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Voluntary standards and the SDGs: Mapping public-private complementarities for sustainable development

Philip Schleifer [a,*], Clara Brandi [b], Rupal Verma [c], Katharina Bissinger [d], Matteo Fiorini [e]

[a] Department of Political Science, University of Amsterdam, the Netherlands
[b] German Institute of Development and Sustainability (IDOS) & University of Bonn, Germany
[c] Master Student of the Erasmus Mundus Masters in Environmental Science (MESPOM), Sweden
[d] Institute of Agricultural Policy and Market Research, Justus-Liebig-Universität Gießen, Germany
[e] Robert Schuman Centre for Advanced Studies, European University Institute, Italy

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ABSTRACT

To strengthen global sustainability governance, academics and policymakers have called for a better integration of private governance with public policy instruments. Surprisingly, however, systematic research on the state of such public-private complementarities in the field of sustainable development is lacking. With a focus on voluntary sustainability standards and the United Nations 2030 Agenda for Sustainable Development, this article addresses this research gap. It uses a novel dataset of 232 voluntary standards to examine how their policies and organizational processes interact with the 17 Sustainable Development Goals and their targets. We identify significant public-private complementarities, but also areas of institutional disconnect. We further explore how the creation of institutional linkages in this issue area is driven by instrumental, managerial, and normative concerns and develop an agenda for future research. This includes research on whether and how intensifying public-private interactions at the transnational level translate into tangible impacts for sustainable development on the ground.

1. Introduction

Developed by companies, civil society organizations, and multi-stakeholder initiatives, voluntary sustainability standards (VSS) are widely used to govern environmental and social issues in global supply chains. The United Nations Forum on Sustainability Standards defines them as "requirements that producers, traders, manufacturers, retailers or service providers may be asked to meet, relating to a wide range of sustainability metrics, including respect for basic human rights, worker health and safety, the environmental impacts of production, community relations, land use planning and others" (UNFSS, 2013: 4). Examples of major VSS are the Forest Stewardship Council (FSC), Fairtrade International, and Rainforest Alliance. But these are only the most widely known programs, and the organizational population of VSS has grown strongly in recent years (Schleifer et al., 2019). According to Standards Map of the International Trade Centre, a database of standard-driven sustainability initiatives, there are now over 300 VSS active in 600 product groups, 15 industry sectors, and 180 countries.[1] The global market coverage of these programs has grown considerably over the past decade. For example, in the agriculture sector, commodities with a significant share of global production certified by leading VSS include cocoa (27%), coffee (21%), cotton (18%), tea (16%), and palm oil (15%) (values for 2018).[2] The market uptake of VSS is also widespread in other industries, such as forestry, fisheries, electronics, textiles, mining, and garments. Today, VSS regulate environmental and social condition on millions of farms, plantations, factories, and mines around the world, making them an important mode of private sustainability governance (Auld, 2015).

Given the growing importance of VSS as providers of environmental and social regulation in the world economy, this paper examines the question of how their policies and organizational processes interact with the Sustainable Development Goals (SDGs), the internationally authoritative policy framework in the field of sustainable development. The SDGs were adopted at the United Nations Sustainable Development

* Corresponding author. University of Amsterdam, Department of Political Science, Nieuwe Achtergracht 166, 1018 WV, Amsterdam, the Netherlands.
E-mail address: p.schleifer@uva.nl (P. Schleifer).

[1] https://www.standardsmap.org.
[2] https://www.sustainabilitymap.org/trends.

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Summit in New York in September 2015. To implement their ambitious agenda, the United Nations has also called on the private sector to contribute to the process. According to former UN Secretary-General Ban Ki-moon, "partnerships with the private sector are crucial to achieving sustainable development" (United Nations, 2013).

Against this background, the starting point for this analysis is the observation that the interactions between VSS and the SDGs are little researched. There is an academic literature on public-private partnerships for sustainable development (Beisheim and Liese, 2014; Pattberg et al., 2012). However, VSS, as a mode of private market-driven governance, fall largely outside its conceptual scope. There also are several recent policy publications exploring the linkages between VSS and the SDGs, which signals growing interest from policymakers in the subject (Bissinger et al., 2020; Fernandez de Cordoba et al., 2018; WWF and ISEAL Alliance, 2017). However, systematic empirical research in this area is lacking.

This paper addresses this gap. We do so against the background of widespread arguments in the sustainability governance literature about the need to better integrate private authority with public policy instruments (e.g., Abbott, 2012; Green and Auld, 2017; Lambin et al., 2014; Renckens, 2020b). Our main contribution to this literature is empirical, as we conduct the first systematic analysis of public-private complementarities in the field of sustainable development.

More specifically, the contribution of this paper is threefold. First, at the policy level, we map the policy linkages between the known landscape of VSS and the SDGs and their targets. This makes it possible to identify the areas in which private policy objectives are complementary to the United Nations 2030 Agenda. Similarly, it allows for the identification of policy disconnects. Second, at the level of organizational processes, we explore how the SDGs are reflected in the rhetoric, activities, and structures of VSS. This adds another layer to the analysis and allows for the attribution of intentionality. Third, we probe into the underlying motivations by illustrating how instrumental, managerial, and normative concerns drive VSS to link their policies and organizational processes to the SDGs.

The article is structured as follows. Section 2 provides a review of the state of the research. Section 3 discusses questions of methods and data. Section 4 presents the results of the empirical analysis. A final section summarizes the main empirical findings and provides an outlook for future research.

2. State of research

The analysis of this paper is situated in the research literature on transnational business governance interactions (see Cashore et al., 2021; Eberlein et al., 2014). We also address the literature on "governance through goals" (Biermann et al., 2017; Kanie and Biermann et al., 2017; Vijge et al., 2020).

The literature on transnational business governance interactions examines the patterning and consequences of regulatory interactions to govern cross-border business conduct. In a world characterized by an increasing multiplicity of regulatory standards (Fransen et al., 2019), this includes interactions among private standards (Derkx and Glasbergen, 2014; Marx and Wouters, 2015; Smith and Fischlein, 2010) and interactions across public and private policy spheres (Lambin et al., 2014; Renckens, 2020b). Exploring the linkages between VSS, an important mode of non-state market-driven governance (Cashore et al., 2004), and the SDGs, the authoritative public policy framework in the field of sustainable development, the focus of this paper is on the latter.

