ELSEVIER

Contents lists available at ScienceDirect

## **Resources Policy**

journal homepage: www.elsevier.com/locate/resourpol





# What enables metals 'being' 'responsible'? An exploratory study on the enabling of organizational identity claims through a new sustainability standard

Jean-Pierre Imbrogiano <sup>a,b,\*</sup>, Bodo Steiner <sup>a</sup>, Renzo Mori Junior <sup>c</sup>, Kathryn Sturman <sup>c</sup>

- a Department of Economics and Management, University of Helsinki, Latokartanonkaari 5, 00790 Helsinki, Finland
- <sup>b</sup> Centre for Sustainability Management, Leuphana University Lüneburg, Lüneburg, Germany
- <sup>c</sup> Centre for Social Responsibility in Mining, Sustainable Minerals Institute, University of Queensland, Australia

#### ARTICLE INFO

#### Keywords:

Organizational sustainability identities Voluntary sustainability standards Minerals and metals industry Minerals and metals value chain Sustainability performance Provision type analysis

#### ABSTRACT

Claims about resource sustainability abound in business communications. Yet, little do we know about how such claims are enabled amidst ongoing controversy of industrial and organizational benefits. Here, we propose to approach these claims through the concept of organizational sustainability identities (OSIs), which are claims serving as sustainable identifiers, and whose meanings are co-constructed by stakeholders. We assess how a new voluntary sustainability standard (VSS) of the metals industry is driven by a mission to enable an OSI for the product of its members, such as that their metal 'is' 'responsible', and how the members attain this through the structural conditions set by the new scheme. We present an exploratory case study that is based on data from a content analysis of standards texts and thematic analysis of stakeholder interviews. We find that VSS enable OSIs through a) an advanced performance rationale, b) the creation of a community of practice, c) members' perceptions of altered power relations among value chain stakeholders, and d) the facilitation of a platform to keep defining the 'responsible metal'. We contribute to the discussions of VSS emergence and their effectiveness, for which we highlight the prolificness of the OSI concept and introduce a novel comparative method of provision type analysis to capture the developments of performance rationales.

### 1. Introduction

Claims about natural resources 'being', for instance, 'responsible' abound as a part of the public relation strategies of contemporary business. Examples of such claims are descriptions of metals as 'green', 'eco-friendly', 'responsible', or 'sustainable'. The making of such claims usually presupposes that businesses follow practices understood by stakeholders to represent a state-of-the-art for social and/or environmental engagement (Tröster and Hiete, 2019). There is also widespread acknowledgement that claims about the responsible nature of business result from negotiations and contestations between stakeholders (Azevedo, in press; Frostenson et al., 2022; Hatch and Schultz, 1997, 2002; Kennedy et al., 2012; Kouamé et al., 2022; Levy et al., 2016; Scott and Lane, 2000), while such claims affect an organization's strategy and legitimacy building (Huemer, 2010; Napier et al., 2023). What is further noteworthy is that there has been a change regarding the foci of such

claims; from an emphasis on major upstream resource producers to a value chain perspective that includes also downstream processors and traders (Bleischwitz et al., 2012; Deberdt, 2022; Liu et al., 2022; Mancini et al., 2021; Sauer and Seuring, 2017; Tröster and Hiete, 2019). Yet, what has remained so far underexplored is the role of mediators among stakeholders, such as voluntary sustainability standards (VSS), in the enabling of claims of 'being' 'responsible' of natural resources, and how that enabling role constitutes the added value of a new VSS for its adopters.

In this article, we approach the phenomenon of claims about metals 'being' 'responsible', and their enabling by VSS, through the conceptual lens of organizational sustainability identities (OSIs). OSIs are a recent emerging concept within management and organization studies (Bouncken et al., 2022; Frostenson et al., 2022; Hamilton and Gioia, 2009; Imbrogiano and Steiner, 2022), that directs scholarly attention to the understanding of 'sustainable' 'being'. OSIs are presented as a

<sup>\*</sup> Corresponding author. Department of Economics and Management, University of Helsinki, Finland.

E-mail addresses: jean-pierre.imbrogiano@helsinki.fi (J.-P. Imbrogiano), bodo.steiner@helsinki.fi (B. Steiner), r.junior@uq.edu.au (R. Mori Junior), k.sturman@uq.edu.au (K. Sturman).

positive state of an organization regarding perceived or actual environmental or social effects of operations or products (Imbrogiano and Steiner, 2022). OSIs are thus focused on the organizational level, yet also apply to statements about a state of 'being' of an organization's product (s), as these statements principally serve to respond to questions about 'Who are we as an organization?' or '(As) Who do we want to be (seen) as an organization?' (Albert and Whetten, 1985; Gioia et al., 2000). As we will highlight in this study, VSS are indispensable for metals 'being' (seen as) 'responsible'. While VSS and reasons of their emergence have been studied from multiple angles in the governance literature, their centrality in providing the grounds to enable ambiguous OSI claims has not yet been raised.

Our study reveals the OSI-enabling conditions for VSS by tracking the emergence of a new scheme for the metals industry (hereafter referred to as 'MSS'). Our data covers the period from when MSS was in the making and had not yet been adopted by businesses, to when the standard was established and adopted. Thus, our study stretches over a period of five years and comprises two analytic methods and datasets: first, we conducted a comparative content analysis based on the provisions covered by MSS and the standards that were already available to the industry by the time of its nascence; second, we complemented the content analysis through a range of stakeholder interviews once certification against MSS became a new established practice for the industry. Thereby we find that four structural conditions place VSS into the position of being OSI-enabling: a) the creation of a community of practice in the industry to pursue an OSI, b) the perceived alterations of power relations in that community to influence the OSI, c) an augmentation of the performance rationale underlying the enabled OSI, compared to preexisting VSS available to the industry; as well as, d) the facilitation of a discursive platform for the industry to keep engaging in the translation of the OSI into viable practice. From these insights, we draw conclusions on the emergence of VSS and the fragmentation of sustainability standards fields, as well as on VSS effectiveness.

The article is structured as follows: first, we provide an overview of the literature on OSIs and the emergence of VSS. This is followed by the presentation of our findings in two parts: a content analysis of relevant standards, and a thematic analysis of stakeholder interviews. We discuss our findings by situating our contribution in the relevant literature. We conclude with a summary of our study, and with suggestions for further research.

#### 2. Literature review

Our study deploys the recently emerging concept of organizational sustainability identities (OSIs) (Bouncken et al., 2022; Frostenson et al., 2022; Imbrogiano and Steiner, 2022; see also Hamilton and Gioia, 2009) which are defined as assertions of a positive status of an organization regarding perceived or actual environmental or social effects of operations or products (Imbrogiano and Steiner, 2022), such as 'we are an environmentally friendly organization' and 'our product is sustainable'. We thus assess how such identity claims become enabled for business communication by VSS.

OSIs relate to organizational identities that are crucial for organization members to answer central questions such as 'Who are we as an organization?' and '(As) Who do we want to be (seen) as an organization?' (Albert and Whetten, 1985; Gioia et al., 2000). Like organizational identities in general, OSIs also are infused with ambiguity (Corley and Gioia, 2004; Gioia et al., 2000, 2010). OSI ambiguity mirrors limited abilities to operationalize concepts of business engagement for sustainable development (Crane et al., 2014; Fleming and Jones, 2013; Meesters and Behagel, 2017; Owen and Kemp, 2013). Another similarity we consider is that OSIs also are dynamic and depend on stakeholders to negotiate their meanings (Azevedo, in press; Frostenson et al., 2022; Hatch and Schultz, 1997, 2002; Kennedy et al., 2012; Kouamé et al., 2022; Levy et al., 2016; Scott and Lane, 2000; Schönherr, 2022). These insights imply that OSIs require stakeholders to provide the necessary

structural conditions to enable their use; a need and reality that the literature has not yet captured when assessing sustainability claims, for instance, from a viewpoint of greenwashing (Delmas and Burbano, 2011; Lyon and Montgomery, 2015).

