



MSPs for the SDGs – Assessing the collaborative governance architecture of multi-stakeholder partnerships for implementing the Sustainable Development Goals

Lisa-Maria Glass^{a,*}, Jens Newig^a, Simon Ruf¹

^a Research Group Governance, Participation and Sustainability, Institute of Sustainability Governance, Leuphana University Lüneburg, 21335, Lüneburg, Germany

ARTICLE INFO

Keywords:

Multi-stakeholder partnerships
Sustainable Development Goals
Governance
Interlinkages
Implementation
United Nations

ABSTRACT

Multi-stakeholder partnerships (MSPs) involving a diverse set of actors are assumed to reduce implementation gaps of the 2030 Agenda and the Sustainable Development Goals (SDGs). While existing research suggests that MSPs can complement state-led efforts in environmental and sustainability governance, a deeper understanding of the composition, thematic focus, and specific governance functions of MSPs for the SDGs is still wanting. In this article, we present the results of a survey of 192 MSPs registered on the United Nations Partnership Platform, analyzing their set-up and organization, partner composition, agency of partners, governance functions, SDG coverage, and effectiveness. We further complement existing research by investigating whether MSPs address SDG nexuses and relate our findings to previously identified interlinkages between the goals. Comparing our results to earlier studies, we find that MSPs have become more inclusive, involving more non-state actors overall, and as lead partners. Our results further indicate a complementary role of MSPs in SDG implementation by focusing on often underrepresented and cross-cutting goals such as climate action (SDG 13), quality education (SDG 4) and gender equality (SDG 5). However, there appears to be untapped potential for MSPs to capitalize on shared resources and capabilities to address combinations of SDGs that are likely to produce negative spillovers among each other. Moreover, we find partnerships between actors from multiple societal sectors to be potentially more effective than those involving only one societal sector.

1. Introduction

People, planet, prosperity and peace – these are four of the “5 P’s” (Gusmão Caiado et al., 2018; Jayasooria, 2016), the pillars that structure the United Nations (UN) 2030 Agenda for Sustainable Development. Its 17 Sustainable Development Goals (SDGs) and 169 targets are considered the major internationally agreed normative guiding framework for the attainment of worldwide sustainable social, economic and environmental development (Biermann et al., 2022a). However, in the face of a global pandemic, the worsening effects of climate change, and appalling military conflicts, recent years have shown that major

challenges to achieving sustainable development by 2030 remain pressing. Much hope is placed on the fifth “P” – *partnerships* – which are explicitly recognized as important means of implementation within SDG 17 (*partnerships for the goals*) under targets 17.16² and 17.17³ (UN, 2015).

Especially since the 2002 Johannesburg World Summit on Sustainable Development (WSSD), multi-stakeholder partnerships (MSPs) have emerged alongside multilateral agreements and national policies as an important governance component for addressing complex sustainability problems (Pattberg and Widerberg, 2016; Bäckstrand, 2006). Although the term often suffers from conceptual vagueness (Pattberg et al., 2012),

* Corresponding author.

E-mail addresses: lisa-maria.glass@leuphana.de (L.-M. Glass), jens.newig@leuphana.de (J. Newig), me@simonruf.de (S. Ruf).

¹ Independent scholar

² “Enhance the Global Partnership for Sustainable Development, complemented by multi-stakeholder partnerships that mobilize and share knowledge, expertise, technology and financial resources, to support the achievement of the Sustainable Development Goals in all countries, in particular developing countries.” (UN, 2015).

³ “Encourage and promote effective public, public-private and civil society partnerships, building on the experience and resourcing strategies of partnerships.” (UN, 2015).

MSPs are commonly regarded as voluntary collaborative agreements between actors from different societal sectors working transnationally to implement public policy objectives (ibid.; [Pattberg and Widerberg, 2016](#); [Bäckstrand, 2006](#)). Academic literature has repeatedly underlined their potential to complement purely governmental efforts in sustainability governance ([Andonova, 2014](#); [Pattberg et al., 2012](#); [Stafford-Smith et al., 2017](#); [Biermann et al., 2012](#)) by performing a variety of governance functions, such as generating and disseminating knowledge, setting standards, and facilitating participation in decision-making and implementation ([Andonova and Levy, 2003](#)).

International institutions and national governance initiatives are struggling to address the ambitious 2030 Agenda and the SDGs in an integrated way ([Biermann et al., 2022a](#); [UN, 2023](#)). In this context, scholars have emphasized the need to harness the diverse capacities of public and private actors ([Haywood et al., 2019](#); [Coenen et al., 2022](#)), taking into account both positive interactions (synergies) and negative spillovers (trade-offs) between the goals ([Liu et al., 2018](#); [Bennich et al., 2020](#); [Weitz et al., 2018](#); [Pradhan et al., 2017](#); [Nilsson et al., 2018](#)). Resonating with the call for integrated implementation efforts, they suggest nexus approaches that engage different stakeholders to identify and enhance synergies and reduce trade-offs between the SDGs by integrating different policy domains ([Liu et al., 2018](#); [van Zanten and van Tulder, 2021a, b](#); [Bowen et al., 2017](#); [Boas et al., 2016](#)). Involving a diverse set of actors from different societal sectors, MSPs can thus serve as one important vehicle for putting nexus approaches into practice, provided that their work considers and reflects SDG interlinkages ([Stafford-Smith et al., 2017](#)). They could thereby help to bridge silos between the goals and drive integrated and collaborative implementation.

By now, research has been devoted to the analysis of (multi-stakeholder) partnerships in environmental and sustainability governance in terms of accountability ([Bäckstrand, 2008](#)), effectiveness ([Beisheim and Liese, 2014](#); [Pattberg et al., 2012](#)), legitimacy ([Bäckstrand, 2006](#)), and internal and external conditions for their success ([Pattberg and Widerberg, 2016](#); [Horan, 2019](#)). However, empirical studies to assess their potential to overcome silo approaches to SDG implementation by enhancing synergies between the goals through cross-sectoral collaboration are still missing. With the present study, we aim to address this question by presenting the results of a survey of 192 partnerships listed on the UN Partnership Platform⁴ ([UN, 2022](#)).

We structure our analysis as follows. First, we describe the conceptual foundation and previous research findings on MSPs as a collaborative governance tool. Given the prevailing ambiguity in defining and operationalizing the term MSP in existing scholarship, we distinguish between cross-subsector partnerships (CSSPs) and intra-subsector partnerships (ISSPs) as different types of MSPs. This distinction allows us to capture nuanced differences between all participating subsectors. After elaborating on our research method, we then turn to the presentation and discussion of our survey results. We examine MSPs for the SDGs along six dimensions, i.e., set-up and organization, partner composition, agency of partners, governance functions, SDG coverage, and effectiveness. By analyzing which SDGs are addressed jointly by MSPs, we follow the call to enrich in-depth qualitative research on nexus approaches for the SDG with quantitative research methods ([Liu et al., 2018](#)). Finally, comparing our findings to earlier studies on partnerships for sustainable development allows us to provide valuable insights into the dynamics of the collaborative global sustainability governance architecture over time.

Table 1

Differentiation between societal sectors and subsectors in the context of MSPs.

