Contents lists available at ScienceDirect





Global Environmental Change

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

Effects of stakeholder input on voluntary sustainability standards

Hamish van der Ven

Department of Wood Science, Faculty of Forestry, University of British Columbia, 4644 - 2424 Main Mall, Vancouver, BC V6T 1Z4, Canada

ARTICLE INFO

Keywords: Voluntary sustainability standards Stakeholders Stakeholder engagement Certification Private governance Sustainability

ABSTRACT

Voluntary sustainability standards can be powerful tools for incentivizing sustainable production practices. Most standards rely on stakeholder input to gain legitimacy and set levels of achievement for businesses at an appropriate level. Yet, the effects of stakeholder input are contentious. Whereas some see stakeholder input leading to more stringent standards, others believe stakeholder input dilutes standards and renders them toothless. I intervene into this debate through an analysis of the effects of stakeholder comments on eight different voluntary sustainability standards. Drawing on an original dataset of 7945 stakeholder comments submitted during public comment periods between 2012 and 2019, I answer three interrelated research questions. First, who comments on sustainability standards and are some groups better represented than others? Second, what types of input do stakeholders provide? Third, which stakeholder comments result in observable changes to the content of sustainability standards? I find that industry groups are over-represented compared to other stakeholder groups. I also find that comments intended to weaken the stringency of sustainability standards are more likely to be implemented than comments intended to strengthen their stringency or other types of comments. A key implication is that stakeholder input is more likely to weaken or maintain the status quo of sustainability standards than strengthen them.

1. Introduction

For over a quarter century, voluntary sustainability standards (VSS) have been used to moderate the environmental impacts of production, protect human rights, and ensure the wellbeing of workers (Cashore, 2002; Derkx and Glasbergen, 2014; Lambin et al., 2014; van der Ven, 2019) They do so by setting voluntary rules for businesses to ensure that the things they sell do not negatively impact people or the environment. For the most part, VSS are created, enforced, and maintained by non-governmental organizations (NGOs) and industry associations (Darnall et al., 2017; Renckens, 2020). As such, they constitute a form of private governance (Auld, 2014; Grabs, 2020). Since these types of organizations are unelected, they derive their legitimacy and authority from other forms of participation and inclusion. One of the most common approaches to incorporating stakeholder input is to submit sustainability standards to public comment periods wherein stakeholders are invited to comment on draft standards.

There are a number of reasons why public comment periods are now ubiquitous in the VSS community. First, they form an important component of political legitimacy or "the acceptance of shared rule by a community as appropriate and justified" (Bernstein and Cashore, 2007, p. 348; Suchman, 1995). In essence, businesses, local communities, and environmental groups are more likely to support VSS when their rules have been developed through quasi-democratic processes. This support enables VSS to scale quicker and govern a broader share of global production.

The second reason is more contentious. Some argue that stakeholder input contributes to better governance outputs (Stevenson, 2016). Proponents of the instrumental value of stakeholder input argue that standards become more stringent and regionally relevant when a diversity of actors participate in their design (Beaulieu-Guay et al., 2021; ISEAL Alliance, 2014). For example, receiving comments from textile workers on a sustainable textile standard might lead to stronger rules about working conditions or improved attention to regionally-specific labour issues (Locke, 2013; Wong, 2012). The logic being that bringing more voices to the table helps increase problem solving capacity by drawing on a larger collective pool of ideas and balancing against powerful actors who might seek to shape VSS in their own self-interest (Hong and Page, 2004; Landemore, 2012). Thus, the instrumental argument in favour of stakeholder input is that: "inclusive and diverse decision-making procedures are likely to produce better outcomes than those that are exclusive and homogeneous" (Stevenson, 2016, p. 400).

However, others argue that stakeholder input may actually lead to diluted governance outputs that are less likely to achieve sustainability

https://doi.org/10.1016/j.gloenvcha.2022.102554

Received 29 October 2021; Received in revised form 29 April 2022; Accepted 12 June 2022 Available online 25 June 2022

E-mail address: hamish.vanderven@ubc.ca.

^{0959-3780/© 2022} The Author. Published by Elsevier Ltd. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/).

outcomes (Cashore and Bernstein, 2022; Cashore and Nathan, 2020; Ponte, 2014). The logic behind this argument is that public comment periods lead to lowest common denominator compromises and sustains unequal power dynamics between industry representatives and other stakeholder groups. Past research has found that deadlock between environmental and industry groups can lead to a focus on procedural rigor while lowering the substantive stringency of VSS (Judge-Lord et al., 2020; Loconto and Fouilleux, 2014). Concurrently, industry stakeholders often exert more influence in multistakeholder groups because of their ability to dedicate more time, money, and personnel to the highly technocratic process of providing input into VSS (Bacon, 2010; Bennett, 2017; Cheyns, 2014; Fouilleux and Loconto, 2017). Large businesses also benefit from a position of centrality in global value chains that allows them to control access to networks of suppliers who are essential to the uptake of VSS (van der Ven, 2018).

It is this debate over whether stakeholder input leads to more or less stringent governance outputs that I address in this paper. I do so by posing three research questions: first, who participates in public comment periods for VSS? Second, what types of input do they provide? Third, which stakeholder comments result in observable changes to the content of sustainability standards? I answer these questions using an original dataset of 7945 stakeholder comments submitted during public comment periods for eight different sustainability standards managed by different six standard setters. These comments represent a diverse and timely example of stakeholder input for VSS in action and offer implications for the broader practice of soliciting input on public policies, regulations, corporate codes of conduct, and other modes of governance.

My findings reveal the limits of public comment periods as a means of increasing the stringency of VSS. First, I find that most stakeholder comments (92%) result in no observable change to sustainability standards. Second, I find that stakeholder input is imbalanced. Business interests are significantly over-represented in comparison to other stakeholder groups. Industry-affiliated stakeholders represent twothirds of all non-anonymous comments in my dataset. However, notwithstanding their over-representation, industry comments are no more likely to be implemented than comments from other stakeholder groups. Nor are they universally characterized by a goal of weakening standards. Third, I find that most stakeholder input either seeks to maintain the status quo or clarify existing rules. The number of comments that seek to strengthen the procedural or substantive stringency of VSS is significantly less than the number of comments that seek to weaken it. Fourth, I find that stakeholder input that seeks to weaken the stringency of VSS is significantly more likely to be accepted than comments intended to strengthen its stringency or other types of comments. Fifth, and perhaps counterintuitively, I find that small and mediumsized enterprises (SMEs) are somewhat more likely to have their comments result in an observable change to a standard than other stakeholders. However, SME comments mainly focus on weakening or clarifying the content of standards. Thus, on balance, stakeholder input through public comment periods appears to weaken the procedural and substantive stringency of VSS more than strengthen it. My findings imply that stakeholder input in VSS falls short on raising the bar for sustainability.

I proceed as follows: I begin by providing some background on VSS and the use of public comment periods in this space. Next, I outline some hypotheses on stakeholder influence derived from the existing literature, describe my data and methods, and review my results. I conclude with a discussion of implications for VSS and private governance more broadly.