To understand how OSI claims are being enabled about natural resources 'being' 'responsible', we follow Imbrogiano and Steiner (2022) when directing our attention to VSS. Yet, we expand their view on the OSI-enabling role of sustainability schemes by inquiring into the structural conditions through which VSS promote their provisions for business. We thus consider VSS as initiatives built on a documented set of provisions which serves as a "guide for behaviour and for judging behaviour" (Abbott and Snidal, 2001, p. 345) with regards to the performance of businesses on environmental, social, and governance criteria (Gilbert et al., 2011; Marx et al., 2022). A provision is a component of a standard, which communicates a distinct expectation about business behavior, such as 'The company needs to conduct a product lifecycle assessment' (see also Bennett, 2018; Marx et al., 2017). Furthermore, the voluntary character of VSS underlines that compliance with its provisions is not enforced by regulators, hence, it is self-regulated (Christmann and Taylor, 2006). Compliance with VSS can, however, be endorsed by regulators (Lambin et al., 2020; Lambin and Thorlakson, 2018; Partiti, 2019). Therefore, the emergence of VSS forms part of the privatization of governance and rulemaking (Lambin and Thorlakson, 2018), in particular regarding the concerns of public interest which transcend the jurisdictional boundaries of nation states (Clapp, 1998; Cutler et al., 1999; Scherer and Palazzo, 2007).

The literature on VSS has determined a variety of reasons for why these forms of private governance emerge. Among them are: the avoidance of stricter regulation (Christmann and Taylor, 2002; Vogel, 2008), power interests (Christmann and Taylor, 2002; Lambin and Thorlakson, 2018), reduction of transaction costs (Bartley, 2011; Potoski and Prakash, 2009), a need to overcome collective action problems (Bartley, 2011; Potoski and Prakash, 2009), legitimacy seeking (Lambin and Thorlakson, 2018; Vogel, 2008), and the differentiation of a company or product (Christmann and Taylor, 2002, 2006; Dietz and Grabs, 2022; Lambin and Thorlakson, 2018; Levy et al., 2016; Manning et al., 2012; Smith and Fischlein, 2010; Vogel, 2005, 2008). There have also been substantial research interests into the fragmentation of standards' fields, as to why VSS emerge despite the existence of a variety of initiatives covering similar ambitions (e.g., Fransen and Conzelmann, 2015; Turcotte et al., 2014). These studies find varying structural, governance, and political reasons for explaining why new VSS emerge. For instance, Heidingsfelder (2019) elaborates on the gold sector-specific drivers that led to the emergence of eleven different private governance schemes. According to this study, the diversity of VSS mirrors industry structures, diverse interests in issue coverage and interpretation, as well as organizational orientations and interests of governance scheme makers, are decisive factors leading to fragmentation. Tröster and Hiete (2019) were also interested in the field's fragmentation, albeit from a point of view of whether VSS effectively cover stakeholder expectations. They find that this applies to VSS in varying degrees, with rather new ones that are focused on specific minerals and engage a broader range of value chain stakeholders to also be more effective in their design. However, the development of new VSS has so far, not been assessed from an OSI point of view, in particular with regards to the structural conditions needed for the establishment of VSS for value chain stakeholders to be able to substantiate sustainability claims.

#### 2.1. VSS selection and engagement

To study the OSI-enabling role of VSS and the structural conditions for this phenomenon to become effective, we turned our attention to an emerging scheme in the metals industry. 'MSS' is a VSS that has been formally established in the last decade, and features, like other VSS for this industry, major global industrial corporations among its members.

Yet, MSS is metal-specific, hence why we became interested in shedding light on the specific 'responsible metal' claim. We engaged with MSS during its emergence over a time span of five years, from when its standard texts became adopted to when substantial amounts of businesses became certified against the standard. During the same period, three of the authors were part of facilitating teams of a workshop and a conference with participation from MSS. Two authors conducted a survey of the MSS members, one author interviewed an MSS representative also during the early period of its development, and another author attended a stakeholder meeting of MSS. These engagements helped us further with interpreting and validating our subsequent findings on MSS' development.

To comprehend the OSI-enabling role of MSS, we approached the phenomenon through two perspectives: first, we wanted to know, to what extent the standard texts launched provide novelty in comparison to prior existing standards applicable to the industry; second, we analyzed the perceptions of stakeholders about the necessity of MSS and its OSI-enabling role. To facilitate our study, we promised anonymity to all research participants, which is why no identifying information can be provided in this phenomenon-focused study (e.g., Steiner, 2017).

#### 3. Study part one

#### 3.1. Methods

In the first part of our empirics, we pursue the sub-question to what extent the nascent MSS provides novelty compared to other initiatives already followed by the industry. To grasp what initiatives with a similar purpose the industry already followed, we scrutinized the publicly available information in sustainability reports and on websites of ten metal producing organizations relevant to MSS. Some of these

businesses are involved in upstream processes such as mining and ore processing, which we therefore considered as representative of the metal value chain. We thereby identified six VSS to be covered by at least two of the metal producing organizations. After taking into account the initiatives' overlaps through cross-recognition and shared assurance practices, we reduced their number to three, as those three represented the VSS prevalence in the industry at that time well: a principle-based standard (PBS; i.e., a standard formulating principles for orientation and practices and to which organizations subscribe), an index-based standard (IBS; i.e., a standard that ranks organizations) and a reporting-based standard (RBS; i.e., a standard providing guidance to organizations on their public reporting). All three VSS are, however, not industry specific. We collected a set of copies of the three standard texts for our comparative analysis with the newly proposed MSS. For matters of maintaining a focus on the researched phenomenon and fairness towards involved parties, here, we also abstain from using VSS-identifying information.

Next, we conducted a content analysis of the four standard texts for a comparison of scope and meanings (Holsti, 1969; Schreier, 2013; Vaismoradi et al., 2013). In the first step, we transformed the standard text of MSS into individual provisions, meaning, into equivalent and clear formulations about what issues a company should address and in what manner. This led us to discern 151 provisions promoted by MSS in its core standard text. In the second step, we mapped out *what* the diverse issues are, addressed in the provisions of all four standard texts. In the third step, we labelled each provision by *how* the standard texts suggest companies to address the specific issue. For example, a specific issue covered in one provision could be human rights abuses. One standard text would suggest companies to provide public information about its human rights abuses, while the other standard text would suggest that companies have a human rights due diligence process with procedures

Provision types	Performance rationales	Provision group labels
Compliance Assurance Information on demand	Provide the basis for responsible practices and demonstrate willingness to perform responsibly.	Performance premisses
Internal communication	Communication and cooperation are assumed to lead through information exchange and deliberation to improved performance.	Performance incubators
External communication		
Cooperation with affected stakeholders		
Cooperation with industry stakeholders		
Non-negotiables	Provide detailed information about what needs to be done and what shall not be done. Performance is here supposedly stable.	Performance substantiators
Infrastructure prescriptions		
Technical prescriptions		
Management prescriptions	Are assumed to stimulate stable or continuous learning for performance.	Performance perpetuators
Management tools prescriptions		
Performance management prescriptions		
Performance assessment	Lead to indicators and goals by which performance and success is evaluated.	Performance motivators
Performance objectives		
Product sustainability		

Fig. 1. Categorization of provision types by underlying performance rationales.

AUGMENTING PERFORMANCE RATIONALE

to mitigate related risks. Hence, while both standard texts would cover the same issue in their provisions, they would differ in provision types. This led us to differentiate between 16 provision types (see Fig. 1), which we then used to code the data. In a way to further aggregate and synthesize the data, we determined how the diverse provision types could be classified by distinct performance rationales, meaning, by how the formulations of provision types inherently presume how companies achieve an ideal performance on the issue addressed. We inductively formed five groups of provision types (Azungah, 2018), which we labelled performance premises, incubators, substantiators, perpetuators, and motivators. Their definitions by underlying performance rationales are provided in Fig. 1. Finally, we structured the provision types by their performance rationales by what we conceive to be an order of augmenting performance rationales, i.e., from requirements of 'compliance' to 'product sustainability'. We use this analytic framework in the following to provide first significant insights into the emergence of MSS, in terms of how MSS is similar and/or different to the previously existing VSS used by the industry.