Sector	Public/State	Private/Non-state	
	Governmental	Civil society (non-profit)	Business (for-profit)
Sub-sector/ Stakeholder types	• IGOs • National government (agencies) • Cities • Other subnational actors (e.g., counties, districts, provinces)	• NGOs • Research and education • Others (e.g., youth groups, faith-based organizations, think tanks)	• Companies/corporations • Business associations

2. MSPs as collaborative governance instrument for SDG implementation

Collaborative governance approaches involving public and private actors (particularly in the form of MSPs) can be seen as a “manifestation of the ongoing restructuring of environmental governance in the context of globalization” ([Andonova, 2014](#), p.506). In light of an insufficient response of (inter-)national actors and traditional multilateral agreements to address the urgency and complexity of sustainable development ([Bäckstrand, 2006](#); [Chan et al., 2019](#)), MSPs have found their way into nearly all major international climate and development agendas over the past thirty years. From the 1992 Earth Summit and the Agenda 21, to the 2002 WSSD, the 2012 United Nations Conference on Sustainable Development (Rio +20) and more recently, the 2015 Paris Agreement and the 2030 Agenda (see [Pattberg and Widerberg, 2016](#)) – the international realm has been promoting the establishment of MSPs with increasing impetus.

The proliferation of partnership approaches has sparked considerable academic interest. However, the research landscape remains scattered across disciplines and at times inconsistent, from the use of competing definitions to differing assessments of partnerships ([Pattberg and Widerberg, 2016](#)). Ambiguities in the definition and operationalization of the term partnership has led some to discredit it as a buzzword ([Stott and Murphy, 2020](#)), or as “conceptually empty and merely politically expedient” ([Brinkerhoff and Brinkerhoff, 2011](#), p.31). This is particularly true for the term MSP. While initially often equated with (transnational) public-private partnerships ([Pattberg et al., 2012](#); [Stott and Murphy, 2020](#)), more recent definitions of MSPs in the context of the SDGs define them as “collaborative relationship between or among organizations from different stakeholder types aligning their interests around a common vision (...) to maximize value creation towards the Sustainable Development Goals” ([Stibbe and Prescott, 2020](#), p.23). We believe that the evolution of the term MSP to capture interactions between different stakeholder types is important. First, since in practice, many MSPs (including in the context of the WSSD and the SDGs) are formed between stakeholders from the same sector. Examples hereof include partnerships between governmental agencies and intergovernmental organizations (IGOs) (public sector only); or between non-governmental organizations (NGOs) and academia (private sector only). These types of MSPs have been deemed equally relevant to the implementation of the SDGs alongside (transnational) public-private partnerships ([Beisheim and Simon, 2016](#)). Second, scholars have increasingly cautioned against a mere distinction between public and private (or state and non-state) actors, arguing that actors from the same sector often fulfill different governance functions depending on their capacities, resources, and power ([Nasiritousi et al., 2016](#)). Since the term “sector” has equally been used interchangeably to differentiate between public and private actors, state and non-state actors or

⁴ Hereafter also referred to as “the partnership platform” or “the platform”. In June 2022, the “Partnerships for SDGs online platform” (<https://sustainabledevelopment.un.org/partnerships>) was migrated to a new website and changed its name to “The Partnership Platform” (<https://sdgs.un.org/partnerships>). In spring 2023, its name was changed again to “SDG Actions Platform”.

stakeholder from different societal subsectors, Table 1 below depicts our understanding of the different terms at play. With this, we aim to be transparent about the terminology applied in this article. Accordingly, we refer to sectors to denote the duality between public or state and private or non-state actors. The private sector is commonly also further divided into civil society and business actors to capture differences between non-profit and for-profit organizations.

To account for different constellations of stakeholder types (according to subsectors) involved in many MSPs and to test the added value of this more nuanced conceptualization, in the empirical analysis of this article we further distinguish between *cross subsector partnerships* (CSSPs) involving two or more actors from different subsectors, and *intra subsector partnerships* (ISSPs), denoting collaborations between two or more actors from the same subsector. While ISSPs also bring together different actors (e.g., two or more NGOs, or two or more IGOs, etc.), CSSPs combine knowledge, resources and experiences from different subsectors, which is argued to be particularly important for advancing nexus approaches (Boas et al., 2016).

While by no means uncontested, MSPs are seen as a promising collaborative governance tool for promoting sustainable development, increasing effectiveness, efficiency and inclusiveness in global policy (Pattberg and Widerberg, 2016). These high expectations placed on MSPs build inter alia on the observed complementarity of state and non-state action in environmental and sustainability governance (Andonova et al., 2017; Coenen et al., 2022), and the diverse capabilities and resources of the actors involved (Moreno-Serna et al., 2020). Mostly distinguishing between public and private actors only, research has highlighted that non-state actors such as cities and other subnational actors, NGOs, private business as well as think tanks and other research organizations assume a variety of functions in global governance. These include e.g., knowledge production and dissemination, capacity building, technology provision, monitoring and evaluation, agenda or goal setting, and mobilization of public engagement (Bäckstrand et al., 2017; Chan et al., 2019). While the distinction is not always clear-cut, these can be considered rather *soft* governance functions as opposed to *hard* governance functions such as regulation, rulemaking and funding, which are predominantly assumed by states, government agencies and IGOs (Betsill and Milkoreit, 2020). Ideally, effective sustainability governance should build on these complementary soft and hard modalities to achieve the change required. Leveraging and pooling these resources remains a major argument in favor of collaborative governance arrangements and MSPs in particular (Beisheim and Simon, 2018).

The literature provides as many assessments of MSPs as different definitions. Comprehensive analyses of MSPs in the field of climate and sustainability governance question their overall performance, while simultaneously acknowledging that – under favorable conditions – they can be highly effective (Pattberg and Widerberg, 2016; Beisheim and Simon, 2018; Pattberg et al., 2012). Some ascribe legitimacy to MSPs based on the involvement of diverse actors and underrepresented groups (Chan et al., 2019), while others consider them a neoliberal tool to advance business interests (Utting and Zammit, 2009). Similarly, we find mixed results regarding their ability to close governance gaps (Coenen et al., 2022; Pattberg et al., 2012; Chan et al., 2019; Bäckstrand, 2006). This list is by far not exclusive and could be extended to a variety of controversially discussed aspects related to collaborative governance approaches (see e.g., Widerberg et al., 2022). And indeed, we should be cautious not to blindly overestimate their potential, also considering that international institutions, and especially the UN, fall short of effective monitoring and follow-up of MSPs (Beisheim and Simon, 2018). However, still today, many national governments fail to deliver on their climate and sustainability commitments, and despite their mixed track record, MSPs keep being promoted, are steadily increasing in number and became normatively situated within the 2030 Agenda as important means of implementation of the complex and interrelated SDGs.

