council’s standard-setting committee is split 50/50 between industry members and non-industry members. Of the 28 total spots within the standards setting committee, two non-industry spots are reserved for the Diamond Development Initiative and the Alliance for Responsible Mining. Their board of directors, on the other hand, was composed of 85% individual company representatives. This is visualized in figures 4 and 5.

Responsible Jewellery Council Governance Breakdown: Standards Committee
 Total members = 28

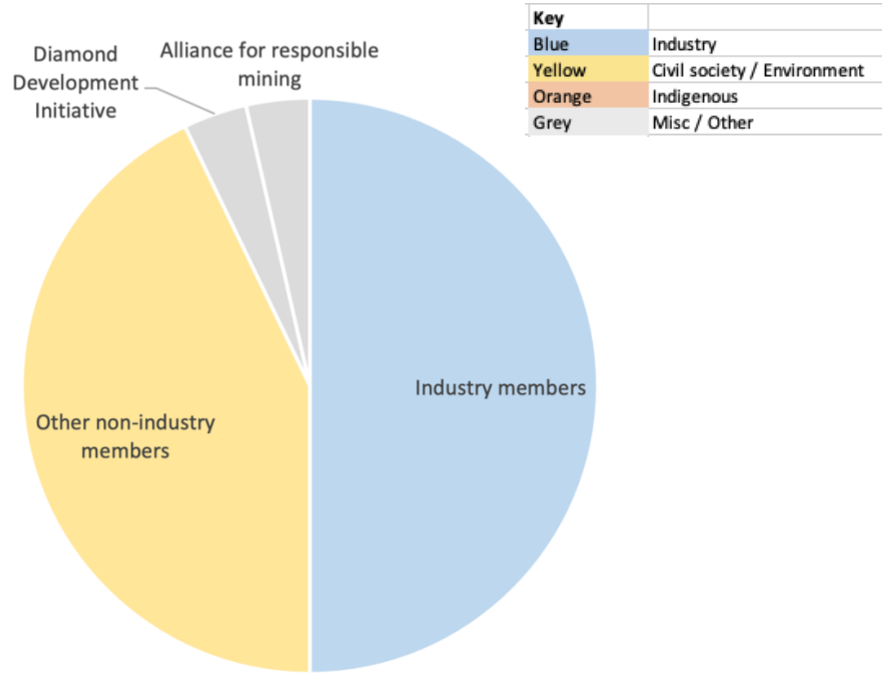


Figure 4: Responsible Jewellery Council Governance Breakdown: Standards Committee

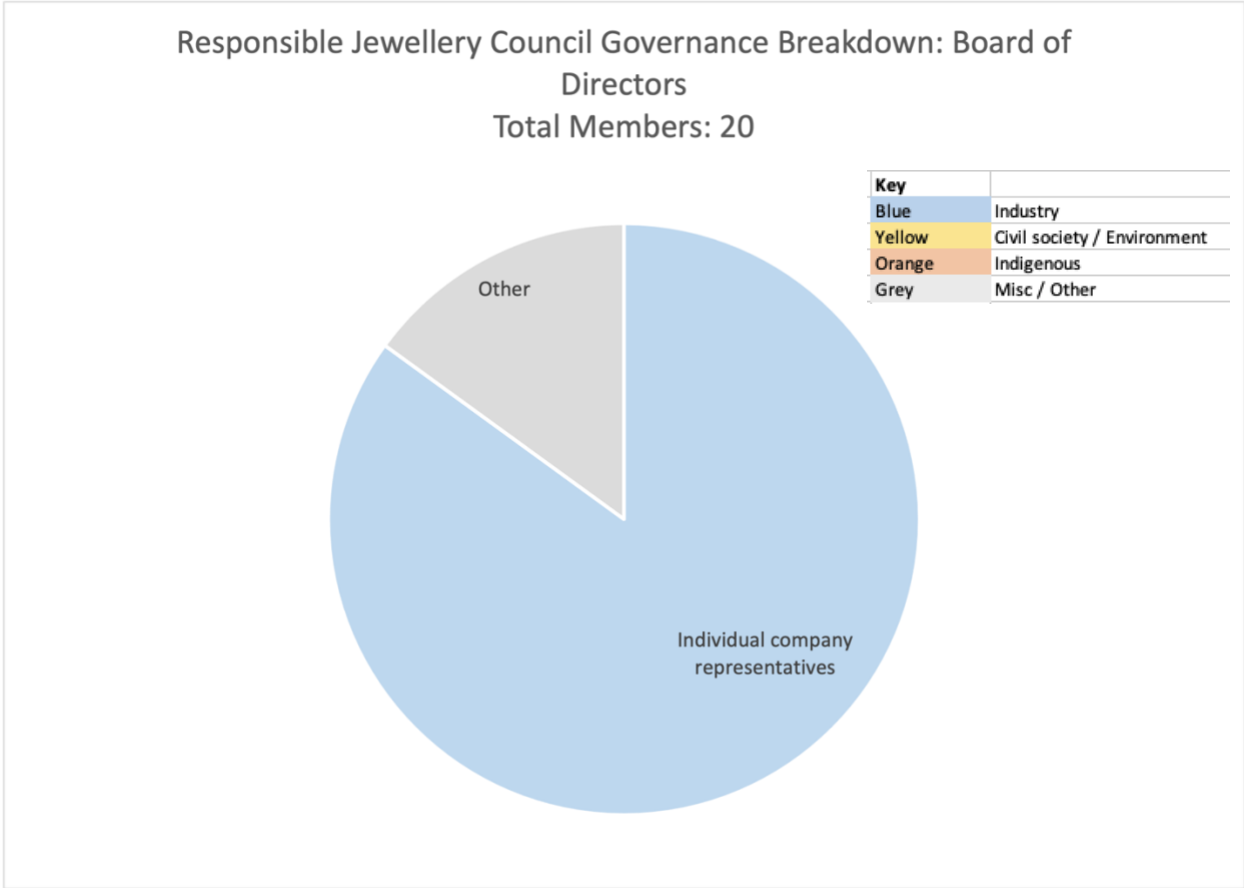


Figure 5: Responsible Jewellery Council Governance Breakdown: Board of Directors

The Responsible Minerals Initiative is the only SSP that was developed through an industry association (the Responsible Business Alliance), making it more of a business-led initiative rather than a true multistakeholder initiative. This is apparent in the breakdown of their steering committee: three of fourteen members represent non-industry interests, while the other 11 represent industry interests, with nine of those representing individual companies. The companies represented on the RMI steering committee are mainly electronics companies. They include Apple Inc, Dell Inc, Samsung Electronics America, KEMET, Siemens Energy, Intel Corporation, GeSI, Global Advanced Metals, and BMW Group. This is visualized in figure 6.