2. Stakeholder input in voluntary sustainability standards

The scale and reach of VSS have grown significantly in the last 25 years (FiBL et al., 2021). In certain sectors, such as coffee and cocoa, nearly a quarter of global production is certified to a VSS (FiBL et al., 2021; Tayleur et al., 2017). Given that the rules outlined in VSS have

massive influence across global value chains, scholars are paying close attention to how these organizations build and maintain their standards (Auld, 2014; Darnall et al., 2017; Grabs, 2020; Sun, 2022; van der Ven, 2019). Concurrent with broader trends in global governance, sustainability standard setters pay close attention to getting the process right (Gupta, 2008). Guidelines for best practices in sustainability standard setting (e.g., the International Social and Environmental Accreditation and Labelling Alliance (ISEAL) Codes, the International Organization for Standardization (ISO) 14024 standard, etc.) place considerable emphasis on stakeholder engagement and input during the development of new standards and the revision of existing ones (Derkx and Glasbergen, 2014; ISEAL Alliance, 2014; ISO, 1999). The ideal process for mapping and consulting stakeholders is illustrated in Fig. 1.

The standard setters in this study follow a relatively similar procedure for developing and revising standards. They begin by identifying key stakeholders and notifying them of the upcoming development or revision of a standard. Following this, they publish the terms of reference, draft standard, timeline, and opportunities for providing input on their website. The standard setter then opens the draft standard for public comment for a minimum of 60 days. In most cases, input is provided in a structured format, either via a web form or a document template. For standards that are global in scope, in-person workshops are sometimes used to gain producer input. In some cases (especially new standards), standard setters may offer one or two additional rounds of public comment for 30 days each wherein stakeholders provide input on revised versions of the original standard. Once the public comment period closes, standard setters compile and post all the comments they received and may voluntarily choose to disclose how they have responded to those comments. They then send the new standard to a standards committee for approval before sign-off by a higher-level decision-making body.

It is worth noting that this process encapsulates only the formal dimension of receiving stakeholder input and a somewhat truncated one at that. In practice, stakeholders have many means of exerting influence 'behind the scenes' through informal communications with standard setters before the outset of stakeholder consultations. Indeed, everything from the text of the draft standard to the questions posed during consultations likely reflects informal forms of input that exist outside of this process. Unfortunately, these modes of influence are less readily observable. Nonetheless, much can be learned from examining the provenance, content, and effects of comments submitted to public comment periods.

3. Existing explanations of stakeholder influence on VSS

Empirical examination of stakeholder influence on VSS is still a nascent field of research (Ponte, 2014; Schleifer et al., 2019). There is a dearth of cross-sectoral comparative research in this field and most studies remain a step removed from examining the actual outputs of stakeholder participation. Nonetheless, the existing literature on VSS and global governance more broadly provides the basis for a few hypotheses on which types of stakeholders or comments are most likely to lead to changes to the content of VSS.

To start, there is a significant literature that predicts a disproportionate influence for industry stakeholders within multistakeholder governance organizations (Beyers and Arras, 2020; Boström, 2006; Hanegraaff, 2015; Yackee and Yackee, 2006). Marxian scholars have previously critiqued certain types of VSS as examples of regulatory capture wherein industries with a vested interest in governance outcomes influence decision-making and standard setters become 'captured' by the very businesses they purport to govern (Jaffee and Howard, 2016). In the context of VSS, regulatory capture can take two forms. Industry stakeholders can lower the bar for achieving sustainability certification thereby reducing costs of compliance or legitimizing their own business as usual practices (Fridell et al., 2008). Alternately, industry can raise the bar to create financial barriers for smaller



Fig. 1. Receiving Stakeholder Input in Voluntary Sustainability Standards.

competing operations or competitors from less-regulated areas (Cashore et al., 2007; Cashore and Stone, 2014; Raynolds et al., 2007).

There are several reasons to believe that industry stakeholders have the structural power to do so. As others have pointed out, many VSS depend on logo licensing fees from the same corporations and producers they hope to regulate (Bacon, 2010). Thus, there are financial imperatives that afford large industry players disproportionate influence in setting the criteria for VSS since their support is essential to the survival of standard setters and their employees. Large downstream businesses also control access to their networks of suppliers since they hold the power to unilaterally impose new supplier codes of conduct on the companies that supply them. There is a growing trend across several key commodity sectors towards exclusive procurement agreements whereby big retailers set a target of sourcing 100% VSS certified products by a target date thereby compelling their suppliers to seek VSS certification (Bullock and van der Ven, 2018). In this way, large industry players act as 'gatekeepers' to their networks of suppliers and control the ability of VSS to gain market penetration (van der Ven, 2018). Here too, one can expect VSS to be particularly attuned to the needs of large industry stakeholders since they hold the key to gaining scale. The following hypothesis follows these observations:

H1: Comments from industry stakeholders will be more likely to result in a change to the content of a voluntary sustainability standard than comments from other stakeholder groups.

If industry stakeholders hold proportionately more power over the content of VSS, then it follows that other stakeholders might have proportionately less power. Two categories of stakeholders in particular have been examined in previous research: regional NGOs and small and medium-sized enterprises (SMEs) (Bennett, 2017; Cheyns, 2014; Lee et al., 2012). Both categories are vital to efforts to legitimize VSS within particular communities, however both also face constraints on their ability to participate meaningfully in VSS development. Beginning with NGOs, a central constraint to their ability to engage is a lack of resources (Burchell and Cook, 2008). Quite simply, many regional environmental NGOs lack the time and human resources required to systematically review draft versions of sustainability standards, offer in-depth comments, and ensure that their views are reflected in the final standard. For many NGO employees, engaging with VSS may be something they do off the side of their desk while managing other campaigns. Accordingly, their comments may reflect broad, high-level priorities based on a quick reading that are less easily actionable than specific, more technical comments.

This observation applies equally to SMEs. Smaller businesses are frequently the target of VSS, yet they often lack the resources required for meaningful participation in the development or revision of sustainability standards. Past research has found cross-sectoral evidence of SMEs being systematically excluded from VSS governance and having their comments/concerns marginalized (Bennett, 2017; Ponte, 2014). While there is a growing effort amongst VSS schemes to bring SMEs to the table, there are still significant barriers to their effective representation within VSS governance bodies. There are very few SMEs that have the human resources available to dedicate an employee to carefully reading and commenting on VSS. This condition is particularly acute in small agricultural collectives where: "the lack of professional staff within the producer networks threatens to undermine producers' ability to sustain effective participation in critical governance debates" (Bacon, 2010). Furthermore, the value accorded to global "experts" in these stakeholder engagement exercises often overshadows the input of small producers whose knowledge is rooted in their lived experiences (Cheyns, 2014). The following two hypotheses follow from these observations:

H2: Comments from NGO stakeholders will be less likely to result in a change to the content of a voluntary sustainability standard than comments from other stakeholder groups.

H3: Comments from SME stakeholders will be less likely to result in a change to the content of a voluntary sustainability standard than comments from other stakeholder groups.

Finally, there are several hypotheses that relate to the nature of the input provided by a given stakeholder. Whereas some comments may seek to make VSS more stringent or procedurally rigorous, others may seek to lower the bar. Still others may appear relatively benign and seek modest clarifications. The nature of the comment imposes different demands on the standard setter. Comments that seek to make standards stronger or impose stronger procedural requirements may face opposition because they could impede the ability of a standard to scale and gain new clients, especially when comments raise costs of compliance by changing behaviours on-the ground (Auld et al., 2015; Grabs, 2020; Judge-Lord et al., 2020). A comment that seeks to clarify existing language may be more easily accepted than one that seeks to raise the bar for compliance significantly. Similarly, it may be easier to weaken a standard than strengthen it because lower standards make it easier for standard setters to garner industry support, particularly for newly launched standards (Auld and Cashore, 2013). The following hypotheses follow:

H4: Comments intended to strengthen a standard will be less likely to result in a change to the content of a voluntary sustainability standard than other types of comments.