It has been argued that the cross-sectoral collaboration characterizing MSPs makes them particularly suitable for advancing SDG achievement (Boas et al., 2016; Horan, 2019; Stott and Murphy, 2020; Moreno-Serna et al., 2020). First, their setup of actors with diverse capabilities can help effectively leverage resources, as described above. Empirical findings further point to a positive correlation of collaborative and participatory governance arrangements with the achievement of the SDG at the national level (Glass and Newig, 2019), and underline their potential to create co-benefits with climate targets under the Paris Agreement at the transnational level (Coenen et al., 2022). Second, MSPs involving a diverse set of stakeholders from different (sub-)sectors appear suitable to foster integrated SDG implementation by means of nexus approaches, bridging silo, and enhancing synergies and mitigating trade-offs between the goals (Liu et al., 2018; van Zanten and van Tulder, 2021a, b; Boas et al., 2016; Bowen et al., 2017; Horan, 2019). Although the 2030 Agenda itself emphasizes that the SDGs are “integrated and indivisible” (UN, 2015, p.3), their setup and operationalization reflects a siloed approach with weak explicit and rather intransparent connections between the goals that – if implemented without a holistic understanding – could hinder overall SDG achievement by neglecting negative spillovers (Boas et al., 2016; van Zanten and van Tulder, 2021b). To prevent this, and acknowledging the complex relationship between the social, economic and environmental dimension of sustainable development, much research has been devoted to revealing the interlinkages between the SDGs (Bennich et al., 2020; Weitz et al., 2018; Pradhan et al., 2017; Nilsson et al., 2018). These empirical findings form the basis for nexus approaches to help identify synergistic effects, minimize trade-offs, uncover unintended consequences, prevent unbalanced prioritization of some goals over others, and thus support integration and policy coherence for the SDGs (Liu et al., 2018; Boas et al., 2016). Third and lastly, transnational MSPs could be particularly suitable to tackle interrelated sustainability problems that often transcend political and jurisdictional boundaries (Boas et al., 2016). A typical case in point is the water-energy-food nexus. The increasing pressure on water resources related to growing demands for food and energy is exacerbated by globalized supply chains which disconnect production and consumption across borders (Newig et al., 2020). Another example are transboundary river basins, where questions of competing economic interests, allocation and resource security could be steered towards more resilient and sustainable development pathways through the application of a nexus lens (Liu et al., 2018).

In sum, MSPs can serve as an effective governance tool for integrated SDGs implementation when attention is given to integration across multiple SDGs (Stafford-Smith et al., 2017). As noted, MSPs have the potential to address SDG nexuses by fostering cross-sector collaboration, leveraging resources and overcoming silo approaches. Whether these expectations are met in practice has to our knowledge not been systematically studied. With this article, we aim at examining the current collaborative governance architecture of MSPs for the SDGs and exploring the extent to which they address previously identified interlinkages between the SDGs in practice.

3. Methodology

Starting our study in 2019, we contacted the UN Division for Sustainable Development Goals requesting access to the underlying raw data of their official partnership platform to conduct our analysis. Our request was denied, indicating that the UN “will not be able to provide the data in xls or csv format”.⁵ Thus, to receive the data required for our study, we first developed a computer program to systemically crawl the entries listed on the platform. By means of this program, we retrieved and parsed the data at three different points of time between January

⁵ UN Division for Sustainable Development Goals, personal communication, February 6, 2019.

2021 and August 2022. The platform lists different types of initiatives, both (single actor) voluntary commitments and MSPs, yet it is not possible to filter entries accordingly. In general, data quality of the platform is low, as the data is often unstructured and inconsistent, incomplete or outdated. In addition, it is not readily possible to identify the types of partners involved in the partnerships. Therefore, we decided to contact all listed initiatives that provided an email address, explicitly inviting those that registered a partnership to participate in an online survey. After filtering out duplicates, we contacted a total of 4226 initiatives between July 2021 and August 2022. We received responses from 192 initiatives that correspond to the definition of MSPs applied in the present article. The survey consisted of 20 questions, including on the set-up and organization, the partners and their respective roles and activities within the partnership, the geographic focus, the SDGs addressed, the governance functions assumed by partnerships, as well as about the respondents' judgement of the partnership's success in pursuing its objectives (the complete survey is available in the appendix). To compile the list of governance functions, we drew on previous research on WSSD partnerships (Pattberg et al., 2012), transnational cooperative initiatives (Dzebo, 2019) and agency in earth system governance (Betsill and Milkoreit, 2020).

While the decision to contact the partnerships directly entailed a smaller sample size when compared to the totality of cases listed on the platform, the survey method offered important advantages: First, this approach ensured that only partnerships that have been or are currently "active" were included in our study. For there is reason to assume that a large part of the 4226 listed initiatives is no longer – or has never even been – active. For example, 15% of all survey invitations could not be delivered, mostly since the provided contact email was inexistent. This corroborates the claim that the UN failed to provide a clear mandate, political will and sufficient funding for effective monitoring, review and follow-up of partnerships (Beisheim and Simon, 2018). Further, the UN appears to use the platform to showcase action towards the SDGs. However, quite some of the initiatives that we contacted for our survey were not aware of their listing on the platform. To some degree, this can be attributed to the UN merging commitments from earlier conferences and action networks in one platform – including some that were held prior to the launch of the SDGs (see UN, 2022). In conjunction with unstructured, missing or outdated information about partnerships registered on the platform, the transparency and accountability of the UN database can at least be questioned. Second, we were able to scrutinize the SDGs addressed by MSPs through a two-stage selection process. In the first step, we asked respondents to indicate the SDGs that correspond to both the primary and secondary objectives of the partnership. In the second step, we only displayed the SDGs selected before and asked respondents to choose exclusively those that reflect the partnership's main purpose. This enabled us to reduce a bias by "box-ticking" all SDGs, which has been observed in comparable data bases (Coenen et al., 2022). It further helped us to create a refined data set for the analysis of SDG nexuses addressed. We consider a partnership to address an SDG nexus if it selected at least two goals as the primary objectives of their work. Third, by giving respondents the opportunity to comment freely on their input provided, we were able to retrieve additional insights about the partnerships that we would not have received by relying only on the information published at the platform.

4. Results and discussion

This section presents and discusses the results of the 192 MSPs that answered our survey. Of these, 114 qualify as CSSPs, involving at least two partners from different subsectors. 34 MSPs can be considered ISSPs, referring to partnerships between stakeholders from the same subsector. For 44 partnerships, we received no specification on the stakeholder types involved.

We structure our analysis according to six dimensions: *Set-up and organization, partner composition, agency of partners, governance functions,*

SDG coverage, and effectiveness. Mostly, we contrast our results on CSSPs and ISSPs to explore differences between the two types of MSPs. Selectively, we focus on CSSPs only to examine particularities between the different societal subsectors involved. While we acknowledge that we cannot assume full representativeness of our sample, our findings can nonetheless provide valuable insights on the collaborative governance architecture of MSPs for SDG implementation.

4.1. Set-up and organization

Table 2 depicts the findings on set-up and organization related variables, i.e., activity status, annual project budget, communication frequency and monitoring. We find that most partnerships in our sample are still active (89%), while 11% have ceased their activities. For the subset of CSSPs, we see a higher percentage of active partnerships (93%), especially when compared to ISSPs with 76%. We note, however, that the survey methodology used in our study may bias these results, as active partnerships are more likely to have available resources to respond to our questionnaire. Regarding financial resource endowment, we find huge differences across partnerships. While 17% have no budget at all, 13% indicate an annual project budget of more than \$1,000,000.

Most MSPs (53%) are rather small partnerships, with 1–20 people actively involved. This number is slightly higher for ISSPs (64% vs. 54% of CSSPs). However, 25% of CSSPs report working with up to five people only, compared to 12% for ISSPs. In terms of regular communication between partners, we find that the majority (68%) communicates at least monthly or bi-monthly, or even more frequently. This aggregate result is the same for both types of MSPs. Yet, we find that more ISSPs (21%) communicate daily, compared to 12% of CSSPs. Notably, we find a higher number of ISSPs reporting no or no regular communication (14%) compared to CSSPs (9%). Similarly, a higher share of CSSPs (91%) reports regularly monitoring of its activities compared to ISSPs (79%). Taken together, the analysis indicates that partnerships for the SDGs in our sample have a relatively high degree of institutionalization. Previous research has argued that "institutionalization is the basic factor leading to partnerships' effectiveness" (Szulecki et al., 2012, p.98). In how far these institutional variables relate to (self-reported) effectiveness of MSPs will be assessed in section 4.6.