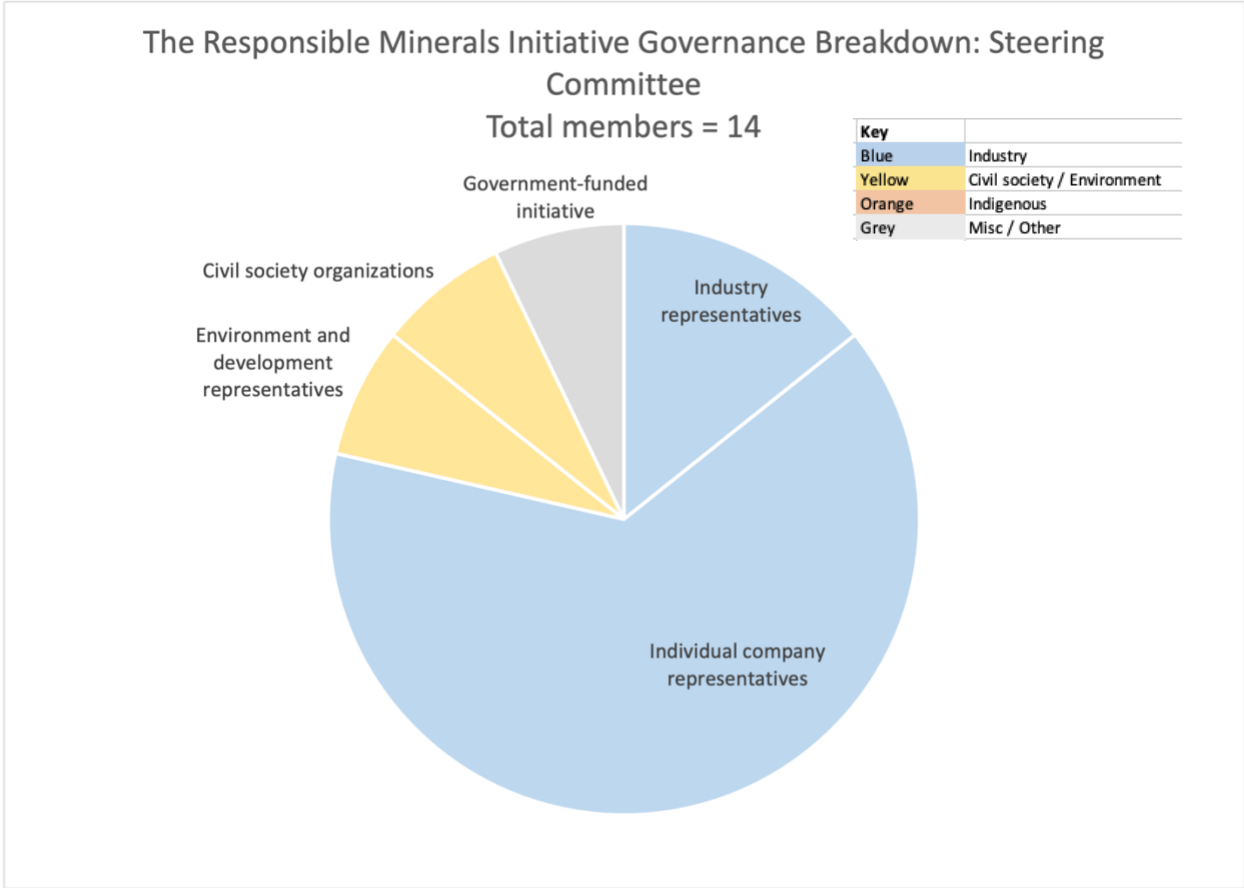


Figure 6: The Responsible Minerals Initiative Governance Breakdown: Steering Committee

The board of directors of the Responsible Business Alliance is composed completely of individual company representatives, visualized in figure 7. These companies are Dell Technologies, Jabil, Molex, Google, AMD, Seagate Technology, Intel Corporation, NXP Semiconductors, Apple Inc, Sony Group Corporation, and Ford Motor Company.

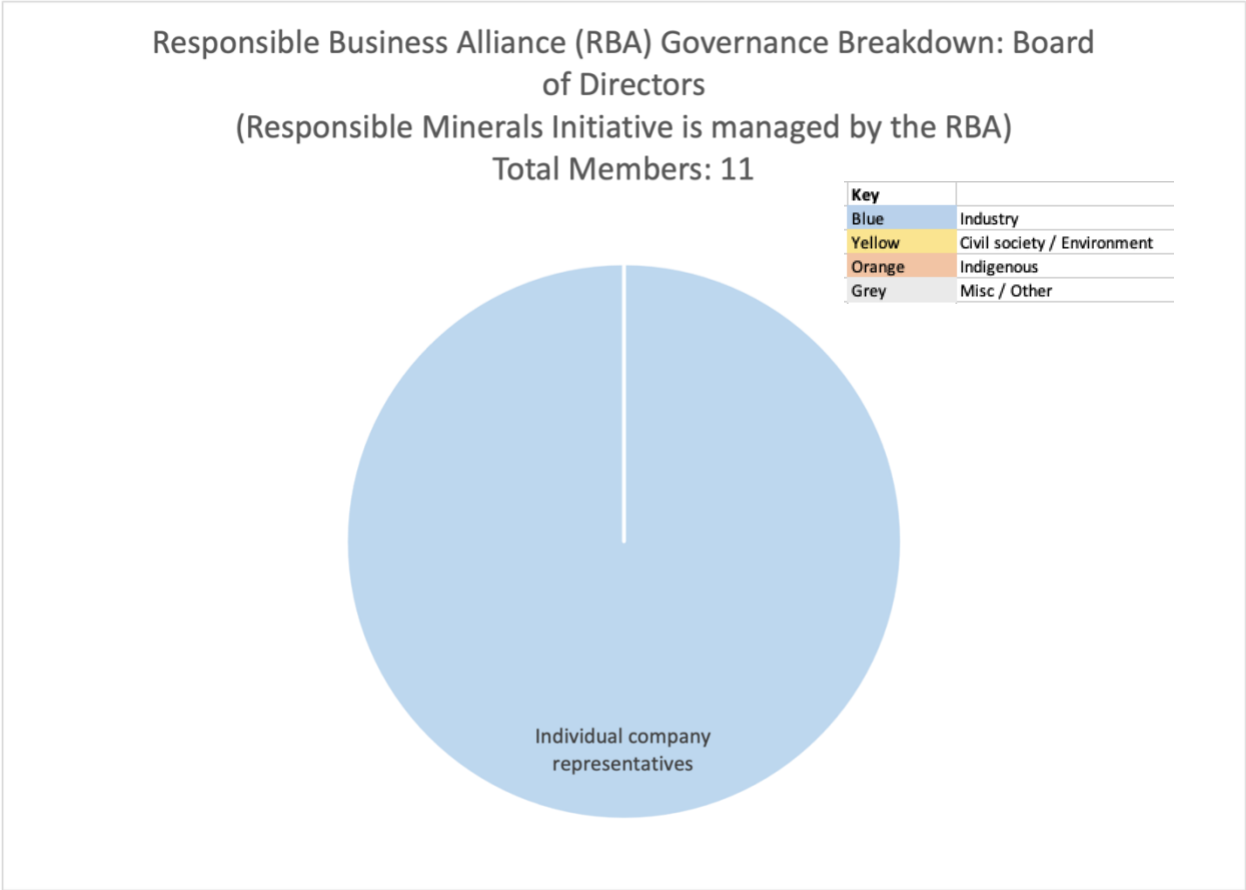


Figure 7: The Responsible Business Alliance Governance Breakdown: Board of Directors

Towards Sustainable Mining is made up of a board of directors which includes 94% representatives from individual companies. The board of directors is guided by a Community of Interest Panel, and these two groups must come to consensus. The distribution of the Community of Interest Panel is depicted in figure 8.

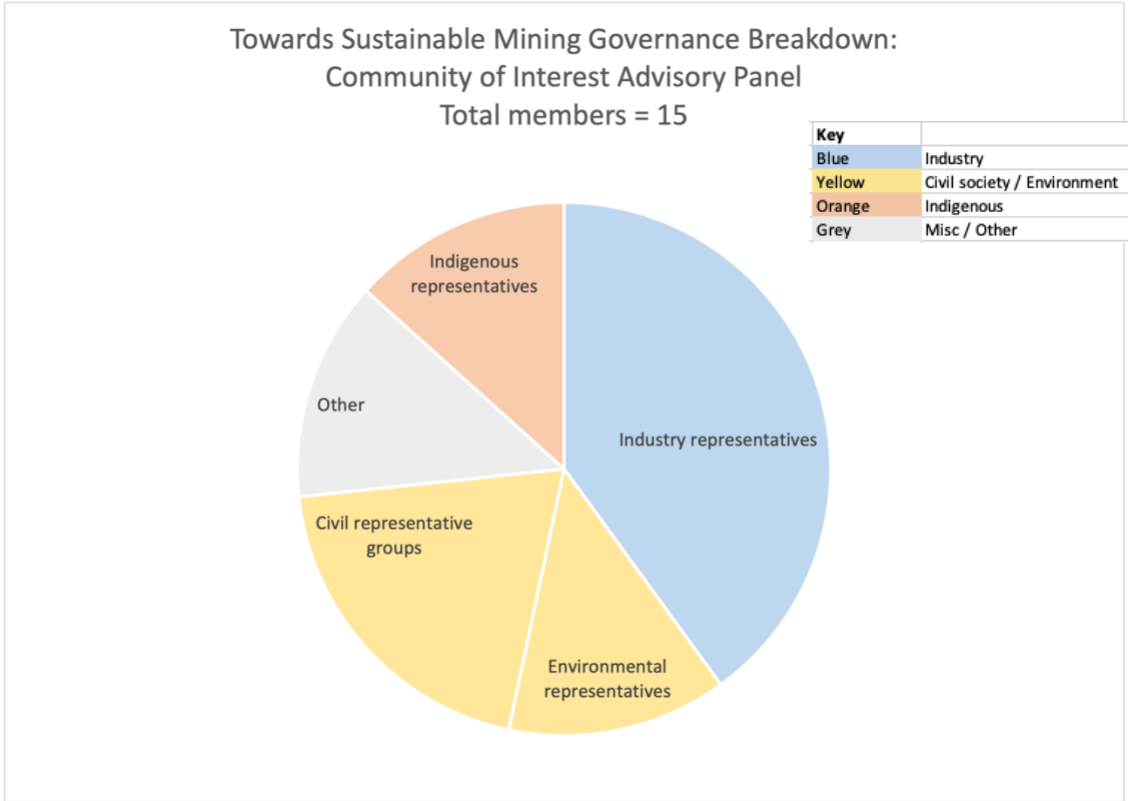


Figure 8: Towards Sustainable Mining Governance Breakdown: Community of Interest Advisory Panel

The composition of Towards Sustainable Mining’s board of directors is visualized in figure 9.