H5: Comments intended to weaken a standard will be more likely to result in a change to the content of a voluntary sustainability standard than other types of comments.

H6: Comments intended to clarify a standard will be more likely to result in a change to the content of a voluntary sustainability standard than other types of comments.

4. Data and methods

I test these hypotheses using an original dataset comprising 7945 stakeholder comments submitted across eight VSS public comment periods amongst six standard setters covering products from farmed trout to jewellery. I selected these six standard setters because they transcend economic sectors, vary in their prioritization of social or environmental issues, and possess different origins and governance structures (i.e., some were launched by industry associations whereas others have multistakeholder roots). This diversity is representative of the broader population of VSS and therefore provides some basis for drawing inferences about stakeholder influence on VSS as a whole. The VSS included in this study are described in Table 1:

The dataset brings together for the first time information on which stakeholder groups participated, what they said, and whether their comments resulted in an observable change to the subsequent sustainability standard. Public comment periods are open to anyone and generally last about 60 days with subsequent rounds of comments as needed. Most of the raw data of stakeholder comments is publicly available on the internet, however I also procured some through private correspondence with standard setters. I use a preference attainment model to understand stakeholder influence (Dür, 2008). By matching stakeholder comments with the language used in VSS, I compare actor positions ex ante with outputs ex post. The dataset was assembled between January and December 2019. A codebook was assembled by the author and all coding was performed manually by two graduate research assistants. The intercoder reliability coefficient was calculated using Cohen's Kappa at 0.81, based on a sample of 794 dual-coded observations (Allen, 2017). The dataset, raw data (comments and subsequent standards), replication materials, and codebook are available in the supplementary materials.

The first two research questions – who comments on sustainability standards and what types of input do stakeholders provide – are addressed through descriptive statistics. Most stakeholders are identified by name and organizational affiliation in the data. They are grouped into one of nine stakeholder categories (see Table 2) to determine the balance of stakeholders involved in each consultation. A similar system is used for the second research question. Each comment is coded according to one of seven categories depending on its primary objective (see Table 3).

The third research question - which stakeholder comments result in observable changes to the content of sustainability standards - is addressed through multi-level mixed effect logistic regression analysis using the Stata command: xtmelogit. This approach is more suitable than conventional logistic regression because the data are clustered into distinct public comment periods for different sustainability standards, hence the likelihood that a comment will be influential varies according to the consultation. The dependent variable (DV) for this question is whether an observable change resulted to the subsequent version of a sustainability standard following a stakeholder's comment (var: change). The DV is categorical and binary and is therefore coded as a dummy variable with an observed change coded as '1' and no change coded as '0'. A change is said to have taken place when there is mark-up on a subsequent version of a standard in track changes mode AND/OR the usage of similar language to the stakeholder comment AND correspondence between the section of the standard identified by the stakeholder comment and the subsequent change. Similar language means that the language in the subsequent standard is either identical or preserves the

Table 1

VSS Consultations Included in this Study.

Table 2

Stakeholder	Coding	Categories.
-------------	--------	-------------

Stakeholder Category	Description
Industry	A representative of a profit-seeking organization involved in the process of producing goods for sale
Industry	A representative of an organization that supports companies
Association	and employers of a particular type of industry and advocates for their rights
NGO	A representative of a non-governmental organization whose
	primary function is to address an environmental, social or political issue
Government	A representative of an organization that has formal ties,
	legally or financially, to the state
Auditor	A representative of a legally independent organization that
	assesses conformance against a voluntary sustainability standard
Public	An independent member of the public who does not represent
	any of the other stakeholder categories
Media	A representative of an organization involved in a journalistic enterprise
Standard-setter	A representative of an organization responsible for managing
	the development or revision of a standard
Unclassified	A residual category for any instances when the categorization
	of the stakeholder is unclear or identifying data is missing

entire meaning or intention of the original stakeholder comment. While this coding does not offer irrefutable evidence that a stakeholder comment *caused* a specific change, it does offer strong evidence of correlation between particular stakeholder comments and specific changes that result.

The independent variables for this study fall into two categories: stakeholder specific variables and comment-specific variables. H1-H3 are operationalized as dummy variables where a stakeholder is coded '1' if they belong to a specific stakeholder category and '0' if otherwise (see Table 2). For theoretical reasons outlined in the preceding section, my analysis focuses on the influence of three stakeholder categories in particular: industry, NGO, and SMEs. I include auditors and standard setters in my regression analyses as control variables to mitigate against bias in interpreting coefficients for comment-specific variables.

H4-6 reflect comment-specific variables. Each comment in the dataset is manually coded as a dummy variable according to its primary intention (see the coding definitions outlined in Table 3). Per my hypotheses, I include comments categorized as 'strengthening,' weakening,' and 'clarification' in my regression models. Readers should note that my coding for weakening and strengthening does not distinguish between procedural and substantive suggestions. Thus, a comment calling for better documentation of afforestation practices and one that requests a higher threshold for afforestation efforts would both be coded

	Standard Setter	Consultation focus	Consultation Year	Resultant Standards	No. of Comments
1	Aquaculture Stewardship Council (ASC)	ASC Pangasius Standard v1.0	2017	ASC Pangasius Standard v1.2	24
2	Aquaculture Stewardship Council (ASC)	ASC Salmon Standard v1.1	2017	ASC Salmon Standard v1.2	74
3	Aquaculture Stewardship Council (ASC)	ASC Freshwater Trout Standard v.1.1	2017	ASC Freshwater Trout Standard v.1.2	89
4	Aluminum Stewardship Initiative (ASI)	ASI Chain of Custody Standard	2016	ASI Chain of Custody v.1 – Draft 4	227
5	Alliance for Water Stewardship (AWS)	AWS International Water Stewardship Standard v.1.0	2019	AWS International Water Stewardship Standard v.2.0	211
6	Better Cotton Initiative (BCI)	BCI Principles and Criteria Review v.1.0	2016	BCI Principles and Criteria Review v.2.1	352
7	Responsible Jewellery Council (RJC)	RJC Code of Practices v.1.0 (2013)	2017	RJC Code of Practices v.2.0	124
8	Sustainable Agriculture Network (SAN)	SAN Standards for Agriculture and Cattle Producer Groups and Farms - Draft	2013	SAN Standards for Agriculture and Cattle Producer Groups and Farms v.5.1	6844

Table 3

Comment Coding Categories.

Comment Category	Description	Example
Question	Stakeholder inquires about an element of the standard system	"What sort of best practice? Regional best practice? International?"
Clarification	Stakeholder requests clarification, guidance, specificity, definitions, neutral rephrasing, or further information about an element of a standard system or suggests a means to clarify interpretation of a standard	"Please clarify the difference between wetlands and water bodies. These two terms have been used interchangeably"
Strengthening	Stakeholder requests increased stringency in standard provisions or an element of the standard system	"Would recommend strengthening the requirement for undertaking due diligence in this regard"
Neutral assent	Stakeholder expresses satisfaction with an existing element of a standard system	"We support the criteria as written"
Weakening	Stakeholder requests the removal or weakening of standard provisions or an element of the standard system in a manner that would make compliance easier to achieve. Or stakeholder voices dissatisfaction about the level of achievement required in a given standard	"This criteria should not be critical for compliance"
Contextualize	Stakeholder requests a change to standard provisions or an element of the standard system in support of making a standard more regionally culturally appropriate OR stakeholder voices dissatisfaction about the appropriateness of a standard for a given region	"Revisit this criteria because local government prohibits the gathering and meeting of more than 50 people"
Unclassified	A residual category for comments that fit none of the other categories	"We could provide some examples for this criteria"

as 'strengthening.' I return to the importance of this distinction below and in the discussion section.