#### 3.2. Results

The first insight we gained from the analysis is that MSS covers a variety of issues that are not attended to by other initiatives applied within the industry. On one hand, MSS provides more details on issues where others stay general, but on the other hand, it also includes industry-specific expectations that the generalized standards PBS, IBS, and RBS do not aim to cover. Fig. 2 provides an overview of how the comparative issue coverage by MSS unfolds along overarching themes. Issue themes where MSS stands out, by formulating provisions not yet covered by others, are business management, resource management, climate change, emissions and waste, biodiversity, human rights, labor rights, as well as health and safety. Within the water and business integrity themes, MSS seems not to add novelty to the pre-existing standard field. We noted that also, there are themes not serviced by MSS, such as economic impact, or a rather limited coverage of issues concerning mining communities and how to engage stakeholders, where IBS and RBS provide a more extended coverage. Yet, we find that 54% of MSS' provisions are not covered by PBS, IBS, and RBS.

The second insight we gained from the provision type analysis is that MSS predominantly uses a different performance rationale compared to other initiatives used by the industry. Fig. 3 shows the results of the provision type analysis. While PBS has only a very limited set of provisions, it focusses on issues formulated as non-negotiables as well as prescriptions of the management processes and tools. IBS, due to the nature of how it operates, is focusing on companies needing to provide

information upon request, with a variety of stipulations also demanding public communication and the use of management tools. RBS, in contrast, places its emphasis on public communication. MSS is very different in comparison to these initiatives, by focusing most of its provisions on a performance rationale labelled here as 'performance perpetuators'. These provisions by MSS focus on making prescriptions on how to manage issues of concern, but also on the tools that management should use. Other differences are a stronger focus on stakeholder engagement as a way to address their concerns, as well as prescriptions of performance assessments and the setting of objectives. We can, however, also see through this analysis, how all the involved initiatives converge towards zero provisions when it comes to defining product sustainability or, hence, the 'responsible metal' as such.

#### 4. Study part two

#### 4.1. Methods

To further deepen our insights into the emergence of MSS and its enabling role of OSI that wouldn't be yet clear from the results of the provision type analysis, we wanted to know about the perceptions of the stakeholders, in particular with regards to whether, and how MSS adds value to the pre-existing standard field. In this second part of our study, we therefore interviewed representative stakeholders, such as businesses being certified or planning to be certified by MSS. In total, we conducted nine interviews with 11 representatives from MSS business stakeholders, plus one interview with a representative from MSS itself. Regarding the value chain coverage of the specific metals industry, we aimed by the selection to have both upstream and downstream businesses in the sample, as typical for the industry structure. In our interviews with business staff, we focused on retrieving the perceptions and experiences of managers that were involved in the decision-making about participation and/or the standard's implementation for certification. We conducted most of the interviews as a part of a larger study on sustainable supply chain practices of European businesses, and asked thereby the following questions related to MSS' emergence and participation in the initiative: 1) why businesses joined MSS, 2) whether they assessed alternative VSS before joining MSS, 3) what changes in business practices their participation in MSS led to (or will likely lead to); 4) what benefits they gained from participating in MSS, and 5) what value MSS adds, compared to other VSS previously applied by the industry. Furthermore, we interrogated participants with regards to; 6) how they conceive of their own OSI, and 7) how their OSI are driven by MSS and its mode of promoting sustainable supply chains.

We analyzed interview transcripts thematically and focused on

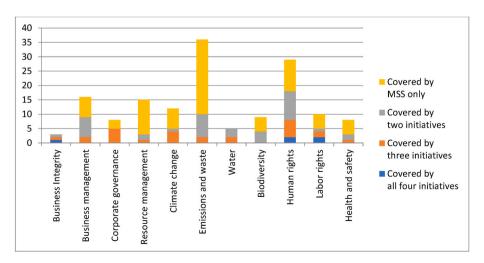


Fig. 2. Amounts of shared provisions between MSS and other previously existing initiatives with a similar purpose, taking MSS provisions as the basis of comparison, summarized by overarching themes.

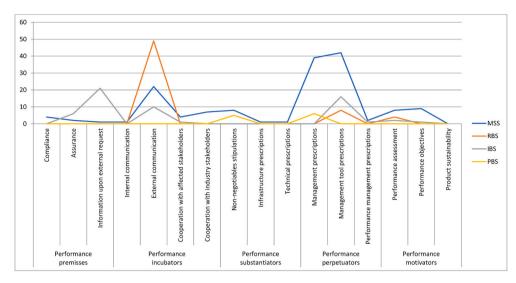


Fig. 3. Results from provision type analysis between MSS and other previously existing initiatives with a similar purpose.

emerging latent themes (Braun and Clarke, 2006; Vaismoradi et al., 2013). This means that on one hand, we inductively retrieved themes from initial coding of the data (Braun and Clarke, 2006). On the other hand, this means that we ultimately made choices on selecting themes that provide new insights on the phenomenon of interest (Braun and Clarke, 2006). For instance, many of the participants would name the added value to their credibility by the third-party assurance done as part of a certification against MSS. Yet, also pre-existing standards applicable to the industry included third-party assurance practices. Therefore, instead of expanding here, a well-known debate about the benefits and perils of assurance practices (e.g., Dashwood, 2014; Gürtürk and Hahn, 2016; Locke, 2013; Mori Junior et al., 2014; Short et al., 2016), we concentrated on providing explanations specific to the phenomenon of our interest, i.e., the OSI-enabling role of VSS. We identified in this second part of our study four themes offering complementary explanation.

#### 4.2. Results

# 4.2.1. MSS facilitates industry stakeholders to create a community of practice to facilitate an OSI

Many of the interviewed stakeholders expressed that prior to the establishment of MSS, there was no VSS applicable to their industry. This however, does not mean that other VSS applicable to the industry were not in use, as some of these companies referred to the use of such, including the aforementioned PBS, IBS, and RBS. Yet, what became clear through our interviews, as also highlighted in the epigraph opening this article, is that this perception of a missing VSS for the industry was linked to the need of establishing an OSI specific to the industry's core product, to enable the identification and statement about the 'responsible metal'.

But it was around (that year) that a group – and I understand it to be around 30 or 40 different stakeholders – coming together to talk about: 'what does responsible (metal) mean, you know, potentially?' And different sorts of solutions or potential ways of tackling that were discussed. (Representative of MSS)

Based on this need of being able to identify and thus enable the 'responsible metal' claim, we could then observe how stakeholders would also emphasize the necessity of establishing a new VSS for their industry.

To my knowledge, there was at that time, no certifiable standard for [metal], no sustainability standard. And [MSS] was the first to start this. I

think, therefore, that there was no alternative. (...) And there still is none. (Representative of a certified downstream business)

That is why [MSS] is a good choice for us, and I believe that for [metal], it's unrivaled. (Representative of a non-certified downstream business)

The FSC already existed, having been set up, (...) So, maybe it was '95 that it actually got started. And there was nothing really that was the same for [metal]. So, we were one of the co-founders of [MSS] because if there isn't such a standard, then, then we said 'OK, well, what can we do? It's not enough just to sit back and say 'OK, then (...) we don't do anything.' (Representative of a certified downstream business)

It also became clear in the interviews that, when reflecting on the need for a VSS for the industry, there was a model for such an initiative. Its widespread use made the Forest Stewardship Council (FSC) serve as a template for the establishment of MSS (see also Dingwerth and Pattberg, 2009; Gulbrandsen, 2008; Lambin and Thorlakson, 2018; Scherer and Palazzo, 2007). There are two specific features that were of importance in establishing the new MSS: there was a need to find means to bring the diverse value chain stakeholders together into one initiative in order to address industry-specific issues, and that the initiative should function through multi-stakeholder governance.