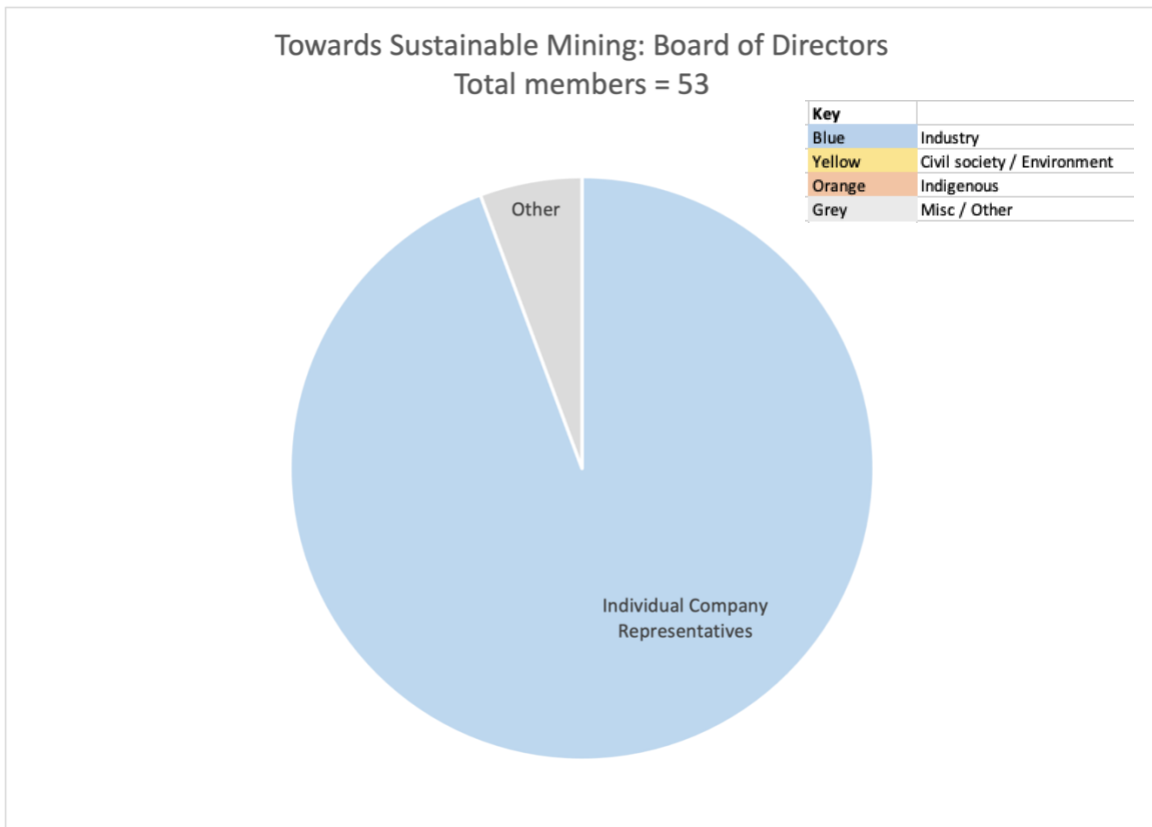


Figure 9: Towards Sustainable Mining Governance Breakdown: Board of Directors

2b. Are there resources in place to include stakeholders that would otherwise not be able to participate, i.e. funding?

All the SSPs have specifically stated resources to ensure that all relevant stakeholders are able to participate in the standards-setting process except for Fair Stone and the Responsible Minerals Initiative. Fair Stone does not have public consultations; therefore, they do not have the resources they would theoretically need to have public consultations. There was no evidence found regarding whether the RMI or TSM have resources in place to include stakeholders that would otherwise not be able to participate.

The ASI, to ensure stakeholders are equally able to participate, waive external costs of complaints for Indigenous organizations, civil society groups and organizations, and individuals. They also make use of web-based engagement where travel restrictions exist.

IRMA, ResponsibleSteel, FairTrade Gold, and the Responsible Jewellery Council do not have clear resources in place, but rather state that they must include all stakeholders in their engagement and have methods to ensure they do so. IRMA conducts stakeholder mapping,

ResponsibleSteel “aims to support stakeholders in raising issues,” FairTrade Gold has a mandate to engage with all relevant stakeholders, and the RJC “aims to ensure open and transparent consultations”.

2c. Does the SSP have a requirement for a maximum interval between standard reviews?

The ISEAL code of good practice requires that the maximum time between standard reviews be five years, and all the SSPs that follow the ISEAL code have a maximum review interval of five years. Fair Stone does not follow the ISEAL code and therefore reviews its standards on an ad hoc basis. There was no evidence found regarding the maximum interval between standard revisions for RMI, but they are working towards an ISEAL certification which suggests that they will implement that maximum in the future. TSM also did not have information about the frequency of their standard reviews. All the SSPs analyzed except for Fair Stone also have ongoing comment forms for the public to provide feedback, which is another ISEAL code requirement.

2d. Does the standard review require additional consultation?

The ISEAL code of good practice requires that standard reviews include a public consultation, therefore, all the SSPs that follow ISEAL have a public consultation alongside their standard reviews. Fair Stone does not have a public consultation alongside their standard reviews. There was no information found for RMI or TSM.

3. The standards ensure that certified entities have effective stakeholder engagement in order to meet the standard (where applicable)

3a. Does the SSP have a stakeholder mapping procedure that they and the certified entity must follow to ensure consultations encompass all possible stakeholder perspectives?

The ISEAL code of good practice requires that the SSP “engage a balanced and representative group of stakeholders in standards development,” therefore, all ISEAL compliant SSPs have this as part of the standard, however, IRMA and ResponsibleSteel stand out as having distinct documents that outline their stakeholder engagement process. The ASI, FairTrade Gold, RMI, and the RJC all have stakeholder engagement requirements, but they are mixed into the standard itself and less comprehensive than IRMA and ResponsibleSteel. TSM only has a technique for

stakeholder mapping in achievement level AAA, otherwise, there is no clear mapping procedure outlined.

3b. Is stakeholder engagement considered to be transactional, transitional, or transformational?

Engagement would be considered transactional when certified entities offer information to stakeholders after decisions have been made, have one-way communication, and a passive stance towards those stakeholders (Bowen et al., 2010). Transformational engagement is two-way and involves interactive collaborations between stakeholders and certified entities. Transformational engagement describes two-way engagement where communities are empowered to make decisions for themselves in collaboration with the CE. No information on this topic was found for Fair Stone. ASI, ResponsibleSteel, and the Responsible Jewellery Council can be categorized as requiring companies to have transitional engagement. They require that certified entities engage with communities, but they do not have specific requirements where they transfer decision-making power to communities and have significant empowerment initiatives. RMI requires that CEs engage with stakeholders, but the CEs have to make their own stakeholder engagement plan. For comparison, the FSC has an outline of the transitional-transactional-transformational types of engagement (under different names) and they allow certified entities to choose their level of engagement for particular situations.

IRMA and TSM both can be considered to have ‘transformational’ stakeholder engagement strategies in their standards, but they’re both structured to provide different certifications for different levels of performance, so lower levels do not include transformational engagement - it is only the highest IRMA level and the two highest levels for TSM.

3c. How often do organizations following the standard need to engage with civil and environmental stakeholders?

ISEAL does not cover whether standards should require the certified entities to engage at a certain interval, however, all the SSPs except for Fair Stone require that certified entities engage with stakeholders on an ongoing basis. There was no evidence found that Fair Stone or RMI have a time-based requirement for certified entities.

3d. Does the SSP state that the CEs must use democratic processes during stakeholder engagement?

The FSC, analyzed as a comparison, is the only SSP that claims to have internal democratic processes. IRMA, ResponsibleSteel, and FTG do not claim to be internally democratic, but IRMA and ResponsibleSteel require certified entities to gain broad community support through democratic processes, and the FTG encourages the use of democratic processes for certified entities' decision-making. Mentions of democratic processes were not found for ASI, Fair Stone, RMI, and the RJC. TSM, at the higher levels of achievement and when engaging with Indigenous stakeholders, require companies to develop engagement processes with Indigenous communities that include their traditional decision-making processes, which may be more appropriate than democracy in that context.

3e. When standards require certified entities to make decisions for mining communities, is there a requirement that the company respect cultural heritage and create long-term benefits?

Little evidence was found for Fair Stone regarding this topic. All the other SSPs require that human rights be upheld, but FSC, FTG, and RJC do not go further than that. ASI, IRMA, and ResponsibleSteel have specific sections of their standard addressing the maintenance of cultural heritage and delivering long-term benefits to communities. RMI has a requirement that the CE must 'avoid, minimize, reduce and compensate for adverse impacts on cultural heritage' through stakeholder engagement. TSM achievement level A and higher requires that long-term sustainable benefits are provided to communities.

4. There is output legitimacy

Overall, the SSPs analyzed were found to have good output legitimacy.

4a. Are there audits or checks to ensure that certified entities are meeting the requirements of the standard?