Fig. 1 shows the location of partnerships' administrative bases, spanning 61 different countries. We find a relatively even regional distribution between Africa (27%), Asia (23%) and Europe (27%), while fewer partnerships report their administrative base location in Latin America and the Caribbean (14%), Northern America (8%) and especially Oceania (1%). Earlier studies have criticized the predominance of Global North-based actors in collaborative climate and sustainability governance arrangements, cautioning against a consolidation of power asymmetries in global governance (Bäckstrand, 2012; Chan et al., 2019). While we find that, taken together, 35% of partnerships in our sample have their administrative base in either Europe or Northern America, roughly two thirds of the MSPs' headquarters or secretariats are located in other regions. However, while Northern America has a lower regional representation in relative terms, the United States were the second most frequently reported administrative base location after India.

Fig. 2 depicts the countries of implementation. The partnerships reported current or past activity in 147 countries. 20 partnerships (15%) indicated a global scope⁶. On average, a partnership is or was active in four different countries. The pie chart in Fig. 2 shows how many partnerships report implementation in at least one country of the respective

⁶ A global scope refers to partnerships whose output and impact is not focused on a specific territory only, and which aims to address global challenges to advance sustainable development globally.

⁷ Regional groupings are based on the UN SDG Indicator site (<https://unstats.un.org/sdgs/indicators/regional-groups/>) except for Taiwan, which was counted as Asian country.

Table 2

Set-up and organization of partnerships. The table depicts variables concerning the set-up and organization of MSPs for the SDGs for the total sample and its subsets CSSPs and ISSPs. Data for “NA” refers to survey responses that did not provide further information on the stakeholder types involved.

	n Total (CSSPs/ISSPs/NA)	Total	CSSPs	ISSPs	NA
Activity status					
Active	192 (114/34/44)	170 (89%)	106 (93%)	26 (76%)	38 (86%)
Inactive		22 (11%)	8 (7%)	8 (24%)	6 (14%)
Budget					
No budget	191 (114/34/43)	32 (17%)	16 (14%)	6 (18%)	10 (23%)
Less than USD 25,000		34 (18%)	22 (19%)	7 (21%)	5 (12%)
USD 25,001–100,000		31 (16%)	22 (19%)	5 (15%)	4 (9%)
USD 100,001–250,000		24 (13%)	15 (13%)	3 (9%)	6 (14%)
USD 250,001–1,000,000		30 (16%)	17 (15%)	5 (15%)	8 (19%)
More than USD 1,000,000		25 (13%)	14 (12%)	4 (12%)	7 (16%)
Unknown/No answer		15 (8%)	8 (7%)	4 (12%)	3 (7%)
Staff (people actively involved)					
1–5	191 (114/34/43)	41 (21%)	29 (25%)	4 (12%)	8 (19%)
6–20		62 (32%)	33 (29%)	18 (52%)	11 (26%)
21–50		35 (18%)	26 (23%)	3 (9%)	6 (14%)
51–200		19 (10%)	11 (10%)	3 (9%)	5 (12%)
More than 200		24 (13%)	11 (10%)	3 (9%)	10 (23%)
Unknown		10 (5%)	4 (4%)	3 (9%)	3 (7%)
Communication frequency					
Daily	119 (91/28/-)	17 (14%)	11 (12%)	6 (21%)	–
Weekly/Bi-weekly		30 (25%)	25 (27%)	5 (18%)	–
Monthly/Bi-monthly		34 (29%)	26 (29%)	8 (29%)	–
3–5 times per year		19 (16%)	16 (18%)	3 (11%)	–
Once or twice per year		7 (6%)	5 (5%)	2 (7%)	–
None/not regularly		12 (10%)	8 (9%)	4 (14%)	–
Monitoring					
Yes	192 (114/34/44)	171 (89%)	104 (91%)	27 (79%)	40 (91%)
No		21 (11%)	10 (9%)	7 (21%)	4 (9%)

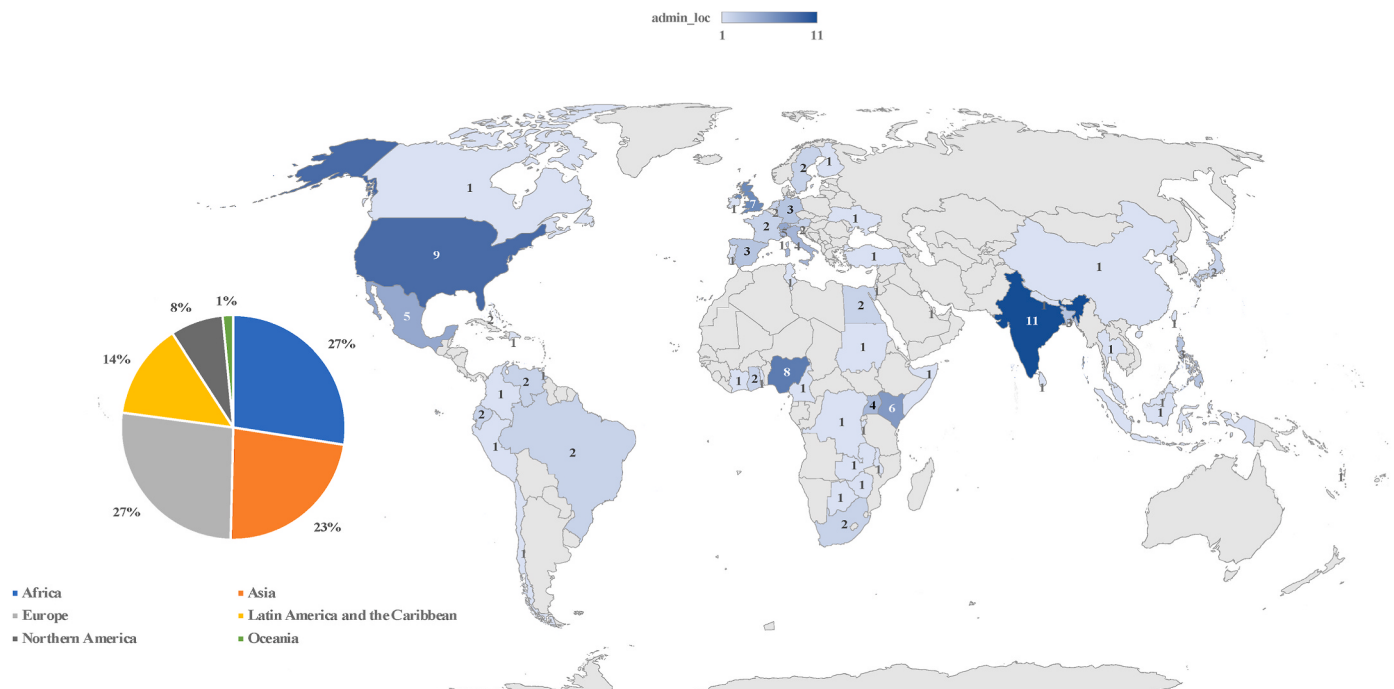


Fig. 1. Partnerships' administrative base location. The map shows in which countries the partnerships' administrative base are located. The pie chart indicates the regional distribution⁶ (n = 131).

region. Here, Europe and Northern America sum up to 38%, while a similar share of partnerships implements their projects in at least one country in Africa (37%) and Asia (34%). Latin America and the Caribbean (17%) and again, especially Oceania (5%), are comparatively underrepresented.

