THE UNIVERSITY OF QUEENSLAND
AUSTRALIA

SMI CSRM
Centre for Social
Responsibility in Mining

DESIGNING SUSTAINABILITY CERTIFICATION FOR GREATER IMPACT

Perceptions, expectations and recommendations
in sustainability certification schemes

SEPTEMBER 2016

Study authors
Dr Renzo Mori Junior, Research Fellow, CSRM
Professor Saleem H. Ali, Chair in Sustainable Resources Development, CSRM

CSRM
The Centre for Social Responsibility in Mining (CSRM) is a leading research centre, committed to improving the social performance of the resources industry globally. We are part of the Sustainable Minerals Institute (SMI) at The University of Queensland, one of Australia's premier universities. SMI has a long track record of working to understand and apply the principles of sustainable development within the global resources industry.

At CSRM, our focus is on the social, economic and political challenges that occur when change is brought about by resource extraction and development. We work with companies, communities and governments in mining regions all over the world to improve social performance and deliver better outcomes for companies and communities. Since 2001, we have contributed to industry change through our research, teaching and consulting.

Contents

Highlights

52% of the comments from participants revealed that entities seek participation because certification schemes add value.

33% stated the reason for entities to seek certification was external pressure from customers, civil society, consumers and investors.

87% of participants stated that stakeholder participation positively influences the effectiveness of schemes, especially in the early stages.

The **Theory of Change** is considered an important component of M&E mechanisms. It is recommended that schemes should build their Theory of Change at the beginning.

There are duplications, and schemes must work together to improve

interoperability and cross-recognition.

Transparency is a key component of any
scheme, but the majority of the schemes are not transparent about
their operations, governance structure, outcomes and challenges.

Including stakeholder consultation
into the assurance scope and having an oversight mechanism in
place are considered good practices.

It is important to clearly communicate
goals to all stakeholders involved to avoid misunderstandings, false
expectations and false claims.

Acronyms

ASM   Artisanal and Small-Scale Mining
CSRM   Centre for Social Responsibility in Mining
EU   European Union
ISEAL   International Social and Environmental Accreditation and Labelling Alliance
OECD   Organisation for Economic Co-operation and Development
SMI   Sustainable Minerals Institute
UQ   The University of Queensland
US   United States of America
3TG   Tin, Tungsten, Tantalum and Gold

Executive Summary

Sustainability certification schemes are increasingly being used by mineral companies as a tool to demonstrate that they are operating responsibly, and by civil society actors to hold mineral companies to account. This research report interviewed 15 participants[1] in these schemes to identify the drivers for participation, design characteristics affecting the effectiveness of sustainability certification schemes, and improvement opportunities. Selected participants with recognised professional or academic experience in assessing, designing, implementing, participating and/or assuring sustainability certification schemes were interviewed.

This report represents the second stage of an applied research project looking into the effectiveness of certification schemes in the minerals industry and the potential role sustainability certification schemes can play to improve standards for responsible mining. The research is being undertaken by the Centre for Social Responsibility in Mining (CSRM) at The University of Queensland, and is funded by The Tiffany & Co. Foundation through a grant to The University of Queensland in America.

Although sustainability certification schemes in mining have been growing rapidly, previous studies suggest that to date there are few studies that have assessed the drivers for participation and explored what the main design characteristics influencing the effectiveness of such schemes in mining are. The analysis presented in this report is based on information provided by participants during interviews. Interviews were framed to obtain and explore the ideas, perceptions and expectative of participants in relation to the drivers for participation, the more important design characteristics schemes should get right in order to be effective and improvement recommendations. Some of the key findings from this report are:

- More than half of the comments (52%) from participants revealed that entities seek participation because certification schemes add value.
- External pressure from customers, civil society, consumers and investors was the second-most (33%) stated reason for entities to seek certification.
- Thirteen out of 15 (87%) participants stated that stakeholder participation positively influences the effectiveness of schemes, especially in the early stages. However, doubt still persists as to what type of stakeholders should be involved and at what stage they should be involved.
- Participants had different opinions about the involvement of stakeholders in the governance of the scheme.

---

1 Participants included scheme representatives, assurer or consultant representatives, NGO representatives, peak standard-setting body representatives, certified company representatives, and academia representatives.

- Stakeholder engagement processes carried out by some of the schemes are considered superficial and ineffective.
- Monitoring and Evaluation (M&E) mechanisms are fundamental instruments for schemes to assess their impacts, provide accountability, support decision-making processes and improve credibility.
- Very few schemes have proper M&E mechanisms in place.
- The Theory of Change is considered an important component of M&E mechanisms. It is recommended that schemes should build their Theory of Change at the beginning.
- Demonstrating impacts and individually assessing acts is complex and costly.
- New technologies should be considered to reduce costs, improve M&E mechanisms and improve effectiveness of stakeholder engagement processes (e.g. mobile solutions to monitor and evaluate health and safety issues, teleconferences).

More than half of the comments from participants revealed that entities seek participation because certification schemes add value.

- There are duplications, and schemes must work together to improve interoperability and cross-recognition.
- Competition to gain business and increase market share discourages interoperability.
- Interoperability should go beyond interaction with other schemes and consider governments and multilateral institutions as well. Interoperability should adopt both horizontal and vertical approaches.
- Uniformity and quality of assurance processes are fundamental to successful interoperability.
- Transparency is a key component of any scheme, but the majority of the schemes are not transparent about their operations, governance structure, outcomes and challenges.
- Transparency is important to avoid greenwashing and false claims of efficacy.
- Schemes should keep as much information in the public domain as possible to improve accountability and transparency for their stakeholders.

- Independent assurance processes should be in place to improve credibility. Different types of assurance processes and approaches should be considered by schemes.
- Each assurance process should have a follow-up mechanism to monitor and assess action plans addressing situations of non-compliance identified by assurers.
- Some schemes have weak assurance processes in place and use non-qualified assurance providers.
- Results of the assurance processes and identification of the assurance providers should be publicly available.
- Including stakeholder consultation into the assurance scope and having an oversight mechanism in place are considered good practices.
- Some schemes do not apply consequences for participants not complying. These schemes do not take action against or penalise participants not in compliance with the scheme.
  - Schemes should have in place detailed sanctions for situations of non-compliance, and these should be clearly communicated to stakeholders.
  - Some schemes are working in their own interests rather than representing the interests of the beneficiaries and meeting the needs of people on the ground.
  - Lack of communication and understanding between scheme representatives and local community representatives creates expectation gaps.
  - To maximise positive impacts on local communities, schemes should focus on management systems that allow participants to operate those management systems in their local context.
- Schemes need to spend more time understanding the roots of the problems they are trying to solve and listening to the people on the ground before determining strategies and developing their programs.
- Schemes could consider local development either as a goal, or not as a goal. However, it is important to clearly communicate goals to all stakeholders involved to avoid misunderstandings, false expectations and false claims.
- Schemes should develop initiatives to provide financial and technical support to vulnerable participants (e.g. ASM miners, new starters located in non-developed countries).
- It was suggested that ISEAL Codes are needed to strengthen sustainability certification schemes.

1. Introduction

Over the past decade the mining industry has attempted to strengthen their corporate policies, increase their engagement with government, civil society and community actors, and improve their professional capability to respond to environmental and social challenges. But doubt still persists in the minds of those outside the minerals industry about the authenticity of such change. There is also increasing concern from civil society actors about the dramatic shifts in the scale, technology and location of mineral developments. Certification schemes are increasingly being used by minerals companies as a tool to demonstrate that they are operating responsibly. Some schemes may also be used by civil society actors to hold mineral companies to account. But how effective are they? And with the recent proliferation of different schemes, could they work together to lift the sustainability standards of the sector as a whole?

This applied research project investigates the potential role sustainability certification schemes (schemes[2]) can play to improve standards for responsible mining. The research project will assist civil society, businesses and governments to ensure that standards for responsible mining lead to improvements in the performance of the minerals sector.

The specific objectives of the project are to:

- identify the full range of planned and operational schemes applicable to the minerals industry and their supply chains, and compare their design characteristics, such as objectives, focus, process for standards development and operation of such schemes
- analyse the effectiveness of different design characteristics of schemes, and the collective effectiveness of schemes in the minerals industry as a whole
- undertake in-depth analysis and fieldwork to consider the relationship between design characteristics and scheme outcomes
- produce guidance material that captures the findings from all of the above, to support mineral operations, assurance providers, standards organisations, civil society groups, investors, and resource communities to improve practice and outcomes.

The project uses a mixed-method approach, including three consecutive stages: (1) desktop analysis;[3] (2) semi-structured interviews; and (3) field research and comparative analysis. This report refers to the second stage of this research project, which involves consultations (interviews) with key professionals and academics involved with sustainability certification schemes to obtain their perceptions about the drivers for participation and the effectiveness of such schemes in mining.

The report begins by outlining the methods used during the second stage of this research project. Section 2 provides a description of the participants' ideas, perceptions and expectations in relation to the effectiveness of sustainability certification schemes. Section 3 concludes the report.

1.1   Method

The method employed by this research project reflects its primary purpose, which is to obtain and explore the ideas, perceptions and expectative of participants in relation to the drivers for participation, the more important design characteristics schemes should get right in order to be effective and improvement recommendations. To do so, semi-structured interviews were conducted. The semi-structured interview format was selected because this is the interview model most suitable to study a phenomenon in-depth, and it allows more flexibility to examine associated issues that could arise in the course of the interview. Semi-structured interviews are the most widely used interview format for research that employs a qualitative approach, as these kinds of interviews are well suited to investigate participants' perceptions and opinions (DiCicco-Bloom & Crabtree, 2006; Gillham, 2000; Smith, 2014).

Interviews were individually conducted by phone or Skype, and each interview took approximately 45 minutes. To ensure the accuracy of the data collected, each one of the interviews was recorded by a tape recorder and coded with a sequential number according to the chronological sequence of the interviews, to protect the privacy of participants. All interviews were transcribed into MS Word documents and input into QSR NVivo; and once all transcriptions were input, we commenced the data analysis of the qualitative data through a coding process. Data analysis was conducted considering the following

---

2   In this report we use the term sustainability certification schemes (schemes) to refer to all of the types of certification schemes and standards that address governance, social and/or environmental issues, resulting in a public claim, label or certificate attesting to compliance.

3   The desktop analysis phase of this research was concluded in June 2015 and its report is available at: https://www.csrm.uq.edu. au/publications/designing-sustainablity-certification-for-greater-impact-an-analysis-of-the-design-characteristics-of-15-sustainability-standards-in-the-mining-industry

Representative	Number of Invitations Sent	Number of Interviews Performed	Response Rate
Certification Scheme	9	5	55%
Assurer or Consultant	8	3	37%
NGO	4	2	50%
Academia	3	1	33%
Peak Standard-Setting Body	5	2	40%
Certified Company	2	2	100%
Total	31	15	48%

Table 1: Participants invited, participants interviewed and response rate

phases: the organisation of details about the interview, the categorisation of data, the interpretation of single instances, the identification of patterns and the synthesis of this data. This data analysis approach allowed the researchers to identify and systematise ideas, concepts and categories uncovered in the data identifying features, behaviours or ideas, and distinguishing them with labels (Given, 2008; O'Reilly, 2008; Ormrod & Leedy, 2005). Once all relevant information was categorised, common comments, perceptions, ideas and recommendations were then grouped together to form key components (labels).

The semi-structured interviews were conducted with key participants to understand and explore two topics: (1) drivers for participation; (2) design characteristics influencing effectiveness and improvement recommendations.

This report is based on and restricted to the analyses of responses from 15 participants interviewed, and it has limitations. It aims not to generalise results but to explore and better understand the phenomena under investigation. Also, results were based only on participants' ideas, perceptions and expectations, which may not reflect the participants' actual views. Sometimes participants may provide responses to satisfy the researcher's expectations, or they may not wish to expose details about problems (Appleton, 1995; Opdenakker, 2006). In addition, due to the small sample used, descriptive statistical analyses in this report must be carefully interpreted and should not be generalised to a broader context based on this research project alone. The descriptive statistical analyses provided aim to illustrate results rather than to develop statistically significant conclusions.

1.1.1 Sample selection

A purposive selection technique was applied to identify and select key participants with professional or academic experience in assessing, designing, implementing, participating in and/or assuring sustainability certification schemes. Purposive selection techniques are typically designed to select a small number of participants that will provide more information about a particular phenomenon and lead to greater depth of information (Dale & Volpe, 2008; Teddlie & Yu, 2007). The selection technique considered sustainability certification scheme representatives, certified company representatives, assurance providers and different stakeholders involved in and/or affected by those schemes, such as academics, NGOs and peak standard-setting body representatives. Criteria for selection of participants included geographic coverage, experience with sustainability certification schemes, and stakeholder coverage.