We had some kind of models in mind, typically FSC, for instance, which is a very recognized certification. That clearly was what we wanted, which is that we wanted something that was adequate, that was addressing the specific [metal] issues. So, it was difficult to (...) have an existing (...) standard, because those; if you, if you look at (...) mining, (...) you don't have the same issues when you mine other materials. There are some similarities with; you have some very specific, just also because of the location (...) around the world. (Representative of a certified downstream business)

And so I think the way that all of these sorts of initiatives have developed is because there's been a range of stakeholders come to the table to say 'Look, we're getting questions about this. It's not something that we can deal, we can unilaterally decide. We see the importance of a multistakeholder process. We need a way to kind of have these discussions and to make decisions.' (Representative of MSS)

Beyond having the diverse industry stakeholders involved in MSS, interviewees expressed how there are shared interests and dependencies between them. For most of the interviewees, being able to demonstrate responsible practices across the value chain, meaning that beyond the boundaries of the own business by enhancing transparency of practices

in the value chain, is of imminent importance to establish an OSI. Compared to PBS, IBS, and RBS, for instance, MSS stands out as being about the industry and the existing value chains thereof, as opposed to the applicability and relevance of the standard to individual businesses only. What is therefore novel about MSS, is that it can be understood as addressing the industry as a community of shared concerns, whereas individual companies make use of MSS by being part of certified industry. In other words, the ability for MSS to enable the OSI of the 'responsible metal' depends on its ability to motivate all relevant value chain stakeholders.

Why that is important for us? Well, it is indeed a core concern, the value chain, the upstream value chain. And we do not see any other opportunity. You can talk as much as you want about how a miner, any individual supplier operating somewhere in your chain, would have so and so nice projects. But that will never really be credible if you cannot prove that something really changed, namely comprehensively across the whole chain. (Representative of a certified downstream business)

So, there's always this competition with other, you know, [metal] options. So, I think there was a clear recognition that if the industry comes together and develops this fairly unique standard with respect to metal producers; not only the mining, but in metal production, (...) the whole chain. (Representative of a certified upstream business)

A further significant change that the establishment of MSS brings to the industry is that beyond providing a means to integrate diverse value chain stakeholders in one initiative, it establishes a set of commonly accepted practices that underly the OSI of a 'responsible metal'. The establishment of a community of practice stems here from a perceived need to overcome individual approaches that hamper shared positioning of the industry, as well as providing a common denominator to determine what responsible practices are in the context of an OSI for metal. From this point of view, the establishment of a community of practice through MSS is also a reaction to the fragmentation of business practices in the industry.

And really, for me, I was seeing a lot of (...) temptation from the sector to stop everybody with their own green offer (...), doing this and doing that. I thought, and I still believe, that we need to have a sector approach to these issues and not everyone on their own. (...) there needs to be a kind of common ground and a way to ensure that (...) there are common practices along the sectors that are being implemented, guaranteeing a certain level (...) that is acceptable, and that is managed, and that is mitigated in case there are some issues. (Representative of a certified downstream business)

Standardization has the benefit of, at the very least to have an even playing field. It will never be perfect. But if it's done in a good way, at least it will make sure that all the participants claiming to be sustainable within that segment or industry (...) adheres to the same basic principles. And then you can add on to those, which we do of course. (Representative of a certified upstream business)

#### 4.2.2. MSS alters power relations within the value chain

Another latent theme we encountered in the data and to support the OSI-enabling role of MSS, is that resulting from the diverse areas of the value chain being incorporated in and affected by MSS and the joint deliberations about good practices, there is a perceived change in power relations among MSS stakeholders. This insight adds to the previous observations about how NGOs exert power on supply chains through VSS (Christmann and Taylor, 2002; Lambin and Thorlakson, 2018). The reported perceived change in power relations occurs, however, between both upstream and downstream segments of the value chain. In particular, the downstream business representatives expressed that MSS provides them the advantage to now be able to exert some power over the upstream segments of the industry.

And you're looking at what levers you have to make a change. Obviously, all our levers are pretty small versus the big upstream companies where even if we're a leading company in our sector, in our part of the value chain, we are much smaller than the big mining companies, typically. So, our lever to change, to make any change, or to make any impact on that is pretty small. So, we figured out that with [MSS], our lever was much bigger because we were part of a bigger scheme, and we could influence that scheme through that organization. (Representative of a certified downstream business)

And as a medium-sized business in [Europe], we have low access opportunities on the [metal] value chain. Therefore, to take on our responsibilities, also concerning all those opinions that exist about [metal] (...) we decided to join [MSS] in order to work on a good initiative, comprehensively, and by closing the ranks. (Representative of a certified downstream business)

Regarding the opposite direction of power relations, meaning, about the upstream industry exerting pressure on downstream segments of the value chain, we did not find equivalent evidence, as there might also not be any need for such from an OSI point of view. Yet, what we find from the data is that, on one hand, there is interest also among mining companies to be associated in the public with reputable downstream brands, and on the other hand, that MSS itself takes care that aspirations about advancing responsible practices affect the whole industry. Therefore, the results suggest that initiatives like MSS balance power in the value chain by making sure that all stakeholders take on their respective and relevant positions in adopting and promoting agreed-on practices about the 'responsible metal'. Beyond MSS pushing here also for a more holistic discourse of responsible practices in the value chain, for many downstream companies the demanded practices are already part of customer demands.

One of the key areas in the standard relates to [the resource management] question, which is essentially saying that (...) the issues in mineral supply chains are not just about mining. They are not just about large waste in mineral processing, or upstream (...) greenhouse gas footprint, or whatever; (...) that there is also a responsibility to all of the supply chain for sustainability issues. (...) It's all of those pieces, (...) are important for, to kind of see sustainability as integrated and interrelated, (...) across multiple issues and, therefore, to advance across all those fronts. (Representative of MSS)

And our customers, if they want to buy today, they want to buy materials (...); they have certain obligations as well. It's not like 'I'm sourcing the right material and I'm done'. I have to do something because I'm part of the solution as a brand, that I'm somehow participating in making sure that my product comes back in recycling and so, therefore, avoiding all the emissions coming up. So that makes a big difference, I think, to other standards. (Representative of a certified downstream business)

The data also suggests, however, that the perceived altering of power relations within the value chain has a caveat that stems from the crucial upstream business practices not having to change significantly to comply with MSS' provisions. Similar to other scholars describing how VSS might align with practices of dominant market players (e.g., Fuchs et al., 2009; Hopkins and Kemp, 2021; Lambin et al., 2020; Smith and Fischlein, 2010; van der Ven, 2018), we find evidence that addressed upstream industry can partake in MSS with relative ease, as the requirements align well with established industry practices. This notion calls at least for caution when arguing about whether there is a *perceived* change in power relations in the value chain as opposed to an *actual* change, and the role of an initiative like MSS in driving perceptions of change for the enabling of OSI claims.

What we found is that what was required by [MSS] was very consistent with what we had. Sometimes it's a question of, you know, the language or just explaining or making sure our people understand well; when you say 'this is why we are talking about ... And, in fact, we already have it.'

You know what I mean? Just interpretation. But by and large, frankly, we were very; this is why we were so comfortable going through this process, because it was very consistent with what we had, particularly in our [social] standard, which speaks to all of the key elements there. And I think it's true as well for environment. (Representative of a certified upstream business)

#### 4.2.3. MSS establishes a revised performance rationale for the industry

A further crucial observation we made on how MSS adds value to the existing standard field and enables OSI for the metal-specific industry, is that it contributes to an amending performance rationale. This means that while MSS-involved companies have addressed some of the sustainability issues before by a certain rationale, they alter their rationale through the engagement with MSS and the provisions it promotes for adoption by the industry. The changing performance rationale appears in different forms, among them, for instance, a change from a prior compliance rationale to an understanding of taking a more holistic view on sustainability concerns that affect, or could hamper, the OSI:

What changed more, the way we look at; we look at this in another way. So, we used to look at it only by compliance with the law and compliance with the standards that we had decided to follow. And [MSS] added more topics and a bit more global use. So typically, we look at the environment, but we were not so much looking at biodiversity, for instance. (...) So, this is one example where it opens a bit more, it gives a little bit more ideas what we could do to improve. (Representative of a certified downstream business)

One particular topic area that received strong emphasis by the interviewees was that MSS is providing a new level of depth for social sustainability with respect to human rights. What became evident is that companies which operated previously without detailed sustainability-practice guidance, lacked apprehension for what it means to demonstrate responsibility for this topic area. We, therefore, assert that for certain topic areas, MSS expands guidance to businesses, and thereby likely supports strategy and legitimacy building (Napier et al., 2023), as it assists in implementing practices in the industry where such guidance was previously missing.