A central tenet of the transnational business governance interaction literature is that the type of interactions within a policy field has important implications for regulatory capacity and effectiveness (Eberlein et al., 2014: 2). In a time characterized by increasing institutional fragmentation in global sustainability governance (Zelli and van Asselt, 2013), scholars argue that more productive public-private interactions are needed to realize institutional synergies (Abbott, 2012; Green and Auld, 2017; Lambin et al., 2014; Tzankova, 2021). However, scholars also note how private governance can displace or compete with public governance; how it can have unintended consequences; or how the nature of public-private interactions can vary over time. Against this background, Cashore et al. (2021) call for a broader research agenda on public-private interactions, including research on the implications of governance interactions for the actual problems that private and public governors are seeking to solve – a point to which we will return to in the concluding discussion.

To describe and analyze the diversity of public-private governance interactions that exist, scholars have developed various, often overlapping, concepts. As synthesized by Lambin and Thorlakson (2018: 372), the main interaction types described in the literature, and the various labels used for them are: 1) complementarity, collaboration, coordination, synergism, or symbiosis; 2) substitution, superseding, or cooptation; 3) competition, antagonism, or chaos. Acknowledging that public-private interactions can take different forms, can have positive and negative effects, and can vary over time, our objective in this paper is to describe the state of public-private complementarity in the field of sustainable development.

Complementary interactions can broadly be defined as interactions in which public and private governance instruments work together in a synergistic fashion by building upon and reinforcing one another. Among other things, this can take the form of overlapping goals, recognition of authority, and voluntary partnerships (Cashore et al., 2021: 7). Surprisingly, there is little empirical research on the state of public-private complementarity in the field of sustainable development. As noted in the introduction, there is a substantial research literature on transnational public-private partnerships for sustainable development (e.g., Beisheim and Liese, 2014; Pattberg et al., 2012). However, VSS and their linkages to the SDGs have not been studied systematically. To our knowledge, only few publications, most of which policy publications, have considered the issue. We briefly discuss these works below and describe how the analysis of this paper advances empirical research in this area.

Few academic works have considered the role of VSS in the United Nations 2030 Agenda for Sustainable Development (Bennett, 2018; Blankenbach, 2020). Systematic research on transnational interactions in this policy domain is missing. Recently, some grey literature has put the spotlight on interactions between VSS and the SDGs (Bissinger et al., 2020; Fernandez de Cordoba et al., 2018; WWF and ISEAL Alliance, 2017). This includes a report by the WWF and the ISEAL Alliance (2017), which explores how businesses can use VSS to contribute to the 2030 Agenda. Based on the analysis of resemblances between the standards of VSS and the targets of 10 (business-relevant) SDGs, another report by the United Nations Forum for Sustainability Standards (Fernandez de Cordoba et al., 2018) reveals a considerable amount of overlap between the policies of VSS and these selected SDGs. The most systematic attempt to date to examine VSS-SDG linkages is a recent report by a group of researchers and practitioners, involving the authors of this paper, which maps the landscape of VSS against the 17 SDGs and their targets (Bissinger et al., 2020).

As mentioned above, by studying VSS-SDG interactions we also address the literature on "governance through goals" (Biermann et al., 2017; Kanie and Biermann et al., 2017; Vijge et al., 2020) and the ongoing debate on whether the SDGs generate behavioral change and can thus said to have "steering effects" in global governance (Biermann et al., 2022). This strand of literature investigates global goal setting as a governance mechanism and assesses whether and how the SDGs generate behavioral change of actors from the political or economic sphere or in society writ large. While the private sector is envisaged to play a substantial role in reaching the SDGs, existing research suggests that the steering effects of the 2030 Agenda on the corporate sector have been mixed so far but that some effects seem to be discernible in corporate reporting and communication (e.g., in terms of social responsibility) or in the context of taking investment decisions. At the

same time, there are concerns about a certain degree of "SDG-washing" (Bull and Miklian 2019; Pizzi et al., 2020). Yet, recent research indicates that the role of the SDGs in the corporate sector is increasing (Bull and McNeill 2019; Williams et al., 2019; Dahlmann et al., 2020) and that transnational business governance can be a complement to state engagement (Kumi et al., 2020). Whereas there is thus some first research on the role of the SDGs for the private sector, to the best of our knowledge, no study exists that assesses whether the SDGs have any a steering effect on VSS.

This paper builds upon and expands these lines of research. Through a layered analysis, it describes the state of complementary public-private interactions in the field of sustainable development at the level of policies and organizational processes. We then explore the underlying logics of action. To this end, the paper leverages a mixed methods approach, which we describe in the next section.

3. Methods and data

In the first part of the paper, we use a quantitative mapping to describe the overlap in policies between VSS and the SDGs. For this, we sourced data from Standards Map of the International Trade Centre. Standards Map is a database which contains information on the content of over 300 VSS, which we assume covers a significant proportion of the known universe of trade-focused VSS. See Fiorini et al. (2019) for a more detailed discussion of the Standards Map database and its properties. The VSS included in Standards Map cover a wide range of sustainability issues, including environmental sustainability (e.g., soil, water, biodiversity), social sustainability (e.g., human rights, labour rights, and local communities), management and ethics (e.g., economic viability, sustainability management, and supply chain responsibilities), and quality (e.g., food quality).[3]

The analysis of this paper is based on a sample of 232 "private" VSS, i.e., standards whose development is led by non-state actors. These VSS all meet the definition of the United Nations Forum on Sustainability Standards provided in the introduction to this paper. We therefore assume that they belong to a recognizable class of voluntary private programs and that they are broadly comparable. More specifically, our sample includes 113 VSS developed by business groups (e.g., GlobalG.A.P, Responsible Business Alliance), 66 VSS developed by civil society organizations (e.g., Rainforest Alliance, Clean Cloth Campaign), and 53 VSS developed by multi-stakeholder bodies (e.g., Forest Stewardship Council, Marine Stewardship Council).[4] Excluded from the analysis are voluntary standards that are developed by governments entities or international organizations (e.g., US Organic, FAO Codex Alimentarius). We also excluded firm-level standards from our analysis (e.g., Unilever Sustainable Agriculture Code), as these are not systematically captured by Standards Map.