We can think of two possible interpretations for this. On the one hand, a relatively equal regional distribution could indicate a positive development, as the SDGs aim for universal applicability in all countries.

On the other hand, [Chan et al. \(2019\)](#) questioned whether predominantly Northern-led initiatives can provide real benefits to countries where the need is greatest, or whether they primarily benefit the Global North. They argue that North-based actors could promote their own (economic) interests at the expense of actual long-term, local needs. Without further analysis, we cannot draw either one or the other conclusion and encourage future research to take up this question.

Borrowing from [Esparcia et al. \(2000\)](#), we further inquired about the

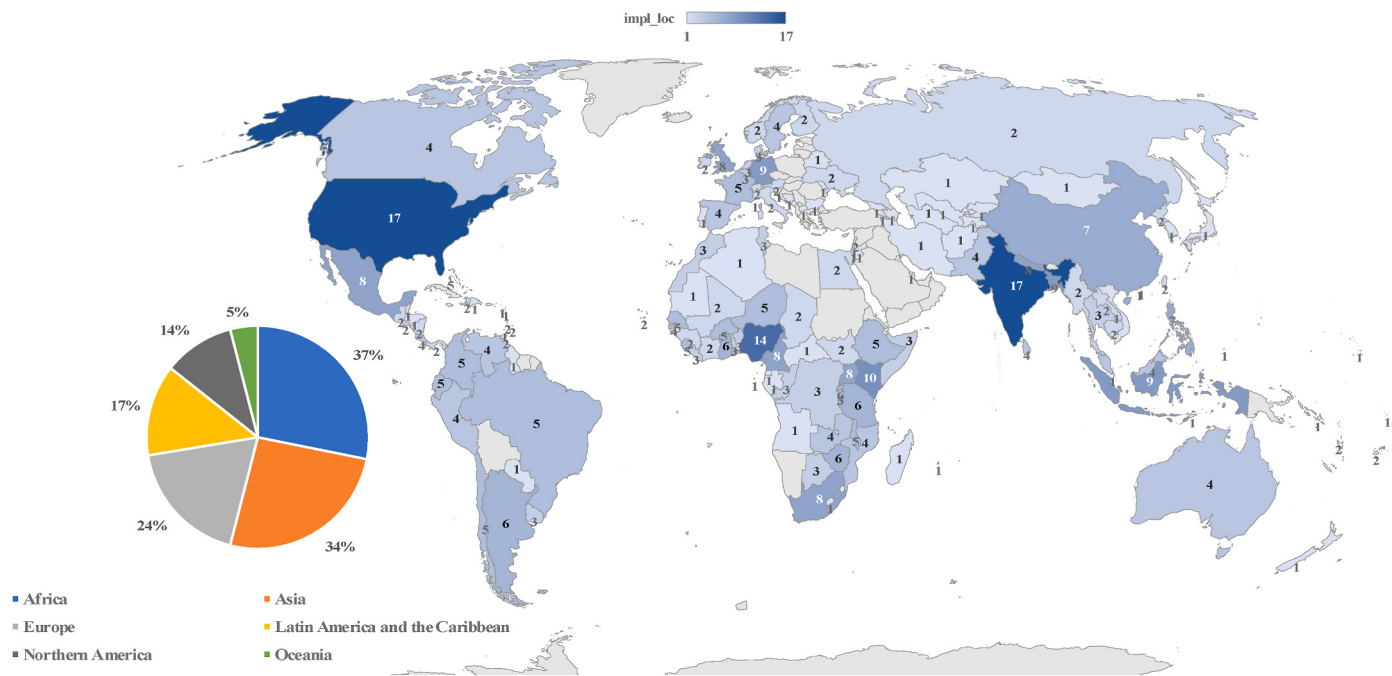


Fig. 2. Countries of implementation. The map shows the countries for which the partnerships reported past or current activity. The pie chart indicates the regional distribution⁶, i.e., the percentage of partnerships that was/is active in at least one country of the respective region (n = 133).

reasons for establishing partnerships (see Fig. 3). For the majority of both CSSPs and ISSPs, joint implementation, the involvement of local or national organizations, as well as strengthening an existing partner network were important motivators. For ISSPs, the latter was reported by most respondents (59%). Remarkably, we find that pooling of resources and securing access to funding are much more important drivers for CSSPs. This points to a higher awareness of the benefits emerging from leveraging different capacities and resources through cross-subsector collaboration by actors participating in CSSPs, which has been deemed decisive for effective and integrated SDG implementation, particularly to enhance synergies between the goals (Moreno-Serna et al., 2020). However, it is important to assess which specific capabilities and resources and thus, which actors are needed for a partnership to fulfill its objectives (Pattberg and Widerberg, 2016).

4.2. Partner composition

Concerning the number of partners, we find that most ISSPs in our sample (56%) involve two partners, still 21% involve three partners and 15% involve four partners. Only three include more than four partners. Numbers for CSSPs are more distributed, yet with the majority involving three partners (20%), followed by two (18%), four (16%) and five partners (12%). The largest CSSP in our sample consists of 117 partners.

As Table 3 shows, we find that in absolute terms, NGOs or Civil Society Organizations (CSOs)⁸ are the subsector most represented in CSSPs, followed by research and education, business and industry, IGOs⁹ and national government (agencies). Other subnational actors (e.g., counties, districts and provinces) are less represented, yet still more frequently than cities. “Other” includes e.g., faith-based organizations,

think tanks, youth organizations or philanthropes. In ISSPs, most actors belong to business and industry, followed by NGOs and research and education. IGOs and national governments are much less represented in absolute terms. We find no ISSPs between subnational actors.

If we compare our findings to earlier studies on WSSD partnerships for sustainable development registered with the UN Commission on Sustainable Development (UNCSD) in 2006 (see Pattberg et al., 2012, p.82), we find considerable differences in the participation of different societal subsectors (see Fig. 4). Acknowledging that we cannot claim representativeness of our sample, comparison with earlier studies can nonetheless provide valuable insights into changes in the collaborative governance architecture over time. Further, UN data may also be non-representative of the universe of partnerships, as many might not even register their activities.

Assuming a broadly similar definition and partnership coverage of the two UN databases, Fig. 4 shows a relative decline of state actor participation in partnerships for sustainable development, i.e., a drop of IGO involvement by 6%, and by 21% for national governments compared to 2006. In contrast, we find an increase of NGO participation by 15%, and by 8% for business and industry as well as research and education. Thus, our results indicate an increased participation of non-state actors in global sustainability governance. We see several possible explanations for this development. On a positive note, there could be greater awareness among non-state actors of the urgency and need for action due to an overall societal shift toward greater sustainability, or due to more noticeable pressures from the increasing deterioration of socio-environmental conditions, such as growing inequality, food insecurity, or the effects of climate change. The relatively inclusive drafting process of the SDGs involving diverse non-state actors (Biermann et al., 2022b) might have influenced this development as well. To what extent such changes in global governance arrangements have been induced by the SDGs is however difficult to single out (Biermann et al., 2022a). On the other hand, the UN partnership platform could suggest more action than is actually out there. First, and especially regarding business actors, these kinds of platforms give room for window-dressing, or what in the present context has been coined “SDG-washing” (Dahlmann et al., 2020) or “blue-washing” (Beisheim and Simon, 2018). While both approaches aim at increasing social legitimacy, the first

⁸ Hereafter, the terms NGO and CSO are used interchangeably.