Before delving into the results, I must first acknowledge several significant limitations of this data. First, the data captured in this dataset only examines the influence of those stakeholders who voluntarily chose to participate in public comment periods. Hence, the results may overestimate the influence of stakeholders on VSS since they exclude those stakeholders who are so disengaged that they did not even attempt to participate. Second, as noted earlier, the data captured here does not account for stakeholder input that happens informally, through inperson consultations, or preceding the launch of VSS. Thus, the results may under-estimate the influence of stakeholders who engage through offline channels. Similarly, it is difficult to correlate the influence of broad sweeping comments with changes to standards, thus the results may under-estimate the effect of non-specific feedback. Third, my coding of comment intention does not disaggregate those comments that strengthen processes in VSS from those that raise performance requirements. Thus, the results may over-estimate industry-support for strengthening stringency in some cases (Judge-Lord et al., 2020). Fourth, forty percent of the comments in this dataset were made anonymously. The vast majority of unclassified comments come from the SAN data. Hence a limitation is that the volume of unclassified comments may lead to some bias in estimates of which stakeholder categories are most influential in shaping VSS. Fifth, there is significantly more data for some consultation exercises than others. The SAN data

constitutes the majority of the dataset at 6844 comments, whereas only 124 comments exist for the RJC. The regression analyses take into account the significant skew in the data, however caution must be exercised in drawing broader inferences from the descriptive statistics. I have made notes in the following section where the SAN data skews the overall findings or where a different pattern exists within a specific cluster of observations.

5. Results

Beginning with the first research question – who comments on VSS – the data yields some surprising insights on which types of stakeholders comment on sustainability standards. Fig. 2 details the frequency of stakeholder comments in the dataset as a whole (N = 7945). As noted earlier, 40% (3160) of all stakeholder comments are coded as 'unclassified' due to stakeholder wishes to remain anonymous. Of the identifiable stakeholder comments, the single largest category of participants is industry. Taken together, industry and industry association comments represent 39% of all comments (or 66% of non-anonymous comments) submitted to VSS - more than the remaining identifiable stakeholder comments combined. NGO comments make up 11% (847), auditors 7% (565), standard setters 3%, and comments from government officials, members of the media, and the public comprise<1% (55) of all comments. The data is skewed by the over-representation of SAN data here and there is significant variation in the representation of stakeholder groups across different sustainability standards. This variation warrants a full paper unto itself, however a few numbers are worth noting here. On average industry represents 48% of comments within each VSS and industry comments outnumber those of all other stakeholder groups in 3 of 6 standard setters.

With regards to the second research question - what type of input stakeholders provide - Fig. 3 illustrates the content of each comment according to the seven-part classification system described in Table 3. As the pie chart demonstrates, most comments (40%) simply affirm consent with the existing wording of a sustainability standard. Just under a quarter (23%) request further clarification about the meaning of a standard. In total, 11% of comments seek to weaken a standard while only 6% seek to strengthen it. The remaining 20% of comments either pose a question to the standard setter about some aspect of the standard system, request a change to make a standard more relevant to regional context, or do not fit into one of the other six categories. Here again, there is variation within standard setters, but the overarching pattern holds across public comment exercises. In five out of six standard setters, the majority of comments are intended to clarify or express neutral consent with existing wording. Only in the RJC did clarification rank second to comments seeking to strengthen the standard.

There is also significant variation in the intent of comments across categories of stakeholders. Table 4 provides a crosstab of each type of comment with the category of stakeholder submitting the comment. The



Fig. 2. Total Comments by Stakeholder Category.



Fig. 3. Intent of Stakeholder Comments.

Table 4	
Intention of Comment by Stakeholder Category.	

	Strengthen	Weaken	Clarify	Contextualize	Neutral consent	Question	Unclassified
Industry	5.1%	9.0%	12.9%	3.9%	55.3%	4.0%	9.9%
	(147)	(262)	(373)	(112)	(1605)	(116)	(287)
Industry Ass.	7.4%	6.3%	46.9%	5.7%	3.4%	8.0%	22.3%
	(13)	(11)	(82)	(10)	(6)	(14)	(39)
NGO	14.4%	9.4%	38.0%	3.8%	6.6%	12.6%	15.1%
	(122)	(80)	(322)	(32)	(56)	(107)	(128)
Government	2.9%	14.3%	34.3%	0%	8.6%	11.4%	28.6%
	(1)	(5)	(12)	(0)	(3)	(4)	(1)
Public	42.1%	10.5%	21.1%	10.5%	0%	0%	15.8%
	(8)	(2)	(4)	(2)	(0)	(0)	(3)
Standard Setter	6.7%	5.8%	41.7%	7.9%	1.7%	11.7%	24.6%
	(16)	(14)	(100)	(19)	(4)	(28)	(29)
Auditor	8.7%	6.5%	12.2%	2.7%	60.7%	5.0%	4.2%
	(49)	(37)	(69)	(15)	(343)	(28)	(24)
Media	0%	0%	100%	0%	0%	0%	0%
	(0)	(0)	(1)	(0)	(0)	(0)	(0)
Unclassified	5.2%	13.7%	26.4%	4.4%	37.5%	5.0%	7.8%
	(163)	(434)	(836)	(138)	(1184)	(159)	(247)

largest proportion of comments for each stakeholder group is bolded. Several interesting patterns emerge when examining these patterns by column. Amongst stakeholder categories, NGOs had the highest proportion of comments intended to strengthen a standard (14.4%). This aligns with the hypothesized expectations that NGOs will be the stakeholders most inclined to raise the bar on sustainability requirements in VSS. Consistent with the broader proportion of comments captured in Fig. 3, comments intended to clarify standards represent the highest proportion of comments across nearly all stakeholder categories (auditors and industry stakeholders tend to voice neutral consent more often). The pattern also holds within each public comment period. Comments requesting a clarification are more frequent than other types of comments amongst every standard setter, except the SAN where they come second to neutral consent.

The third research question asks which stakeholder comments result in observable changes to the content of sustainability standards? Within the entire dataset, 7.8% (619) of all comments resulted in an observable change to a sustainability standard. If one examines the range of responsiveness across the different public comment exercises, the proportion leading to change varied between 3 and 13% of all comments depending on the standard. Table 5 shows the intent of a comment in the leftmost column and the percentage of those types of comments that

Table 5

Changes to Standard by Comment Category.

-	-		
Intent of Comment	Total Comments	Frequency of changes to standard within category	% of comments resulting in change to a standard
Strengthen	477	42	8.1%
Weaken	605	240	28.4%
Clarify	1543	256	14.2%
Contextualize	313	15	4.6%
Question	443	13	2.9%
Unclassified	748	49	6.1%

resulted in a change to a standard in the rightmost column. Here, comments intended to weaken a standard are correlated with a change to a standard in 28.4% of observations. By contrast, while 477 comments aimed to strengthen a standard, only 8.1% of them are associated with an observed change to the standard. This broader pattern is largely consistent with the data within each individual public comment period. Weakening comments were the category that was most highly correlated with a change to a standard amongst five of six standard setters (the ASC is the exception).