To conduct the mapping, we linked the sustainability requirements embedded in Standards Map to the 17 SDGs and their targets. The 169 SDG targets consist of 125 core or substantive targets (denoted by numbers on the UN website) and 44 implementation-centered targets (denoted by letters on the UN website). To give an example, while SDG 1.1 describes a concrete policy goal ('eradicate extreme poverty by 2030'), SDG 1.a prescribes a means of implementation ('create a sound policy framework at the national, regional, and international levels'). As we are interested in the degree of policy overlap between VSS and the SDGs, the analysis of this paper focuses on the 125 core targets.[5] For the mapping, the sustainability requirements included in Standards Map were manually analyzed and then coded according to the degree to which they overlap with the content of an SDG and its targets. For a sustainability requirement and an SDG target to be complementary, we assumed that two conditions must be met: first, the content of the requirement needs to be precisely described (high precision); and second, the content of the requirement must closely correspond with the content of the SDG target (high correspondence). We then combined this initial mapping with data on the content of the actual standards of the 232 private VSS in our sample, making it possible to identify the number of programs whose policies are complementary to a given SDG and its target. The coding exercise was undertaken by different sub-teams. Each requirement was coded by at least two teams independently, whose results were then cross-checked and merged to enhance the reliability and validity of the coding. As explained further below, to increase the validity of our mapping, the SDG Compass, a tool developed by the Global Reporting Initiative, the UN Global Compact, and the World Business Council for Sustainable Development, was used as an additional benchmark in the mapping analysis.[6]

The second part of the analysis complements the mapping of policy complementarity with an assessment of VSS-SDG complementarities at the level of organizational rhetoric, activities, and structures. This was done through a content analysis of the websites of the VSS in our sample. Further, we conducted a structured web-based survey targeting representatives from these VSS systems. The survey was sent via email and was responded to by representatives from 49 VSS (response rate of 21%).

The third part of the analysis explores the motivations of VSS to link their policies and organizational processes to the SDGs. To this end, 10 semi-structured interviews were conducted with VSS representatives from different industries.[7] The information obtained from the interviews was supplemented and triangulated through additional qualitative materials (e.g., reports and organizational records published by the VSS system in our sample).

4. Results

4.1. The state of VSS-SDG complementarity: policy linkages

For the creation of public-private complementarities, policy coordination through the alignment of private governance priorities with public policy objectives is important (see Cashore et al., 2021: 7). To describe the state of policy coordination between VSS and the SDGs, this section synthesizes and interprets the results of our quantitative mapping. We begin with an overview of the big picture results, followed by a description of the policy complementarities and disconnects that exist at the level of individual goals and targets.

Our mapping revealed that all 232 VSS in our sample have at least one complementary (high precision, high correspondence) policy linkage with the SDGs. This means that for all 232 VSS analyzed we identified a high degree of overlap between the content of their standards with at least one SDG target. In total, we identified 6114 complementary linkages with VSS for 55 of the 125 SDG core targets. This is the sum of all linkages shown in Fig. 1, which amounts to 21% of all theoretically

[3] More details can be found under https://www.standardsmap.org. Please note that the online tool does not contain the full database, which was used as a basis for this paper.

[4] In this paper, we do not examine how differences in institutional design or sponsorship influence VSS linkages to the SDGs. However, we encourage future research in this area, building on related work on VSS compliance with international best practice guidelines (see van der Ven, 2019).

[5] See the appendix for additional information on the SDGs and their core targets.

[6] For details see https://sdgcompass.org.

[7] Marine Stewardship Council (fisheries), Sustainable Electronics Recycling International (electronics), Brazilian Association of Textile Retail (textiles), Green Seal (multiple), Fair Wear (textiles), Roundtable on Sustainable Palm Oil (agriculture), ProTerra (agriculture), Fairtrade International (multiple), Global Organic Textiles Standard (textiles), Rainforest Alliance (agriculture).

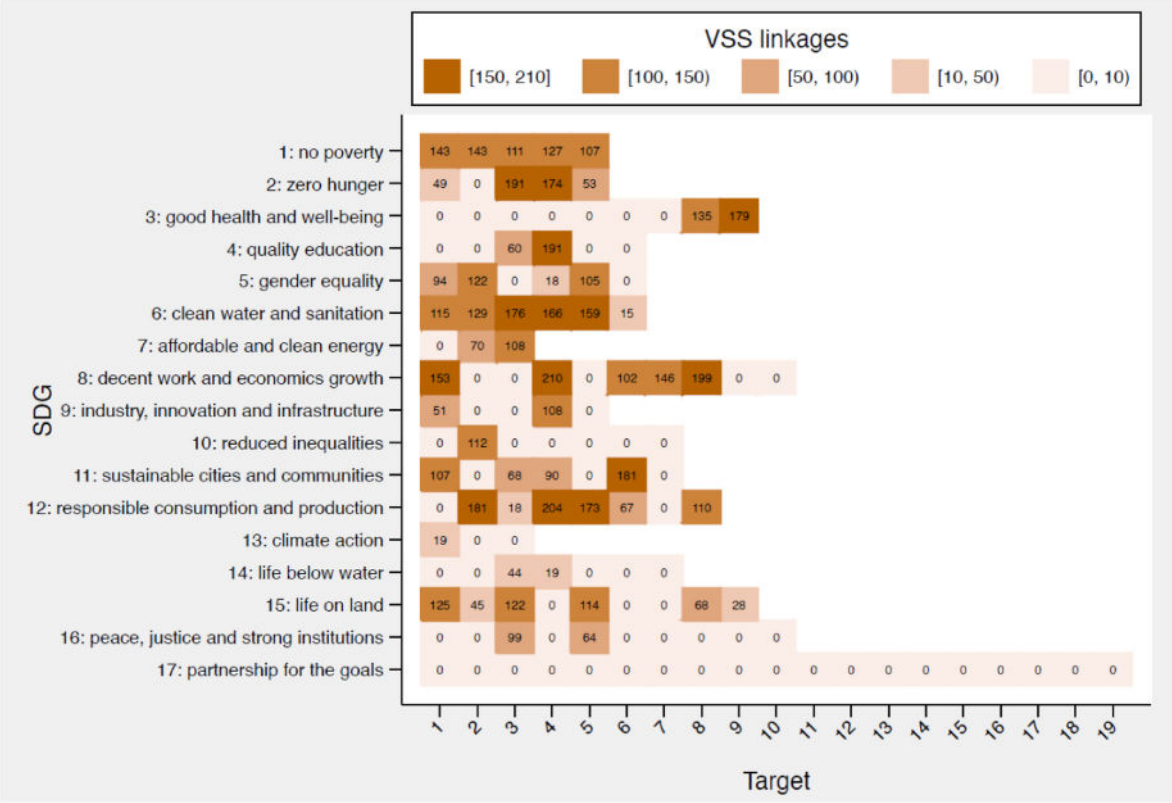

Fig. 1. Heatmap of VSS-SDG Policy Linkages
Note: The heatmap plots the number of VSS that is linked to a specific target. Targets are identified by the combination of an SDG number (listed vertically) and a target number (on the horizontal dimension). The heatmap displays results for the 125 core targets, excluding the 44 implementation-centered targets. The names of the 125 core targets can be found in the appendix.