So, for us, I'm not sure if [MSS] as such added a lot of extra elements in terms of breadth, but definitely in terms of depth, because we have to go deeper into things (...) Where we see the biggest need for change, is related to, you know, a more in-depth and comprehensive understanding of the social elements, (...) the human rights and the labor issues; which we actually think is quite good, because it also helps us. (Representative of a certified upstream business)

So, one area where we noticed that we need to improve as a company, is the whole subject of human rights (...) Well, at least that's what we feel. (...) We are currently in a process, also with support from external consultants, to analyze that. And we said: 'Well, on a high level, we feel pretty comfortable, but we really need now to get down to the details.' (Representative of a certified downstream business)

The most dominant emphasis regarding a changing rationale for MSS adoption is a focus on performance as *performing*, which corroborates our findings in Fig. 3. Interviewed stakeholders showed an understanding that MSS is also by their experiences different from other standards previously applied by the industry. The renewed focus for companies is to demonstrate how they perform on the issues at stake. This means, for instance, where there was by other commonly used rating service providers a dominant rationale of risk assessment and mitigation, companies are within MSS required to demonstrate that they are in a process of working on issues to deliver results.

Yeah, I mean, I think they are different. Like, if you think about a risk assessment, for example, you identify what risks are and then you think about what controls that you can put in place to mitigate those. And, I

guess, and how those controls perform on the ground is ultimately where the rubber hits the road. So, you can have sort of a system. So, [MSS] is made up of things like having systems and procedures. But in terms of the assurance, it's also looking at 'are they performing?' (Representative of MSS)

Biodiversity, for instance, um, because we hadn't done anything about that. We had only a type of high-level risk issue map, something you get from a global service provider, with which one can check: What zones exist that are biodiversity risk zones? And where are our plants and how are they connected to those zones? But then one said 'No! Well, we really want you to think and look at the site-level! How could you do a risk assessment there and how to develop an action plan from that?' (Representative of a certified downstream business)

In further accordance with our findings from the first part of this study (cf. Fig. 3), we were also able to identify among the stakeholder accounts a gap about whether MSS fulfils all relevant levels of performance. Given the focus on *how* the industry performs, there is a gap towards providing detailed and tangible objectives of performance that allow for sustainability claims about product itself, meaning that despite an augmented performance rationale, this rationale does not support OSI directly. One stakeholder emphasizes this insight:

There is a difference between a process certification, which, by and large, [MSS] is, and a product certification, which is what the industry perhaps really needs. (...) [MSS] is not really there where you can physically trace it. (...) And that is a challenge for [MSS], because if you claim that you're sustainable, people automatically expect that to be a sort of a product claim, at least to some degree. (...) Because people don't understand what a process standard is. (Representative of a certified upstream business)

4.2.4. MSS constitutes a discursive platform for an ongoing translation of societal expectations into the 'responsible metal'

A final latent theme we derived from the analysis of stakeholder accounts on their participation in MSS, is how the initiative serves as a discursive platform to make sense of societal sustainability expectations, and to translate these legitimacy considerations (Deegan, 2002) into practices for the industry about the 'responsible metal'. Even topic areas about which there tend to be agreements of basic coverage among VSS, such as human rights, can be ill-defined to an extent that staff in companies have no clarity about how to put corresponding claims into practice (see also Manning and Reinecke, 2016). In the case of MSS, the need to define and translate societal expectations and legitimacy considerations for the industry was already part of its founding impetus and remains part of what is driving businesses to participate when aiming for the use of OSI.

But basically, we have always seen the need to agree with more than ourselves on what sustainability is. And as you probably know, within sustainability, it's notoriously difficult to agree on anything in terms of what is actually impact and progress. (Representative of a certified upstream business)

The interviews also reflected that MSS serves consistently as a discursive platform to define what expectations need to be met and how to translate them into verifiable practices for the industry to enable the OSI of the 'responsible metal'. It is, for a range of VSS, common practice to have frequently standard revisions through multi-stakeholder participation (Mori Junior et al., 2015). We assert from the analyzed data that one needs to conceive of these standard revisions as periods of more intensive deliberation about what new or altered societal expectations exist, and how the VSS can incorporate such changing expectations for OSI establishment and its maintenance. We consider this insight further in line with the general notion about sustainable development as a concept difficult to operationalize for industry (Dyllick and Muff, 2016; Montiel and Delgado-Ceballos, 2014), hence requiring means for

adaptation to changing societal expectations (Levy et al., 2016; Scherer and Palazzo, 2007).

And then of course, you don't have to be satisfied with the standard. And part of membership is that you contribute to standard development. And another thing is that we challenge our suppliers to go beyond them so that, for example, with the climate target, we challenge them to go beyond the requirements of [MSS]. (...) So, it's, we are not satisfied just with certification. It's a platform that we rest upon, but it's certainly not that we rest there and say 'OK, we're done now'. (Representative of a certified downstream business)

So, with [MSS], we know there is a revision process, and this will be part of making sure that we not only respect, you know, we comply with the expectation of today, but of tomorrow. (...) So, this is also the place where all of us learn about (...) new, the evolutions that we need to follow. (Representative of a certified downstream business)

#### 5. Discussion

Our research has focused on how VSS enable the use of OSI for business despite inherent ambiguity (Corley and Gioia, 2004; Gioia et al., 2000, 2010). For this purpose, we have followed the development of a new VSS in the metals industry through two methods and datasets, collected over a period of five years. We find that MSS, as we refer to the new metal-specific VSS, enables the claim of the 'responsible metal' by a) the creation of a community of practice in the industry to pursue the OSI, b) a perceived alterations of power relations in that community to influence the OSI, c) an augmentation of the performance rationale underlying the enabled OSI, as well as d) the facilitation of a discursive platform for the industry to keep engaging in the translation of the OSI into viable practice.

It became clear from the interviews with MSS stakeholders that the industry has had an imminent need of addressing a reputational problem collectively, which was the primary motivation to pursue an OSI for the industry. This finding corroborates with the suggestion by Potoski and Prakash (2009) that the reputation of an industry can be a good held in common. Hence, the industry, i.e., the diverse organizations forming part of the metal value chain, had to develop means to be able to establish a shared representation in the form of a sustainable identifier. Yet, this study goes beyond these notions by suggesting that VSS can, in dependence of their ambitions, enable OSI through the establishment of a community of practice. The sense of developing a community came to the fore by business stakeholders not identifying with other VSS that were not metal-specific. This common perception that there allegedly was no VSS for the industry directs attention to questions of identification with VSS, their founders and their adopters, or the need of having an identity as an industry (Fransen and Conzelmann, 2015), as well as the specific industry needs that VSS serve. Our findings thus demand apprehending VSS as means of creating a community of practice that allow for the fortification of referential categories which turns an industry identifiable and representational as part of an OSI discourse (see also Navis and Glynn, 2010; Reinecke et al., 2012; York et al., 2018).