As a result of the purposive selection technique, the initial set of interview participants comprised 31 possible participants, and 15 of these participants were interviewed. Participants were contacted by an invitation email. The overall response rate was 48%. Table 1 provides information regarding the number of invitations sent, number of interviews conducted and response rates by stakeholder groups.
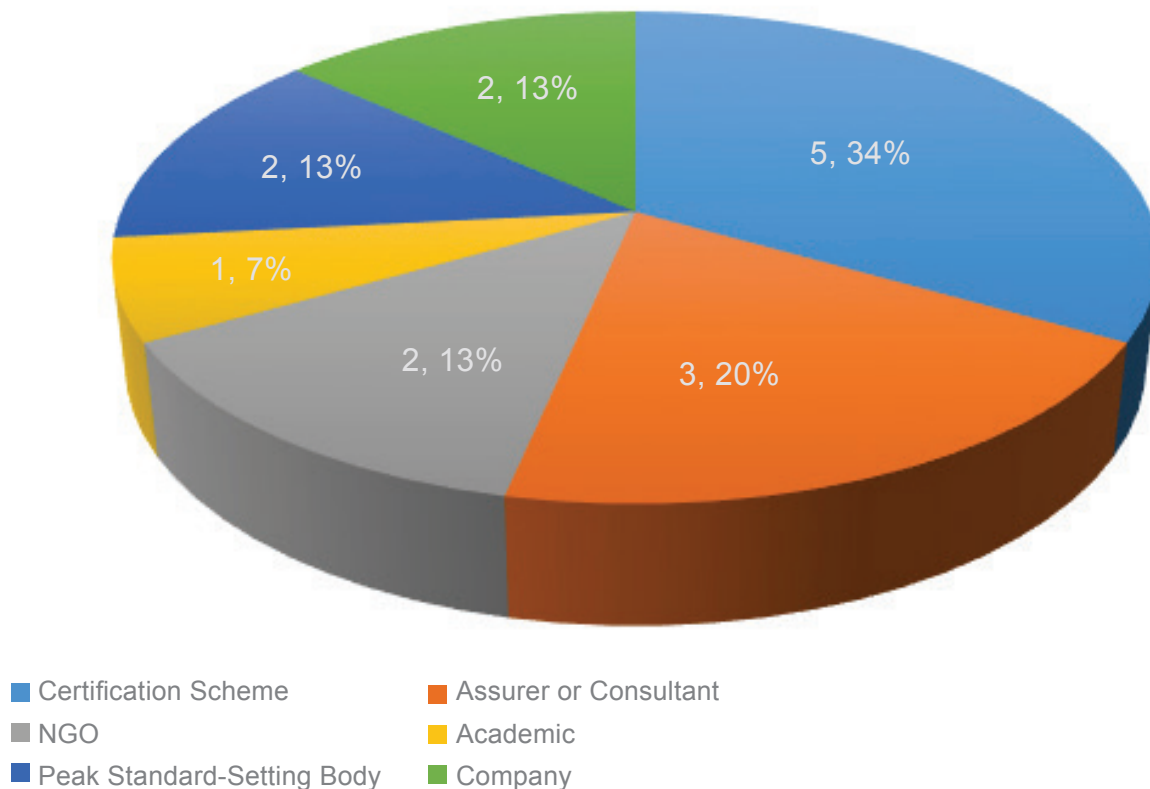
Figure 1: Percentage of participants by stakeholder group

Figure 1 demonstrates that all 15 participants interviewed were divided among six different groups as follows: 5 (34%) certification representatives; 3 (20%) assurer or consultant representatives; 2 (13%) NGO representatives; 2 (13%) peak standard-setting body representatives; 2 (13%) certified company representatives; and 1 (7%) academia representative.

Participants' Experience		
1-5 years	6-10 years	Over 10 years
2 (13%)	3 (20%)	10 (67%)

Table 2: Participants' experience in years

1.1.2 Descriptive analyses of the participants' experience

Interviews were conducted with 15 participants between April and August 2015. Each participant was required to identify the group that best represented their professional or academic experience. Participants were also asked to specify for what period of time they have been familiar with sustainability certification schemes. Table 2 summarises information about participants' experience.

Results provided in Table 2 indicate that all participants have significant experience with sustainability certification schemes. Generally, a greater proportion of participants (67%) had over 10 years' experience with the subject under investigation. Interviewing experienced participants is an important component of this research in order to better explore and study in-depth the phenomenon under investigation.

2. Findings

This section presents findings of the data analysis considering the research project goals. The data analysis is presented in two different sections. The first addresses the drivers for participation in sustainability certification schemes; the second explores the more important design characteristics schemes should get right in order to be effective, and presents scheme improvement recommendations.

2.1   Drivers for participation

This section investigates the drivers for participation in sustainability certification schemes, according to the participants' points of view. During the interviews, participants were asked about the drivers for participation in sustainability certification schemes and to discuss the topic. Responses obtained were initially analysed by categorising answers through interpretation and grouping those categorised answers using a pattern matching technique. The 15 participants provided a total of 53 comments regarding the reasons for entities participating in sustainability certification schemes.

According to the results obtained, drivers for participation could change due to a number of reasons – some of these differences reflect the history of the scheme, the sector, the industry, and organisations involved. However, during the analysis, five most significant different drivers were observed: certifications add value to the certified entity (27; 52%); external pressure for entities to be certified (18; 33%); entities want to do the right thing (5; 9%); legal requirements (2; 4%); and industry convergence (1; 2%).
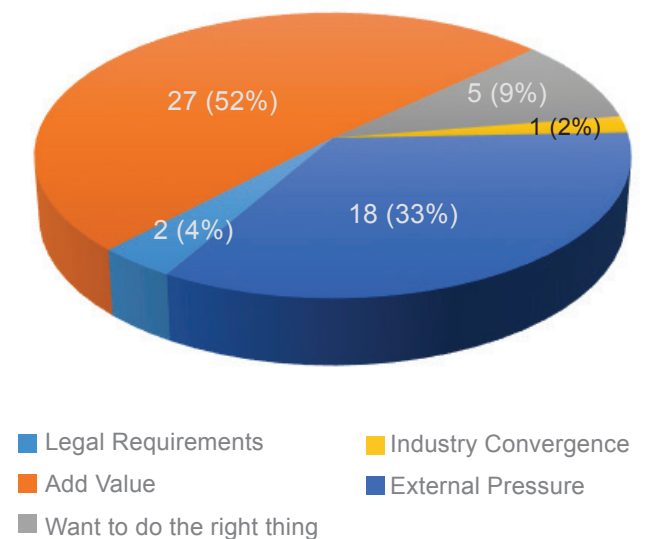

Figure 2: Reasons for participation in certification schemes

Figure 2 presents participants' comments interpreted and grouped.

2.1.1   Adding value

Figure 2 shows that more than half of the comments (27 of 53; 52%) point out that certification schemes add value to the certified organisations. According to these 27 comments, schemes could add value to certified organisations through improving their relationship with communities and helping organisations to obtain their social licence to operate (5; 9%); allowing access to market (4; 8%); managing supply chain risks (4; 8%); improving internal management systems (3; 6%); helping organisations to achieve their sustainability goals (3; 6%); managing reputational risks (3; 6%); allowing organisations to offer premium prices for certified products (2; 4%); offering market leadership (2; 4%); and improving organisations' credibility with their stakeholders (1; 1%).

Improving the relationship with communities and helping organisations to obtain their social licence to operate were indicated most often (5; 9%) as the drivers for participation. Some participants commented that in order to be certified an organisation has to have good management systems, mechanisms and procedures to engage properly with any community affected by its operations. Therefore, such an organisation will have a better relationship with communities affected by its operations and other stakeholders, which facilitates the process of obtaining the social licence to operate.[4] One participant commented:

> *"If a miner or a supplier is assured against a certification scheme, they have an excellent community relationship and an excellent resettlement program." (Participant 2)*

According to comments provided by three participants, certification schemes tend to have a positive impact on stakeholders' perceptions, which also improves the relationship between organisations and their stakeholders:

> *"Mining is a sector where you need the social licence to operate, and certification schemes help with that." (Participant 7)*

> *"Schemes themselves have a positive influence in different types of organisations." (Participant 5)*

---

4   The "social licence to operate" concept governs the extent to which an organisation is constrained to meet societal expectations and avoid activities that societies (or influential elements within them) deem unacceptable, whether or not those expectations are embodied in law (Gunningham, Kagan, & Thornton, 2004).

"There is competition to access resources and they [stakeholders in general] could be in favour if mining companies have certifications." (Participant 4)

In regards to the four comments (8%) that sustainability certification schemes add value to an organisation by facilitating access to market for certified products, it was pointed out that:

"If you want access to a specific market, a certification scheme will help with that." (Participant 5)

This statement provides support for the previous findings that certified products can create new market opportunities or facilitate access to specific markets, especially where regulations are more restrictive and consumers are more aware about sustainable development and corporate social responsibility (Giovannucci & Ponte, 2005; Vogt et al., 1999; Barry et al., 2012).

Four comments (4; 8%) also addressed the potential for certification schemes to help organisations better manage the risks in their supply chains. According to the comments, certification schemes play an important role in facilitating organisations to identify, understand and manage the risks, especially social and environmental ones, associated with their supply chains. For example, two participants stated:

"The main challenge for all multinational companies now is to understand their supply chains. In our case, the initial driver is that the use of one individual certification scheme can provide important information about my supply chain." (Participant 2)

"Some companies are thinking about where their metals come from. Jewellery is a good example of how the idea of the conflict diamond has driven jewellery companies to better manage their supply chain using certification schemes." (Participant 4)

In this context, certification schemes can provide the guidance and framework necessary for organisations to assess their suppliers and to ensure that the suppliers comply with the requirements. This information is valuable for risk management systems and decision-making processes. One participant added:

"I think the certification which is being largely successful is the certification which is being driven by a large buyer of products, who feels accountable for the environmental and social integrity of that supply chain, but doesn't have the expertise in their own company to make the checks, nor do they really have the credibility to make the checks." (Participant 15)

The use of sustainability certification schemes as a vehicle to help companies achieve their sustainability goals was also mentioned by three participants (3; 6%). For instance:

"You see cases where you have business owners who just believe in sustainability and want to figure out a way to be a more sustainable business, and they see these schemes as guides as to how to do that." (Participant 13)

Comments also cited reputational risk reduction (3; 6%), premium price for certified products (2; 4%), improvement in credibility (1; 1%), and market leadership (2; 4%) as drivers for entities to participate in the schemes. According to those comments, those aspects have the capacity to add value for certified entities. For example:

"Certainly external credibility because you can have all of your internal systems, but this external credibility comes with certification by third-party auditors. That is the main driver." (Participant 3)

> *... sustainability certification schemes add value to an organisation by facilitating access to market for certified products ...*

2.1.2 External pressure

External pressure as a driver for entities to participate in sustainability certification schemes was the second-most mentioned topic. Eighteen (18; 33%) of the comments provided by participants addressed the external pressure from four different groups as follows: customers (11; 21%); civil society (4; 8%); consumers (2; 4%); and investors (1; 1%). For instance:

"Depends on the nature of the business, for example, where you've got consumers facing the end of the chain there is value there because people may want to know where those diamonds come from or they want to be sure that that gold comes from a certified supply chain. I think it is difficult with coal, for example, where the relationship between the commodity and the consumer is not really clear. I think they are consumer-driven." (Participant 2)

"There are customers demanding that you have to engage in a particular standard or from a list of them." (Participant 5)

"I would go back to consumer demand. Even in instances where there is a government regulation or a legal regime

that promotes or even requires some of the certification schemes, without consumer demand, you can't expect to see great participation." (Participant 10)

"I would say while civil society definitely is a part of the underlying pressure, the real fighting point was when big procurers of raw material were asking their suppliers for reassurances and checks that nothing bad was happening." (Participant 15)

"I have continuous questions from investors and analysts. The ISO 14001 to some extent has been like the entry level for environmental management. This is the first question of any investor questionnaire." (Participant 9)

Consumer/customer-driven certification schemes have been referred to by previous authors as non-state market-driven sustainability governance initiatives. Those governance initiatives tend to develop their own private environmental and social standards and rely on verification mechanisms to assure end-users or customers concerned about environmental and social risks in their products or supply chains. Such initiatives aim to develop and implement environmentally and socially responsible management practices (Auld et al., 2009; Cashore, 2002; Young, 2015).

Non-state market-driven governance initiatives usually do not rely on government regulations and tend to keep governments as interested actors, compared to traditional governance initiatives where governments play a policy-making role. According to Bernstein and Cashore (2004), non-state market-driven initiatives aim to create incentives for changes in behaviour when governments are unable or unwilling to act.

2.1.3   Want to do the right thing

Comments stating that organisations join sustainability certification schemes because they want to do the right thing were mentioned by five participants (5; 9%). The current societal awareness about economic, social and environmental problems we are all facing – such as natural disasters, inequalities, poverty, climate change, tailings dam disasters, water and soil contamination – has resulted in the search for business and development models that are more ethical and sustainable. Industries, as part of this society, have also been adopting a new approach that also considers environmental and social performance. In this context, schemes can guide companies to adopt a more responsible and sustainable approach. Regarding this issue, for example, Participant 13 said:

"I think the interest is that although many of them [organisations] may be doing it because the supply chain partners are asking, I think there's also a large number who are doing it because they genuinely want to be better employers, better businesses and they don't know how, and when they see a sustainability certification scheme they are like: 'Okay, here is a

framework that can help me'. So I think it is multi-factorial – some have to do with economic reasons, like access to market and income, and some have to do with genuine sustainability and social reasons." (Participant 13)

2.1.4   Legal requirements

The need to be in compliance with legal requirements was also considered one of the drivers for participation. Two comments (2; 4%) considered the need to be in compliance with legal requirements as the main reason for companies seeking certification. Regarding this matter, Participant 2 stated:

"In some cases you have governments putting their initiatives in place and as a result of that, buyers have to understand the human rights impacts in their supply chain, so companies have to incorporate in their process those issues." (Participant 2)

There are some examples where legal requirements were passed demanding companies and importers of minerals to check their supply chains to make sure they don't fuel conflicts or have any social or environmental complications. One of the most well-known legal requirements of this kind is the Dodd-Frank Act. In 2010, the United States (US) passed the *Dodd-Frank Wall Street Reform and Consumer Protection Act 2010* (the Dodd-Frank Act) in which section 1502 requires companies listed on the US stock exchange using conflict minerals[5] in their production processes to declare the origin of such minerals and perform appropriate supply chain due diligence.