Table 6 also answers the third research question, but holds other

Table 6

	Mixed	Effects	Logistic	Regression	(DV =	Change to	Standard).
--	-------	---------	----------	------------	-------	-----------	------------

Variables	1	2	3	4	5		
	Coef. (SE)	Coef. (SE)	Coef. (SE)	Coef. (SE)	Coef. (SE)		
Industry	-0.92	-0.76	-0.92	-0.78	-0.87		
-	(0.14)***	(0.14)***	(0.14)***	(0.14)***	(0.16)***		
Industry	0.21	0.38	0.21	0.15	0.35		
Assoc	(0.25)	(0.26)	(0.25)	(0.25)	(0.26)		
NGO	0.13	0.27	0.14	0.06	0.26		
	(0.14)	(0.15)	(0.14)	(0.14)	(0.15)		
Std Setter	-0.18	0.04	-0.18	-0.24	0.01		
	(0.22)	(0.24)	(0.22)	(0.22)	(0.23)		
Auditor	-0.44	-0.18	-0.43	-0.31	-0.19		
	(0.20)**	(0.20)	(0.20)**	(0.20)	(0.20)		
SME	0.82	0.64	0.82	0.80	0.61		
	(0.18)***	(0.19)***	(0.18)***	(0.18)***	(0.19)***		
Weakening	_	2.12	-	-	2.04		
		(0.10)***			(0.12)***		
Strengthening	-	-	-0.12	-	-		
			(0.18)				
Clarification	-	-	-	0.81	-		
				(0.09)***			
Weak*Indust.	-	-	-		1.49		
					(0.19)***		
constant	-2.1	-2.47	-2.06	-2.40	-2.43		
	(0.37)	(0.39)	(0.37)	(0.37)	(0.19)		
Log like.	-2040	-1838	-2040	-2003	-1837		
AIC	4097	3695	4098	4024	3695		
BIC	4152	3758	4161	4087	3765		
N	7945	7945	7945	7945	7945		

variables constant. I use five models in sequence, each adding a control for a particular type of comment. The fifth model adds an interaction term for the effect of a comment coming from an industry stakeholder and seeking to weaken VSS. The regression models cast significant doubt on H1, the idea that industry stakeholders are more likely to have their comments result in observable changes to a sustainability standard. In fact, when controlling for other variables, industry stakeholders are significantly less likely to have their comments result in an observable change to a sustainability standard. The only condition under which industry is more likely to have its comments accepted is when those comments call for a weakening of the standard, as evinced by the significance of the interaction term and the positive coefficient (Weak*-Industry) included in model 5. There is no significant relationship between changes to a standard and comments from NGOs (H2). Interestingly enough, the models suggest the inverse of H3, namely, that SMEs are actually somewhat more likely to have their comments implemented than other stakeholders all other things being equal.

H5 predicted that comments intended to weaken a standard would be more likely to lead to a change in a sustainability standard. Models 2 and 5 in Table 6 provide robust support for this hypothesis. Even when controlling for who is making the comment, comments intended to weaken a standard are significantly more likely to lead to an observed change in a sustainability standard. Model 4 also provides support for H6, comments intended to clarify a standard are more likely to be accepted than other types of comments. Model 3 offers no evidence in support of H4, the hypothesis that comments intended to strengthen a standard are less likely to result in a change to the standard.

6. Discussion

6.1. Stakeholder input does not necessarily lead to more stringent sustainability standards

Four conclusions can be drawn from the preceding results. First, and most importantly, these results imply that the capacity of stakeholder input to generate more stringent VSS should be treated cautiously. At the very least, the way that stakeholders are presently engaged in VSS may

lead to over-representation of industry interests, a paucity of comments that aim to increase stringency, and potentially, weaker standards. According to its proponents, the instrumental value of stakeholder engagement lies in bringing diverse voices and expertise to bear on solving sustainability challenges (Balzarova and Castka, 2012; Stevenson, 2016). It is for this reason that the most widely-used guidelines for developing VSS - notably the ISEAL codes and ISO 14024 - place a heavy emphasis on seeking the input of diverse stakeholders through public comment periods. However, my findings suggest that public comment periods are largely dominated by industry groups and that most stakeholders are primarily concerned with clarifying expectations or maintaining the status quo. Moreover, comments intended to weaken or lower a standard's substantive or procedural criteria are significantly more likely to be accepted and lead to a change in the content of the standard, all else being equal. Thus, the ability of public comment periods to raise the bar for certification appears highly circumscribed. In plain terms, the most common medium for bringing more voices to the table does not necessarily lead to more stringent VSS.

6.2. Industry is over-represented, but not necessarily watering-down VSS

Second, the data confirms the findings of previous research that stakeholder representation in VSS governance is imbalanced (Bennett, 2017; Cheyns, 2014). Based on the comparatively heavy share of comments from industry and industry association stakeholders, it would seem that industry does indeed have more resources to participate in sustainability standard development than NGOs or SMEs. On average, industry comments represent just under half of all comments for each standard setter. When viewed in tandem with the structural power of industry stakeholders over third-party sustainability standard setters through financial dependence and gatekeeping access to their suppliers, this might suggest a worrisome trend towards industry capture of VSS (Bacon, 2010; Jaffee and Howard, 2016; van der Ven, 2018). After all, it is in industry's economic self-interest to shape the content of VSS in line with existing business practices to avoid costs associated with behavioural change while still accruing the reputational benefits of certification (Bernstein and Cashore, 2007; Potoski and Prakash, 2010).

However, it is difficult to determine whether industry overrepresentation leads to weaker standards. There are a number of reasons why this may be. First, industry interests are not homogenous. As others have noted, businesses that exceed existing VSS criteria may seek to strengthen standards as a means of raising the bar on competitors (Cashore et al., 2004; Raynolds et al., 2007). In particular, businesses that are located in highly-regulated jurisdictions may try to level the playing field by forcing their competitors to undertake costly behavioural changes in order to achieve certification (Cashore et al., 2007). In doing so, they may forge 'Baptist-bootlegger' coalitions wherein industry and NGOs collaborate to crowd out mutual adversaries (Overdevest and Zeitlin, 2014). When such approaches are successful, the result can be a 'California effect' or racing-to-the-top dynamic wherein businesses gain a competitive advantage by increasing their sustainability performance (Cashore and Stone, 2014; Vogel, 1995).

Alternately, large businesses may seek to strengthen procedural requirements for certification in order to eliminate competition from smaller operators. For example, in the RJC comments, one industry stakeholder requests a strengthening of new criteria that would prohibit sourcing from unregistered artisanal miners. Presumably, this is a means of raising the costs of certification for smaller competitors. On the other hand, there are numerous contexts in which industry may actively seek to weaken VSS criteria. Amongst others, businesses who are lagging on sustainability, situated in weakly regulated jurisdictions, or cannot afford costly behavioural changes may seek to weaken VSS criteria. This divergence of interests explains why we should not infer a linear relationship between industry over-representation and weaker standards.

Second, the way in which 'weakening' and 'strengthening' are coded in this study may affect the relationship between industry representation and impacts on standards. The coding does not distinguish between comments intended to strengthen substantive criteria (e.g., levels of pesticide use) versus procedural criteria (e.g., documentation of pesticide use) (Judge-Lord et al., 2020). As such, calls for stronger standards from industry stakeholders may be more targeted at raising procedural requirements to crowd out competitors than raising the bar for social or environmental performance. Indeed, some have argued that procedural stringency may actually drive down substantive stringency (Cashore and Bernstein, 2022; Cashore and Nathan, 2020). The need to disaggregate measures of stringency is a theme I return to in the conclusion.