The response to reputational issues of the industry by establishing a community of practice supports the possibility of using common identifiers, such as the OSI referring to one's product as a 'responsible metal' (see also Levy et al., 2016). Our findings also go here beyond previous insights on VSS, specifically about how these are platforms for deliberation and negotiation between stakeholders (Scherer and Palazzo, 2007; Schouten et al., 2012). We find in the assessed case of a newly emerging VSS, that the ability to deliberate on meanings of OSI in relation to business practices is an essential purpose of the initiative. Interview data suggests that multi-stakeholder deliberation about the meaning of the 'responsible metal' for the industry was a founding impetus for the initiative, and continues to be part of ongoing standard development. This ongoing development includes certified businesses contesting the

value of MSS by proposing that, for some organizations in the value chain, applied practices go beyond what MSS can cover in its provisions resulting from stakeholder deliberation. Our insight, therefore, that MSS serves the industry as a discursive platform about the meanings of an OSI and related practices, is an essential feature of the value which the initiative adds to the standard field. We also consider the finding about perceived changing power relations among stakeholders in this light, as the discursive platform seems to assist reducing and balancing power of particular actors over the value chain, as well as their influence over the industry's reputation. This finding thus also adds to the sustainable supply chain literature, which usually considers buyer firms at the downstream end as leaders that bring sustainability to the further upstream partners of the value chain (e.g. Hoejmose et al., 2013; Imbrogiano and Steiner, 2022; Seuring and Müller, 2008; Villena and Gioia, 2018). MSS appears in our study also as a means to balance unidirectional power exertion, sustainability claims and pressures on parts of the value chain.

Furthermore, the provision type analysis we have developed in this research sheds new light on the debate of the effectiveness of VSS (e.g., Barry et al., 2012; Imbrogiano, 2021; Wijen, 2014). We were able to show along the covered provision types, as well as through stakeholder perceptions, that MSS has changed the performance rationale as previously applied in the industry and promoted by other initiatives. We, therefore, also consider MSS to have been able to emerge amidst a field of pre-existing standards because it has filled a gap in performance expectations that could be used for an effective OSI. However, our provision type analysis also shows that not all possible performance rationales are equally covered, and that more technical prescriptions as well as such that allow for the discerning of achieved performance and actual product sustainability, are lacking within MSS. These further gaps in performance rationales might offer opportunities for further evolution of the standard field (see e.g., Gale et al., 2017; Smith et al., 2019). We hence consider the provision type analysis as a useful method for scholarship and practitioners to better understand standard emergence also in crowded standard fields, their complementarities and added values. Provision type analysis could also help overcoming the opacity of standard fields (Wijen, 2014), by bringing more clarity into performance discourses that are used and fueled by VSS (Imbrogiano, 2021), as well as about whether a 'race to the bottom' or 'ratcheting up' of VSS is reflected in their performance rationales (Bartley, 2011; Dietz and Grabs, 2022; Utting, 2015).

#### 6. Conclusion

This paper set out to explore how VSS enable the use of OSIs for business communication, in spite of a diversified field of already existing standards with a similar portfolio of sustainability ambitions. Our study of a new VSS in the metals industry reveals four structural conditions that enable OSIs: the support for industry stakeholders in creating a community of practice; the perceived alterations of power relations within the value chain; the promotion of a renewed performance rationale for the sustainability ambitions of the industry; and the provision of a discursive platform that supports the ongoing translation of OSI into business practices. These findings are important for any new attempt of VSS emergence, as leaving one of these structural conditions apart could undermine the effective establishment of OSIs for industry.

The nature of our study also provides opportunities for researchers and practitioners to revisit and expand its findings. Firstly, due to this research being focused on a singular case, there is value in taking a broader look at the continuing fragmentation of VSS in the metals and other industries. Secondly, we have focused our analysis of stakeholder perceptions and experiences mainly on the context of European businesses of the metal value chain. Samples with more intercontinental representation, or foci on other regions of the world, could add further novelties to apprehending standard emergence and their OSI enabling role amidst crowded standard fields, as well as the dynamics these

amidst public pressure. Thirdly, in terms of the interpretation of the data, we remained concentrated on the data and its applicability to the MSS case in the analysis of stakeholder perceptions. Regarding the findings of changing performance rationales and MSS constituting a discursive platform for the industry, there are potential opportunities in taking rather sociological perspectives on the creations of OSI meanings for sustainable development and the altering of performance rationales globally (Imbrogiano, 2021). Lastly, we see also, a need for ethnographic insights on VSS emergence, as such observer and participant accounts are scarce (e.g., Hopkins and Kemp, 2021), yet it would help us further in understanding the internal dynamics behind the formulation of provisions, their implementation, and verification of OSIs.

#### **Author statement**

Jean-Pierre Imbrogiano

Conceptualization; Data curation; Formal analysis; Investigation; Roles/Writing - original draft.

**Bodo Steiner** 

Methodology; Supervision; Roles/Writing - original draft.

Renzo Mori Junior

Conceptualization; Methodology; Writing - review & editing.

Kathrvn Sturman

Conceptualization; Investigation; Methodology; Funding acquisition.

#### Acknowledgements

We are thankful for Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH having financially supported the first part of the research.

#### References

- Abbott, K.W., Snidal, D., 2001. International 'standards' and international governance. J. Eur. Publ. Pol. 8, 345–370. https://doi.org/10.1080/13501760110056013.
- Albert, S., Whetten, D.A., 1985. Organizational identity. In: Cummings, L.L., Staw, B.M. (Eds.), Research in Organizational Behavior, Seventh Vol. Jai Press, Greenwich, CT, pp. 263–295.
- Azevedo, G., 2023. The interpretation of organizational ontologies. J. Manag. Inq. https://doi.org/10.1177/10564926231155104.
- Azungah, T., 2018. Qualitative research: deductive and inductive approaches to data analysis. Qual. Res. J. 18, 383–400. https://doi.org/10.1108/QRJ-D-18-00035.
- Barry, M., Cashore, B., Clay, J., Fernandez, M., Lebel, L., Lyon, T., Mallet, P., Matus, K., Melchett, P., Vandenbergh, M., Vis, J.K., Whelan, T., 2012. Toward Sustainability: the Roles and Limitations of Certification. RESOLVE, Inc., Washington, DC. Available at: https://www.resolve.ngo/docs/report-only.pdf.
- Bartley, T., 2011. Certification as a mode of social regulation. In: Levi-Faur, D. (Ed.),
  Handbook on the Politics of Regulation. Edward Elger Publishing, Cheltenham, UK,
  pp. 441–452
- Bennett, E.A., 2018. Voluntary sustainability standards: a squandered opportunity to improve workers' wages. Sustain. Dev. 26, 65–82. https://doi.org/10.1002/sd.1691.
- Bleischwitz, R., Dittrich, M., Pierdicca, C., 2012. Coltan from Central Africa, international trade and implications for any certification. Resour. Pol. 37, 19–29. https://doi.org/10.1016/j.resourpol.2011.12.008.
- Bouncken, R.B., Lapidus, A., Qui, Y., 2022. Organizational sustainability identity: 'new work' of home offices and coworking spaces as facilitators. Sustain. Tech. Entrepreneurship 1, 100011. https://doi.org/10.1016/j.stae.2022.100011.
- Braun, V., Clarke, V., 2006. Using thematic analysis in psychology. Qual. Res. Psychol. 3, 77–101. https://doi.org/10.1191/1478088706qp063oa.
- Christmann, P., Taylor, G., 2002. Globalization and the environment: strategies for international voluntary environmental initiatives. Acad. Manag. Perspect. 16, 121–135. https://doi.org/10.5465/ame.2002.8540373.
- Christmann, P., Taylor, G., 2006. Firm self-regulation through international certifiable standards: determinants of symbolic versus substantive implementation. J. Int. Bus. Stud. 37, 863–878. https://doi.org/10.1057/palgrave.jibs.8400231.
- Clapp, J., 1998. The privatization of global environmental governance: ISO 14000 and the developing world. Glob. Gov 4, 295–316. https://doi.org/10.1163/19426720-00403004
- Corley, K.G., Gioia, D.A., 2004. Identity ambiguity and change in the wake of a corporate spin-off. Adm. Sci. Q. 49, 173–208. https://doi.org/10.2307/4131471.
- Crane, A., Palazzo, G., Spence, L.J., Matten, D., 2014. Contesting the value of "creating shared value". Calif. Manag. Rev. 56, 130–153. https://doi.org/10.1525/cmr.2014.56.2.130.
- Cutler, A.C., Haufler, V., Porter, T., 1999. Private authority and international affairs. In: Cutler, A.C., Haufler, V., Porter, T. (Eds.), Private Authority and International Affairs. Suny Press, Albany, NY, pp. 3–28.