A similar approach has been used by the European Union (EU) to break the link between minerals extraction and trading, and the financing of armed conflicts. The EU is currently working to pass a regulation requiring all EU importers of four specific minerals (tin, tungsten, tantalum and gold (3TG)) to ensure they do not fuel conflicts and human rights abuses. The EU aims to set up a system for supply chain due diligence self-certification in order to curtail opportunities for armed groups and security forces to trade in tin, tantalum and tungsten, their ores, and gold. It is designed to provide transparency and certainty in regards to the supply practices of importers, smelters and refiners sourcing from conflict-affected and high-risk areas.[6]

---

5   The US Dodd-Frank Act, section 1502 defines "conflict minerals" as minerals containing tin, tantalum, tungsten and gold originating in the DRC and adjoining countries (Securities and Exchange Commission, 2010).

6   The UN defines "conflict-affected and high-risk areas" as areas in a state of armed conflict or fragile post-conflict, as well as areas witnessing weak or non-existent governance and security, such as failed states, and widespread and systematic violations of international law, including human rights abuse (European Commission, 2014).

2.1.5 Industry convergence

Industry convergence was also mentioned by one participant (1; 2%). This participant pointed out:

"The third driver is industry convergence. If the playing field is going towards a particular scheme, if you don't engage in the scheme, you are weaker and have a disadvantage among your competitors." (Participant 5)

According to Participant 5, industry convergence, in this case towards a particular certification scheme, appears to be a pervasive phenomenon pressuring non-participant companies to engage in a scheme used by the majority of the companies in a specific sector. Companies operating in a converging environment can face many challenges and are often disadvantaged because their competitors are producing certified products for the same market. Industry convergence could also foster the development of schemes that are able to operate through the whole life cycle of specific commodities affecting different industries.

2.2 More important design characteristics to get right, and recommendations

This section lists the more important characteristics schemes have to get right in order to be effective, according to participants' points of view. During the interviews, participants were asked about the more important design characteristics schemes should get right to be effective and to discuss this topic. Recommendations to improve the effectiveness of such schemes were also explored with participants during the interviews, and results are included in this section. Participants' opinions, perceptions and recommendations were identified, categorised and grouped in key components considering common characteristics.

As a result, 130 comments were provided and nine key components were identified: Transparency (26; 20%); Stakeholder Participation (23; 18%); M&E mechanisms (20; 15%); Interoperability (17; 13%); Assurance (16; 12%); Local Development (10; 8%); Sanctions for Non-Compliance (7; 5%); Standards (6; 5%); and Training and Capacity Building (5; 4%). Figure 3 presents the number of comments provided by participants on each key component identified.

2.2.1 Transparency

Transparency is a fundamental component of any credible scheme and can be demonstrated through different methods. Schemes could provide public information about costs associated within the certification process, public disclosure of financial information, details about how the scheme is governed, who the decision makers are and how decisions are made, how decision makers are chosen, objectives, goals and achievements, keeping available communication channels where stakeholders can engage, and so on. The importance of this theme for schemes is demonstrated in different studies. For instance, the ISEAL Alliance (2013) considers transparency one of its credibility principles. In fact, it is suggested that schemes should present relevant information in clear and accessible formats for stakeholders.

During the interviews, it was observed that participants support the idea that transparency is a key attribute for schemes to be credible and successful. The need for more transparency, and the diversity of forms in which schemes can improve their credibility through transparency, were also identified. Participant 1 argued that schemes still have a long way to go to improve transparency, particularly in governance. According to this participant, schemes are
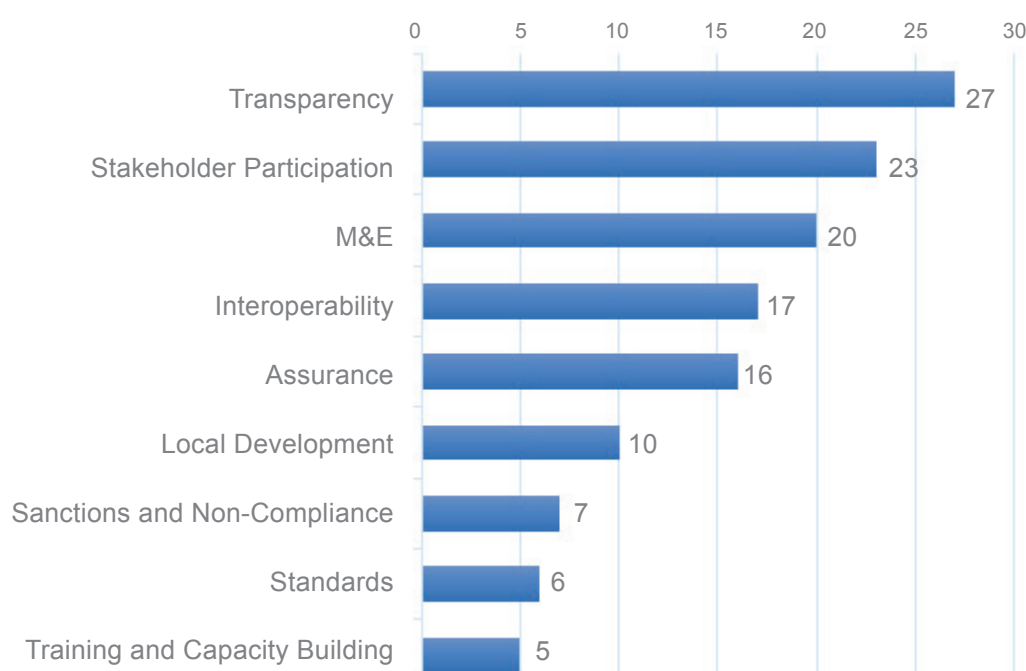

Figure 3: Number of comments on each key component

currently not properly making relevant information accessible to stakeholders. The need for more transparency in relation to the operations, decisions, processes, objectives and impacts of the schemes was observed during different interviews. This need for more transparency could be observed, for instance, when one of the participants was asked about what schemes should improve. This participant said:

"Transparency, certainly. The scheme itself and standards. How those standards were set. How you evaluate them and who is the user of them. Also, who is undergoing that standards assessment and what those results are. That is a very critical part, because what transparency does is create accountability and create reliability." (Participant 11)

A similar response was provided by Participants 13 and 14 when they were asked about the most important design characteristic for schemes to get right. These participants pointed out:

"What I would say is extremely important is a really clear democratic, well-governed accountability mechanism within the scheme. ISEAL uses the term credibility as a catch-all phrase that encompasses many of these principles but I think within that, for me personally what I would prioritise is transparency, clear accountability mechanisms in different places within a scheme and a genuine sort of healthy governance structure that ensures that there is an openness to the learning, there's an openness to failure, there's an openness

to criticism and that the scheme genuinely, you know, improves over time." (Participant 14)

"So clearly we want to avoid schemes that are acting as if they do things that they don't, or people making claims based on the use of a scheme that isn't actually representative of what the scheme is trying to achieve." (Participant 13)

These participants suggested that schemes need to be more transparent, especially regarding their governance structure, challenges and performance. A similar comment was provided by Participant 2 when asked about improvement opportunities:

"Degree of transparency externally. For instance, how are decisions made, who are the decision-makers, and what are the processes behind decisions? Importantly, discuss what happens when a certified entity or an entity that wants to be certified has done something in violation of the criteria. What is the process to decide how to deal with this situation? Transparency is really important. Sometimes there is no clear information about those aspects. Grievance mechanisms – these mechanisms should be transparent." (Participant 2)

In addition to the decision-makers and decision-making processes, this same participant commented about the importance of having grievance mechanisms in place and transparency in situations where participants are not in compliance. Another important aspect high-lighted by participants was the importance of communicating the outcomes, impacts and performance improvements. Regarding this matter, Participants 2 and 5 stated:

"Transparency, as great as possible. I think we need to make sure that all certification schemes demonstrate their performance improvements." (Participant 2)

"I do feel schemes have an obligation to respond to stakeholders about challenges and their inquiries. It is incredibly important that they do it in an open and transparent way." (Participant 5)

In the same vein, Participant 6 argued that one of the methods of improving transparency is sharing information in the public domain. This participant suggested that schemes should keep as much information as possible in the public domain in order to be accountable to their stakeholders. Standards, guidelines, information about assurers, results of assurances, information about the members of the board, impacts and results should all be available to stakeholders. This participant also criticised the current governance structure used by schemes. They stated that there are conflicts of interest in the governance level of some schemes which affect the capacity of such schemes to be transparent and credible. In the participant's words:

"I have served on the boards of some organisations [schemes] that have profound conflict of interest at the very heart of their boards. It does not mean that what they are doing is bad, it just means that it affects their credibility at the governance level. So, to me, strength of the scheme comes down to the strength of its governance. And obviously, part of this strength in governance is a commitment to transparency and the accountability, both to stakeholders and users of the systems, as well as to the public." (Participant 6)

Recommendation
Information about governance and performance should be kept in the public domain to improve accountability and transparency.

A similar point of view in relation to the public availability of assurance material was provided by Participant 7 when asked to provide a good example of transparency. This participant stated:

"When a participant is audited for compliance, the end result of that compliance audit is summarised into a document and it is posted on the website. So any stakeholder can go on to the website and see for themselves what the auditor or auditors found in that particular operation and evaluate for compliance. But equally important is that the auditors' information is also available – who were the auditors, what were the findings? It is everything there for stakeholders to view. So everything is transparent." (Participant 7)

During the interviews, different recommendations were suggested to improve the level of transparency of schemes. Participants suggested the use of the ISEAL Codes as guidelines to improve transparency and the need to implement transparent communication channels considering different stakeholders and participants involved.

Recommendation
The ISEAL Codes could be used as important guidelines to improve transparency.

Recommendation
Transparent communication channels can be developed and implemented considering different stakeholders.

Communication of what schemes want to achieve and the problems they are trying to solve should be very

clear and understood by the entities and people involved. Recommendations to clearly communicate how the processes and decisions are made and how disputes are settled were also placed. Regarding this matter, one of the participants stated:

"It needs to be clear how the processes are governed, how decisions are made and how disputes are settled. What are the voting rights? You need to have all of that set out and clear. It is important to set it up before the work starts." (Participant 9)

Recommendation
Objectives, scope and the problems schemes are trying to solve should be clearly communicated and understood by the stakeholders involved.

Recommendation
The decision-making process and how disputes are settled should be clearly communicated and understood by the stakeholders involved.

According to one of the participants, the main reason why schemes are not adopting a transparent approach is because companies are reluctant to be transparent. This participant stated that overall, certified companies are reluctant to be transparent because they might be more subject to scrutiny and questioned about their ethical performances and achievements. In this participant's words:

"Overall, companies are reluctant to be transparent initially because sometimes they feel they will be more subject to scrutiny. People will say, are you really ethical or is this just greenwashing? So they are kind of hesitant to take the step forward. So, if something goes wrong they don't want everybody to know. They say sometimes, the reason we have a certification scheme is for somebody to come in a confidential way and look to see what our strengths and weakness are and issue a decision that, if it is in favour, we don't necessarily want more transparency there because this third party already came here and provided this decision." (Participant 2)

Although transparency was considered a key component impacting on certification schemes' credibility and success, according to some of the participants, schemes must adopt a more transparent approach. Transparency about impacts, performance, objectives, governance structure, results of audit processes, participants and decision makers were highly recommended.

2.2.2 Stakeholder participation

Stakeholder participation and involvement in sustainability certification schemes is considered an essential practice for schemes to succeed. This engagement with stakeholders is important to improve credibility, to foster the capacity of stakeholders to strengthen the design characteristics of schemes, to obtain support from stakeholders, and to better manage or reduce risks of conflicts and legitimacy (Gulbrandsen, 2005; ISEAL Alliance, 2013; Mori Junior, Franks, & Ali, 2015; Mueller, Dos Santos, & Seuring, 2009; Round Table Codes of Conduct, 2009). Although it is considered good practice, engaging and managing different stakeholders' perspectives and concerns can be challenging and can make the decision-making process slow (AccountAbility, 2008; Barry et al., 2012; Freeman, 2009; Global Witness, 2012; ISEAL Alliance, 2013). The benefits and challenges of dealing with different stakeholders' concerns, mentioned by previous authors, were also stated by different participants during the interviews. These participants shared their opinions, considering both positive and negative aspects of stakeholder engagement processes and participation. For example:

> *"I have two minds to be honest. I see schemes where the involvement has made the difference in the cause and provided credibility to the scheme. I don't think it hurts and sure brings more credibility. At the same time I observed cases where there is no significant difference. At the end of the day it is a matter of how you structure your scheme in a way that there isn't a firewall between the people that have interests in the scheme to have only more members and those who really want to have a real contribution."* (Participant 1)

The same participant commented that although stakeholders bring benefits, they could also come with their own agenda and put their interests ahead of the objectives of the scheme. According to this participant, it is important to determine exactly where it is more important and appropriate to engage with stakeholders and at what time during the process stakeholders should be engaged to ensure efficient participation. Those statements are well aligned with ISEAL Alliance's (2013) recommendation, in which schemes should determine the most appropriate occasion to engage with stakeholders so as not to engage stakeholders unnecessarily at the expense of efficiency. Similar points of view were provided by Participants 2 and 15:

> *"There is a role for different stakeholders. Our initiative was established on a driven business approach because we wanted to make rapid progress. On the other hand, you have IRMA trying to develop their standards for six years already. Personally, I believe that civil society needs to be involved only in specific aspects."* (Participant 2)

IRMA Response

IRMA's commitment to a multi-stakeholder process does mean that decision-making can be more challenging and that the program has developed more slowly . However, given the lack of trust that many civil society groups have that the mining industry is genuinely willing to commit to measurably more responsible practices, and given the fundamental differences in perspective, engaging consistently with all sectors – with equal power at the decision-making table – has made IRMA the scheme with the greatest credibility and accountability across stakeholder groups, but has also created a greater sense of comfort and willingness for IRMA's civil society leaders to sometimes choose not to engage in detailed discussions on issues that aren't most relevant to them because they trust the overall process and the fact that significant decisions won't be made without them.