possible VSS-SDG target linkages.[8] Conversely, we identified 70 SDG core targets, which are not covered by any of the 232 VSS in our sample. This suggests policy complementarities in some areas but also disconnects in others. Fig. 1 depicts the distribution of complementary policy linkages across the 17 SDGs and their 125 core targets, revealing a strongly varied pattern. For example, while the targets of SDG 8 ('decent work and economic growth') count a total of 810 complementary policy linkages with VSS, the same figure for SDG 13 ('climate action') is only 19. Moreover, while some SDGs have complementary linkages with VSS for all their targets (e.g., SDG 1, 'no poverty', five out of five), others have complementary linkages for only some of them (e.g., SDG 3, 'good health and well-being', two out of nine). There also is one SDG (SDG 17, 'partnerships for the goals') for which no complementary policy linkages with VSS were identified. We discuss this anomality in more detail below. However, 16 out of the 17 SDGs do entail complementarities with VSS at the policy level. In sum, the mapping analysis revealed significant variation in the number of such linkages across the SDGs and their targets. We further describe and interpret these patterns below.

4.1.1. Understanding policy linkages

To structure the interpretation of the results, we use a categorization known as the 'doughnut framework' (Niestroy, 2016: 9-11). The doughnut framework describes the relations between the 17 SDGs, by clustering them into three concentric circles. A first circle of people-centered goals (SDGs 1, 3, 4, 5, 10) is embedded into and supported by a second circle of goals that relate to the production, distribution, and delivery of services (SDGs 2, 6, 7, 8, 9, 11, 12). Both circles, in turn, depend on an outer circle of SDGs that focuses on the conservation and protection of natural resources and ecosystems: climate, oceans, biodiversity, and land (SDGs 13, 14, 15). SDGs 16 ('peace, justice and strong institutions') and 17 ('partnerships for the goals') are depicted outside the doughnut model. They are described as underlying and enabling goals.

Applying the doughnut framework to the mapping results allows us to determine the relative importance that VSS give to the three circles of SDGs in their standards. We find that strong policy complementarities exist with the goals of the first and second circles. Regarding the people-centered SDGs, we identify a total of 1647 policy linkages with the 232 VSS in our sample (27% of the total number of observed linkages). We find that SDG 1 ('no poverty') and SDG 5 ('gender') are particularly well covered. In contrast, there are fewer complementary linkages with SDG 3 ('health'), SDG 4 ('education'), and SDG 10 ('inequality'). Particularly, the relatively low number of VSS that target issues of inequality is noticeable. This finding resonates with research showing that VSS, not only through a lack of programmatic focus, but also through unequal cost sharing arrangements may exacerbate inequalities among producers in developing countries (Schleifer et al., 2019: 7-8).

While the targets of the group of people-centered goals feature prominently in the standards of VSS systems, by far most VSS-SDG policy linkages in our mapping (3431 linkages or 56% of the total number of observed linkages) stem from the production, distribution, and service-centered goals. Partly, this can be explained by the fact that this second circle comprises the largest number of SDGs (seven SDGs in comparison to five and three SDGs in circles one and three, respectively). At the same time, the goals related to production, distribution, and the delivery of service do not only account for most linkages, on average, they are also the ones that are best covered in terms of their individual targets. In this regard, goals in the second circle with very high coverage include SDG 2

[8] If each of the 232 VSS in our sample was linked to all 125 SDG targets this would result in 29,000 linkages.

('hunger') with four out of five, SDG 6 ('water') with six out of six, and SDG 8 ('economic growth') with six out of eight. In sum, when it comes to the distribution of complementary policy linkages across the SDGs belonging to circles one and two of the doughnut model, the mapping largely confirmed our prior intuition on these dimensions of the framework. As sustainable supply chain initiatives, VSS are most relevant for those SDGs that are centered on production processes and the wellbeing of workers and local communities.

In contrast to the relatively well-covered first two circles of the doughnut framework, we found comparatively few interlinkages for some of the goals of the third circle, which focus on the conservation and protection of natural resources and ecosystems. While the targets of SDG 15 ('life on land', e.g., biodiversity) have many policy linkages (500), surprisingly, SDG 13 ('climate action') and SDG 14 ('life below water') are not well covered by VSS. Notably, the low number of complementary policy linkages with SDG 13 (19 linkages to only one of the goal's three targets) is surprising, as climate change is such a central issue on the international agenda. We further elaborate on the reasons for these disconnects in the following section. However, it is also important to point out that few policy linkages are not necessarily a bad thing from a sustainability governance perspective. To give an example, the low number of policy linkages observed for SDG 14 conceals the fact that some of the best-established VSS in terms of market coverage, such as the Marine Stewardship Council (MSC), are active in this issue area. Hypothetically, having few VSS with a high market coverage focus on the key sustainability issues affecting life below water would be desirable over a scenario in which multiple, less established and potentially competing VSS focused on many different issues.

We also examined the remaining two SDGs, which, based on the doughnut model, were identified as underlying and enabling goals. The mapping revealed a significant number of complementary policy linkages between VSS and two of SDG 16's ('peace, justice, and strong institutions') ten targets, namely 16.3 ('promote the rule of law at the national and international levels') and 16.5 ('reduce corruption and bribery in all their forms'). Conversely, we found no linkages for the targets of SDG 17 ('partnerships for the goals'). At first, this seems counterintuitive as many VSS are developed through multi-stakeholder partnerships. However, it is important to understand that SDG 17 is a meta goal that focuses on the revitalization of the partnership approach for the 2030 Agenda. Thus, many VSS contribute to the objective of this SDG by their very existence, but do not explicitly address it in their actual standards.

In sum, the mapping revealed significant policy overlaps between VSS and the policy objectives contained in the SDGs, particularly for the group of people-centered goals and the group of goals that relate to the production, distribution, and delivery of services. In these areas, specifically, there is clear potential for the creation of productive public-private interactions for sustainable development. At the same time, the mapping also revealed no linkages with VSS for 70 out of the 125 core SDG targets. This raises questions about the reasons for such policy disconnects, which we explore in more depth in the next section.