Dashwood, H.S., 2014. Sustainable development and industry self-regulation: developments in the global mining sector. Bus. Soc. 53, 551–582, 10.1177% 2F0007650313475997.

- Deberdt, R., 2022. Land access rights in minerals' responsible sourcing: the case of cobalt in the Democratic Republic of the Congo. Resour. Pol. 75, 102534 https://doi.org/10.1016/j.resourpol.2021.102534.
- Deegan, C., 2002. Introduction: the legitimising effect of social and environmental disclosures—a theoretical foundation. Account Audit. Account. J. 15, 282–311. https://doi.org/10.1108/09513570210435852.
- Delmas, M.A., Burbano, V.C., 2011. The drivers of greenwashing. Calif. Manag. Rev. 54, 64–87. https://doi.org/10.1525/cmr.2011.54.1.64.
- Dietz, T., Grabs, J., 2022. Additionality and implementation gaps in voluntary sustainability standards. New Polit. Econ. 27, 203–224. https://doi.org/10.1080/ 13563467.2021.1881473.
- Dingwerth, K., Pattberg, P., 2009. World politics and organizational fields: the case of transnational sustainability governance. Eur. J. Int. Relat. 15, 707–743, 10.1177% 2F1354066109345056.
- Dyllick, T., Muff, K., 2016. Clarifying the meaning of sustainable business: introducing a typology from business-as-usual to true business sustainability. Organ. Environ. 29, 156–174, 10.1177%2F1086026615575176.
- Fleming, J., Jones, P.T., 2013. The End of Corporate Social Responsibility. SAGE, Los Angeles.
- Fransen, L., Conzelmann, T., 2015. Fragmented or cohesive transnational private regulation of sustainability standards? A comparative study. Regul. Gov. 9, 259–275. https://doi.org/10.1111/rego.12055.
- Frostenson, M., Helin, S., Arbin, K., 2022. Organizational sustainability identity: constructing oneself as sustainable. Scand. J. Manag. 38, 101229 https://doi.org/ 10.1016/j.scaman.2022.101229.
- Fuchs, D., Kalfagianni, A., Arentsen, M., 2009. Retail power, private standards, and sustainability in the global food system. In: Clapp, J., Fuchs, D. (Eds.), Corporate Power in Global Agrifood Governance. MIT Press, Cambridge, MA, pp. 29–59.
- Gale, F., Ascui, F., Lovell, H., 2017. Sensing reality? New monitoring technologies for global sustainability standards. Global Environ. Polit. 17, 65–83. https://doi.org/ 10.1162/GLEP a 00401.
- Gilbert, D.U., Rasche, A., Waddock, S., 2011. Accountability in a global economy: the emergence of international accountability standards. Bus. Ethics Q. 21, 23–44. https://doi.org/10.5840/beq20112112.
- Gioia, D.A., Price, K.N., Hamilton, A.L., Thomas, J.B., 2010. Forging an identity: an insider-outsider study of processes involved in the formation of organizational identity. Adm. Sci. Q. 55, 1–46. https://doi.org/10.2189/asqu.2010.55.1.1.
- Gioia, D.A., Schultz, M., Corley, K.G., 2000. Organizational identity, image, and adaptive instability. Acad. Manag. Rev. 25, 63–81. https://doi.org/10.2307/259263.
- Gulbrandsen, L.H., 2008. Accountability arrangements in non-state standards organizations: instrumental design and imitation. Organ 15, 563–583, 10.1177% 2F1350508408091007.
- Gürtürk, A., Hahn, R., 2016. An empirical assessment of assurance statements in sustainability reports: smoke screens or enlightening information? J. Clean. Prod. 136, 30–41. https://doi.org/10.1016/j.jclepro.2015.09.089.
- Hamilton, A., Gioia, D.A., 2009. Fostering sustainability-focused organizational identities. In: Roberts, L.M., Dutton, J.E. (Eds.), Exploring Positive Identities and Organizations. Psychology Press, New York, pp. 435–460.
- Hatch, M.J., Schultz, M., 1997. Relations between organizational culture, identity and image. Eur. J. Market. 31, 356–365. https://doi.org/10.1108/eb060636.
- Hatch, M.J., Schultz, M., 2002. The dynamics of organizational identity. Hum. Relat. 55, 989–1018. https://doi.org/10.1177/0018726702055008181.
- Heidingsfelder, J., 2019. Private sustainability governance in the making-a case study analysis of the fragmentation of sustainability governance for the gold sector. Resour. Pol. 63, 101462 https://doi.org/10.1016/j.resourpol.2019.101462.
- Hoejmose, S.U., Grosvold, J., Millington, A., 2013. Socially responsible supply chains: power asymmetries and joint dependence. Supply Chain Manag. Int. J. 18, 277–291. https://doi.org/10.1108/SCM-01-2012-0033.
- Holsti, O.R., 1969. Content Analysis for the Social Sciences and Humanities. Addison-Wesley Publishing Company, Reading, MA.
- Hopkins, A., Kemp, D., 2021. Credibility Crisis: Brumadinho and the Politics of Mining Industry Reform. Wolters Kluwer, Sydney, NSW.
- Huemer, L., 2010. Corporate social responsibility and multinational corporation identity: Norwegian strategies in the Chilean aquaculture industry. J. Bus. Ethics 91, 265–277. https://doi.org/10.1007/s10551-010-0618-7.
- Imbrogiano, J.-P., 2021. Contingency in business sustainability research and in the sustainability service industry: a problematization and research agenda. Organ. Environ. 34, 298–322, 10.1177%2F1086026619897532.
- Imbrogiano, J.-P., Steiner, B., 2022. Co-constructing organizational sustainability identities and supply chain management practices. Acad. Manag. Proc. 1, 16413 https://doi.org/10.5465/AMBPP.2022.16413abstract.
- Kennedy, M.T., Chok, J.I., Liu, J., 2012. What does it mean to be green? The emergence of new criteria for assessing corporate reputation. In: Barnett, M.L., Pollock, T.G. (Eds.), The Oxford Handbook of Corporate Reputation. Oxford University Press, Oxford, pp. 69–93.
- Kouamé, S., Hafsi, T., Oliver, D., Langley, A., 2022. Creating and sustaining stakeholder emotional resonance with organizational identity in social mission-driven organizations. Acad. Manag. J. 65, 1864–1893. https://doi.org/10.5465/ amj.2018.1143.
- Lambin, E.F., Kim, H., Leape, J., Lee, K., 2020. Scaling up solutions for a sustainability transition. One Earth 3, 89–96. https://doi.org/10.1016/j.oneear.2020.06.010.