> *"It's always a struggle to get a business model right. I think because FSC was the first to actually truly embrace multi-stakeholder decision-making, it still finds making decisions quite hard, because the processes put in place to make multi-stakeholder decisions is very cumbersome. So it's hard to be pragmatic."* (Participant 15)

Some participants also mentioned during interviews that stakeholders can contribute better if they have information and knowledge about the scheme. A participant addressed this issue, suggesting that schemes should clearly communicate the context where they operate and their objectives, standards, programs and systems to improve the capacity of stakeholders to engage and contribute.

Recommendation

Schemes should clearly communicate the context where they operate and their objectives, standards, programs and systems to improve the capacity of stakeholders to engage and contribute.

The participation of different stakeholders was generally considered positive by most of the participants. According to them, a multi-stakeholder approach is fundamental for schemes to be trustworthy and have unbiased decision-making processes. However, engagement processes and stakeholder participation strategies usually take time to be developed and implemented, as Participant 11 stated:

> *"Schemes that include stakeholders in their very creation are more effective, but they take a very long time to develop and those costs can be detrimental where the customer demand is so high that there is no room on the way. When customers really demand certified products, often the time constraints restrict the*

ability of the stakeholders to be involved in the initial foundation.” (Participant 11)

Additionally, comments addressed exactly where in the process stakeholders should be involved and participate. There is a general agreement that stakeholders should be involved and participate, especially in the early stages of developing the scheme. Monitoring impacts and results, participating in governance, being consulted during assurance processes and providing their perceptions and concerns in forums were also recommended. According to participants, this participation and involvement is not only to obtain legitimacy and improve credibility but to obtain stakeholders’ perceptions and concerns about aspects that might not be identified only by scheme representatives. Regarding this matter, Participants 5 and 7 stated:

“I don’t see schemes surviving without the involvement of stakeholders. For the development of the scheme, stakeholders need to be involved. In terms of communicating impacts, stakeholders should be communicated to about the impacts. Monitoring...stakeholders should have the opportunity to participate in monitoring. Auditors should be required to use stakeholder consultation as part of their audit plan.” (Participant 5)

“I believe that stakeholders should be involved in the beginning, early on. It is important to have stakeholders’ perspectives. In regards to the technical program, stakeholders might not be the best judge on what is achievable. They do not have the technical capacity to develop parameters and frameworks, but I certainly think that having stakeholders involved early on is key to a successful program ... You can build a scheme, but people need to recognise its importance; without this recognition, the scheme will not succeed.” (Participant 7)

Criticism from participants on the way some of the certification schemes are engaging with their stakeholders was also identified during interviews. Some of the participants questioned the effectiveness of current engagement processes conducted superficially only with pre-determined stakeholders. For instance:

“You can have a meeting of 20 people who know nothing about your organisation in a room, in the capital city and just say: ‘Does everybody agree to our scheme?’, and that is the stakeholder consultation, you know.” (Participant 14)

Although there is a general agreement that stakeholders should be involved and participate, there are some differences in relation to the level of involvement and participation of stakeholders, especially in governance. During interviews, some participants recommended participation of stakeholders in governance, and some recommended the opposite – for example, Participant 8. Based on previous experiences with NGOs, this participant was against the participation of different stakeholders in governance:

“Yes, they should participate. That is absolutely given. Where [in the process], it is the question. There were some concerns of the companies in inviting NGOs to participate, and the majority were against the NGO participation. Instead, stakeholders were consulted. You can have the consultation and you don’t need to have everything on board, but you also can not reject everything. I see that the involvement of NGOs in the governance has complicated things. You have people saying you have to do this, you have to do that, but they are not involved with the operations and they don’t have to do this themselves. This situation causes all kinds of tensions. I am still not convinced that this works and that we are getting benefits from it.” (Participant 8)

Some of the participants questioned the effectiveness of current engagement processes conducted superficially only with pre-determined stakeholders.

In contrast, Participant 6 provided a strong statement defending an approach to involve and engage stakeholders. According to this participant, different stakeholders should be involved to improve accountability, because the relationship between large-scale mining companies and governments could be biased. In this participant’s words:

“I think, particularly in mining, that is the case you just cannot trust a relationship between large-scale mining companies and governments. These relationships are not trustworthy. You need some kind of public involvement and accountability.” (Participant 6)

Although a multi-stakeholder approach can bring credibility, support and legitimacy to the scheme, a balance between the interests of stakeholders that are impacted or will

be impacted by the scheme, and participants should be achieved. Lack of involvement and participation by stakeholders could result in lack of credibility and legitimacy. On the other hand, a scheme designed by stakeholders to be used by the industry may not be successful either (e.g. industry representatives could consider the requirements too strict or compliance costs too high). This divergence among participants' opinions regarding this topic was identified in different opportunities and between different participants. For instance, Participants 9, 15 and 12 stated:

"The IRMA problem is that you've got a bunch of NGOs designing a certification scheme to be implemented by the industry... You need the operators involved, because they know what they can do and what they cannot do ... If an industry body sets a standard, it will struggle with credibility. It can be overcome, but that will be a struggle. If it is just designed by outsiders, it will not have credibility with the people who will use it." (Participant 9)

IRMA Response

IRMA does have mining companies at both the decision-making table (the Steering Committee) and in workshops on the content of the draft Standard, and commenting on changes still needed in the Standard. Mining companies have helped to write, review and revise the content of the draft Standard for Responsible Mining. In addition, IRMA has held two field tests unprecedented in the mining sector in which third-party auditors have been hired to join multi-stakeholder leaders in IRMA to walk the ground of mine sites, at the invitation of host mining companies, and turn the auditing lens back on the language of the draft Standard.

While this type of a practice audit does consider whether a mine site is meeting the draft Standard, more over it is evaluating the Standard itself: Is the language clear? Are the requirements appropriate to the intent of each chapter? Can the requirements be measured (audited) in a reasonable amount of time by independent auditors? Two mine-based field tests of this type have influenced substantial changes in every chapter of the IRMA Standard already. And we do agree that mine-based staff are absolutely integral to assuring that the requirements are ones that can be understood and achieved.

"It is strategically important that different stakeholder groups are represented. They hold accountability for the quality of what would be coming out of that scheme." (Participant 15)

"Stakeholder engagement and participation is a fundamental principle. The methods can vary, the participants can vary, but this principle is important." (Participant 12)

In addition, an important link between the involvement of different stakeholders and the current situation regarding

artisanal and small-scale mining (ASM) activities was made by one of the participants. According to this participant, the lack of involvement by and interest from important stakeholders, especially non-mining community representatives that also affect and are affected by ASM, is negatively impacting the effectiveness of schemes designed to operate in this field. This participant stated:

"This is what some of these schemes are doing, they just invite the mining people and this will not change anything ... We need to have all the society representatives present, people affecting and affected positively and negatively should be there. We need a more holistic solution involving those people, not only mining people ... Dialogue should take place at all levels and needs to be with people with knowledge...it needs to engage with small-scale miners as well as people on the ground engaging with those miners, NGOs on the ground. This on-the-ground activity improves the knowledge and brings important issues." (Participant 8)

The importance of having a multi-stakeholder approach to improve knowledge and foster discussion is considered an important instrument to improve effectiveness of certification schemes and their impacts on the ground. In the ASM context, Participant 8 argued that a multi-stakeholder approach should consider not only representatives of the ASM sector but representatives of different sectors, to ensure a broader discussion about the challenges and improvement solutions that will make the certification scheme effective and truly deliver positive outcomes on the ground.

The use of the ISEAL Codes as a guide to develop and implement a stakeholder engagement and participation strategy was mentioned by some participants too. For example:

"All schemes that are involved with the ISEAL tend to be better. That is my understanding. They tend to be good sustainability schemes. My recommendation is to look at the ISEAL Codes and implement those Codes and have focus on continuous improvement." (Participant 12)

Recommendation

The ISEAL Codes could be used as important guidelines to develop and implement a stakeholder engagement and participatory strategy.

Recommendations also addressed the importance of having stakeholders involved during the standard-setting phase. In addition, it was recommended that the stakeholder engagement and participation process should be developed based on the objectives of the scheme. According to one

of the participants, the engagement process should start by identifying who the primary stakeholders are that they think are the most important at various levels, a once you define these stakeholders, you need to set up adequate mechanisms to consult with them, allow them to participate in key processes and allow them to review key outputs at regular intervals in your system development. On this topic, for example, Participant 14 said:

"What I feel is lacking and could be improved is a clear definition of who the stakeholders are." (Participant 14)

Recommendation
A stakeholder engagement strategy should be developed to give a clear definition of who the stakeholders are, and who the stakeholders are that the scheme has to engage and involve.

This participant also mentioned the use of technological innovation as an instrument to improve the effectiveness of schemes and reduce costs of engagement processes with stakeholders. According to this participant, sometimes engagement processes can be costly, and the power of technology can help to better engage and communicate with stakeholders and manage their concerns and perspectives.

Recommendation
The use of technological instruments should be considered to reduce costs and improve effectiveness and accountability of schemes.

In summary, stakeholder participation was noted as being absolutely essential to maintaining legitimacy of the schemes, but managing the input and organising it coherently requires better use of technology and existing networks of influence.

2.2.3 Monitoring and evaluation mechanisms

Monitoring and evaluation (M&E) mechanisms are fundamental instruments for sustainability certification schemes to assess their impacts and improve their systems over time. These mechanisms are equally important for providing accountability to stakeholders, to support decision-making processes, for strategic planning, to build capacity, and to improve credibility (Blackman & Rivera, 2011; ISEAL Alliance, 2014; Komives & Jackson, 2014; Miller & Bush, 2015; Mori Junior et al., 2015; Schiavi & Solomon, 2007; Tikina & Innes, 2008). The importance of M&E mechanisms was stated by different participants during the interviews, for instance, Participants 1 and 4 pointed out:

"It [M&E] is crucial, especially when you combine the lack of impact monitoring mechanisms with the lack of accountability of the scheme by itself, and an oversight committee that has a clear interest to certify participants. It creates a big impact and a big risk. It is fantastic you now have 300 certified entities, but it does not mean that you are providing positive outcomes." (Participant 1)

"Schemes need to have monitoring systems in place to collect information and to test whether they are doing what they think they are doing. They need scientific and verifiable data that will demonstrate that your scheme has this impact." (Participant 4)

Recommendation
Monitoring and evaluation mechanisms should be in place to collect information and to test whether schemes are achieving their goals.

However, Participant 2 said:

"Schemes have to demonstrate how they bring change ... You've got to be able to demonstrate benefits on the ground. You could demonstrate your Theory of Change. I think we have to demonstrate the impacts on the ground ... It is not a matter of certifying and walking away and certifying again, but actually to demonstrate that there is improvement on the ground." (Participant 2)

This participant highlights the importance of an M&E mechanism, not only to clearly demonstrate what the impacts of the scheme on the ground are but also to provide accountability to stakeholders. Some of the participants interviewed also stated that very few schemes actually have proper mechanisms in place to assess their impact. These statements are similar to those provided in previous studies, which also identified that the majority of the schemes do not have proper mechanisms in place to measure achievements, impacts and effectiveness (Blackman & Rivera, 2011; Brockmyer & Fox, 2015; Mori Junior et al., 2015; Stark & Levin, 2011; WWF, 2013). Regarding this matter Participants 1 and 3 pointed out:

"I think schemes are very much lacking in impact analyses right now … RJC has clearly not done that. Fairtrade and Fairmined have not done that too. They did not measure their impacts on the ground. They are trying to do that now. And most of the schemes have not even started to think about it." (Participant 3)

RJC Response
The RJC has a Monitoring and Evaluation (M&E) programme to evaluate whether intended changes are happening and where strategies need adjusting. As part of the programme, RJC carries out data

collection and analysis on certificate holders and also commissions independent research on the impact of the RJC standards in key parts of the supply chain. It is through this programme, and in particular through an impact study conducted with SMEs, that the RJC identified the need to simplify its documentation, improve guidance and increase the number of translations to aid companies in implementing the RJC standards. RJC is continually reviewing the M&E system. As a full member of the ISEAL Alliance, RJC demonstrates year-on-year compliance with the ISEAL Code of Good Practice for Assessing the Impacts of Social and Environmental Standards.

Fairtrade Response

We have undertaken a baseline assessment prior to launching Fairtrade gold in 2011. Prior to 2015, Fairtrade sales were low as we built market understanding and commitment to purchasing on Fairtrade terms. It was thus premature to undertake independent research, but Fairtrade has been working with certified mines on an ongoing basis to capture how premium investments have been spent and the impact of these.

With more significant sales in 2015/16, we will be financing a third party to undertake independent impact analysis and recommendations on how we can improve our approach to ASM gold.

Fairmined Response

Since 2014, ARM has worked hard on improving the monitoring and evaluation system, following a systematic conceptualization process as recommended by ISEAL Guides. We have developed a Theory of Change (ToC) for the organization and the standards system, which guides our strategy of contributing towards a sustainable artisanal and small-scale mining (ASM) sector. At the same time, it was also a point of departure for setting up a Monitoring and Evaluation (M&E) system, with a set of indicators focusing on the short- and medium-term change in the sustainability issues that are the basis of the standard (change on the way towards, and after the certification), and long-term impact on people and the environment. To express the importance of this conceptualization process, our 2015 Annual Report is structured around the four ToC core strategies.