⁹ Including e.g., specialized UN agencies such as the World Health Organization (WHO), the UN Environment Programme (UNEP) and the UN Educational, Scientific and Cultural Organization (UNESCO); financial organizations such as the World Bank and the Asian Development Bank; regional organizations such as the Secretariat of the Pacific Regional Environment Programme (SPREP), and others.

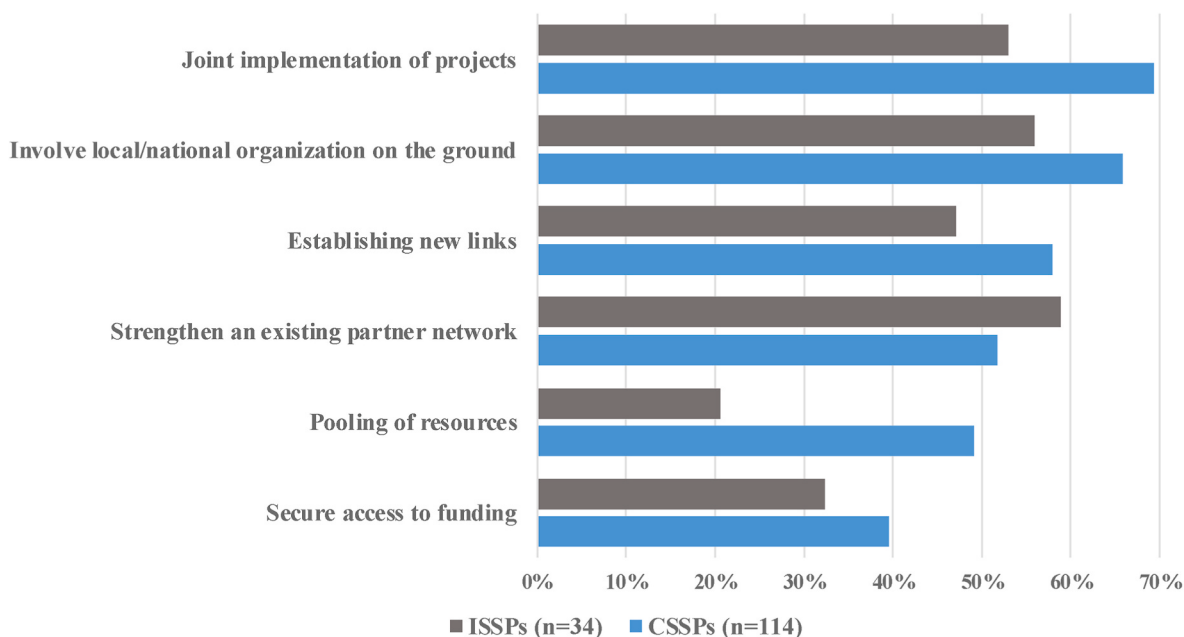


Fig. 3. Motivation for establishing a partnership. The figure shows the reasons for initiating a partnership (multiple answers possible) as percentage of ISSPs (n = 34) and CSSPs (n = 114).

Table 3

Number of partners by subsector (absolute count). The figure shows the involvement of actors from different subsectors for MSPs (n = 148), and for CSSPs (n = 114) and ISSPs (n = 34) specifically.

	NGO/ CSO	IGO	Research and Education	Business And Industry	National Government (Agencies)	City	Other Subnational Actors	Other	Not indicated
CSSPs	319	119	156	146	81	10	56	16	9
ISSPs	46	7	28	58	10	0	0	0	0
Total	365	126	184	204	91	10	56	16	9

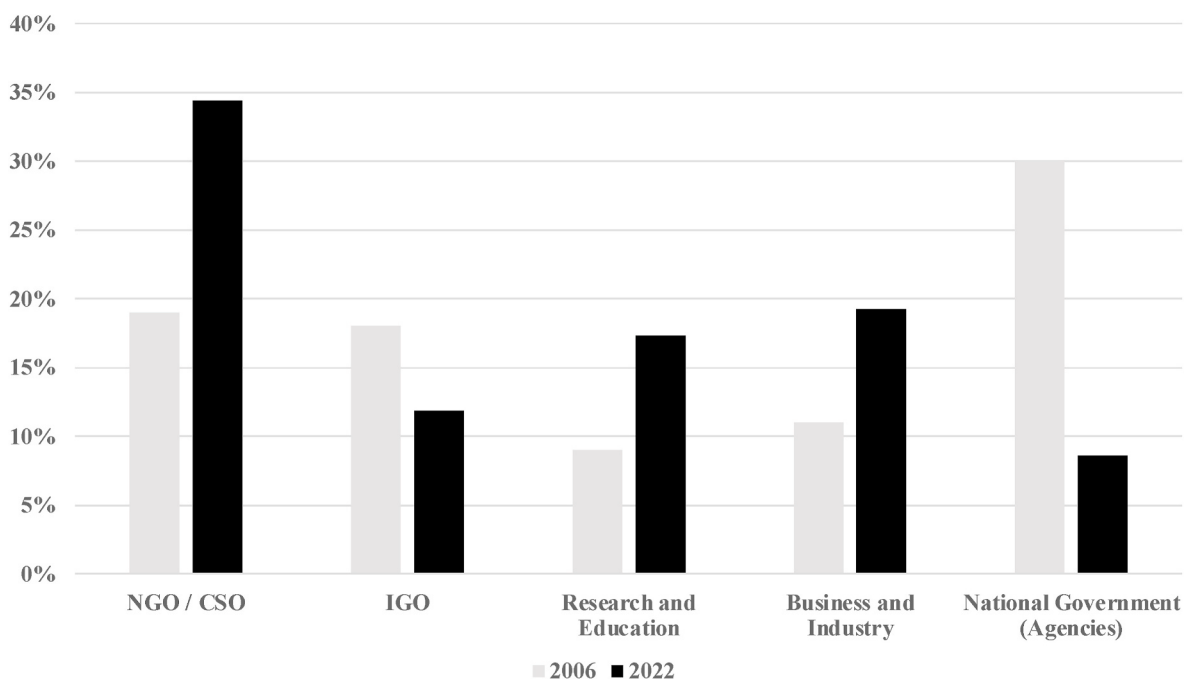


Fig. 4. Participation of partners in MSPs by subsector (2006 vs. 2022; in %). The figure displays the relative distribution of partners from selected subsectors (n₂₀₀₆ = 6711; n₂₀₂₂ = 1061). Data for 2006 from [Pattberg et al. \(2012, p. 82\)](#).

seeks to do so through superficial or sham commitments to the SDGs, while the latter intends to create benefits from association with the UN. This could be reduced by sound review and tracking of the registered entries. Yet, as we have elaborated in section 3, evidence from our survey suggests that the monitoring, review and follow-up to the registered partnerships is at best moderate.