- Lambin, E.F., Thorlakson, T., 2018. Sustainability standards: interactions between private actors, civil society, and governments. Annu. Rev. Environ. Resour. 43, 369–393. https://doi.org/10.1146/annurev-environ-102017-025931.
- Levy, D., Reinecke, J., Manning, S., 2016. The political dynamics of sustainable coffee: contested value regimes and the transformation of sustainability. J. Manag. Stud. 53, 364–401. https://doi.org/10.1111/joms.12144.
- Liu, W., Agusdinata, D.B., Eakin, H., Romero, H., 2022. Sustainable minerals extraction for electric vehicles: a pilot study of consumers' perceptions of impacts. Resour. Pol. 75, 102523 https://doi.org/10.1016/j.resourpol.2021.102523.
- Lyon, T.P., Montgomery, A.W., 2015. The means and end of greenwash. Organ. Environ. 28, 223–249. https://doi.org/10.1177/1086026615575332.
- Locke, R.M., 2013. The Promise and Limits of Private Power Promoting Labor Standards in a Global Economy. Cambridge University Press, New York.
- Mancini, L., Eslava, N.A., Traverso, M., Mathieux, F., 2021. Assessing impacts of responsible sourcing initiatives for cobalt: insights from a case study. Resour. Pol. 71, 102015 https://doi.org/10.1016/j.resourpol.2021.102015.
- Manning, S., Boons, F., von Hagen, O., Reinecke, J., 2012. National contexts matter: the co-evolution of sustainability standards in global value chains. Ecol. Econ. 83, 197–209. https://doi.org/10.1016/j.ecolecon.2011.08.029.
- Manning, S., Reinecke, J., 2016. A modular governance architecture in-the-making: how transnational standard-setters govern sustainability transitions. Res. Pol. 45, 618–633. https://doi.org/10.1016/j.respol.2015.11.007.
- Marx, A., Brando, N., Lein, B., 2017. Strengthening labour rights provisions in bilateral trade agreements: making the case for voluntary sustainability standards. Glob. Pol. 8, 78–88. https://doi.org/10.1111/1758-5899.12397.
- Marx, A., Depoorter, C., Vanhaecht, R., 2022. Voluntary sustainability standards: state of the art and future research. STAND 2, 14–31. https://doi.org/10.3390/ standards?010002
- Meesters, M.E., Behagel, J.H., 2017. The social licence to operate: ambiguities and the neutralization of harm in Mongolia. Resour. Pol. 53, 274–282. https://doi.org/ 10.1016/j.resourpol.2017.07.006.
- Montiel, I., Delgado-Ceballos, J., 2014. Defining and measuring corporate sustainability: are we there yet? Organ. Environ. 27, 113–139, 10.1177%2F1086026614526413.
- Mori Junior, R., Best, P.J., Cotter, J., 2014. Sustainability reporting and assurance: a historical analysis on a world-wide phenomenon. J. Bus. Ethics 120, 1–11. https:// doi.org/10.1007/s10551-013-1637-y.
- Mori Junior, R., Franks, D., Ali, S., 2015. Designing Sustainability Certification for Greater Impact: an Analysis of the Design Characteristics of 15 Sustainability Certification Schemes in the Mining Industry. Centre for Social Responsibility in Mining, University of Queensland, Brisbane, Qld. Available at: https://www.csrm. uq.edu.au/publications/designing-sustainability-certification-for-greater-impact-a n-analysis-of-the-design-characteristics-of-15-sustainability-standards-in-the-mini ng-industry.
- Napier, E., Knight, G., Luo, Y., Delios, A., 2023. Corporate social performance in international business. J. Int. Bus. Stud. 54, 61–77. https://doi.org/10.1057/s41267-022-00584-w.
- Navis, C., Glynn, M.A., 2010. How new market categories emerge: temporal dynamics of legitimacy, identity, and entrepreneurship in satellite radio, 1990–2005. Adm. Sci. O. 55, 439–471, 10.2189%2Fasqu.2010.55.3.439.
- Owen, J.R., Kemp, D., 2013. Social licence and mining: a critical perspective. Resour. Pol. 38, 29–35. https://doi.org/10.1016/j.resourpol.2012.06.016.
- Partiti, E., 2019. Orchestration as a form of public action: the EU engagement with voluntary sustainability standards. Eur. Law J. 25, 94–117. https://doi.org/10.1111/euli.12299.
- Potoski, M., Prakash, A. (Eds.), 2009. Voluntary Programs. MIT Press, Cambridge, MA. Reinecke, J., Manning, S., von Hagen, O., 2012. The emergence of a standards market: multiplicity of sustainability standards in the global coffee industry. Organ. Stud. 33, 791–814. 10.1177%/F0170840612443659.
- Sauer, P.C., Seuring, S., 2017. Sustainable supply chain management for minerals. J. Clean. Prod. 151, 235–249. https://doi.org/10.1016/j.jclepro.2017.03.049.

- Scherer, A.G., Palazzo, G., 2007. Toward a political conception of corporate responsibility: business and society seen from a Habermasian perspective. Acad. Manag. Rev. 32, 1096–1120. https://doi.org/10.5465/amr.2007.26585837.
- Schönherr, N., 2022. Same same but different? A quantitative exploration of voluntary sustainability standards in agriculture. Sustain. Times 14, 5060. https://doi.org/ 10.3390/su14095060.
- Schouten, G., Leroy, P., Glasbergen, P., 2012. On the deliberative capacity of private multi-stakeholder governance: the roundtables on responsible soy and sustainable palm oil. Ecol. Econ. 83, 42–50. https://doi.org/10.1016/j.ecolecon.2012.08.007.
- Schreier, M., 2013. Qualitative content analyis. In: Flick, U. (Ed.), The SAGE Handbook of Qualitative Data Analysis. SAGE, London, pp. 170–183.
- Scott, S.G., Lane, V.R., 2000. A stakeholder approach to organizational identity. Acad. Manag. Rev. 25, 43–62. https://doi.org/10.2307/259262.
- Seuring, S., Müller, M., 2008. From a literature review to a conceptual framework for sustainable supply chain management. J. Clean. Prod. 16, 1699–1710. https://doi. org/10.1016/j.jclepro.2008.04.020.
- Short, J.L., Toffel, M.W., Hugill, A.R., 2016. Monitoring global supply chains. Strat. Manag. J. 37, 1878–1897. https://doi.org/10.1002/smj.2417.
- Smith, T.M., Fischlein, M., 2010. Rival private governance networks: competing to define the rules of sustainability performance. Global Environ. Change 20, 511–522. https://doi.org/10.1016/j.gloenvcha.2010.03.006.
- Smith, W.K., Nelson, E., Johnson, J.A., Polasky, S., Milder, J.C., Gerber, J.S., West, P.C., Siebert, S., Brauman, K.A., Carlson, K.M., Arbuthnot, M., Rozza, J.P., Pennington, D. N., 2019. Voluntary sustainability standards could significantly reduce detrimental impacts of global agriculture. Proc. Natl. Acad. Sci. USA 116, 2130–2137. https://doi.org/10.1073/pnas.1707812116.
- Steiner, B.E., 2017. A phenomenon-driven approach to the study of value creation and organizational design issues in agri-business value chains. Econ. agro-aliment. 19, 89–118. https://doi.org/10.3280/ECAG2017-001005.
- Tröster, R., Hiete, M., 2019. Do voluntary sustainability certification schemes in the sector of mineral resources meet stakeholder demands? A multi-criteria decision analysis. Resour. Pol. 63, 101432 https://doi.org/10.1016/j. resourcel.2019.101432.
- Turcotte, M.F., Reinecke, J., den Hond, F., 2014. Explaining variation in the multiplicity of private social and environmental regulations. Bus. Polit. 16, 151–189. https://doi. org/10.1515/bap-2012-0016.
- Utting, P., 2015. Corporate social responsibility and the evolving standards regime: regulatory and political dynamics. In: Tsutsui, K., Lim, A. (Eds.), Corporate Social Responsibility in a Globalizing World. Cambridge University Press, Cambridge, UK, pp. 73–106.
- Vaismoradi, M., Turunen, H., Bondas, T., 2013. Content analysis and thematic analysis: implications for conducting a qualitative descriptive study. Nurs. Health Sci. 15, 398–405. https://doi.org/10.1111/nhs.12048.
- van der Ven, H., 2018. Gatekeeper power: understanding the influence of lead firms over transnational sustainability standards. Rev. Int. Polit. Econ. 25, 624–646. https://doi.org/10.1080/09692290.2018.1490329.
- Villena, V.H., Gioia, D.A., 2018. On the riskiness of lower-tier suppliers: managing sustainability in supply networks. J. Oper. Manag. 64, 65–87. https://doi.org/ 10.1016/j.jom.2018.09.004.
- Vogel, D., 2005. The Market for Virtue: the Potential and Limits of Corporate Social Responsibility. Brookings Institution Press, Washington, DC.
- Vogel, D., 2008. Private global business regulation. Annu. Rev. Polit. Sci. 11, 261–282. https://doi.org/10.1146/annurev.polisci.11.053106.141706.
- Wijen, F., 2014. Means versus ends in opaque institutional fields: trading off compliance and achievement in sustainability standard adoption. Acad. Manag. Rev. 39, 302–323. https://doi.org/10.5465/amr.2012.0218.
- York, J.G., Vedula, S., Lenox, M.J., 2018. It's not easy building green: the impact of public policy, private actors, and regional logics on voluntary standards adoption. Acad. Manag. J. 61, 1492–1523. https://doi.org/10.5465/amj.2015.0769.