While we implement this detailed M&E system, we have been gathering and publishing information on important indicators: numbers of beneficiaries, volumes of gold sold under Fairmined, and the amount of Fairmined Premium received. This information is presented transparently in a dedicated section on the Fairmined website: http://www.fairmined.org/our-impact/, but also summarized each year in our Annual Reports. We have also made efforts to make the Fairmined concept, and responsible ASM in general, simple to understand for the general public, with a production of this short video: https://youtu.be/8ATjU7auDTg

Designing and implementing a robust M&E system is challenging, and it takes time to get the results. It is especially true for the sector such as ASM, where quality information is not so easy to get (gold miners are a rather secretive folk), and gathering good data is a long-term trust-building process. Although Fairmined Certification is a relatively new one, and considering that time is needed to fully show its impact and learn from the process, in ARM we have been taking the M&E seriously, and we are committed to continuously widening the scope and improving the quality of impact information we provide.

The Theory of Change was considered an important component of M&E mechanisms. According to some participants, schemes need to be designed to achieve their Theory of Change and schemes' programs, systems, strategies, standards and mechanisms should be designed based on their Theory of Change. It is important for schemes to work on their Theory of Change to determine their outcomes and impacts in the short, medium and long terms. Different participants highlighted the importance of the Theory of Change to assess the impacts and effectiveness of schemes. For instance:

> *"The Theory of Change should be considered. We need to demonstrate improvements in mining, not a tick-box exercise, but improvement in terms of performance ... They [schemes] have to take it seriously and not just put something in place to use as marketing. Not actually greenwashing, but you know what I mean."* (Participant 2).

> *"First you have to think clearly about what you want to achieve and what your Theory of Change is, and from that you design your scheme to achieve those objectives, such as your scale, your business model, high standards or low standards, design your standards, verification, certification or a different model – what is your governance system to manage that? Objectives and Theory of Change are the beginning and from that you design your scheme."* (Participant 4)

Recommendation

The Theory of Change should be considered to determine outcomes and impacts in the short, medium and long terms.

> *"It [M&E] is really important and it is something that ISEAL has been promoting as part of its impacts code. They [schemes] have to think in terms of what the long-term desired impacts are, what kind of outcomes lead to that, how you set up metrics to measure what the impacts are, how to adapt or evolve the scheme to better achieve its objectives. So it is another kind of strategic planning process that is focused very much on the core mission of the scheme."* (Participant 12)

Recommendation

ISEAL's Impact Code could be used as an important guideline to develop and implement effective M&E mechanisms.

"Schemes need to have a Theory of Change. Theory of Change is not just, you know, a nice picture which everybody in your M&E team knows, but the Theory of Change must be well understood by all your staff whether they work at the program level, at market access level or in communications. I think it's both the kind of change and the extent of change that you think you can bring about." (Participant 14)

Statements provided by Participants 2, 4, 12 and 14 also support previous authors' recommendations in relation to the importance of the Theory of Change for schemes to assess their effectiveness and impacts. For example, Brockmyer and Fox (2015) recommended schemes to first articulate a Theory of Change that lays out their strategy for moving from inputs, to outputs, to medium- and long-term outcomes, before defining what the effectiveness is and impacts are. According to these authors, the Theory of Change can also help schemes to identify which stakeholders need to be engaged, what activities are worth expanding, and which ones have no effect.

During the interviews participants also mentioned the reasons why most of the schemes do not have a proper mechanism in place to assess their impacts. Participants stated that schemes are not properly assessing their impacts because there is not enough attention and public debate about it, and because most of the certification schemes are not mature enough to start demonstrating their effectiveness and impacts. Supporting this idea, Participant 3 claimed:

"One of the reasons is that certification schemes are so relatively new and some of the organisations have not gone through a full cycle, there are not enough organisations certified. That said, there is not enough attention on assessing those aspects yet." (Participant 3)

Additional reasons explaining why schemes are not properly assessing their impacts and effectiveness were provided by different participants. For instance, Participants 4, 7 and 12 stated that measuring impacts is complex and costly. In these participants' words:

"Personally, I think it is incredibly difficult to demonstrate impacts of one particular intervention of a particular scheme. It is difficult and expensive to measure and monitor impacts and demonstrate that you are having

impacts. Most of the schemes, when they start, they just don't have the resources to do that job properly, and it is not their priority, they are more concerned with having the scheme up and running. It is later on that they begin to have resources to do that." (Participant 4).

On the same note, Participants 7 and 12 stated:

"You can go out in your case study and talk to people to know how the Cyanide Code has made a difference at their operation on the ground and how it has improved management systems and how they manage risks and the like. But it is not always easy to measure some of those outcomes, including effectiveness." (Participant 7)

"I think the practice for impact evaluation is still very young, it has only been a year or two that schemes are trying to put in place those sort of systems and start to collect data. There are others that have difficulty putting in place long-term plans. It is a challenge." (Participant 12)

In addition to the costs involved and the lack of maturity of schemes, Participant 12 stated that assessing acts in a specific context individually is also very difficult. This participant stated:

"They [effectiveness and outcomes] can be quite difficult to assess, not just from the point of collecting or deciding what data would represent, but also assigning agency to individual acts, whether the certification scheme or others provided improvements. For example, [in regards to] greenhouse gas improvements in the mineral supply chain, is it achievable to say that it was the requirements of the schemes, the companies' initiatives to reduce emissions, or the regulatory driver? That kind of assessment is more difficult to make." (Participant 12)

… the Theory of Change can also help schemes to identify which stakeholders need to be engaged, what activities are worth expanding, and which ones have no effect.

Just as importantly, participants argued that unfortunately when schemes begin they tend to focus their resources on aspects that allow them to start running. In such a situation, aspects such as market access, certifications, programs and standards are prioritised rather than developing M&E mechanisms and building a Theory of Change. This situation influences the effectiveness of schemes because they have to build their Theory of Change retrospectively, and the Theory of Change is more effective when it is built

at the beginning. As Participant 14 claimed:

> "Many of the schemes began as market-based schemes, and a lot of energy was put into developing that side of the system: market access, certification, labelling, reaching out, groups of products you are going to source; and I genuinely think that although many schemes had a broad vision, I don't think they would be genuinely investing in monitoring and evaluation. I think the entire function was extremely under-invested in in many schemes – parts of the scheme like certifications and standards and programs were far more well developed and M&E came later. So, what happens as a result of that is that you are trying to build a Theory of Change retrospectively, and the Theory of Change is technically supposed to be built at the start." (Participant 14)

Recommendation
The use of the Theory of Change should be considered at the start.

Conell and Kubisch (1998), one of the first studies that associated the use of the Theory of Change with evaluating community initiatives, argued that a good Theory of Change has to be plausible (evidence and common sense that the activity will lead to desired outcomes), doable (economic, technical, political, institutional, and human resources are available to carry out the initiative), and testable (specific and complete enough for an evaluator to track its progress in credible and useful ways).

Regarding an effective M&E mechanism, Participant 4 suggested that monitoring mechanisms should be accountable, receive data on a regular basis and have a forum where gaps can be identified and actions plans to fill those gaps can be tested. Exploring opportunities to have stakeholders involved in monitoring processes, and providing an effective communication channel to communicate the results of the impact assessment to stakeholders were also suggested. Regarding these recommendations, Participant 5 said:

> "The impact assessment is something that schemes should improve, that is something that needs to be corrected in order not only to judge effectiveness but to communicate it. This would also aggregate results, see improvements over time and identify where there are gaps that need to be addressed." (Participant 5)

Suggestions to consider new technologies to develop and improve M&E mechanisms were also placed. Participant 10, for instance, mentioned the existence of mobile solutions for engaging stakeholders and measuring environmental, social and governance issues. This participant suggested a mobile solution to monitor and evaluate health and safety issues, which could be used to improve M&E mechanisms:

> "It [mobile solution to monitor and evaluate health and safety issues] assures and ensures that responses are private and anonymous, creates an information verification system, creates a feedback system and ensures that relevant health and safety indicators are obtained." (Participant 10)

The incidence of concerns and questions from different stakeholders about the real contributions and effectiveness of certification schemes, were also addressed by some of the participants. According to those participants, there is pressure from stakeholders for certification schemes to be more accountable, especially regarding their outcomes, impacts and effectiveness. In this context, M&E mechanisms are the basis to providing such accountability. In this regard, Participant 12 and 14 pointed out:

> "ISEAL is placing a lot of efforts and resources into [assessing impacts and effectiveness] because I think it is one of the largest questions for certification schemes. I think most people have a sense that this does not make the difference, but assembling data and research is a long-term project which all schemes have to face." (Participant 12)

> "I think it's been extremely useful that external pressure for improved M&E has come from donors, from funders, from even ISEAL through the Impact Code, and I think that's been an extremely strong impetus for schemes to up their game when it comes to M&E." (Participant 14)

As can be seen, M&E mechanisms are important for certification schemes to assess effectiveness, demonstrate impacts and provide accountability. Such mechanisms can also play an important role in providing valuable information for decision makers. According to participants, the Theory of Change is an important component of M&E mechanisms and it should be considered at the start. In addition, participants highlighted that the majority of sustainability certification schemes still do not have M&E mechanisms in place.

2.2.4 Interoperability
Interoperability has been a topic much in vogue with the recent proliferation of certification schemes. The increasing number of schemes could result in duplication and overlapping, which can increase the costs of compliance. Also, numerous schemes with different requirements could lead to schemes with loose performance standards and lack of reliability, and stakeholders may not be able to recognise these differences. In this context, interoperability is considered an important instrument to avoid duplication and overlapping among certification schemes, standards, regulations, principles and governance initiatives. In addition to the cost reduction, interoperability can amplify the outcomes achieved by individual schemes as schemes coordinate and exchange knowledge and practices (Barry et al., 2012; Campbell, 2006; Derkx & Glasbergen, 2014; Main et al., 2014; Mikkilä, Heinimö, Panapanaan, Linnanen,

& Faaij, 2009; Mori Junior, Franks, & Ali, 2016; Scarlat & Dallemand, 2011; WWF, 2013; Young, Fonseca, & Dias, 2010).

The need for schemes to put effort into avoiding duplications was mentioned by different participants. According to these participants, schemes have to work together to improve cooperation and cross-recognition to avoid duplication. The concern of a participant in relation to the lack of interoperability among schemes was evident during one of the interviews. In this participant's words:

"It is very important to make efforts to avoid duplication, there is nothing worse than duplicating efforts and having different auditors assessing the same thing. This just raises the cost and annoys everybody involved. Harmonisation is the key to making life easier for participants." (Participant 1)

Similar statements were provided by Participants 4 and 6, who pointed out:

"It [interoperability] is easy to say and hard to do, but there is a need for more cooperation. They [schemes] need to cooperate and change information. There is lots of space for coordination among schemes. They [schemes] have to do more to coordinate and to align with other schemes." (Participant 4)

"Schemes need to start working more closely together because there is lots of duplication. We need organisations that do not work for their own interest but genuinely represent the interest of the beneficiaries ... When the ARM broke away from Fairtrade and decided to set up a competition, we went from one standard, one auditor, one set of conversations with miners and consumers to two standards, two sets of consumers, two auditors, two labels, two market narratives, basically a duplication of work and expenditure; but everybody is still working with the same sources. It was not in the miners' interests for the ARM to break its partnership agreement." (Participant 6)

Fairtrade Response
Fairtrade fully agrees there is too much duplication and we are committed to collaboration with NGOs and industry in order to eliminate duplication and collectively achieve greatest impact. We are proactively working with industry bodies (such as RJC and BGI) and also NGOs (such as ARM and Solidaridad) to ensure a cooperative approach in which we can focus on each other's strengths.
Fairtrade sees our principal future role in ASM as: (i) mobilising our consumer and business connections to create demand for gold purchased from responsible ASM sources, and (ii) supporting miners to organise into strong groups that form the foundation for trade and development.

ASM is seen is a very high risk proposition for government and companies: we believe high public recognition and trust in Fairtrade can help create a new approach to ASM in which deeply ingrained poverty can be addressed step by step with integrity and public goodwill.

Fairmined Response
It is important to give a proper context to the difficult decisions made by ARM and Fairtrade to discontinue the partnership. ARM was founded to develop a standard specific for ASM, and after several years of a multi-stakeholder process a Standard Zero was developed, the first Standard for responsible ASGM. To leverage the impact of this pioneer Standard, joining forces with a more experienced fair trade organization seemed like a natural way forward. The initial partnership was of 3 years; however, the market results in this time were not fulfilling the expectations. Additionally, there were clearly a number of strategic differences on how to take the gold project forward, especially in relation to marketing, country presence, supply chain solutions, premium levels, decision-making structure, and organizational commitment to mining as a sector. Without finding a common ground on these key issues, ARM took the decision not to extend the partnership.

Regarding the benefits of better interaction among schemes, Participant 1 argued that interaction between schemes can result in improvements because, through good interaction, schemes can learn from each other and share experiences. This interaction can also work to improve awareness about the aspects they want to work with or the problems they want to solve.