Since this criterion is a basic principle of assurance, all the SSPs include an audit mechanism.

4b. Does the SSP have enforcement to handle non-compliance by the certified entity?

Similarly to criterion 2-4a, having enforcement for non-compliance is a basic principle of legitimacy, therefore, all the SSPs have language suggesting that firms will lose certification in the case of unremedied non-compliance. ASI, Fair Stone, RMI, and FTG will revoke their certifications if corrective action is not taken to remedy instances of non-compliance. FTG and ResponsibleSteel have a strong emphasis on finding solutions and helping to remedy instances of

non-compliance. IRMA and TSM have levels of achievement, where the lowest level is simple disclosure. In the case that a higher level is not reached, they would be awarded a lower one. In the case that they are not found to disclose according to the standard, they would not achieve the base level.

4c. Are certified entity audits done by independent parties from the certified entities?

All the analyzed SSPs have independent organizations conduct the audits to verify compliance with their standards.

5. There are strong governance arrangements

5a. Does the SSP have a constitution or similar 'rulebook' that determines the purpose, structure, and limits of the organization?

The ASI, ResponsibleSteel, FairTrade Gold, and the Responsible Jewellery Council have constitutions, whereas no constitution was found for Fair Stone, IRMA, RMI, or TSM.

5b. Does the constitutional document outline rules and procedures for its amendment?

Since a constitution was not found for Fair Stone, IRMA, RMI, and TSM this criterion does not apply. Procedures for the amendment of the ASI, ResponsibleSteel, and the RJC were not found, whereas FTG does.

5c. Can the authors of the standard can be amended over time through voting procedures or otherwise?

ASI, IRMA, ResponsibleSteel, and RJC have voting procedures to amend their respective decision-making groups. Fair Stone does not specify whether their board is determined by a voting process, but they do state in a blog post that a person was elected as a deputy, implying there are voting procedures. FairTrade Gold also had a small amount of information on this topic, but their list of members states that the chair will be re-elected at a certain time, implying there are voting procedures. Very little information was found on the topic for RMI and TSM.

5d. Are there limits or requirements on how long members of the board can serve?

ASI, FTG and RJC have limits to how long members of the board can serve. There is no evidence that there is a time limit for members under Fair Stone, RMI, IRMA, TSM, or ResponsibleSteel.

5e. Does the standard comply with the ISEAL code of practice for setting social and environmental standards?

Fair Stone and TSM are not compliant with the ISEAL code of practice for setting social and environmental standards. RMI is also not currently following the code but working towards it. ASI, IRMA, ResponsibleSteel, FairTrade Gold, and RJC all comply with the ISEAL code. Many of the criteria in the framework derived from the literature is similar to the ISEAL code, therefore, Fair Stone and RMI are clear outliers in many of the criteria since they do not follow the same meta-framework for establishing standards.

5f. Are there annual internal audits of the SSP management system?

ISEAL requires that compliant SSPs conduct internal audits, though they are not necessarily annual. ResponsibleSteel and the RJC are the only two SSPs that conduct annual internal audits. ASI, Fair Stone, IRMA, RMI, TSM, and FTG did not provide evidence that they conduct annual internal audits.

5g. Is the SSP's board of directors a multistakeholder group (not an industry association)?

ASI, Fair Stone, IRMA, ResponsibleSteel, and FairTrade- Gold Standard are governed by a multistakeholder board of directors (or equivalent overseeing body). The RJC has a board of directors made up mostly of representatives from individual companies. RMI and TSM are both overseen by an industry association.

6. Conflicts are well managed

6a. Do the authors of the standard strive to reach consensus during decision-making in relation to standards development?

This criterion is an ISEAL code requirement. No information was found regarding Fair Stone or RMI's decision-making strategies and whether they strive for consensus. All other SSPs analyzed do strive for consensus in decision-making.

6b. Do the standards require that certified entities strive for consensus during their private consultations with stakeholders?

There was no information found to answer this question for Fair Stone, FTG, RMI, or RJC. IRMA and TSM do not mention requiring certified entities to come to a consensus during their consultations. ASI and ResponsibleSteel do not mention consensus as a specific requirement for CEs in their standards.

6c. Is there a process outlined for handling grievances, including grievances with the discussion process itself?

All the analyzed SSPs have a grievance process except for TSM, where no evidence of an outlined grievance process was found.

7. Power inequalities are accounted for

7a. Are the standards published in multiple languages?

ResponsibleSteel does not publish their standard in multiple languages. All other analyzed SSPs publish their standards in more than one language.

7b. Are translation services available for consultations during the standard-setting process?

There was no information about this topic found for Fair Stone, FTG, RMI, or RJC.

ResponsibleSteel does not commit to providing translation services and suggests commenters use a translation software. ASI requires an agreement prior to submitting comments in languages other than English. IRMA only considers comments made in English as formal comments.

7c. Are certified entities required to offer translation services when consulting with communities?

ASI, IRMA, RJC, TSM, and ResponsibleSteel do require that communities are engaged with in an appropriate language. No information was found for Fair Stone, FTG, or RMI.

7d. Does the SSP have a special group to address Indigenous relations during the consultation process?

The only SSPs analyzed that had a specialized group representing Indigenous people on their board of directors (or similar standards authorship group) were ASI and TSM. Fair Stone, ResponsibleSteel, RMI, and RJC do not have any special group. IRMA has an ‘affected communities’ category of representatives on the board, which indirectly represents Indigenous peoples. FTG does not have a specific group on their board representing Indigenous peoples, but the fundamental missions of the SSP is to shift the balance of power to communities in the Global South and they are representing the needs of small producers, therefore, Indigenous people’s empowerment is more engrained in the missions and perhaps less necessary than some other SSPs.

7e. Does the standard require that members or participants commit to legal compliance, ILO core conventions, Free Prior and Informed Consent, and maintain High Conservation Values (HCVs)?

ASI, FTG, and RJC do employ these frameworks in their standards. Fair Stone requires compliance with local laws and ILO core conventions, but they do not mention FPIC or HCVs. IRMA requires compliance with local laws and has FPIC as part of their standard. The ILO conventions are used to guide the standards, and HCVs are not mentioned. ResponsibleSteel, TSM, and RMI require legal compliance, FPIC, and some ILO conventions are internally recognized, but they do not recognize HCVs.

8. The SSP is transparent

8a. Does the SSP disclose decision-making deliberations?

None of the SSPs disclose their decision-making deliberations. This could be to allow stakeholders to speak freely.

8b. Does the SSP disclose decisions (in relation to stakeholder feedback) once they are made?

(Included in IRMA standard) Fair Stone does not disclose decisions, but all the other SSPs analyzed do. Decisions were disclosed for RMI's Risk Readiness Assessment (RRA), which is currently under review, but the disclosure was not found for the RMAP ESG standard, which was the standard examined in this research.

8c. Does the SSP disclose their governance structure and procedures?

(Included in IRMA standard) Fair Stone discloses the role of each person on the board and their occupation outside of the program, but not their governance structure or procedures. All other SSPs analyzed do disclose that information.

8d. Does the SSP disclose the identities, backgrounds, roles, and responsibilities of the standard authors?

(Included in ISEAL standard) All SSPs analyzed disclose who their authors are.

8e. Does the SSP have financial transparency?

ASI, ResponsibleSteel, and FTG publish their financial reports. Fair Stone does not publish financial reports, but they do disclose that their income comes from fees charged to certified entities. Financial reports for IRMA were not found, but they do state they are not-for-profit.

Financial reports for RJC, TSM, and RMI were not found either, but RMI discloses their member rates.

8f. Does the SSP require the certified entities to publish audit reports?

(Included in ISEAL standard) Fair Stone does not require companies to publish their audit reports, but all other SSPs do. RMI only requires a summarized version.

Comparisons to ISEAL and the FSC

In comparing the ISEAL code of good practice for setting social and environmental standards to the framework, it was found that many of the criteria overlapped. This meant that if the SSPs followed the ISEAL code, they generally met more of the criteria within the framework.

In comparing the FSC, it was found that the FSC fared relatively well against the framework, but did not achieve every criteria. It was generally comparable to many of the ISEAL-compliant SSPs in the mining sector.

9. Analysis

9.1 Comparison Between Sustainability Standard Programs

As was stated in the [methods](#) section, the criteria within the framework were weighted equally, which does not indicate the differences in the amount of legitimacy meeting them would provide the SSP. To see significant overall differences between SSPs, a points system was used. When a criterion was met, the SSP was assigned a 1 for that criterion. When the SSP partially met the criterion, they were assigned 0.5. When the SSP did not meet the criterion or there was no information, they were assigned a 0. The partial scores are explained in the Microsoft Excel data sheet associated with this research. Scores were summed, and SSPs with a total score of less than 15 (achieving less than 40%) were given a ‘C,’ scores between 15 and 25 (between 40 and 70%) are given a ‘B,’ and scores above 25 (more than 70%) are given an ‘A’. The ranges are assigned to provide a general comparative discussion between the analyzed SSPs. With this system, Fair Stone and RMI got C scores, meaning they met significantly fewer criteria than all the other SSPs which scored A, except for TSM which scored B. These scores are presented in table 4.