4.1.2. Understanding policy disconnects

An important reason for the observed policy disconnects is that many SDG targets are formulated in a state-centric way and that they therefore fall outside the remit of VSS as a private mode of governance. For example, this is the case for two of the three targets of SDG 13 on climate action. In this regard, target 13.2 focuses on the integration of climate measures in national policies and target 13.3 focuses on climate change education. Likewise, the targets of SDG 14 ('life below water') focus, among others, on issues like fishery subsidies and the economic benefits of small island states. These are policy objectives which focus on questions of government policy formulation that clearly lie outside the remit of VSS as a mode of private market-based governance. But this does not mean that VSS are not relevant for climate protection and the protection of life below water more broadly construed. For instance, many VSS have policy linkages to other SDGs that are thought to be synergistic with SDG 13 and the objective of climate protection, including SDGs 11, 12, and 15 (see Fuso Nerini et al., 2019: 676). As previously mentioned, regarding SDG 14 on oceans, the low number of complementary policy linkages observed for this goal also conceals the fact that some of the best-established VSS focus on fisheries.

To explore the issue of policy disconnects further, we use the SDG Compass as an external benchmark. A joint initiative of the Global Reporting Initiative, the United Nations Global Compact, and the World Resource Council for Sustainable Development, the SDG Compass comprises 58 existing sustainable business indictors (e.g., UN Global Compact, ISO 14000) and identifies connections between them and the SDGs and their targets. We use the SDG Compass as an additional benchmark to determine the relevance of the business sector (and VSS as an important mode of transnational business governance) for a given SDG target. We attribute no relevance if the SDG Compass produces no connections for any of its 58 sustainable business indicators for a given SDG target. Conversely, we attribute a relevance if the SDG compass produces such connections.

Cross-checking the 70 non-linked SDG targets from our mapping in the SDG Compass, the tool confirms no relevance for the business sector for 34 of them. Most of these (17) belong to SDG 17. For illustration, this includes targets such as SDG 17.1 ('improve domestic capacity for tax and revenue collection') or SDG 17.2 ('implementation of official development assistance commitments'). It is easy to see how the business sector and VSS are of no direct relevance for these state-centric targets. However, the SDG Compass indicates a relevance for the business sector for 36 of the targets that are not covered by any of the 232 VSS in our sample. For 11 of those, the SDG Compass even suggests a high relevance (i.e., >10 connections with the 58 sustainable business indicators it contains). This includes targets such as SDG 10.3 on equal opportunity and the reduction of inequalities.

Together, this suggests that there are indeed areas of disconnect in which the policies of VSS could and should be more closely aligned with the SDGs and their targets. However, it also is important to note that a mapping of policy overlap alone is insufficient to assess the state of VSS-SDG complementarity. One reason is that many VSS have evolved beyond regulatory standard-setting, as they have taken on new activities, including consultancy work, capacity building, and lobbying (Fransen, 2018; Renckens, 2020a). Another reason is that our mapping provides only a snapshot of existing policy complementarities, which could also be purely coincidental. Against this background, the following section broadens the analysis by examining VSS' organizational processes.

4.2. The state of VSS-SDG complementarities: organizational processes

The mapping presented above provides important insights into the linkages that connect VSS and the SDGs at the policy level. Complementing these insights with an analysis conducted at the level of organizational processes, this section examines how the SDGs are reflected in the rhetoric, activities, and structures of VSS systems. The analysis thereby enables us to investigate complementarities beyond VSS' standard requirements and to explore the degree to which VSS-SDG complementarities are intentional: whereas the policy linkages described in the previous section might be purely coincidental, observing explicit references to the SDGs makes it possible to attribute intentionality. We first present the results of the content analysis of VSS' websites to investigate how standard bodies engage with the SDGs. In a second step, we share the key findings from our survey to assess in more detail the rhetoric, activities, and structures of VSS systems and their linkages with the SDGs.

The data collected from the websites of the VSS in our sample shows

that around half of them include an explicit reference to the SDGs. Some VSS, for example, ProTerra Foundation[9] and Fairtrade International[10], have a dedicated section to describe how they contribute to achieving the SDGs and provide evidence for their SDG-related activities. In line with our findings for the complementary policy linkages outlined above, SDG 12 ('responsible production and consumption') and SDG 8 ('decent work and economic growth') are the most frequently mentioned SDGs. Bonsucro, for instance, mentions on its website that it contributes to achieving SDG 8 by ensuring workers' safety and having the lowest recorded number of farm accidents (Bonsucro, 2018). The FSC states that it contributes to SDG 12 by providing consumers with a choice to buy sustainably produced timber for construction, furniture and thereby specifically aims to contribute to the achievement of SDG targets 12.2 ('efficient use of natural resources'), 12.6 ('encourage sustainable practices of transnational corporations'), and 12.8 ('awareness of sustainable development') (FSC, 2016).[11]

While these findings suggest that many VSS systems make rhetorical references to the SDGs, it is possible that VSS' SDG-related rhetoric does not reflect their actual organizational behavior. To explore whether VSS' rhetoric amounts to more than window dressing, we further investigate their activities and structures. According to our survey, 41 (83%) of the 49 respondents view the SDGs as important or very important for their work. In terms of activities, 41% of the responding VSS describe concrete organizational activities that are linked to the SDGs and their implementation. This includes activities such as the organization of events aimed at awareness raising or the promotion of knowledge exchange or capacity building. For example, Biosphere Tourism describes how the SDGs are central to its training programs and the Global Aquaculture Alliance reports that the SDGs are regularly emphasized at its annual Global Outlook for Aquaculture Leadership conference. Relatedly, 59% of the respondents indicated to have joined an external partnership or network of direct relevance to the United Nations Sustainable Development Agenda. The MSC, for example, reported being an active participant of the UN Ocean Decade for Science and UN conferences on SDG 14.

In terms of organizational structures, 47% of the survey respondents state that their organizations had established or were in the process of establishing an internal governance structure (e.g., a committee or working group) to help them plan and coordinate their SDG-related activities. For example, the Gold Standard Foundation has a Technical Advisory Committee that seeks to align its organizational agenda with the Paris Agreement and the SDGs. Among the standard organizations that responded not to have a separate governance structure, some mentioned that already existing bodies would serve these functions. The Aquaculture Stewardship Council (ASC), for instance, responded that "*There is no such specific SDG Committee at Board Level, but there are several staff members reporting directly to the CEO and working on a full mapping of the ASC standards and program in relation to the SDGs; and on a gap analysis of where the standards can more fully contribute to the achievement of the SDGs*".