6.3. SMEs have some influence, but primarily seek weaker and clearer standards

Third, the data suggests a counterintuitive relationship between SMEs and VSS. SMEs, particularly those located in the Global South, often have little choice but to conform to VSS or risk losing contracts with large downstream buyers of their goods (Marques and Eberlein, 2021; Starobin, 2021(Sun and van der Ven, 2020)). Compliance with VSS comes with acute costs for SMEs, including costs associated with changing production practices, keeping meticulous records, and paying for conformance assessments from independent third-party auditors (Glasbergen, 2018). For these reasons, having a voice in shaping the content of sustainability standards is vitally important for the economic livelihood of SMEs.

Many standard setters have enacted policies to include SMEs in standard development and the data suggests that at least some of these efforts have worked. SMEs account for 3-5% of total comments received by each standard setter (the AWS and SAN are outliers with 0% and 10% respectively). The regression results tell us that, all things being equal, SMEs are somewhat more likely to have their comments result in an observed change to a standard than other stakeholders. However, when it comes to influence, who is commenting may be less important than the content of what they are saying. If one examines all SME comments associated with accepted changes in VSS content, 51% of those comments aimed to weaken a standard, 29% sought a clarification, and only 2% sought to strengthen a standard. The remainder requested a contextualization or are unclassified. There are many reasons SMEs may seek to weaken criteria, some related to self-interest and others related to practicality (e.g., minimizing paperwork). Whatever their motivation, a key take-away is that while SMEs have some influence over VSS, what they generally seek is a lower bar for standards and greater clarity in prescriptions for sustainability.

7. Conclusion

Voluntary sustainability standards are often used to address the social and environmental impacts of production. However, it can be difficult to know when these standards actually achieve their intended impacts (Grabs, 2020; Roheim et al., 2018; Santika et al., 2021; van der Ven et al., 2018). Sustainability outcomes are affected by a myriad of factors, thereby making it difficult to infer a causal relationship between a given standard and an outcome (van der Ven and Cashore, 2018; Vanderhaegen et al., 2018). As a proxy measure for outcome effectiveness, scholars and practitioners have directed increased attention towards "getting the process right" (Gupta, 2008; van der Ven, 2019; Young, 2003, 1999). Outcome effectiveness is sometimes thought to flow from organizations that are inclusive and representative (Dingwerth et al., 2019; Stevenson, 2016; Tallberg et al., 2014). In theory, adding more voices to the table increases problem-solving capacity and provides a check against powerful interests that would seek to mould VSS to their own self-interest. It is for this reason that the arbiters of best practice in sustainability standard setting - groups like the ISEAL Alliance and ISO - place a heavy emphasis on stakeholder consultation and engagement (ISEAL Alliance, 2014; ISO, 1999). Yet, to date, very little empirical research has systematically probed the relationship between

stakeholder input and governance outputs (Beaulieu-Guay et al., 2021; Betsill and Corell, 2008; Dür et al., 2019). In the absence of clear evidence of impacts, stakeholder engagement becomes something of a 'magic wand' that organizations can wave to prove that they take sustainability seriously.

Long-time observers of VSS are divided on the question of whether stakeholder input leads more or less stringent standards. The main finding of this paper is that stakeholder input is more likely to maintain the status quo or lead to weaker standards than to strengthen them. This does not imply that all mediums for receiving stakeholder input are similarly flawed, but it does imply that the most commonly used tool for stakeholder engagement in VSS – the public comment period – is unlikely to result in stronger standards.

There are a number of reasons for this finding. First, all things being equal, comments intended to weaken VSS are significantly more likely to be heard and accepted. This trend is consistent across all public comment periods in this study. Second, the majority of comments across all standards skew heavily towards maintaining or clarifying existing content. Amongst all comments, only 6% are intended to 'ratchet-up' the procedural or substantive stringency of VSS. Comments intended to strengthen a sustainability standard formed the majority of input in only one public comment period (the RJC). Third, industry is overrepresented in public comment periods. While the effects of industry over-representation are contentious and may alternately drive standards up or down, certainly some industry comments seek to minimize the costs of compliance with VSS by lowering the bar for achievement (Cashore et al., 2007; Darnall et al., 2017). Fourth, inasmuch as SMEs are involved in providing input, they largely seek to weaken or clarify standards. For these reasons, it appears that public comment periods in VSS may actually lead to less-demanding sustainability standards.

These findings offer a counterpoint to those who see stakeholder input in VSS - and global or corporate governance more broadly - as a proxy for rigorous and effective outputs (Asif et al., 2013; Stevenson and Dryzek, 2014). They also offer a number of practical and theoretical implications. For VSS practitioners, the results suggest that further emphasis on balancing stakeholder influence is required in extant guidelines for developing or revising VSS. Standard setters should strive for full transparency in disclosing who participates in public comment periods and whose comments are reflected in the final outputs. The findings also imply that the way stakeholder input is received in VSS should be re-evaluated. If standard setters took steps to engage stakeholders more meaningfully earlier in the process or met in-person instead of through highly-technocratic, online, document reviews, it might affect who is able to participate and the nature of their input. Above all, current systems of stakeholder engagement should use positive sustainability outcomes as the common thread that guides and inform comments. For example, stakeholders might be asked to consider how their comments might improve a sustainability outcome or deliver a specific benefit as part of the consultation process.

For scholars of VSS and global sustainability governance more broadly, this paper suggests that attention to stakeholder input and inclusiveness cannot be treated as a proxy for good governance outputs (Cashore and Bernstein, 2022; Cashore and Nathan, 2020). It may be possible to "get the process right" but still end up with governance outputs that are equally or less stringent. A key implication is that scholars of VSS impacts need to move beyond examining formal systems and procedures for stakeholder engagement and focus instead on the outputs of this engagement and their observed linkages to sustainability outcomes.

A number of avenues for future research follow. First, this paper does not address the variation that exists between VSS systems with respect to stakeholder participation, types of comments, or responsiveness to input. The data shows significant variation between sustainability standard setters both in terms of composition of stakeholders, the nature of comments they receive, and their responsiveness to those comments. Industry stakeholders are far more involved in some VSS than others and comments asking for a stronger standard are more frequent in some consultations. Thus, a logical next step in this research agenda is to examine why some organizations attract a more diverse group of stakeholders, different types of input, and are more responsive to stakeholder feedback.

Second, future research might add nuance to this topic by looking more closely at the documented changes to standards and understanding how stakeholder input affects procedures, substantive behaviours, or issues relevant to broader standard systems (e.g., auditing). One avenue of research would be to separate industry comments into those that come from sustainability leaders or sustainability laggards. Doing so would afford better insight into when and how industry input either lowers or raises the bar in a way that might affect impacts 'on the ground'.

Third, more research is needed into how changes to the operationalization of stakeholder democracy in VSS affects outputs and outcomes. If public comment periods are biased towards the status quo, then it is worth exploring whether requiring balanced input from different stakeholder groups or weighting certain types of comments leads to more stringent standards and better outcomes. Better understanding the conditions under which stakeholder input leads to more stringent VSS is vital to driving sustainability impacts.

CRediT authorship contribution statement

Hamish van der Ven: Data curation, Funding acquisition.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Acknowledgments

I am grateful to Victoria Coates, Alice Dechamps, Marion Dessalles, Colleen Flanagan, Suraiya Foss-Phillips, and Nicolas Cote for research assistance. Thanks to Jaye Ellis for collaborating on the development of the dataset upon which this paper is based and to Krzysztof Pelc, Aaron Erlich and two anonymous reviewers for helpful comments. This work was financially supported by the Fonds de Recherche du Québec Société et Culture (2019-NP-253410) and the McGill Sustainable Systems Initiative (MSSI).