It is further insightful to examine the representation of stakeholder types *within* partnerships instead of focusing only on the absolute count displayed in Table 3. For instance, the sample includes a single ISSP involving 53 business actors alone. Fig. 5 shows the percentage of partnerships involving at least one partner from the respective subsector.

Here, we see that most ISSPs in our sample (47%) are collaborations among NGOs, followed by research and education partnerships (26%). Much less arrangements consist solely of national governments (12%), business and industry (9%) or IGOs (6%). Percentages for CSSPs exceed 100% as every CSSP combines at least two or more subsectors. Here, we also find a predominance of NGOs, with 75% of all CSSPs including at least one partner from this subsector. Almost half of all CSSPs involve at least one partner from business and industry (48%) or research and education (46%). National governments participate in 42% of the CSSPs, while IGOs are involved in slightly more than a third (36%).

We find that the vast majority (80%) of CSSPs involves two (53%) or three (27%) different sectors. Fig. 6 shows the most frequent combinations of partners in CSSPs by subsector, displayed as a network graph. While the size of the nodes corresponds to the absolute number of actors from the respective subsector (see Table 3), the thickness of the edges relates to the number of CSSPs involving at least one actor from both connected subsectors (see Table 4).

The most prevalent combinations of actors in CSSPs are those of NGO and business/industry (46), followed by NGO and research/education (38), and NGO and national government (32). When analyzing the combination of state and non-state actors in CSSPs (excluding “Others” and “NA”; $n = 110$), we find that most partnerships (65%) involve both state actors (national governments, IGOs, cities or other subnational actors) and non-state actors (NGOs, research/education, or business/industry). 28% of CSSPs are constellations between different non-state actors, while only 7% are partnerships solely between state actors. This underlines again the relevance of non-state actors in global sustainability governance, both in combination with state actors, yet also in

collaborative initiatives established without public sector involvement.

We further analyzed which actors most often lead MSPs. Fig. 7 display the results in comparison to earlier studies by Pattberg et al. (2012) and Andonova and Levy (2003), who analyzed leadership in WSSD partnerships for the years 2007 and 2003 respectively. Contrasting these results with our findings on MSPs for the SDGs in 2022 provides a valuable overview of changes in leadership patterns within partnerships for sustainable development over time.

Our findings show NGOs to be the most frequent lead partners in MSPs (43%). This contrasts previous findings, where state actors, i.e., national and local governments as well as IGOs, led around 60% of all partnerships. Interestingly, we find not only an increasing participation of non-state actors overall (see Fig. 4), but also as lead partners. In our sample, state actors run only 23% of all partnerships. Our results further show an increase of business and industry partners leading MSPs, from around three percent in 2003 and 2007 to 10% in 2022. Lead partners from research and education keep steadily increasing over time, reaching about 12% in 2022. This could indicate greater collaboration among scientist or the strengthening of research networks in the context of the SDGs. Indeed, the SDGs have attracted considerable scientific interest, and evidence-based approaches have become central to assessing progress towards the SDGs. One example is the Global Sustainable Development Report (GSDR), an UN-mandated scientific assessment report to strengthen the science-policy interface and inform the High-Level Political Forum (HLPF), which is responsible for the follow-up and review of SDG implementation. While we find that relatively fewer MSPs today are led by IGOs, they remain the second most frequent lead partner (15%). Endowed with human and financial resources, IGOs are well-equipped to manage and support partnerships (Dzebo, 2019). They often lead as powerful orchestrators, which has been claimed to be key for effective governance (ibid.). Below (section 4.6), we further examine the relationship between lead partners and MSPs’ effectiveness. Finally, we find few MSPs led by subnational actors. In our sample, no city actor, but rather other subnational actors lead MSPs. This is quite surprising given the many city networks, such as C40 or 100 Resilient Cities, concerned with building resilient and sustainable urban areas. It is likely that these networks are simply not registered on the partnership platform.

In sum, while Pattberg et al. (2012, p.83) concluded that partnerships (at the time) “reproduce or even intensify existing relationships in

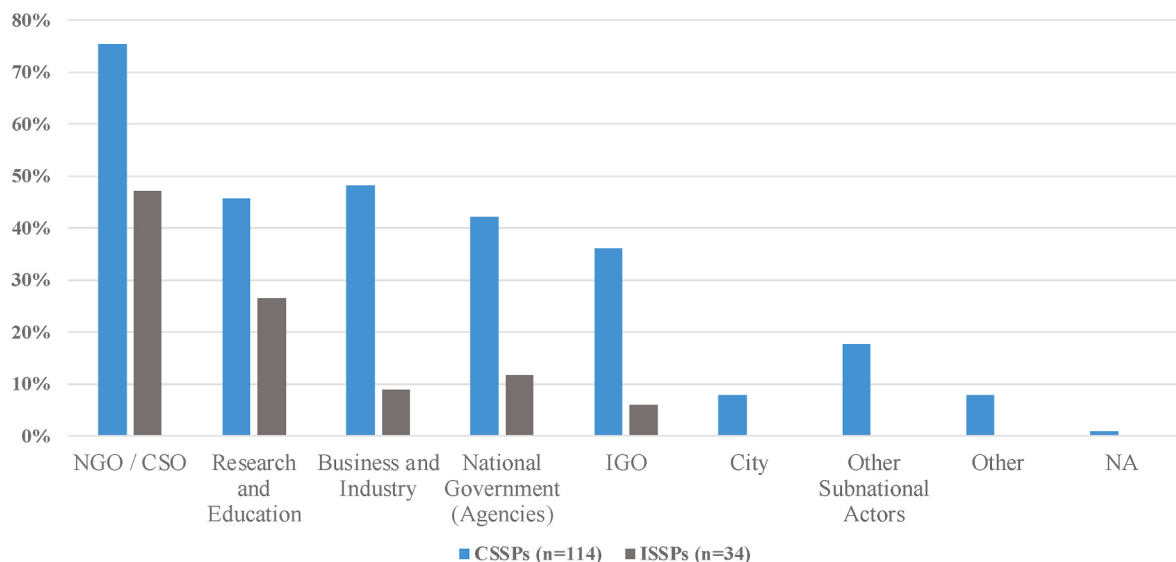


Fig. 5. Representation of subsectors in partnerships (in %). The figure displays the percentage of partnerships involving at least one partner from the respective subsector, for both CSSPs ($n = 114$) and ISSPs ($n = 34$).