The survey also revealed that around 39% of the respondents changed their standard requirements in response to the United Nations 2030 Agenda and the publication of the SDGs. The Common Code for the Coffee Community (4C), for example, mentioned that "*the structure of the latest 4C Code of Conduct and its requirements better reflects the SDGs and […] new criteria were included with the SDGs in mind,* e.g.*, ensuring food security and development of soil and water conservation plans.*" Similarly, Biosphere Tourism mentioned that they restructured their compliance requirements by focusing on all 17 SDGs and their targets. Moreover, the Fairtrade website does not only underline "*a large amount of cross-over between the SDGs and Fairtrade's work*" and that "*Fairtrade has a direct and indirect impact on all 17 goals*" but also emphasizes that Fairtrade is "*aligning [its] indicators with the SDGs*" (Fairtrade, 2022). These findings suggest that the SDGs have partially reshaped priorities in the VSS context rather than simply fortifying governance priorities that were already in existence prior to the adoption of the 2030 Agenda.

In sum, multiple VSS refer explicitly to the SDGs, organize SDG-focused activities, and have created governance structures to better align their organizational agendas with the SDGs. Yet, these findings must be interpreted with care. One reason is that the survey results are likely to be biased insofar as SDG "enthusiastic" VSS have self-selected into our survey. Another reason is that survey respondents as well as our interviewees may for strategic considerations overemphasize the significance of the SDGs for their organizations. Moreover, it is important to reiterate that the analysis of organizational processes, as does the policy mapping, also points to major disconnects as there are many VSS which have not established complementarities with the SDGs. In fact, according to the content analysis and the survey, around half of the VSS in our sample remain largely disconnected from the UN 2030 Agenda in the sense that they do not engage with the SDGs in their rhetoric, activities, or structures.

Interestingly, our analysis also reveals several differences between VSS-SDG linkages at the level of policies and at the level of organizational processes. These findings matter because they help us better understand some of the disconnects we identified at the level of policies. Most notably, while the quantitative policy mapping found no linkages between the landscape of VSS and SDG 17 ('partnerships for the goals'), the assessment of VSS systems' rhetoric and the activities described on their websites revealed important complementarities. One example is the FSC, which describes how it contributes to SDG 17.7 by promoting partnerships with civil society (FSC, 2022). The content analysis of the websites also revealed more significant complementarities between the landscape of VSS and SDG 13 ('climate action') than we found in the mapping based on requirements. 73 websites, out of the 232 websites studied, mentioned SDG 13 as one of the priority SDGs. This confirms our previously stated intuition that addressing climate change has become an important policy objective for many VSS systems. However, given the state-centric formulation of SDG 13, this goal and its targets are not well reflected in the VSS requirements.

But there are also disconnects between the SDGs and the rhetoric, activities, and structures of VSS. What explains them? Some disconnects are likely due to the fact that many smaller VSS systems have limited resources and managerial capacity to engage with the SDGs in an explicit and systematic way. Relatedly, existing SDG-related activities may not be communicated on the sometimes very basic and infrequently updated websites of these organizations. However, there are also larger VSS with sophisticated websites, for example ABNT, Ecolabel, Fair Labor Association, and LEAF Marque which do not make any references to the SDGs or describe any relevant organizational activities or structures. Future research is needed to further examine why some VSS systems are more prone to creating complementarities with the SDGs than others.

At the same time, even if we interpret the results of the survey with caution, our data shows that a substantial number of VSS systems does engage with the SDGs at the organizational level. Overlapping goals, recognition of authority (Cashore et al., 2021: 7) of the SDGs or other signs of synergism or coordination point to increasing complementary interactions between VSS and the 2030 Agenda for Sustainable Development. Several VSS system have created close linkages with the SDGs, and they do so in ways that address some of the disconnects that we found at the policy level, for example concerning SDG 13 on climate action or SDG 17 on global partnerships. Overall, the rhetoric, activities, and structures reflect an intentional effort on the part of VSS systems to interact with the SDGs.

[9] https://content.proterrafoundation.org/ebook-proterra-sdg.

[10] https://www.fairtrade.net/issue/sdgs.

[11] The third most prominent SDG on VSS websites is SDG 15 ('life on land'). For example, the Global Organic Textiles Standard (GOTS) mentions its contribution to SDG 15 via mandating the use of certified organic fiber, which in turn leads to reduced soil degradation (GOTS, 2022).

4.3. VSS-SDG complementarities: logics of action

The substantial number of VSS-SDG complementarities give rise to the question why VSS systems link their standards as well as their rhetoric, activities, and structures to the SDGs. In this section, we begin to connect our empirical findings to theoretical explanations of VSS-SDG linkages. In the following, we identify an instrumental logic, a managerial logic, and a normative logic, which can serve as hypotheses for future research.

First, we find evidence for an *instrumental logic* that focuses on access to material resources (e.g., finance, networks) in line with the "logic of consequences" (March and Olsen, 1989). According to resource dependency theory (Pfeffer and Salancik, 1978), the procurement of external resources is an important objective of organizations. VSS systems can therefore be expected to try to safeguard the flow of the material resources they need for organizational survival. External actors, such as funding bodies, can also use this resource dependency to exercise "coercive pressures" and thus to influence VSS′ polices and organizational processes (DiMaggio and Powell, 1983). In addition to material resources, ideational resources (e.g., legitimacy, credibility) are important for organizational survival. Ideational resources are granted by an organization's audience in a process of legitimation (Bernstein, 2011; Cashore, 2002). VSS can be expected to strive to ensure ideational resources by actively pursuing strategies for organizational legitimation (Schleifer, 2019). In line with an instrumental logic, we find that VSS indeed strategically engage with the SDGs as a framework to access and generate material and ideational resources. For instance, some VSS engage with the SDG agenda to generate funding because certain foundations or ministries have specific funding lines for SDG implementation (Interview with Fairtrade, Development Policies Manager, Fairtrade Germany, 19 August 2020). Similarly, engaging with the SDG agenda allows VSS organizations to position themselves in strategically important forums or networks. As a representative of MSC explained: *"[Engagement with the SDGs] doesn't boil down to [access to resources] like money or revenue streams directly, but in the end, it does come down indirectly to revenue stream because it's building credibility and it's positioning yourself in very, very important forums*" (Interview, MSC, Director, Scandinavia and the Baltic Sea Region, 17 March 2020). On the other hand, we find that SDGs matter for ideational resources such as legitimacy (Interview with Fairtrade, Development Policies Manager, Fairtrade Germany, 19 August 2020; Interview, Green Seal, Director, Science & Standards Department, 26 March 2021). For example, as a representative of MSC underlines: "*It's very, very important for an organization like MSC to get recognized by the UN*" and therefore to engage with the SDGs (Interview, MSC, Director, Scandinavia and the Baltic Sea Region, 17 March 2020).[12]