Appendix A. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.gloenvcha.2022.102554.

References

- Allen, M., 2017. The SAGE Encyclopedia of Communication Research Methods. SAGE Publications, Thousand Oaks.
- Asif, M., Searcy, C., Zutshi, A., Fisscher, O.A.M., 2013. An integrated management systems approach to corporate social responsibility. J. Clean. Prod. Sustainability management beyond corporate boundaries 56, 7–17. https://doi.org/10.1016/j. jclepro.2011.10.034.
- Auld, G., 2014. Constructing Private Governance: The Rise and Evolution of Forest, Coffee, and Fisheries Certification. Yale University Press, New Haven, CT.
- Auld, G., Cashore, B., 2013. Mixed Signals: NGO Campaigns and Non-state Market Driven (NSMD) Governance in an Export-Oriented Country. Can. Public Policy Anal. Polit. 39, S143–S156.
- Auld, G., Renckens, S., Cashore, B., 2015. Transnational private governance between the logics of empowerment and control. Regul. Gov. 9, 108–124.
- Bacon, C.M., 2010. Who decides what is fair in fair trade? The agri-environmental governance of standards, access, and price. J. Peasant Stud. 37, 111–147.
- Balzarova, M.A., Castka, P., 2012. Stakeholders' Influence and Contribution to Social Standards Development: The Case of Multiple Stakeholder Approach to ISO 26000 Development. J. Bus. Ethics 111, 265–279. https://doi.org/10.1007/s10551-012-1206-9.

- Beaulieu-Guay, L.-R., Tremblay-Faulkner, M., Montpetit, É., 2021. Does business influence government regulations? New evidence from Canadian impact assessments. Regul. Gov. 15, 1419–1435. https://doi.org/10.1111/rego.12313.
- Bennett, E.A., 2017. Who Governs Socially-Oriented Voluntary Sustainability Standards? Not the Producers of Certified Products. World Dev. 91, 53–69.
- Bernstein, S., Cashore, B., 2007. Can Non-State global governance be legitimate? An analytical framework. Regul. Gov. 1, 347–371.
- Betsill, M., Corell, E., 2008. NGO Diplomacy: The Influence of Nongovernmental Organizations in International Environmental Negotiations. MIT Press, Cambridge, MA.
- Beyers, J., Arras, S., 2020. Who feeds information to regulators? Stakeholder diversity in European Union regulatory agency consultations. J. Public Policy 40, 573–598. https://doi.org/10.1017/S0143814X19000126.
- Boström, M., 2006. Regulatory Credibility and Authority through Inclusiveness: Standardization Organizations in Cases of Eco-Labelling. Organization 13, 345–367. https://doi.org/10.1177/1350508406063483.
- Bullock, G., van der Ven, H., 2018. The Shadow of the Consumer: Analyzing the Importance of Consumers to the Uptake and Sophistication of Ratings, Certifications, and Eco-Labels. Organ. Environ. https://doi.org/10.1177/1086026618803748.
- Burchell, J., Cook, J., 2008. Stakeholder dialogue and organisational learning: changing relationships between companies and NGOs. Bus. Ethics Eur. Rev. 17, 35–46. https://doi.org/10.1111/j.1467-8608.2008.00518.x.
- Cashore, B., 2002. Legitimacy and the Privatization of Environmental Governance: How Non-State Market-Driven (NSMD) Governance Systems Gain Rule Making Authority. Governance 15, 503–529.
- Cashore, B., Auld, G., Bernstein, S., McDermott, C., 2007. Can Non-State Governance 'Ratchet Up' Global Environmental Standards? Lessons from the Forest Sector. Rev. Eur. Community Int. Environ. Law 16, 158–172.
- Cashore, B., Bernstein, S., 2022. Bringing the Environment Back In: Overcoming the Tragedy of the Diffusion of the Commons Metaphor. Perspect. Polit. 1–24. https:// doi.org/10.1017/S1537592721002553.
- Cashore, B., Nathan, I., 2020. Can finance and market driven (FMD) interventions make "weak states" stronger? Lessons from the good governance norm complex in Cambodia. Ecol. Econ. 177, 106689 https://doi.org/10.1016/j. ecolecon.2020.106689.
- Cashore, B., Newsom, D., Auld, G., 2004. Governing Through Markets: Forest Certification and the Emergence of Non-State Authority. Yale University Press, New Haven, CT.
- Cashore, B., Stone, M.W., 2014. Does California need Delaware? Explaining Indonesian, Chinese, and United States support for legality compliance of internationally traded products. Regul. Gov. 8, 49–73.
- Cheyns, E., 2014. Making "minority voices" heard in transnational roundtables: the role of local NGOs in reintroducing justice and attachments. Agric. Hum. Values 31, 439–453. https://doi.org/10.1007/s10460-014-9505-7.
- Darnall, N., Ji, H., Potoski, M., 2017. Institutional design of ecolabels: Sponsorship signals rule strength. Regul. Gov. 11, 438–450. https://doi.org/10.1111/ rego.12166.
- Derkx, B., Glasbergen, P., 2014. Elaborating global private meta-governance: An inventory in the realm of voluntary sustainability standards. Glob. Environ. Change 27, 41–50.
- Dingwerth, K., Witt, A., Lehmann, I., Reichel, E., Weise, T., 2019. International Organizations under Pressure: Legitimating Global Governance in Challenging Times. Oxford University Press.
- Dür, A., 2008. Measuring Interest Group Influence in the EU: A Note on Methodology. Eur. Union Polit. 9, 559–576. https://doi.org/10.1177/1465116508095151.
- Dür, A., Marshall, D., Bernhagen, P., 2019. The Political Influence of Business in the European Union. University of Michigan Press. Ann Arbor.
- FiBL, I.T.C., Iisd,, 2021. The State of Sustainable Markets 2021 [WWW Document]. accessed 4.8.22. https://www.fibl.org/en/info-centre/news/the-state-of-sustaina ble-markets-2021.
- Fouilleux, E., Loconto, A., 2017. Voluntary standards, certification, and accreditation in the global organic agriculture field: a tripartite model of techno-politics. Agric. Hum. Values 34, 1–14.
- Fridell, M., Hudson, I., Hudson, M., 2008. With Friends Like These: The Corporate Response to Fair Trade Coffee. Rev. Radic. Polit. Econ. 40, 8–34. https://doi.org/ 10.1177/0486613407311082.
- Glasbergen, P., 2018. Smallholders do not Eat Certificates. Ecol. Econ. 147, 243–252. https://doi.org/10.1016/j.ecolecon.2018.01.023.
- Grabs, J., 2020. Selling Sustainability Short?: The Private Governance of Labor and the Environment in the Coffee Sector. Cambridge University Press.
- Gupta, A., 2008. Transparency Under Scrutiny: Information Disclosure in Global Environmental Governance. Glob. Environ. Polit. 8, 1–7. https://doi.org/10.1162/ glep.2008.8.2.1.
- Hanegraaff, M., 2015. Transnational Advocacy over Time: Business and NGO Mobilization at UN Climate Summits. Glob. Environ. Polit. 15, 83–104.
- Hong, L., Page, S.E., 2004. Groups of diverse problem solvers can outperform groups of high-ability problem solvers. Proc. Natl. Acad. Sci. 101, 16385–16389. https://doi. org/10.1073/pnas.0403723101.
- ISEAL Alliance, 2014. ISEAL Code of Good Practice for Setting Social and Environmental Standards - Draft Version 5.3.
- Iso, 1999. ISO 14024 Environmental Labels and Declarations Type 1 Environmental Labels – Principles and Procedures –, First Edition. International Organization for Standardization, Geneva, Switzerland.
- Jaffee, D., Howard, P.H., 2016. Who's the fairest of them all? The fractured landscape of U.S. fair trade certification. Agric. Hum. Values 33, 813–826. https://doi.org/ 10.1007/s10460-015-9663-2.