Aspects impacting schemes to improve interoperability were also explored during the interviews. Competition was considered one of the aspects impacting interoperability. According to some of the participants, schemes are currently competing to gain business and increase market share, which discourages cooperation. Participants 3, 4 and 6 stated:

"There is quite strong competition in making certification schemes self-sustaining and competing to gain business and increase market share. I think that discourages cooperation...There is still this fear and protection of market share and loyalty." (Participant 3)

"Sometimes it is the simple question of funding – you compete for funding, you compete for NGO support." (Participant 4)

"Schemes do not work together because of institutional ego and money. There are lots of organisations out there that can only operate if they get charitable funding, and they have administration costs, office costs, travel costs, salaries to pay." (Participant 6)

Loyalty was also cited by Participants 4 and 15 as one of the obstacles to interoperability:

> "When you've got some stakeholders discussing new standards for two years, you have loyalty and trust in it [the scheme]. You build a sense of trust and build a sense of commitment with the scheme, but then you realise that someone else has another scheme overlapping your scheme but you clearly are committed to your scheme and not with this new scheme ... It is hard for a group that was spending two years doing that to give up on this scheme and work with another model, or merge your work with another model. It is psychologically difficult to do that." (Participant 4)

> "There are too many schemes. And what happens is the boards get very emotionally attached to their particular scheme. They get preoccupied in protecting the organisation and protecting what they set up 10 years ago. What they're not good at is moving with the times, like businesses do." (Participant 15)

Furthermore, suggestions to improve interoperability were provided by some of the participants. One participant suggested that schemes need to start working together and fostering a close alignment with specific overlapping topics. For instance, schemes can align their standards and adopt similar approaches on related topics. Participant 4 suggested:

> "For example, water – there are different approaches to assess water. But, for example, schemes that assess water should talk about and discuss what they are doing regarding this matter. And all standards should have a very similar approach, almost an overlap in terms of what we want companies to record to manage water. It is the same for biodiversity, there aren't many different ways to ask companies to assess biodiversity." (Participant 4)

This participant also added:

> "There is this big project right now where different schemes are discussing together how to address and have a common approach to living wage. They are sitting and saying...we all believe in living wage, what is it? How can we define it? So, they are working together to achieve this goal. They are not saying that they will merge, but they are saying on this issue let's have a coordinated approach." (Participant 4)

Recommendation

Interoperability and collaboration should be improved to avoid overlapping.

The International Cyanide Management Code and the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk

Areas are considered good examples of interoperability. According to some of the participants, different schemes have incorporated and accepted the Cyanide Code and the OECD Guidance in their assurance programs and processes, improving interaction and interoperability. Participants also stated that interoperability goes beyond the interaction among schemes. It needs to consider governments and multilateral institutions as well.

Recommendation

Interoperability should go beyond the interaction among schemes and also consider governments and multilateral institutions.

One of the participants also stressed the importance of interoperability to improve consumers' understanding about schemes and to facilitate participation. Through interoperability, information about schemes could be simplified, which will facilitate stakeholders' understanding and avoid confusion. Also, simplifying processes will reduce compliance costs and facilitate participants to be in compliance with the schemes.

Recommendations regarding assurance integration were also provided. However, in this case, the uniformity and quality of the assurances are fundamental to a successful integration. The adoption of different approaches and different levels of requirements were also considered obstacles to effective interoperability. Without a common base in relation to requirements, objectives, approaches and standards, schemes cannot be integrated. Regarding this matter, Participants 5 and 12 mentioned:

> "There is a workplace that has three different types of schemes, and all of them show different compliance thresholds." (Participant 5)

> "The approaches may not be seen by different initiatives as equivalent, so there is one that is very focused in capacity building and another that is very focused on setting a high bar. Then, the schemes obviously have very different objectives, and looking at 'cooperability' is more complex because it might not be just about what the certification scheme is but also about the assurance model or objectives." (Participant 12)

Interesting comments about horizontal and vertical interoperability were also provided by two participants. Those participants stated that interoperability should not only be focused on a horizontal approach, where a specific sector across multiple industries is considered, but also on a vertical approach, where different actors within a specific supply chain are considered. For instance:

> "Interoperability also should be vertical between different actors in the supply chain, like if my supplier has a

certain certificate or recognition that should improve the ability for me to be certified and recognised. And vice versa, so again, [interoperability] should be both horizontal and vertical." (Participant 11)

It was also stated that little research has been done on interoperability and most of the schemes have been set without considering the interoperability concept. According to these participants, schemes have to start considering interoperability and set up collaborative objectives. In this context, participants also emphasised the importance of having decision-makers and leaders representing schemes to put energy into developing common agendas among different schemes to highlight the importance of the interoperability principle. In addition, the ISEAL Alliance was mentioned by three participants as an important framework to improve interoperability.

In conclusion, participants stated that much work still needs to be done by certification schemes to improve horizontal and vertical interoperability in light of the recent proliferation of schemes. Competition to gain business and increase market share, and differences in objectives, requirements and assurance processes, were considered the main obstacles to improving interoperability.

2.2.5 Assurance

The assurance process plays an important role in evaluating the compliance of participants in relation to the scheme's requirements and also upholding the credibility of the scheme (Barry et al., 2012; ISEAL Alliance, 2011; Komives & Jackson, 2014; WWF, 2013). During the interviews participants provided support for these statements and highlighted that an assurance process with quality is fundamental for any scheme to have credibility, to be effective and to succeed. The assurance process of certification schemes should be designed considering a whole range of factors, such as the objectives of the scheme, stakeholders involved, participants involved, uptake, costs, and accessibility.

According to one of the participants, regardless of the type of assurance process used (first-, second- or third-party), schemes have to have a mechanism in place to provide an independent opinion and add credibility. When asked about what design characteristics schemes should get right in order to be effective, this participant stated:

"An audit mechanism to provide an independent assurance. I don't think schemes have to always have third-party audits, but it is important to have a mechanism in place to add credibility to it … There is still that perception out there among stakeholders that schemes to be credible need to have external auditors, and I know there are other types of auditors that also bring very good results, such as internal auditors." (Participant 3)

According to Participant 3, in addition to the third-party assurances, schemes could make use of different types of assurance, such as first- and second-party assurances, self-assessments and internal auditors. The self-assessment, for instance, was also highlighted as an important instrument to improve capacity building, to reduce costs, and to improve the effectiveness of schemes.

According to some participants, schemes that integrate self-assessment processes into their operations have a better impact in practice than those that only rely on external assurers. In that case, participants will be able to look on their own practices and be familiar with details of the operation and requirements they need to be in compliance with. As a result, these participants will be prepared and better understand their management practices and the schemes' expectations, which results in better management systems, better practices and better outcomes. It can also reduce the costs of the assurance process and improve the capacity building of the participants involved. In the participant's words:

"The sooner participants are required to look on their one practice and be familiar with the requirements and review their internal systems before they go to an external review, these participants are prepared and better understand the expectations. I think this is always neglected by certification schemes, and it is very important. It is also cheaper in a way. A participant that expends some time doing self-assessment is going to have less gaps and less follow-ups, and you might get a cheaper assurance process. It also helps capacity building." (Participant 1).

Recommendation
The use and/or integration of different types of assurance processes and self-assessments, as part of the assurance process, should be considered to improve capacity building, reduce costs and improve effectiveness.

Follow-up of the assurance process was also considered an important component. According to the same participant, some of the schemes fail in not having a follow-up mechanism in place to monitor and assess the development and implementation of action plans to address assurance findings. Regarding this matter, Participant 1 stated:

"There is one crucial assurance characteristic to get right. To me, the most important one is the follow-up. By that I mean monitoring and assessing people that are not complying. I feel that without this mechanism of following-up there is no effectiveness in the scheme." (Participant 1)

> **Recommendation**
>
> *The assurance process should have a follow-up mechanism to monitor and assess action plans addressing situations of non-compliance identified by assurers.*

> **Recommendation**
>
> *Training and/or technical material should be provided online to foster capacity building and allow participants to improve their practice.*

The qualification and training of assurance providers was also mentioned by participants as an important component of assurance processes. According to those participants it is fundamental to have assurance providers qualified not only in technical aspects of the certification scheme and its requirements, but also regarding the assurance process itself. Some of the participants criticised the quality of the assurance providers, for example:

"There is not always good assurers up to the level of the scheme and sometimes it is hard to find qualified assurers to provide the service. Sometimes you have weak training and weak requirements." (Participant 1)

"I've seen audits that assessed everything properly and I've seen audits that did not assess anything properly for the same certification scheme. We have auditors that have never been to a mining site before ... That undermines the credibility of the certification scheme!" (Participant 9)

These statements show there is a clear link between the quality of the assurance process, including its assurance providers, and the credibility of the certification scheme. Participant 9 commented on a situation where the technical capacity of the assurance team to provide assurance was severely questioned. In order to avoid such a situation, this participant suggested the use of a rigorous accreditation process to avoid poor assurance processes and maintain the credibility of certification schemes.

> **Recommendation**
>
> *Accreditation processes should be in place to avoid poor assurance processes and to maintain the credibility of the certification schemes.*

Public disclosure of information about the assurance providers and publicly available results of the assurance processes were also mentioned during interviews. It was stated by some of the participants that transparency is important to improve credibility of the certification

scheme. Through a transparent approach, results of the assurance process and information about the assurance providers could be provided to stakeholders, allowing those stakeholders to play an overseer role assessing the quality of the assurance process. This approach improves the quality of the assurance process and the credibility of the scheme. Regarding the importance of this transparent approach, Participant 7 said:

"No one is perfect, no operation is perfect, but not providing support documents or what was found on a certification evaluation I think is depriving the public of some very important knowledge. I am not suggesting that every certification scheme has to have it, but you have to evaluate in terms of their needs, their stakeholders, in terms of the consequences of not having it. I think greater transparency is probably the best thing." (Participant 7)

Similar statements were provided by Participants 9 and 5:

"As long as there is no sensitive information available, I think assurance reports should be made publicly available. If they achieve certification, documents are available and if they are rejected then documents are not available. I think this is fair enough. I don't see a problem in having the report available as long as there is no commercial and sensitive information in it." (Participant 9)

"You know it is a bit strange. Some schemes have their assurance reports public and some do not. I am in favour to have as much transparency as possible. I believe in transparency, more and more organisations should move towards this approach." (Participant 5).

> **Recommendation**
>
> *Summarised results of the assurance process should be publicly available. Details about the assurance team could also be publicly available.*

In addition, according to some of the participants, a transparent assurance process can encourage participants to stay in the system and improve their practices, and can avoid bias and greenwashing when there are membership instruments where participants pay dues. In relation to those two aspects Participant 3 stated:

"When you have a transparent mechanism in place it keeps organisations in the system to progressively improve their practice and performance. It encourages them to stay in the system and improve." (Participant 3)

"I think in this situation [when member organisations pay dues], if you do not have a proper audit mechanism

in place then there is opportunity to make decisions that do not expose its members. So, perhaps they want to protect members because there are some conflicts of interest to have members in the system; this is the worst case." (Participant 3).

Although the transparency of the assurance providers and the results of the assurance process have been noted as something positive, the possibility of sensitive information being disclosed and only negative aspects being highlighted were mentioned. The full disclosure of assurance findings can contain sensitive information that participants might not be keen or prepared to share. In this regard, Participant 2 added:

"I think transparency is key, but this is not always easy to do. When assessment or audit information becomes publicly available, participants will not be comfortable with that, because only the negative aspects get highlighted. I want to be as transparent as possible, but I know there are some aspects hard to achieve." (Participant 2).

Questioned why schemes do not make assurance documents public, one of the participants stated that some of the schemes don't want to be transparent because participants do not want to demonstrate details about their performance. This participant pointed out:

"People have vast interest in not making this public. People want to make the claim without demonstrating the detail. That comes down to their interests. When you come to the details of the claim, that claim is hidden because it could be commercially compromising for the organisation. So you have to create a structure that both makes the claim but hides the detail." (Participant 6)

Including stakeholder consultations in the scope of the assurance processes was also recommended by one of the participants. This participant suggested that schemes should include stakeholder consultations in the scope of the assurance processes in order to improve the quality of the assurance process and its outcomes; aspects not informed or not identified by companies' representatives could be informed or identified during stakeholder consultations. The importance of well-designed and detailed assurance protocols was also mentioned by different participants. According to those participants, details about the assurance process and its outcomes should be clear enough to avoid misunderstanding and different expectations. The assurance protocol should be sufficiently detailed and documented so different assurance providers, in different assurance processes, can use the same criteria and reach similar conclusions in like situations. An oversight or a quality control component as an instrument to monitor the quality of the assurance processes was also suggested. Regarding this oversight or quality control mechanism, one of the participants concluded:

"You need an overview to be sure that your assurers are working properly and also that they provide the quality you want. Without a good assurance, you don't have anything." (Participant 7)

Recommendation
Stakeholder consultation should be included in the scope of the assurance.

Recommendation
Assurance protocols should be well designed and sufficiently detailed to avoid misunderstanding.

Recommendation
An oversight or a quality control component should be in place to monitor the quality of the assurance processes.

The importance of assurance processes with quality to uphold the credibility of schemes was stressed by different participants. Those participants also criticised schemes that do not have follow-up mechanisms in place. General criticism of the quality and rigour of assurance providers was also identified during interviews.

2.2.6 Sanctions for situations of non-compliance
Mechanisms to determine sanctions and penalties for situations of non-compliance are important to uphold the credibility of certification schemes. The credibility and the level of trust in certification schemes can be affected by situations of non-compliance that do not result in penalties or sanctions. Additionally, in such situations, already certified and compliant participants might lose interest in participating in and complying with the scheme. As a result, the capacity of the certification schemes to improve practices and generate positive impacts could be affected (Acosta, 2014; Mori Junior et al., 2016; Partnership Africa Canada, 2009; Sharife & Grobler, 2013; Stark & Levin, 2011). Some participants also supported these findings provided by previous authors. For example:

"If there are no consequences for non-compliance or any penalties in this matter, then the effectiveness of the scheme is really affected." (Participant 1).

Participant 1 had experienced a situation of non-compliance that did not result in sanctions or penalties and provided a strong comment. In the participant's words:

"This is my perception and frustration as an assurance provider. When we go to the same place and find exactly the same issue over and over again and you write your report and there is no change." (Participant 1)

"For example, the RJC. There is a clear interest that their members get certified so they will have more participants, more members. The organisation will look better, so there is not a huge appetite to not certify a participant. For example, with the CFSP, there is a lot of pressure for participants to get certified. Companies associated with this certification scheme have lots of suppliers participating, so there is very little incentive for the scheme to apply its own follow-up and there is a big incentive to allow exceptions and more time to be in compliance." (Participant 1)

RJC Response

RJC certification is based on a third-party approach to ensure objectivity and impartiality. Audits of company compliance with the RJC Standards are conducted by independent and accredited third-party auditors. RJC certification can only be granted to a company if a positive certification recommendation is made by the independent auditor, and if the audit has been carried out in accordance with the requirements set out in the RJC Assessment Manual.