Second, VSS engagement with the SDGs can be motivated by a *managerial logic*. From a managerial point of view, in line with research on managerial efficiency (e.g., Dunleavy and Hood, 1994), the focus is on strategies and approaches to streamline organizational processes and communication. Following such a managerial logic, VSS systems might use the SDGs as a tool to streamline their work and increase the efficiency of managerial processes and communication with internal and external stakeholders. Indeed, our interviews indicate that the SDGs do provide the basis for "*speaking the same languages with different kinds of partners*" (Interview, Rainforest Alliance, Standards Specialist, 9 September 2020) and for standard bodies "*to explain what [they] do, and how it fits in the bigger picture*" (Interview, Sustainable Electronics Recycling International, SERI, Executive Director, 25 March 2021).[13] In line with a managerial logic, the SDGs are thus a useful communication tool for many standard bodies, for example, by easing communication and facilitating relationships with governmental bodies, companies, and other relevant organizations. VSS systems are also using the goals and targets of the SDGs to create benchmarks to measure their performance or modify their requirements based on SDG benchmarks. Moreover, SDGs allow for easing collaborations and making the work of VSS systems more efficient by "*avoiding the step of reinventing the wheel*": According to a representative of ProTerra, "[an advantage of using the SDGs is that] *you don't have to redefine sustainability every time you do something. You have definitions and very good summaries of what the key topics are. And of course, none of them is perfect, but you have them there, so use the existing tools, use the existing definitions. And it helps companies, specifically when operating global supply chains, to use ILO conventions, SDGs etc., so that everybody knows what you're talking about. In the end, it makes it so much more efficient*" (Interview, ProTerra, Managing Director, 26 August 2020).

Third, VSS managers might also be driven by a *normative logic* that focuses on the "logic of appropriateness" to engage with the SDGs (Bernstein and Cashore, 2007). Embedded in the constructivist school of thought, the "logic of appropriateness" (March and Olson, 1989) fundamentally differs from the "logic of consequences". From that perspective, rather than striving for material and ideational resources to ensure organizational survival, VSS managers would be motivated by shared norms about sustainable development challenges and ways to tackle them and see their engagement with the SDGs as a way to mitigate these challenges and as "the right thing to do". In line with such a normative perspective, some standard bodies see an alignment of their requirements to the SDGs as a way to increase their contribution towards sustainable development; similarly, they also view the SDGs as an important basis for identifying the potential of market-driven approaches to contribute to the public good (e.g., Interview, Fairtrade, Development Policies Manager, Fairtrade Germany, 19 August 2020; Interview, Green Seal, Director, Science & Standards Department, 26 March 2021). As pointed out by the Managing Director of ProTerra, the "*basic vision for sustainability is that you never […] change big things alone. So, I want to work together, use existing standards, definitions such as the accountability framework and the SDGs*" (Interview, ProTerra, Managing Director, 26 August 2020). And as underlined by the Research and Advisory Manager of the Roundtable on Sustainable Palm Oil (RSPO): "*At the RSPO, we do refer to and look at how we can contribute to the SDGs*" (Interview, RSPO, Research & Advisory Manager, 3 September 2020). This suggests that, in addition to instrumental or managerial aspects, a normative logic might also play a role in explaining why VSS engage with the SDGs in their policies, rhetoric, activities, and structures.

At the same time, several VSS make clear that they see themselves as contributing to sustainable development even if they do not formally align their rhetoric, activities, and structures with the SDGs (e.g., Interview, Green Seal, Director, Science & Standards Department, 26 March 2021; Interview, Fair Wear, Country Representative of India, 25 March 2021). Other VSS systems are aware of many intersections with the SDGs and see themselves as working alongside the SDGs but are putting a stronger focus on the direct "*needs of the farmers we work with or the companies we work with*" rather than the SDGs as a "*guiding tool*" (Interview, Rainforest Alliance, Senior Specialist, Science and Impacts, 9 September 2020) or a "*primary tool*" (Interview, Green Seal, Director, Science & Standards Department, 26 March 2021).

Overall, we find evidence for the existence of various intentional VSS-SDG complementarities. Future research can build on our insights into the causal mechanisms for these complementarities to uncover

[12] Recent research indicates that corporate actors use the rhetoric of the SDGs as a means of legitimation without necessarily engaging in any substantial change of their practices and approaches (Siegel and Bastos Lima, 2020).

[13] This is in line with a recent study by Florini and Pauli (2018) which argues that the SDGs provide a "shared language" for both the public and the private sector.

more details about the motivations of VSS systems to interact with the SDGs. Looking ahead, it will also be important to investigate why VSS systems do not engage with the SDGs and to what extent this might be due to a lack of motivation or other factors, such as limited managerial capacities.

5. Conclusion

Research on transnational business governance has pointed to the need for better linking private authority with public policy instruments to promote institutional synergies and regulatory effectiveness. Relatedly, scholars of global sustainability governance ask about the steering effects of the SDGs in global governance. Against the background of these broader academic debates, this article provides the first systematic analysis of public-private interactions in the field of sustainable development by empirically examining how the policies and organizational processes of VSS interact with the SDGs. Overall, we find substantial public-private complementarities but also evidence for institutional disconnects.

First, mapping the complementarities between the known landscape of private VSS and the SDGs at the level of policies, we find that all VSS have complimentary linkages with the SDGs. VSS are especially relevant for SDGs that focus on production processes and the wellbeing of workers and local communities. Areas in which the policy priorities of VSS are aligned with the SDGs offer windows of opportunity to generate productive public-private interactions for sustainable development. Second, our analysis of organizational processes shows that many VSS-SDG complementarities are not coincidental. Many VSS managers intentionally align their rhetoric, activities, and structures with the SDGs. They make explicit references to the SDGs and establish activities (e.g., events or trainings) as well as internal governance structures (e.g., committees or working groups) that are unambiguously linked to the SDGs and their agenda. Third, inquiring into the motivations of VSS managers to engage in complementary interactions with the SDGs, we found evidence for instrumental, managerial, and normative logics of actions at play. In sum, the empirical findings of this article shows that the landscape of VSS is increasingly interlinked with the SDGs both at the level of policies and at the level of organizational processes.