Score	ISEAL member?	SSPs that achieved the score
A	YES YES YES YES YES	ASI: Aluminium Stewardship Initiative FTG: FairTrade – Gold Standard IRMA: Initiative for Responsible Mining Assurance RJC: Responsible Jewellery Council Res Steel: ResponsibleSteel
B	NO	TSM: Towards Sustainable Mining
C	NO NO	Fair Stone RMI: Responsible Minerals Initiative

Table 4: SSPs’ scores against the framework

Score	SSP	1. There is evidence of consultation with varied groups of stakeholders	2. Stakeholders are fairly included in the development of the standard	3. The standards ensure that certified entities have effective stakeholder engagement in order to meet the standard	4. There is output legitimacy	5. There are strong governance arrangements	6. Conflicts are well managed	7. Power inequalities are accounted for	8. The SSP is transparent	Total score
A	ASI	100%	88%	50%	100%	71%	100%	90%	83%	82%
	FTG	100%	88%	70%	100%	93%	67%	50%	83%	81%
	IRMA	100%	75%	100%	67%	43%	67%	60%	67%	69%
	RJC	100%	88%	50%	100%	79%	67%	60%	67%	74%
	Res Steel	100%	88%	80%	83%	57%	100%	30%	83%	74%
B	TSM	100%	25%	70%	100%	0%	33%	70%	75%	54%
C	RMI	100%	13%	30%	100%	0%	33%	30%	50%	38%
	Fair Stone	0%	33%	0%	100%	21%	33%	30%	25%	26%
Scores across SSPs		88%	62%	56%	94%	46%	63%	53%	67%	62%

Table 5: Comparison of all SSPs by mid-level criteria. Criteria are weighted equally; therefore, equal percentages do not indicate equal achievement.

Table 5 illustrates the relative achievements of the SSPs in comparison to the framework, though due to the lack of relative weighting of individual criteria, equal percentages do not indicate equal achievement. These percentages are presented not to provide for precise analysis, but rather to demonstrate the variations in achievement of each SSP. Table 5 demonstrates that many SSPs scored relatively well against the framework, with five of the eight possessing more than 70% of attributes identified by the framework. The sections of the framework where the SSPs met the most criteria were (1) There is evidence of consultation with varied groups of stakeholders, (4) There is output legitimacy, and (8) The SSP is transparent. The sections where the SSPs met the fewest criteria were (3) The standards ensure that certified entities have effective stakeholder engagement in order to meet the standard (where applicable), (5) There are strong governance arrangements, and (7) Power inequalities are accounted for.

Naturally, there is variation in achievement of the individual criteria, but some of these stand out. The Aluminium Stewardship Initiative has a lower score in category 3 than its scores in the other categories. This is, first, because they do not have a clear stakeholder mapping procedure but

rather stakeholder engagement guidance mixed into their standards. Second, they require their CEs to have transitional engagement with their stakeholders, third, they do not explicitly state that CEs need to engage on an ongoing basis with civil and environmental stakeholders. Lastly, there was no evidence to suggest that CEs must use democratic processes during stakeholder engagement.

The FairTrade – Gold Standard had a lower score in criterion 7 compared to its other criteria namely due to a lack of evidence that they require translation services. They also only got a partial score for criterion 2-7-d (Does the SSP have a special group to address Indigenous relations during the consultation process?) because they do not have a specific group, but 50% of their general assembly is made up of producers.

IRMA's score for category 5 was low namely because of a lack of evidence for meeting criteria 2-5-a (Does the SSP have a constitution or similar 'rulebook' that determines the purpose, structure, and limits of the organization?), 2-5-d (Are there limits or requirements on how long members of the board can serve?), and 2-5-f (Are there annual internal audits of the SSP management system?). Additionally, due to there being no evidence to suggest they have a constitution or similar 'rulebook,' criteria 2-5-b (Does the constitutional document outline rules and procedures for its amendment?) does not apply. IRMA also had a low score in comparison to the other SSPs in category 4. This is because there are only 3 sub-criteria to measure criterion 4, and one of these did not apply to IRMA. They do not have “enforcement to handle non-compliance by the certified entity,” per se, because IRMA is a level based SSP, meaning if the CE achieves fewer of the requirements IRMA sets out in their standard, they achieve a lower level of the standard rather than have their certification revoked entirely.

The Responsible Jewellery Council scored noticeably low in category 3 because, first, they achieved partial scores for criteria 2-3-a (Does the SSP have a stakeholder mapping procedure that they and the certified entity must follow to ensure consultations encompass all possible stakeholder perspectives?), 2-3-b (Is stakeholder engagement considered to be transactional, transitional, or transformational?), and 2-3-e (When standards require certified entities to make decisions for mining communities, is there a requirement that the entity respect cultural heritage and create long-term benefits for those communities?). They require that all stakeholders are included in consultations, but there are no specific methods outlined, they require transitional engagement, and they require that rights be upheld, but do not require further creation of mutual

benefits for communities. Finally, there is no evidence that CEs must use democratic processes during stakeholder engagement.

ResponsibleSteel had a lower score for criterion 7 because they do not publish their standards in multiple languages, they do not require or offer translation services, they do not have a specific group to represent Indigenous People, and they do not include the protection of High Conservation Value areas in their standards. This also meant they had a lower score for this criterion in relation to the other SSPs.

Towards Sustainable Mining had a wide range of scores between the different criteria. They scored relatively well against criteria 1, 3, 7, and 8, while scoring relatively poorly against criteria 2, 5, and 6. They scored poorly in criterion 2 namely due to a lack of evidence to suggest they meet sub-criteria 2-2-b (Are there resources in place to include stakeholders that would otherwise not be able to participate, i.e. funding?), 2-2-c (Does the SSP have a requirement for a maximum interval between standard reviews?), and 2-2-d (Does the standard review require additional consultation?). They scored poorly against criterion 5 because there is no evidence to suggest they meet criteria 2-5-a (Does the SSP have a constitution or similar 'rulebook' that determines the purpose, structure, and limits of the organization?), which means criterion 2-5-b does not apply, 2-5-c (Can the authors of the standard can be amended over time through voting procedures or otherwise?), 2-5-d (Are there limits or requirements on how long members of the board can serve?), and 2-5-f (Are there annual internal audits of the SSP management system?). They also do not comply with the ISEAL code of practice for setting social and environmental standards and their board of directors is industry-based.

RMI had the same issues as Towards Sustainable Mining for criterion 5, earning them a low score. They also scored low in criteria 2 for the same reasons as TSM, except they only partially meet sub-criteria 2-2-a (Are there mechanisms in place to ensure that varied stakeholder interests are proportionately considered during standards development? Ex. Chambers for interests with equal voting power (like FSC), or another structure that manages stakeholder percentages in discussion).

Fair Stone scored low for criteria 1 and 3 because they do not have public consultations, but rather have a private consultation with a set group of experts.

9.2 Major Findings

The findings of the analysis are outlined below. These are general descriptions of the findings, but the direct associations between the framework and the raw data can be found in the Nvivo file associated with this research.

Five of the eight analyzed SSPs fared relatively well against the framework. This was the most significant finding, suggesting that SSPs are relatively legitimate based on democratic legitimacy theory. It follows that many SSPs in the minerals and mining industry are largely meeting the criteria to achieve input legitimacy, based on Habermasian democratic principles. Importantly, the five SSPs analyzed that scored highest were also compliant with the ISEAL code of good practice of setting social and environmental standards, which contributed to their legitimacy and meeting the criteria since the framework and the ISEAL code included many similar requirements for SSPs. This is demonstrated by the finding that Fair Stone, RMI, and TSM, which are the SSPs that do not follow the ISEAL code, did not receive ‘A’ scores in the analysis.

Important criteria that many SSPs did not meet were: (category 2: 3-b) “is stakeholder engagement considered to be transactional, transitional, or transformational (Bowen et al., 2010)?”; (category 2: 3-a) “Does the SSP have a stakeholder mapping procedure that they and the certified entity must follow to ensure consultations encompass all possible stakeholder perspectives?”; and (category 2: 7-d) “Does the SSP have a special group to address Indigenous relations during the consultation process?”

One major finding was that the Initiative for Responsible Mining Assurance (IRMA), FairTrade – Gold Standard (FTG), and Towards Sustainable Mining Standards (TSM) were the only SSPs requiring CEs to have ‘transformational’ engagement with stakeholders. FTG is deemed to require transformational engagement because they require that decisions affecting stakeholders be made through democratic processes. IRMA has a similar requirement, but it only applies if the company is achieving the highest level of the standard, that being IRMA 100. For context, IRMA’s levels are, from most basic to most rigorous: transparency, 50, 75, and 100. Similarly, TSM can be considered to have transformational engagement, but only if the CEs meet the AA or AAA certification levels (with the levels being C, B, A, AA, AAA). The other five SSPs analyzed had stakeholder engagement requirements, but they did not require CEs to

transfer any decision-making power into the hands of communities. Consequently, that engagement cannot be considered “transformational.”