- Judge-Lord, D., McDermott, C.L., Cashore, B., 2020. Do Private Regulations Ratchet Up? How to Distinguish Types of Regulatory Stringency and Patterns of Change. Organ. Environ. 33, 96–125. https://doi.org/10.1177/1086026619858874.
- Lambin, E.F., Meyfroidt, P., Rueda, X., Blackman, A., Börner, J., Cerutti, P.O., Dietsch, T., Jungmann, L., Lamarque, P., Lister, J., Walker, N.F., Wunder, S., 2014. Effectiveness and synergies of policy instruments for land use governance in tropical regions. Glob. Environ. Change 28, 129–140. https://doi.org/10.1016/j. gloenvcha.2014.06.007.
- Landemore, H., 2012. Why the Many Are Smarter than the Few and Why It Matters. J. Public Deliberation 8, 1–12.
- Lee, J., Gereffi, G., Beauvais, J., 2012. Global value chains and agrifood standards: Challenges and possibilities for smallholders in developing countries. Proc. Natl. Acad. Sci. 109, 12326–12331.
- Locke, R.M., 2013. The Promise and Limits of Private Power: Promoting Labor Standards in a Global Economy. Cambridge University Press, Cambridge, UK.
- Loconto, A., Fouilleux, E., 2014. Politics of Private Regulation: ISEAL and the shaping of transnational sustainability governance. Regul. Gov. 8, 166–185.
- Marques, J.C., Eberlein, B., 2021. Grounding transnational business governance: A political-strategic perspective on government responses in the Global South. Regul. Gov. 15, 1209–1229. https://doi.org/10.1111/rego.12356.
- Overdevest, C., Zeitlin, J., 2014. Assembling an experimentalist regime: Transnational governance interactions in the forest sector. Regul. Gov. 8, 22–48.
- Ponte, S., 2014. 'Roundtabling' sustainability: Lessons from the biofuel industry. Geoforum 54, 261–271. https://doi.org/10.1016/j.geoforum.2013.07.008.
- Potoski, M., Prakash, A. (Eds.), 2010. Voluntary Programs: A Club Theory Perspective. MIT Press, Cambridge, MA.
- Raynolds, L.T., Murray, D., Heller, A., 2007. Regulating sustainability in the coffee sector: A comparative analysis of third-party environmental and social certification initiatives. Agric. Hum. Values 24, 147–163. https://doi.org/10.1007/s10460-006-9047-8.
- Renckens, S., 2020. Private Governance and Public Authority: Regulating Sustainability in a Global Economy. Cambridge University Press, Cambridge.
- Roheim, C.A., Bush, S.R., Asche, F., Sanchirico, J.N., Uchida, H., 2018. Evolution and future of the sustainable seafood market. Nat. Sustain. 1, 392–398. https://doi.org/ 10.1038/s41893-018-0115-z.
- Santika, T., Wilson, K.A., Law, E.A., St John, F.A.V., Carlson, K.M., Gibbs, H., Morgans, C. L., Ancrenaz, M., Meijaard, E., Struebig, M.J., 2021. Impact of palm oil sustainability certification on village well-being and poverty in Indonesia. Nat. Sustain. 4, 109–119. https://doi.org/10.1038/s41893-020-00630-1.
- Schleifer, P., Fiorini, M., Auld, G., 2019. Transparency in transnational governance: The determinants of information disclosure of voluntary sustainability programs. Regul. Gov. 13, 488–506. https://doi.org/10.1111/rego.12241.
- Starobin, S.M., 2021. Credibility beyond compliance: Uncertified smallholders in sustainable food systems. Ecol. Econ. 180 https://doi.org/10.1016/j. ecolecon.2020.106767.

- Stevenson, H., 2016. The Wisdom of the Many in Global Governance: An Epistemic-Democratic Defense of Diversity and Inclusion. Int. Stud. Q. 60, 400–412. https:// doi.org/10.1093/isq/sqw027.
- Stevenson, H., Dryzek, J.S., 2014. Democratizing Global Climate Governance. Cambridge University Press, Cambridge.
- Suchman, M.C., 1995. Managing Legitimacy: Strategic and Institutional Approaches. Acad. Manage. Rev. 20, 571–610.
- Sun, Y., 2022. Certifying China: The Rise and Limits of Transnational Sustainability Governance in Emerging Economies. MIT Press, Cambridge, MA.
- Sun, Yixian, van der Ven, Hamish, 2020. Swimming in their own direction: Explaining domestic variation in homegrown sustainability governance for aquaculture in Asia. Ecological Economics 167. https://doi.org/10.1016/j.ecolecon.2019.106445.
- Tallberg, J., Sommerer, T., Squatrito, T., Jönsson, C., 2014. Explaining the Transnational Design of International Organizations. Int. Organ. 68, 741–774. https://doi.org/ 10.1017/S0020818314000149.
- Tayleur, C., Balmford, A., Buchanan, G.M., Butchart, S.H.M., Ducharme, H., Green, R.E., Milder, J.C., Sanderson, F.J., Thomas, D.H.L., Vickery, J., Phalan, B., 2017. Global Coverage of Agricultural Sustainability Standards, and Their Role in Conserving Biodiversity. Conserv. Lett. 10, 610–618.
- van der Ven, H., 2019. Beyond Greenwash? Explaining Credibility in Transnational Eco-Labeling. Oxford University Press, New York.
- 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.
- van der Ven, H., Cashore, B., 2018. Forest Certification: The Challenge of Measuring Impacts. Curr. Opin. Environ. Sustain. 32, 104–111.
- van der Ven, H., Rothacker, C., Cashore, B., 2018. Do eco-labels prevent deforestation? Lessons from non-state market driven governance in the soy, palm oil, and cocoa sectors. Glob. Environ. Change 52, 141–151. https://doi.org/10.1016/j. gloenvcha.2018.07.002.
- Vanderhaegen, K., Akoyi, K.T., Dekoninck, W., Jocqué, R., Muys, B., Verbist, B., Maertens, M., 2018. Do private coffee standards 'walk the talk' in improving socioeconomic and environmental sustainability? Glob. Environ. Change 51, 1–9. https:// doi.org/10.1016/j.gloenvcha.2018.04.014.
- Vogel, D., 1995. Trading Up: Consumer and Environmental Regulation in a Global Economy. Harvard University Press, Cambridge, MA.
- Wong, W.H., 2012. Internal Affairs: How the Structure of NGOs Transforms Human Rights. Cornell University Press, Ithaca, NY.
- Yackee, J.W., Yackee, S.W., 2006. A Bias Towards Business? Assessing Interest Group Influence on the U.S. Bureaucracy. J. Polit. 68, 128–139. https://doi.org/10.1111/ i.1468-2508.2006.00375.x.
- Young, O., 2003. Determining Regime Effectiveness: A Commentary on the Oslo-Potsdam Solution. Glob. Environ. Polit. 3, 97–104.
- Young, O.R., 1999. The Effectiveness of International Environmental Regimes: Causal Connections and Behavioral Mechanisms. MIT Press, Cambridge.