CFSI Response

The vast majority of CFSI's members are downstream companies that are subject to public reporting requirements and/or have to make public commitments toward responsible sourcing pursuant to the OECD Due Diligence Guidance, which articulates a specific role for downstream companies. The CFSI leverages its multi-industry membership to encourage smelters/ refiners to undergo independent third-party audits (e.g. CFSI, LBMA, RJC). Participation improves the ability of downstream companies to source responsibly (and meet regulatory requirements) while incentivizing progressive improvement in upstream sourcing practices and on-the-ground conflict/human rights outcomes. Our membership therefore views active engagement and encouragement for smelter/refiner participation as a critical supplemental activity to offering an independent validation mechanism.

CFSI recognizes due diligence as a continuous, ongoing process with the expectation of continual improvement in performance. Accordingly, CFSI offers a path and timeline for smelters to enter the program and learn the requirements and process before undergoing an audit. To promote development of strong management systems and due diligence practices, we provide capacity-building tools, including free one-on-one technical assistance, pre-audit onsite visits, in-person seminars, and free online training courses via CFSI's eLearning Academy website.

Some smelters and refiners have challenges meeting the requirements of the CFSI protocol. Those companies are not deemed compliant by the auditors and would not be added to the compliant smelter/refiner list. The CFSI captures information about smelters and refiners that are not yet compliant to the protocol, or are no

longer in the program, in the revision history list of the Smelter Reference List and through our Active List, available on the CFSI website. Through this medium, the CFSI is transparent about the reasons and timing of removal from the list.

OECD Guidance recommends that programs such as the CFSP have realistic expectations about the due diligence activities and performance of companies (e.g. an acceptance of failings/challenges following good faith and reasonable efforts, provided there is commitment to improve within an agreed timeline).

The CFSI has an Extended Corrective Action Plan policy, which is a concrete and transparent way for the program and downstream companies to engage non-compliant smelters and refiners as they pursue risk mitigation and continual improvement in their processes, as recommended in the OECD Guidance. If smelters choose this route, participants are listed on the CFSI website and are subject to specific requirements to progress toward compliance, including stating the reason for their non-compliance and the actions and timelines to address findings.

Participant 5 had a similar experience and provided similar comments:

"Some of the schemes are soft regarding performance of their participants and they do not have good sanction mechanisms. They do not penalise organisations that are not doing a good job." (Participant 5)

"I am thinking in a specific case where I was an auditor and found organisations not in compliance. I was extremely disappointed that disciplinary action was not taken against the applicants, but that was just part of the system, that was the lack of enforcement." (Participant 5)

Comments provided by Participants 1 and 5 highlight the importance of having mechanisms in place to determine sanctions or penalise participants in situations of non-compliance. Both comments demonstrate the lack of trust and disappointment of both participants in relation to certification schemes that did not properly address situations of non-compliance. In addition, and more serious, is the statement saying that some of the certification schemes are more concerned with improving their uptake and attending to participants' and companies' interests rather than improving practices and delivering positive outcomes on the ground. There is also a worrisome situation in this context, where certification schemes might be misleading stakeholders by hiding poor performers and prolonging situations of non-compliance behind certificates, labels or claims.

Certification schemes should be transparent and accountable to their stakeholders in relation to the existence or not of a mechanism that determines and applies sanctions or

penalties for participants in situations of non-compliance. If such a mechanism is in place, details about its operation should be clearly communicated. During the interviews, one of the participants pointed out that there are two important points that should be considered in this context. The first is expectations – schemes should clearly define what compliance is, considering both expectations and requirements (e.g. specify the number of acceptable non-conformities per assurance process, specify types of non-conformities, such as: low, medium or high). The second point is the implementation of action plans and how situations of non-compliance will be addressed. One of the participants stated that schemes should be reasonable in regards to the implementation of action plans for situations of non-compliance. A balance needs to be structured to make sure participants will have the disincentive to keep their non-compliances but at the same time not be so strong that they will be unwilling to participate in the scheme.

Recommendation
Sanctions for situations of non-compliance should be defined and clearly communicated.

Recommendation
Schemes should be reasonable in regards to the implementation of action plans for situations of non-compliance. A balance needs to be structured to make sure participants will have the disincentive to keep their non-compliances but at the same time not be so strong that they will be unwilling to participate in the scheme.

Recommendations to have clear rules about situations of non-compliance and how these situations will be addressed were stated by some of the participants, for instance:

"Schemes need to have very clear rules to deal with data that arise from the field. Auditing reports, complaints… they have to have very clear policies and procedures to deal with that rather than act informally." (Participant 5)

"Schemes should decertify people that are not in compliance. They should deal with negative aspects and should inform what happens when people are not in compliance. This is always a good example of the strength of the system." (Participant 6)

In summary, certification schemes were criticised for not having mechanisms determining sanctions and penalties for situations of non-compliance. Such mechanisms were noted as being essential to maintain the credibility of schemes and avoid false claims.

2.2.7 Local development
Sustainability certification schemes could play an important role in supporting vulnerable stakeholders and promoting local development. Technology transfer and diffusion, capacity building initiatives and financial support are examples of initiatives that could be supported and/or encouraged by such schemes. In fact, the stimulation of local development and continual economic, social and environmental improvement is one of the motivations for some minerals certification schemes and standards (Alliance for Responsible Mining Foundation, 2014; Business for Social Responsibility, 2014; FairTrade International, 2013; International Organization for Standardization, 2010; Levin, 2008; OECD, 2013).

Although schemes could be used as instruments to deliver development to local communities affected by mining activities and some of the schemes were designed to foster local development, during interviews some of the participants provided comments criticising the way schemes currently address this matter. Those participants stated that schemes are not actually representing the interests of the beneficiaries, especially in the ASM context. In relation to this, Participant 6 stated:

"We need organisations [schemes] that do not work for their own interests but genuinely represent the interests of the beneficiaries and listen to the beneficiaries in terms of what they are asking for. You need organisations working much more to maximise development and environmental impact on the ground." (Participant 6)

When asked why such schemes are working in their own interests rather than considering development on the ground, this participant said:

"I would say that with lots of them [schemes], it comes down to what I call professional beggars that are sucking on the straw of big money and need to restructure everything and force things on the ground, because it actually is more in the interest of their institution than it is in genuinely meeting the needs on the ground. It is not true in all cases of course, but I have seen enough of that." (Participant 6)

This participant's comments demonstrate that schemes at least need to improve their engagement processes and be more transparent and accountable about their goals and achievements to avoid false expectations from stakeholders, especially in local communities. Also, if such schemes aim to foster and deliver local development, initiatives and programs should be developed, implemented, and periodically assessed to guarantee the desired outcome.

Another interesting aspect mentioned by this participant is the apparent lack of communication between scheme representatives and local community representatives, and lack of understanding between what people on the

ground want and what scheme representatives believe these people want. A similar comment was provided by Participant 8 regarding the local development agenda used by some schemes. This participant stated:

"There are those that believe that supporting farmers is the key to alleviating poverty in developing countries. What I am getting at here is that the whole development agenda is defocused and people are convinced that this can lead people out of poverty, but this is not so. These people do not want to be farmers forever...they have aspirations … they want to send their kids to school...they want to go to university … so once that mindset changes then we can start offering alternative opportunities." (Participant 8)

This participant provided an example where schemes operating with ASM in Africa are not properly tackling poverty and delivering improvements to poor local communities. According to this participant, these schemes were designed to work only with licensed miners, but the complexity of the problems on the ground were not considered. Thus, sustainable local development is not delivered and the real problems are not tackled. In this participant's words:

"Now they are talking about developing and promoting small-scale mining as the centrepiece of development strategy. So all those initiatives we see do not really connect with the poorest of the poor, they want to connect with the medium-scale miners. Well, probably because they go to the country and look to the poorest of the poor…so the poor miners need our help but they are not licensed, we cannot work with these people. The government just wants to work with licensed people, so how can we work with them? We cannot! So it must take a couple of steps back and try to understand why this situation exists in the first place. Why are those miners illegal?" (Participant 8)

"I think we are just putting the cart before the horse. Schemes are the first step and they can play a role, but we need to identify who the main operators are and the ones who need support, and the challenges. But we haven't done that! They say they are targeting the poor, but what are they actually doing to change people's lives? This is what needs to be done before we can really say that this certification scheme that we are promoting is actually improving the livelihoods of the poorest of the poor. Because at the moment, it is not happening." (Participant 8)

In order to maximise positive impacts on local communities, Participant 1 recommended that schemes should focus on management systems that allow participants to operate those management systems in their local context. Minimum global standards should be developed and implemented allowing comparability, but flexibility and accessibility should also be respected to work with regional aspects. According to this participant, there are challenges in

implementing this approach. However, it has the capacity to deliver positive local outcomes. Additional suggestions were made recommending schemes spend more time understanding the roots of the problems they are trying to solve and listening to the people on the ground before determining strategies and developing their programs. Also, Participant 8 recommended that schemes operating with ASM, to succeed and deliver sustainable local development, should work to recognise the importance of the ASM in the developing world and recognise that this activity is a livelihood that should be included in the developing agenda.

Recommendation

Minimum global standards should be developed and implemented allowing comparability, but flexibility and accessibility should also be respected to work with regional aspects.

Recommendation

Strategies and programs to foster local development should be defined and implemented listening to the people on the ground and considering the local context.

More support for development of local communities was considered one of the aspects of schemes that needs to be improved. According to one of the participants, schemes should focus more on fostering local development and trying to provide financial and technical support for local communities.

An interesting conclusion about the use or not of schemes as instruments to foster and deliver local development was well placed by Participant 13. This participant stated that schemes could consider local development as a goal, or not as a goal. The fact a scheme does not consider local development in its strategy or scope does not make this scheme illegitimate. However, in this situation, it is very important to communicate clearly your goals to all stakeholders involved to avoid misunderstandings, false expectations and false claims. Regarding this matter, Participant 13 stated:

"So, if one of your goals is to think about local development then local development definitely is your responsibility. But if you don't have that as a goal I don't think that makes you an illegitimate system. I mean, some stakeholders might not like your system because you don't foster local development, but you may say actually really the only thing we're about is managing environmental processes related to mining and ensuring that we are not polluting the environment. And I don't think that's illegitimate to say that that's your goal.

But what you do need to do is be very explicit about the fact that that's your goal because we don't want schemes that just throw around the term sustainability, say, when they're only looking at one aspect of this broad concept of sustainability." (Participant 13)

Recommendation
Local development could be considered as a goal, or not a goal. However, it is important to clearly communicate goals to all stakeholders involved to avoid misunderstandings, false expectations and false claims.

The importance of having financial or technical programs in place to support participants with financial and technical constraints was also mentioned by one of the participants. These programs are particularly important for certification schemes that work with small producers, especially small local producers located in non-developed countries. The inexistence of such programs could make the certification scheme work towards inequalities, allowing only participants with financial and technical capacity to be certified and reap the benefits of being certified, and reducing the chances that the scheme will deliver local development. Regarding this matter, Participant 2 stated:

"Any scheme, in particular the ones that work with small producers, they need to have mechanisms for access to finance to allow those producer groups to invest in their improvements. The Better Cotton Initiative is a good example. It provides support for producers to improve and it helps with uptake...It is also important to have a mechanism to have people from the certification scheme providing technical support for those producers. One thing is to provide resources, and another is having organisations or representatives of the certification scheme providing technical support to those producers." (Participant 2)

In addition to financial support, this participant also mentioned the importance of technical support. According to this participant, schemes could develop initiatives to provide technical support to vulnerable participants with financial and technical constraints. This support for participants with financial and technical constraints is important to deliver positive outcomes in local communities, especially those located in non-developed countries.

2.2.8   Standards
Previous studies have addressed the differences between performance-based and management-based standards, and the majority of these studies recommended a shift from measuring practices and activities (management-based) to measuring performance (performance-based). According to those studies, this shift would clarify the contributions of the scheme and better improve practices (Barry et al., 2012; Gulbrandsen, 2005; Track Record Global, 2010). During the interviews in the current study, comments on performance-based and management-based standards were also identified. However, participants commented on the different benefits of performance and management standards and suggested that a mixed approach would be more effective. These comments could be a signal of new trends and changes in the way schemes have been developing and implementing their standards. Participants 1 and 2 stated:

"For example, greenhouse gas emissions or some of the environmental impacts are important in gauging performance. While improving social practices in the long run, I believe management standards are more effective because you are not trying to raise the bar but trying to set systems to manage the risks better and improve the practice, which in the long term will improve results." (Participant 1)

"Standards should be a mix of performance and management approaches. Schemes should have a focus on both management system processes and performance outcomes." (Participant 2)

Recommendation
Performance-based and management-based standards should be combined to improve effectiveness.