	Initiative for Responsible Mining Assurance (IRMA)	Towards Sustainable Mining (TSM)
Requires transformational engagement	IRMA 100	AAA AA
Does not require transformational engagement	IRMA 75 IRMA 50 IRMA - Transparency	A B C

Table 6: Levels of achievement in the IRMA and TSM standards that require ‘transformational’ engagement

The next major finding was that many of the SSPs (ASI, Fair Stone, FTG, RJC, RMI, and lower levels of TSM) did not have clear stakeholder mapping requirements for their certified entities (CEs). Martens et al. (2019) argue that for deliberative democracy to work conceptually for SSPs, relevant stakeholders must be defined. Arguably, a stakeholder mapping exercise would define these. Therefore, in the cases where stakeholders are not mapped, the SSPs fall short in their ability to be democratic.

Another major finding was that some SSPs did not have a specific group or section of their organization to address the needs of Indigenous peoples. Of the analyzed SSPs, the Aluminium Stewardship Initiative and Towards Sustainable Mining are the only SSPs with a specific group representing Indigenous peoples on the board of directors (or equivalent standard authorship group). The Forest Stewardship Council was analyzed for comparison, and it was found that they do have a special group representing Indigenous interests as well. The FairTrade: Gold Standard does not have a specific group; however, their fundamental mission is for equitable trade between actors along supply chains in the Global North and the Global South. Therefore, it may be redundant for FTG to have a representative group for Indigenous Peoples. Fair Stone, IRMA, ResponsibleSteel, and the Responsible Jewellery Council do not have specific groups representing the needs of Indigenous people in their governance structure.

This research suggests that there are two main determinants that significantly affect the legitimacy of the SSPs: The first is whether the SSP follows the ISEAL code of good practice for setting social and environmental standards, and the second is if the SSP is part of a business association. The ISEAL code was compared against the framework that was derived from the

literature, and many of the criteria overlapped. This meant that when SSPs followed the ISEAL code, they were more likely to meet more of the framework criteria. The similarities between the ISEAL code and the framework also triangulates the framework's ability to assess the legitimacy of SSPs. The second suggested determinant of legitimacy, whether the SSP was part of a business association, was demonstrated by RMI and TSM's lack of data availability and the finding that they met fewer criteria than the other SSPs. It was also found that there was a weak link between whether the SSP was overseen by an industry association or a multistakeholder board and the SSPs achievement against the framework. RMI and TSM are overseen by industry associations and RMI scored a 'C' against the framework, while TSM was the only SSP that scored 'B.' That said, Fair Stone scored a 'C' against the framework but was not overseen by an industry association, and RJC scored an 'A' and has a board of directors that is mainly made up of individual company representatives.

The SSPs analyzed were varied in their function and structure, which affects how they meet the framework criteria. Details about each SSP analyzed are outline in [Appendix A](#). ASI, Fair Stone, IRMA and ResponsibleSteel are all similar types of SSPs in that they have standards that would generally apply to large companies in the mining sector. ResponsibleSteel is a minerals/metals processing standard that also recognizes other standards (IRMA, ASI, and TSM). The Responsible Jewellery Council is unique in that it certifies the supply chains, which includes mining companies, rather than focusing the mining companies themselves. FTG is also unique in that it certifies individuals and small companies that undertake artisanal and small-scale mining, and RMI is unique in that it is more of a business-led initiative than a multistakeholder initiative like the others. IRMA and TSM are both based on CEs achieving 'levels' of certification, meaning there are different certifications for different amounts of implementation.

9.3 The Framework's Successes and Shortfalls

The framework developed based on the literature review outlined in the first half of this thesis, focusing on Habermasian deliberative democracy, was found to be successful in measuring the legitimacy of SSPs. The framework exposed insights about the extent to which SSPs gain their legitimacy through Habermasian democratic processes. The framework was also successful in that it allowed for a generalized comparison between the SSPs analyzed.

The framework, although generally successful, focused on a specific conception of legitimacy based on democratic theory. As such, it was not intended to measure legitimacy based on other theoretical bases. It does, however, include basic principles of legitimacy. The framework could be expanded to include a variety of approaches to measuring legitimacy. Another drawback of the framework is that it does not allow for a granular comparison between SSPs. The framework categorized the SSPs to be able to make high-level comparisons, but without any relative weighting between the different criteria, precise comparisons cannot be made. Weighting the criteria relative to one another would allow for more detailed comparisons between SSPs. A better understanding of the different relative weights of criteria could indicate if there are unnecessary criteria that could be taken out of the framework. This could improve the framework given that it includes a relatively large number of criteria. Additionally, the framework also utilized a 3-point scale to indicate whether the SSPs met, did not meet, or partially met the criteria in question, which removes some qualitative detail. However, this does allow for a clearer analysis.

Although the framework was developed to apply to SSPs in the mining industry, it could apply to other industries.

10. Discussion

This research involved creating a framework based on a literature review of deliberative democracy and its application to SSPs that measures the legitimacy of those programs. The research found that generally, the SSPs met many of the criteria set out by the framework. It is notable that some of the SSPs, although fewer than half, require transformational engagement and/or democratic processes when engaging with stakeholders. The SSPs analyzed also did not always have specific representative groups for Indigenous people, nor did they always have specific stakeholder mapping processes outlined for CEs. Overall, there were mixed findings regarding whether SSPs democratize the control of corporate actions or if they perpetuate the corporate capture of wealth.

10.1 SSPs are Relatively Legitimate

The finding that SSPs develop their standards through legitimate, relatively democratic means may be explained by a few lines of reasoning. It may be because many of them follow the ISEAL code of good practice for setting social and environmental standards, which includes several similar criteria to the framework developed through this research. Another reason why the SSPs were found to meet many criteria is because SSPs in various sectors have now existed for many years and there has been a significant amount of development in the sustainability standard space. The analyzed SSPs may have learned from other standards, which provided them with legitimacy.

10.2 SSPs' Governance Shortfalls

Although much of the framework criteria were met by many of the SSPs analyzed, there are significant areas of the framework where some SSPs did not meet the criteria for democratic legitimacy. The first of these areas is that Indigenous perspectives were not always specifically represented in SSPs, despite the colonial history of the mining industry. Second, only a few of the SSPs had clear stakeholder mapping procedures that would allow CEs to determine their relevant stakeholders. The third, and arguably the most significant finding, is that in many cases, the SSPs do not require that CEs utilize democratic processes to make decisions that affect their stakeholders.

10.2.1 Indigenous Needs Are Not Always Represented

One shortfall to the studied SSPs' legitimacy that was found through this research is that four of the eight SSPs analyzed did not have a defined group within their main governing body that specifically advocated for Indigenous people. The Aluminium Stewardship Initiative, Towards Sustainable Mining, IRMA and the FairTrade - Gold Standard each have versions of groups that represent Indigenous people, though the term 'Indigenous' is not used by IRMA or FTG. The lack of specific representation in many SSPs may be an indicator that they are not adequately addressing the colonial backdrop of the mining industry. The mining industry has historically been found to fail to improve the standards of living in the Global South, as is described in the 'resource curse' hypothesis (Brisbois, 2021). This means that, in some cases, mining companies have historically made claims that they would improve countries' economies through resource extraction and subsequent economic gain. However, these projects have been found to result in increasing foreign debt, poverty, and income inequality while Northern companies gain significant profits (Brisbois, 2021).

Banerjee (2022) argues that deliberative democracy cannot account for the perspectives of those who are defending lands and livelihoods, especially considering that deliberative democracy is based on 'rationality,' which can discount alternative ways-of-knowing and justify the advancement of Western agendas, since Western agendas can be argued to be more 'rational'. This research did not adequately capture whether the use of deliberative democracy as a theoretical framework does, in practice, discount alternative ways-of-knowing. It also did not examine the real-world effects of CE stakeholder engagement on the relationships between mining companies and communities. These are opportunities for future research.

10.2.2 Stakeholder Mapping

Martens et al. (2019) argue that Habermasian deliberative democracy can only be applied to SSPs and their CEs if they have a defined governed population, or a 'demos'. The framework developed included a criterion investigating whether the SSPs included a stakeholder mapping procedure for CEs. Many of the SSPs only included vague stakeholder identification procedures rather than a clear and specific mapping procedure. Consistent with the proposition by Martens et al. (2019) that a defined demos is necessary for democratic legitimacy, there was a relationship where most SSPs that did not have democratic engagement requirements also did

not have clear stakeholder mapping procedures outlined for CEs. The opposite is true as well, as demonstrated in Table 7.