Yet, our analysis also reveals significant disconnects between VSS and the SDGs. The disconnects at the policy level, i.e., the absence of policy linkages with VSS for 70 out of 125 SDGs core targets, is partially due to the state-centric formulation of several SDG targets. But we also found areas of disconnect in which VSS and their policies could more strongly interact with the SDGs and their targets, such as in the area of SDG 10 on inequalities. At the same time, our findings at the level of organizational processes helped to cast additional light on some of these disconnects by revealing that VSS organizations engage strongly with SDGs in their rhetoric, activities, and organizational structures that do not feature prominently at the policy level, for example in the area of SDG 13 on climate action.

Moreover, our findings show that the SDGs changed the priorities of multiple VSS organizations, thereby lending support to arguments about the steering effects of the 2030 Agenda for Sustainable Development. Finally, from a practical perspective, identifying overlaps and gaps at the policy as well the organizational level offers important insights for VSS systems who are motivated to better align their standards with the SDGs.

Our investigation opens two new avenues for future research on VSS-SDG interactions. One avenue of future research in this area concerns the question of why and under what conditions VSS organizations create institutional linkages with the SDGs in the first place. Our analysis of the underlying logics of actions provides the basis for future theory-guided research into the causal mechanisms that drive VSS to create institutional complementarities and the reasons why some important disconnects remain. Relatedly, future work in this area could draw on existing research on VSS credibility and compliance with international best practices to identify and study the determinants of VSS-SDG complementarities (see van der Ven, 2019).

A second avenue for future research concerns the question of whether and how public-private interactions contribute to actual problem-solving (Cashore et al., 2021). The analysis conducted in this paper suggests that the SDGs have steering effects on VSS, as they influence the design of their policies and organizational processes. These steering effects can help reduce the degree of institutional fragmentation in this governance sphere by facilitating horizontal coordination between VSS as well as vertical alignment of private governance priorities with international policy objectives on sustainable development. In theory, this should strengthen the problem-solving capacity of global governance in this issue area. However, whether and how intensifying transnational interlinkages between VSS and the SDGs translate into more profound normative and institutional impacts remains an open and urgent question, particularly in light of mounting evidence about the limited transformative impact of the SDGs (Biermann et al., 2022).

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Declaration of competing interest

The authors declare that they have no competing interests.

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Appendix. The SDGs and their core targets, using the doughnut framework

The doughnut framework describes the relations between the 17 SDGs, by clustering them into three concentric circles and a group supporting goals: (1) people-centered goals; (2) goals related to the production, distribution, and delivery of services; (3) goals related to the conservation and protection of natural resources and ecosystems; and (4) supporting goals (Niestroy, 2016).

People-centered goals.

	SDG1: No poverty	SDG3: Good health & well-being	SDG4: Quality education	SDG5: Gender equality	SDG10: Reduced inequalities
T1	Extreme poverty	Maternal mortality	Effective learning outcomes	Discrimination against women and girls	Income growth
T2	National poverty	Child mortality	Early childhood development	Violence against women and girls	Inclusion (social, economic, political)
T3	Social protection	Communicable diseases	TVET & tertiary education	Early marriage	Eliminate discrimination
T4	Access to basic services	NCD & mental health	Skills for employment	Unpaid care & domestic work	Social protection policies
T5	Resilience to disasters	Substance abuse	Equal access to education	Women in leadership	Regulation of financial markets
T6		Road traffic accidents	Adult literacy & numeracy		Inclusive global governance
T7		Sexual & reproductive health	Sustainable development education		Safe migration & mobility
T8		Universal health coverage			
T9		Health impact of pollution			

Goals related to the production, distribution, and delivery of services.

	SDG2: Zero hunger	SDG6: Clean water & sanitation	SDG7: Affordable & clean energy	SDG8: Decent work & economic growth	SDG9: Industry, innovation	SDG11: Sustainable cities & communities	SDG12: Responsible Consumption & Production
T1	Undernourishment & food security	Safe drinking water	Access to energy services	Per capita economic growth	Infrastructure development	Housing & basic services	Programs on SCP
T2	Malnutrition	Access to sanitation & hygiene	Share of renewable energy	Economic productivity & innovation	Sustainable industrialization	Public transport systems	Sustainable use of natural resources
T3	Small-scale food producers	Water quality	Energy efficiency	Formalization of SMEs	Small-scale industries access to finance	Sustainable urbanization	Food waste & losses
T4	Sustainable agriculture	Water-use efficiency		Material resource efficiency	Sustainable & clean industries	Cultural & natural heritage	Managing chemicals & waste
T5	Genetic resources for agriculture	Transboundary water cooperation		Employment & decent work	Research & development	Resilience to disaster	Reduction in waste generation
T6		Water-related ecosystems		Youth NEET		Urban air quality & waste mgmt.	Corporate sustainable practices
T7				Child & forced labor		Urban green & public spaces	Public procurement practices
T8				Labor rights & safe working env.			Sustainable development awareness
T9				Sustainable tourism			
T10				Access to financial services			

Goals related to the conservation and protection of natural resources and ecosystems.

	SDG13: Climate action	SDG14: Life below water	SDG15: Life on land
T1	Resilience & adaptive capacity	Marine pollution	Terrestrial & freshwater ecosystems
T2	Climate change policies	Marine & costal ecosystems	Sustainable forest management
T3	Climate change awareness	Ocean acidification	Desertification & land degradation
T4		Sustainable fishing	Conservation of mountain ecosystems
T5		Conservation of coastal areas	Loss of biodiversity
T6		Fisheries subsidies	Utilization of genetic resources
T7		Marine resources for SIDS & LDCs	Protected species trafficking
T8			Invasive alien species
T9			Biodiversity in national & local planning

Supporting goals.

	SDG16: Peace, justice, and strong institutions	SDG17: Partnerships for the goals
T1	Reduction of violence & related death	Tax & other revenue collection
T2	Violence against & torture of children	ODA commitments by developed countries
T3	Rule of law & justice for all	Additional financial resources
T4	Illicit financial & arms flows	Debt sustainability
T5	Corruption & bribery	Investment promotion for LDCs
T6	Effective, accountable & transparent institutions	Science & technology international cooperation

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(*continued*)

	SDG16: Peace, justice, and strong institutions	SDG17: Partnerships for the goals
T7	Inclusive decision-making at all levels	Transfer of technologies
T8	Inclusive global governance	Capacity building for ICT
T9	Legal identity	Capacity building for SDGs
T10	Access to information & fundamental freedoms	Multilateral trading system (WTO)
T11		Exports of developing countries
T12		Duty-free market access for LDCs
T13		Global macroeconomic stability
T14		Policy coherence for SD
T15		Respect country's policy space
T16		Global partnership for SD
T17		Partnerships (public, private, CSO)
T18		National statistics availability
T19		Statistical capacity

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