According to Participants 1 and 2, certification schemes should develop their standards employing a mixed approach, where performance-based and management-based standards are used to better address the schemes' goals. In contrast, one of the participants stated that regardless of the type of standard used, to be effective, schemes need to have a management system in place considering the scheme itself and its standards, how standards are set, how standards are evaluated, who the user of these standards is and who is undergoing the standard assessment. This participant said:

"In my mind there is no difference if the scheme is performance [-based], management [-based] or a combination of the two. The organisation that runs the scheme doesn't have an excuse, they have to have a management system in place to manage the scheme." (Participant 5)

The challenge of having international standards consider local contexts was also highlighted during the interviews. According to one of the participants, this challenge could be overcome by schemes designing their standards technically and properly engaging different key stakeholders. This participant stated:

"It could be done. Schemes worked very hard to make sure that their standards are technically applicable. Also, these schemes worked very hard to have many countries involved to develop an international standard. Developing countries, developed countries, consumer countries, producer countries – they had discussions in different regions and different languages. International schemes that succeed had to work very hard." (Participant 4)

Participants also criticised the quality of the standards currently in use by some certification schemes. According to some participants, some schemes are using weak standards, which directly compromises their outcomes and contributions. Scarlat and Dallemand (2011) achieved similar findings and suggested that schemes need to implement strict standards to avoid weak performers. Regarding this matter, Participant 5 mentioned:

"The third negative aspect is particularly relevant to some certification schemes in terms of the standards themselves; if standards are weak then they make room for bad behaviour. So, I think they prevent good behaviour being reached by allowing mediocrity." (Participant 5)

In addition to weak performers and their low contributions, such a situation can also mislead stakeholders' perceptions regarding the real outcomes of certification schemes. Participant 5 indicated:

"The standards themselves need to be designed to an appropriate level. The standards need to have adequate strength to make sense, they need to be robust and practical and cost effective." (Participant 5)

A recommendation to apply the ISEAL Codes was provided by one of the participants, who suggested:

"Schemes should consider the ISEAL Codes. They provide a framework that helps certification schemes to collect evidence and understanding about what they desire to achieve, and measure and set up different kinds of metrics, qualitative and quantitative, to help them to evaluate whether they are achieving that. And then, you know, if they are, great, if they are not, then take another look at how they designed the standards and make adjustments and changes accordingly." (Participant 12)

Recommendation
ISEAL Codes could be used as guidelines to develop and implement standards.

In essence, standards should be developed by schemes considering their objectives and stakeholders. Challenge lies in how schemes can make use of standards that are strict enough to improve practices and deliver positive outcomes without being so costly or stringent that participants could not accept to participate. The use of non-strict standards could also result in certified poor performers, which will impact the credibility of the scheme.

2.2.9 Training and capacity building

Training was also mentioned by some participants during the interviews. Those participants highlighted training initiatives and programs as an important component of an effective certification scheme. Through training initiatives and programs, participants can better understand schemes' goals and requirements, which will improve effectiveness. Regarding this matter, one of the participants suggested that schemes should provide online training so not only participants but also stakeholders will be able to better understand schemes' requirements and expectations. This participant stated:

"Guidance and protocols should be available so people can read for themselves what the expectations of the program are and what participants should do to achieve compliance. In my opinion, schemes should inform stakeholders about the scheme, and provide information about how participants can improve management practices." (Participant 7)

A similar statement was provided by Participant 13. This participant stressed the importance of training and capacity building elements to help participants come into compliance. In this participant's words:

"A certification process really doesn't operate in isolation. So you develop a standard, you have some kind of assurance process associated with that. But you also have probably some sort of capacity building elements that are out there to help people come into compliance." (Participant 13)

Recommendation
Training and capacity building programs should be developed and implemented to help participants and stakeholders better understand schemes' goals and requirements.

Training and capacity building programs are important to maintain effectiveness of schemes, hence maximising their outcomes. The use of technology in such programs is also recommended to reduce costs and increase uptake.

3. Conclusion

This report identified that participants interviewed have varied expectations and ideas about the drivers for participation in certification schemes, and also how different design characteristics influence the effectiveness of sustainability certification schemes in mining. There was also a range of views on how these differences influence outcomes on the ground in terms of ultimate development or conservation impact. Participants provided different insights and recommendations regarding nine different main topics (key components): Stakeholder Participation; Monitoring and Evaluation (M&E) mechanisms; Interoperability; Transparency; Assurance; Standards; Sanctions for Non-Compliance; Local Development; and Capacity Building.

Although the number of sustainability certification schemes in mining is continually increasing and claims are gaining more notoriety among consumers, questions about these schemes' effectiveness and real contributions still persist. According to the majority of the participants, sustainability certification schemes should be more transparent and accountable to their stakeholders about different aspects,

such as scope, participants, donors, governance structure, decision-making processes, operating practices, objectives, impacts, achievements and challenges. Stakeholder involvement strategies, assurance processes, standards development and M&E mechanisms should also be improved to increase effectiveness and guarantee sustainable positive outcomes. Fostering interoperability and collaboration were also recommended by participants.

This report is not a performance assessment nor a guideline to the practice. Instead, it aims to offer a constructive and useful resource to enhance practice in the field of sustainability certification schemes in the mining sector considering participants' experiences, suggestions and opinions. Results presented and recommendations suggested allow scheme representatives to develop long-term strategies based on best practices and implement action plans to improve the effectiveness of their schemes. This report also aims to impact stakeholders, influencing their public attitudes regarding sustainability certification schemes, corporate social responsibility and sustainability.

4. References

AccountAbility. (2008). AA 1000 Stakeholder Engagement Standard Final Exposure Draft. London.

Acosta, A. M. (2014). The extractive industries transparency initiative: Impact, effectiveness, and where next for expanding natural resource governance? A. U4 Brief, 2014(6).

Alliance for Responsible Mining Foundation. (2014). Fairmined Standard for Gold from Artisanal and Small-Scale Mining, including Associated Precious Metals Version 2.0.

Appleton, J. V. (1995). Analysing qualitative interview data: addressing issues of validity and reliability. Journal of advanced nursing, 22(5), 993-997.

Auld, G., Balboa, C., Bernstein, S., Cashore, B., Delmas, M., & Young, O. (2009). The emergence of non-state market-driven (NSDM) global environmental governance. Governance for the environment: New perspectives, 183.

Barry, M., Cashore, B., Clay, J., Fernandez, M., Lebel, L., Lyon, T., . . . Kennedy, T. (2012). Toward Sustainability: The roles and limitations of certification. Washington: RESOLVE, Inc.

Bernstein, S., & Cashore, B. (2004). Non-state global governance: is forest certification a legitimate alternative to a global forest convention. Hard choices, soft law: Voluntary standards in global trade, environment and social governance, 33-63.

Blackman, A., & Rivera, J. (2011). Producer-Level Benefits of Sustainability Certification. Conservation Biology, 25(6), 1176-1185.

Brockmyer, B., & Fox, J. (2015). Assessing the Evidence: The Effectiveness and Impact of Public Governance-Oriented Multi-Stakeholder Initiatives. London: The Transparency and Accountability Initiative.

Business for Social Responsibility. (2014). How Can Business Contribute to the Ethical Mining of Conflict Minerals? Addressing Risks and Creating Benefits Locally in the Artisanal and SmallScale.

Mining Sector in the Democratic Republic of the Congo.

Campbell, T. (2006). A Human Rights Approach to Developing Voluntary Codes of Conduct for Multinational Corporations. Business Ethics Quarterly, 16(2), 255-269. doi: 10.2307/3857824.

Cashore, B. (2002). Legitimacy and the privatization of environmental governance: How non–state market–driven (NSMD) governance systems gain rule–making authority. Governance, 15(4), 503-529.

Connell, J. P., & Kubisch, A. C. (1998). Applying a theory of change approach to the evaluation of comprehensive community initiatives: progress, prospects, and problems. New approaches to evaluating community initiatives, 2(15-44).

Dale, L., & Volpe, B. (2008). Completing Your Qualitative Dissertation: A Roadmap from Beginning to End. Chapter, 3, 65-93.

Derkx, B., & Glasbergen, P. (2014). Elaborating global private meta-governance: An inventory in the realm of voluntary sustainability standards. Global Environmental Change, 27(0), 41-50. doi: http://dx.doi.org/10.1016/j.gloenvcha.2014.04.016.

DiCicco-Bloom, B., & Crabtree, B. F. (2006). The qualitative research interview. Medical education, 40(4), 314-321.

European Commission. (2014). Proposal for a Regulation of the European Parliament and of the Council. In E. Memorandum (Ed.), (Vol. COM(2014) 111 final). Brussels: European Union.

FairTrade International. (2013). Fairtrade Standard for Gold and Associated Precious Metals for Artisanal and Small-Scale Mining Version 08.11.2013 v1.2.

Freeman, R. E. (2009). Turning Point. Can Stakeholder Theorists Seize the Moment? Journal of Corporate Citizenship, 2009 (36), 21-24.

Gillham, B. (2000). Case study research methods: Bloomsbury Publishing.

Given, L. M. (2008). The Sage encyclopedia of qualitative research methods: Sage Publications.

Global Witness. (2012). Do No Harm: Excluding conflict minerals from the supply chain. London.

Gulbrandsen, L. H. (2005). The effectiveness of non-state governance schemes: a comparative study of forest certification in Norway and Sweden. International Environmental Agreements: Politics, Law and Economics, 5(2), 125-149.

Gunningham, N., Kagan, R. A., & Thornton, D. (2004). Law & Social Inquiry, 29(2), 307-341. doi: 10.2307/4092687.

International Organization for Standardization. (2010). ISO 26000:2010 Guidance on social Responsibility.

ISEAL Alliance. (2011). Assuring Compliance with Social and Environment Standards: Code of Good Practice. London.

ISEAL Alliance. (2013). Principles for Credible and Effective Sustainability Standards Systems: ISEAL Credibility Principles. London.

ISEAL Alliance. (2014). Assessing the Impacts of Social and Environmental Standards Systems ISEAL Code of Good Practice. London, United Kingdom: ISEAL Alliance.

Komives, K., & Jackson, A. (2014). Introduction to Voluntary Sustainability Standard Systems Voluntary Standard Systems (pp. 3-19): Springer.

Levin, E. (2008). Certification and Artisanal and Smal-Scale Mining: an Emerging Opportunity for Sustainable Development Communities and Small-Mining (CASM).

Main, D., Mullan, S., Atkinson, C., Cooper, M., Wrathall, J., & Blokhuis, H. (2014). Best practice framework for animal welfare certification schemes. Trends in Food Science & Technology, 37(2), 127-136.

Mikkilä, M., Heinimö, J., Panapanaan, V., Linnanen, L., & Faaij, A. (2009). Evaluation of sustainability schemes for international bioenergy flows. International Journal of Energy Sector Management, 3(4), 359-382.

Miller, A. M., & Bush, S. R. (2015). Authority without credibility? Competition and conflict between ecolabels in tuna fisheries. Journal of Cleaner Production, 107, 137-145.

Mori Junior, R., Franks, D., & Ali, S. (2016). Sustainability certification schemes: evaluating their effectiveness and adaptability. Corporate Governance: The international journal of business in society, 16(3).

Mori Junior, R., Franks, D. M., & Ali, S. H. (2015). Designing Sustainability Certification for Impact: Analysis of the design characteristics of 15 sustainability standards in the mining industry. (SMI Centre for Social Responsibility in Mining, Trans.). In University of Queensland (Ed.). Brisbane.

Mueller, M., Dos Santos, V. G., & Seuring, S. (2009). The contribution of environmental and social standards towards ensuring legitimacy in supply chain governance. Journal of Business Ethics, 89(4), 509-523.

O'Reilly, K. (2008). Key concepts in ethnography: Sage.

OECD. (2013). OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas: Second Edition: OECD Publishing.

Opdenakker, R. (2006). Advantages and disadvantages of four interview techniques in qualitative research. Paper presented at the Forum Qualitative Sozialforschung/Forum: Qualitative Social Research.

Ormrod, J., & Leedy, P. (2005). Practical research: Planning and design. New Jersey, Pearson Merill Prentice Hall.

Partnership Africa Canada. (2009). Diamonds and Human Security: Annual Review 2009. Ontario.

Round Table Codes of Conduct. (2009). Round Table Expert Exchange on "Social Standards - learnings, opportunities and challenges from northern and southern perspectives". Eschborn.

Scarlat, N., & Dallemand, J.-F. (2011). Recent developments of biofuels/bioenergy sustainability certification: A global overview. Energy Policy, 39(3), 1630-1646. doi: http://dx.doi.org/10.1016/j.enpol.2010.12.039.

Schiavi, P., & Solomon, F. (2007). Voluntary initiatives in the mining industry: do they work? Greener Management International, (53), 27-41.

Dodd-Frank Wall Street Reform and Consumer Protection Act (2010).

Sharife, K., & Grobler, J. (2013). Kimberley's Illicit Process. World Policy Journal, 30(4), 65-77.

Smith, M. (2014). Research methods in accounting: Sage.

Stark, A., & Levin, E. (2011). Benchmark Study of Environmental and Social Standards in Industrialised Precious Metals Mining. Available online at http://valorminero.cl/wp/referencias/V_Compilados/4_Revised%20Solidaridad_Benchmark_Study_Revised_Final%20_Dec_2011.pdf, checked on 08.09.2016. Solidaridad.

Teddlie, C., & Yu, F. (2007). Mixed methods sampling a typology with examples. Journal of mixed methods research, 1(1), 77-100.

Tikina, A. V., & Innes, J. L. (2008). A framework for assessing the effectiveness of forest certification. Canadian Journal of Forest Research, 38(6), 1357-1365.

Track Record Global. (2010). Responsible Aluminium Scoping Phase - Main Report. Oxfordshire.

WWF. (2013). Searching for Sustainability - Comparative analysis of certification schemes for biomass used for the production of biofuels. Berlin.

Young, S. B. (2015). Responsible sourcing of metals: certification approaches for conflict minerals and conflict-free metals. The International Journal of Life Cycle Assessment, 1-19.

Young, S. B., Fonseca, A., & Dias, G. (2010). Principles for responsible metals supply to electronics. Social Responsibility Journal, 6(1), 126-142.

THE UNIVERSITY
OF QUEENSLAND
AUSTRALIA

SMI CSRM
Centre for Social
Responsibility in Mining