	No requirement for CEs to use democratic processes	Includes requirement for CEs to use democratic processes
No clear stakeholder mapping procedures outlined	Fair Stone ASI RJC RMI	FTG
Clear stakeholder mapping procedures outlined	ResponsibleSteel (though does “reinforce democratic and civic values) TSM (requires the use of “traditional decision-making processes”)	IRMA (at highest levels)

Table 7: Comparing stakeholder mapping requirements to democratic engagement requirements

This finding suggests that implementing clear stakeholder mapping procedures for CEs improves democratic legitimacy.

10.2.3 ‘Visions of the Future’ Are Created by Certified Entities

The next gap in SSPs’ legitimacy this research unveiled is that four of the eight SSPs analyzed do not require their CEs to employ democratic processes in their decision-making (ASI, Fair Stone, RJC, and RMI). ResponsibleSteel requires that CEs “reinforce democratic and civic values” and TSM requires the use of “traditional decision-making processes.” IRMA and the FairTrade – Gold Standard are the only two SSPs that specifically require democratic processes during CE engagement. Loconto and Fougère (2014) argue that ISEAL, being the meta-standard for many SSPs, diffuses political tension by focusing on procedural standards and shifting what ‘visions of the future’ and political agendas are pushed down to the SSPs. One could argue that the SSPs themselves often do something similar. With many of these standards lacking in clear, comprehensive stakeholder mapping and democratic decision-making guidelines

for handling the stakeholder feedback, the political decision-making can be seen as being shifted to the least-qualified actors for governing: the CE. An examination of the reasons why democratic processes do not always transfer down to CEs presents an opportunity for future research.

10.3 What Does This Mean for the Debate?

10.3.1 Introduction

There is a debate in the literature regarding whether SSPs democratize the control of corporate behaviour or whether they reinforce the private capture of regulatory power (Barlow, 2021; Moog et al., 2015; Rhodes & Fleming, 2020). Five of the eight SSPs analyzed scored an ‘A’ against the framework, indicating that many of the sustainability standards analyzed were developed through relatively democratic means, defined by the developed framework. The research, therefore, suggests that many of the SSPs analyzed are using democratic processes to develop their standards and, in turn, suggests that in many cases these SSPs provide an opportunity to democratize the control of corporate behaviour. It would follow that perhaps SSPs do act to democratize the mining industry’s governance to some degree and create a form of global governance that is relatively legitimate, depending on the specific SSP in question.

Although the findings of this analysis are promising in that SSPs can allow for some level of democratization of corporate behaviour, they also outlined a significant gap where there is still room for corporations to take advantage of power to further their profit-motivated agendas. While SSPs may often develop their standards using democratic processes, these standards are outlining procedures for activities that may not include how CEs should manage political issues. This analysis found that those procedural demands, in some cases, do not require that CEs manage community and environmental affairs through democratic processes. Therefore, it leaves room for CEs to manage many of their specific relevant social and environmental issues in the way that they see fit, which is problematic since many scholars including Banerjee (2014), Djelic & Etchantchu (2017), and Rhodes & Fleming (2020) argue that corporations are structurally incapable of addressing political issues. This suggests that SSPs are also, to some extent, reinforcing the private capture of regulatory power.

10.3.2 What can be Implemented in SSPs to Improve Democratic Input Legitimacy?

Many SSPs did not have stakeholder mapping procedures, which Martens et al. (2019) suggest is necessary to be able to implement democratic processes through SSPs. Requiring that CEs use democratic processes and stakeholder mapping procedures to make decisions that affect communities and the environment may ensure that SSPs work to democratize control of corporate behaviour rather than continue to concentrate power into private hands. Additionally, including a chamber that represents Indigenous perspectives within the SSPs' governance might help address some of the colonial issues that are present in the mining industry, further increasing the legitimacy of SSPs and the associated claims of legitimacy CEs make. Whether the SSPs followed the ISEAL code of good practice for setting social and environmental standards was also found to be related to the number of framework criteria that were met by SSPs. All the SSPs that scored 'A' followed the ISEAL code whereas all those that scored 'B' or 'C' did not. It follows that SSPs adopting this code is likely to improve their legitimacy.

10.3.3 Limited by Willingness

There may be some concrete steps that SSPs can take to improve their legitimacy, but there are also limitations to how much of a positive effect SSPs can have on the sustainability of the mining industry. No matter how perfectly democratic or legitimate they are, SSPs are voluntary and therefore will always have a limited amount of buy-in and, therefore, a limited effect. This is especially true when considering that the mining industry includes many state-owned companies that are less vulnerable to market pressures and may not have the same incentives to adopt sustainability standards as companies in other industries do. Buy-in for sustainability standards may also mean that there is a limit to the SSPs' ability to require transformational engagement. To reduce the limitations placed by corporate willingness, SSP certification could be made mandatory through regulatory implementation. There may be a drop in SSP subscription if too much decision-making power is taken away from the CE once certified. Understanding the effects between the democratic processes required of CEs and the amount of buy-in to the standard requires more research.

11. Conclusion

This research aimed to evaluate the extent to which SSPs in the minerals and mining sector gain their legitimacy through democratic means. This was done by creating a framework based on a literature review and assessing SSPs against that framework. Overall, the main finding from this research was that many of the SSPs analyzed met most of the criteria set out in the framework, with Fair Stone being an outlier and meeting fewer than the other SSPs analyzed. Meaning, the extent to which SSPs in the mining sector obtain input legitimacy through democratic processes is relatively large where SSPs are ISEAL members.

A significant finding from the framework includes that few of the SSPs analyzed required their certified entities to have what would be considered ‘transformational’ engagement with stakeholders, or specifically outlined that they must engage with stakeholders using democratic processes. Many SSPs also lacked a clear stakeholder mapping procedure within their standard, which Martens et al. (2019) argue is necessary for a CE to be using democratic processes. Another important finding was that few SSPs had specific groups within their governing body that directly advocated for Indigenous people, suggesting that the colonial backdrop of the mining industry is not adequately addressed by these SSPs.

To address the debate about whether SSPs are perpetuating the corporate capture of wealth or democratizing the mining industry, this research suggests that there is a risk in many cases that the SSPs are perpetuating corporate wealth, but this risk could be mitigated if stakeholder mapping, democratic procedures of decision-making, and adherence to the ISEAL code of good practice for setting social and environmental standards are followed by SSPs. There are limitations to this prospect, namely that SSPs’ standards must remain appealing to companies, that there may be fundamental barriers to the democratization of CEs, and that democracy may not be the best framework to address these issues in the Global South to begin with.

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Appendix A: Descriptive Attributes of the Analyzed Sustainability Standard Programs

SSP	Mission statement	What it certifies and type of certification	Number of certified entities	Started by?	Year started	For profit/non-profit?
ASI	Our mission is to recognize and collaboratively foster responsible production, sourcing and stewardship of aluminium ¹	Sustainability performance and material chain-of-custody for the aluminium value chain ¹	283 ²	A global group of stakeholders from the aluminium industry, civil society, research and policy organisations, and industrial users of aluminium products, 14 founding companies, a multi-stakeholder Standards Setting Group (SSG) ⁴	2009 ³	Non-profit ¹
Fair Stone	Not stated	The Fair Stone logo proves that the products are produced -in compliance with ILO-Core Labor Conventions -under observation of safety and health of the workers; -are traceable with the software Tracing Fair Stone -under consideration of environmental issues. ⁸	21 ⁷	A group of dedicated professionals, mostly with long-term experiences in their fields, developed the project with the aim to improve the working conditions in China. None of these MSI members has any commercial interest in the natural stone business. ⁶	2014 ⁵	Non-profit ⁹
FTG (FairTrade International)	Our mission is to connect disadvantaged producers and consumers, promote fairer trading conditions and empower producers to combat poverty, strengthen their position and take more control over their lives. ¹¹	Artisanal and small-scale mined gold. Certifies the miners received a fair deal for their hard work and the environment was protected ¹³	Not stated	CAFOD, Christian Aid, Oxfam, Traidcraft, the World Development Movement and the National Federation of Women's Institutes ¹⁴	2011 (Gold specific) ¹⁰	Non-profit ¹²

IRMA	Our mission is to protect people and the environment directly affected by mining. We do this by creating financial value for mines independently verified to achieve best practices, and share this value with the businesses that purchase material from these mines. ¹⁶	IRMA offers true independent third-party verification and certification against a comprehensive standard for all mined materials that provides ‘one-stop coverage’ of the full range of issues related to the impacts of industrial-scale mines ¹⁶	2 ¹⁸	Nongovernment organizations, businesses purchasing minerals and metals for resale in other products, affected communities, mining companies, and labor unions ¹⁵	2006 ¹⁵	Non-profit ¹⁷
RJC	We strive to be the recognised standards and certification organisation for supply chain integrity and sustainability in the global jewellery and watch industry. ²⁰	The RJC Code of Practices (COP) is the global standard for the responsible jewellery and watch industry, focusing on business ethics and responsible supply chains ²⁰	1210 ¹⁹	ABN AMRO, BHP Billiton Diamonds, Cartier, World Jewellery Confederation, Diamond Trading Company (part of De Beers Group), Diarough, Jewelers of America, National Association of Goldsmiths (UK), Newmont Mining, Rio Tinto, Rosy Blue, Signet Group, Tiffany & Co., and Zale Corporation ²⁰	2005 ²⁰	Not-for-profit ²¹
RMI	RMI serves as an umbrella organization for the voice of progressive industry to support responsible mineral sourcing broadly and convenes stakeholders to continually shape dialogue and practices. ²⁴	The Responsible Minerals Assurance Process offers companies and their suppliers an independent, third-party audit that determines which smelters and refiners can be verified as having systems in place to responsibly source minerals in line with current global standards ²⁴	30 active ²²	The RBA (RMI is an initiative of the RBA) was founded by a small group of electronics companies ²³	2004 ²³	Non-profit ²⁵
Responsible Steel	Our mission is to be a driving force in the socially and environmentally responsible production of net-zero steel, globally. ²⁶	It was developed to recognize steel sites that are operated in a responsible manner. The 13 Principles of our Standard cover environmental, social and governance issues, which were identified and agreed upon with our members and stakeholders. ²⁸	19 ²⁷	The Australian Steel Stewardship Forum initially developed the concept and programme and worked with more than 70 stakeholders and 180 individuals on the initial development of the ResponsibleSteel™ Standard. ³⁰	2017 ²⁹	Not-for-profit ²⁶

TSM	To contribute to building a strong, sustainable, and internationally competitive Canadian mining, minerals, and metals industry with broad national support and to promote sound corporate and public policy. ³²	The Mining Association of Canada's Towards Sustainable Mining (TSM) standard is a globally recognized sustainability program that supports mining companies in managing key environmental and social risks. ³¹	51 ³³	The Mining Association of Canada, started in 1935 to promote the Canadian Mining Industry ³²	2004 ³¹	Not disclosed
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Appendix A Sources:

- 1 <https://aluminium-stewardship.org/about-asi/vision-mission-values>
- 2 <https://aluminium-stewardship.org/about-asi/asi-member-listing>
- 3 <https://aluminium-stewardship.org/history>
- 4 <https://aluminium-stewardship.org/history>
- 5 <https://www.en.fairstone.org/about-us/>
- 6 <https://www.en.fairstone.org/about-us/multi-stakeholder-initiative/>
- 7 <https://www.en.fairstone.org/partner/fair-stone-partner/>
- 8 <https://www.en.fairstone.org/>
- 9 <https://www.en.fairstone.org/fair-stone/standard/>
- 10 <https://www.fairtrade.net/product/gold>
- 11 <https://www.fairtrade.net/product/gold>
- 12 <https://www.fairtrade.net/about/fairtrade-international>
- 13 <https://www.fairtrade.org.uk/buying-fairtrade/gold/#:~:text=This%20is%20more%20than%20just,for%20themselves%20and%20their%20communities.>
- 14 <https://www.fairtrade.org.uk/what-is-fairtrade/the-impact-of-our-work/the-history-of-fairtrade/>
- 15 <https://responsiblemining.net/about/history/>
- 16 <https://responsiblemining.net/about/about-us/>
- 17 <https://responsiblemining.net/what-you-can-do/support-irma/>
- 18 <https://responsiblemining.net/what-we-do/certification/mines-under-assessment/>
- 19 <https://www.responsiblejewellery.com/membership/find-an-rjc-member/?bycountry=&rjccategories=&rjccertification=13246,13248&membertype=&sortby=&searchbox=&pagenum=1>
- 20 <https://www.responsiblejewellery.com/about/history/>
- 21 <https://www.responsiblejewellery.com/about/governance/>
- 22 <https://www.responsiblemineralsinitiative.org/smelters-refiners-lists/>

- 23 <https://www.responsiblebusiness.org/>
- 24 <https://www.responsiblemineralsinitiative.org/>
- 25 <https://www.responsiblemineralsinitiative.org/about/governance/>
- 26 <https://www.responsiblesteel.org/>
- 27 <https://www.responsiblesteel.org/certification/issued-certificates/>
- 28 <https://www.responsiblesteel.org/standard/>
- 29 <https://www.responsiblesteel.org/standard-development/>
- 30 <https://www.responsiblesteel.org/faqs/>
- 31 <https://mining.ca/towards-sustainable-mining/>
- 32 <https://mining.ca/about-us/>
- 33 <https://mining.ca/members-partners/our-members/>

Appendix B: Framework Criteria

Main Category	Top-level criteria		Criteria	Sub-criteria
1. Inclusion Criteria	1. Does the SSP have a board or committee that represents more than 1 stakeholder group?			
	2. Does the SSP certify or set standards for certified entities as 'responsible', 'sustainable', 'fair', 'stewardship' etc.?			
	3. Does the SSP certify mining companies, mined products, or supply chains in the mining industry, focusing on this industry (not general product certifications)			
2. Measures of the democratic qualities	1. There is evidence of consultation with varied groups of stakeholders	a	Does consultation occur with potential certified entities ex. Companies, suppliers, manufacturers, etc.?	
		b	Does consultation occur with NGOs, environmental organizations, and other groups representing civil interests?	

	c	Does consultation occur with the public, meaning anybody can present feedback to the standards authors?	
2. There is fair inclusion of stakeholders in the development of the standard	a	Are there mechanisms in place to ensure that varied stakeholder interests are proportionately considered during standards development? Ex. Chambers for interests with equal voting power (like FSC), or another structure that manages stakeholder percentages in discussion	
	b	Are there resources in place to include stakeholders that would otherwise not be able to participate, i.e. funding?	
	c	Does the SSP have a requirement for a maximum interval between standard reviews?	No or ad hoc basis
			5+ year intervals
			1-4 year intervals
			more than once per year
	d	Does the standard review require additional consultation?	

3. The standards ensure that certified entities have effective stakeholder engagement in order to meet the standard (where applicable)	a	Does the SSP have a stakeholder mapping procedure that they and the certified entity must follow to ensure consultations encompass all possible stakeholder perspectives?	
	b	Is stakeholder engagement considered to be transactional, transitional, or transformational?	Transactional- certified entities offer information, one-way communication, passive stance towards community
			Transitional- There are interactive collaborations between the certified entity and community
			Transformational- Two-way communication, support from both sides, empowerment, community decision-making
	c	How often do organizations following the standard need to engage with civil and environmental stakeholders?	Never
			Defined yearly intervals
			more than once per year
	d	Does the SSP state that the CEs must use democratic processes during stakeholder engagement?	

	e	When standards require certified entities to make decisions for mining communities, is there a requirement that the entity respect cultural heritage and create long-term benefits for those communities?	
4. There is output legitimacy	a	Are there audits or checks to ensure that certified entities are meeting the requirements of the standard?	
	b	Does the SSP have enforcement to handle non-compliance by the certified entity?	
	c	Are audits of the certified entities done by parties independent from those entities?	
5. There are strong governance arrangements	a	Does the SSP have a constitution or similar 'rulebook' that determines the purpose, structure, and limits of the organization?	
	b	Does the constitutional document outline rules and procedures for its amendment?	
	c	Can the authors of the standard can be amended over time through voting procedures or otherwise?	
	d	Are there limits or requirements on how long members of the board can serve?	
	e	Does the standard comply with the ISEAL code of practice for setting social and environmental standards?	
	f	Are there annual internal audits of the SSP management system?	

	g	Is the SSP's board of directors a multistakeholder group (not an industry association)	
6. Conflicts are well managed	a	Do the authors of the standard strive to reach consensus during decision-making in relation to standards development?	
	b	Do the standards require that certified entities strive for consensus during their private consultations with stakeholders?	
	c	Is there a process outlined for handling grievances, including grievances with the discussion process itself	
7. Power inequalities are accounted for	a	Are the standards published in multiple languages?	
	b	Are translation services available for consultations during the standard-setting process?	
	c	Are certified entities required to offer translation services when consulting with communities?	
	d	Does the SSP have a special group to address Indigenous relations during the consultation process?	

	e	Does the standard require that members or participants commit to legal compliance, ILO core conventions, Free Prior and Informed Consent, and maintain High Conservation Values (HCVs)?	
8. The SSP is transparent	a	Does the SSP disclose decision-making deliberations?	
	b	Does the SSP disclose decisions (in relation to stakeholder feedback) once they are made?	
	c	Does the SSP disclose their governance structure and procedures?	
	d	Does the SSP disclose the identities, backgrounds, roles, and responsibilities of the standard authors?	
	e	Does the SSP have financial transparency?	
	f	Does the SSP require the certified entities to publish audit reports?	