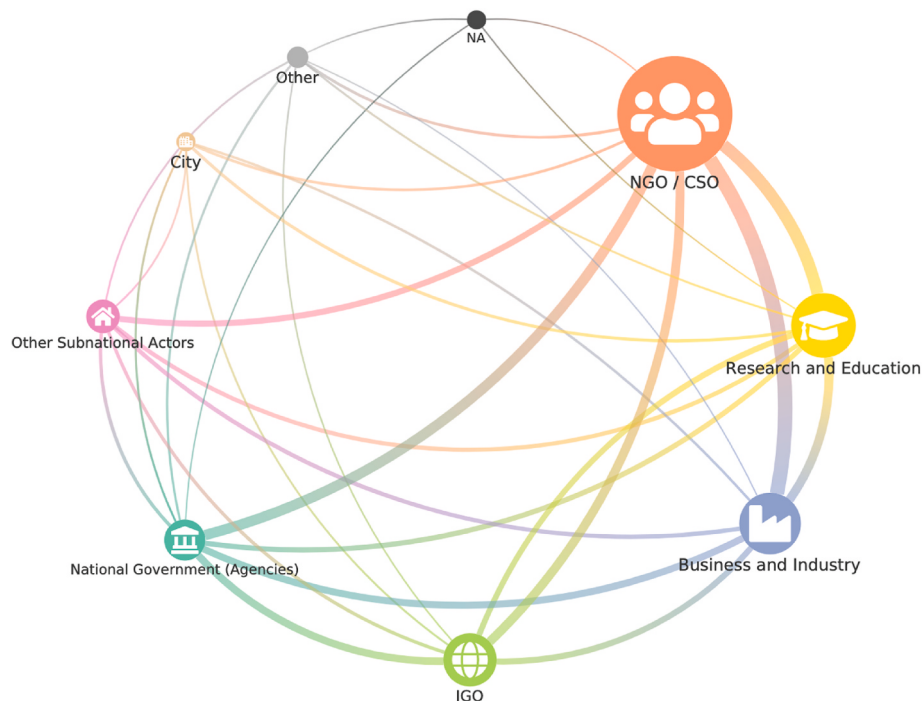


Fig. 6. Partner network of CSSPs. The network shows the connections between different subsectors involved in CSSPs for the SDGs ($n = 114$). The size of the nodes depicts the total amount of each stakeholder type involved (see also Table 3). The thickness of the edges indicates the number of CSSPs involving at least one partner from both connecting subsectors (see also Table 4). The network can be explored online at: <https://kumu.io/LMAG/msps-for-sdgs>.

Table 4

Combination of partners in CSSPs, by subsector. The table depicts the number of CSSPs involving at least one partner from respective subsectors ($n = 114$).

	NGO/ CSO	IGO	Research and Education	Business and Industry	National Government (Agencies)	City	Other Subnational Actors	Other	Not indicated
NGO/CSO	–	–	–	–	–	–	–	–	–
IGO	27	–	–	–	–	–	–	–	–
Research and Education	38	16	–	–	–	–	–	–	–
Business and Industry	46	17	27	–	–	–	–	–	–
National Government (Agencies)	32	22	14	20	–	–	–	–	–
City	6	3	7	5	3	–	–	–	–
Other Subnational Actors	17	8	11	11	8	3	–	–	–
Other	6	2	3	1	4	0	3	–	–
Not indicated	1	0	1	0	1	0	0	1	–

the international system”, our data contrasts their findings, pointing to increasing non-state actor involvement over time and in the context of the SDGs. While earlier studies considered the increased participation of non-state actors in global governance as a shift of political authority from public to private actors (Pattberg and Strippel, 2008), more recently the debate has turned to the idea of a “reconfiguration of authority” (Hickmann, 2017, p.432). In this view, non-state action complements the efforts of governments, but public actors continue to play a central role in global governance. Our results corroborate this assumption, as the next section will elaborate in more detail.

4.3. Agency of partners

We further analyzed agency within partnerships, i.e., the activities assumed by individual actors. Here, we focus on CSSPs only to highlight nuanced differences between actors from different societal subsectors. Fig. 8 displays the results, focusing on the three most frequently indicated activities by stakeholder type.

We find that NGOs are most often involved in implementation (35%), indicating their central role in putting internationally agreed guidelines into practice through direct action on the ground. IGOs mostly engage in

providing information and expertise (30%), as well as representation within the partnerships (29%).¹⁰ This again points to their role as orchestrators. Additionally, these types of activities suggest that IGOs are involved in partnerships to increase their legitimacy. We further note that the main role of national governments is to fund partnerships. Given that governments are involved in 42% of all CSSPs, this finding underlines the remaining importance of nation states in global governance besides the growing involvement of non-state actors. Results further show that partners from research and education are primarily concerned with providing information and expertise (28%) as well as communication (24%) and implementation (22%). Together with their participation in 46% of all MSPs, this is another indication of the importance of science-based approaches to SDG implementation, which is a central component of the nexus approach. Key roles of partners from business and industry include representation (23%) and financing (21%). While critics may interpret representation as pointing towards window-

¹⁰ With “representation” we refer to the participation of stakeholders in a partnership to represent the respective interests and opinions of their organization regarding the projects at stake.

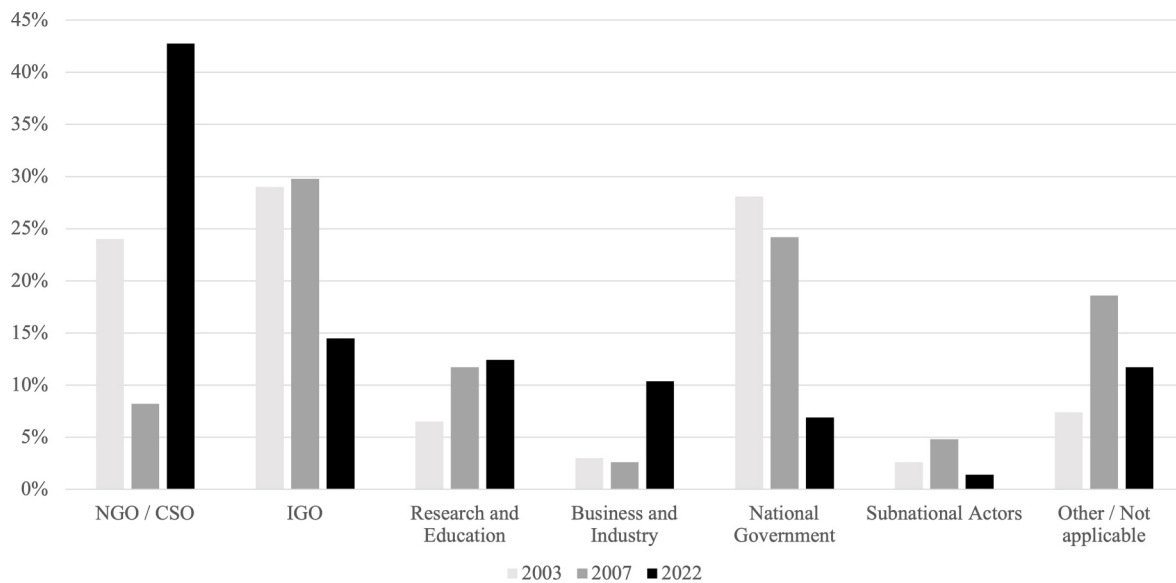


Fig. 7. Lead partners of MSPs for sustainable development by subsector. The graph shows the distribution of lead partners by subsector for the years 2003 (data from Andonova and Levy, 2003, p.23; n = 231), 2007 (data from Pattberg et al., 2012, p.81; n = 321) and 2022 (own data for MSPs; n = 145).

dress, and financing as powerful means to influence decision-making or define standards according to their own interests (Chan et al., 2019), others may see this as sign of growing corporate social responsibility.

While we find cities to engage most frequently in convening and facilitating participation (50%) as well as implementation (20%), these numbers are almost equal, but reversed, for other subnational actors. This suggests that subnational actors function as orchestrators and implementors in local contexts with a focus on involving stakeholders on the ground. Considering a lively debate on the importance of “localizing” the SDGs, i.e., adapting them to the local context for effective implementation (Valencia et al., 2019), this is an interesting result. Overall, our analysis of agency in CSSPs confirms earlier findings: non-state actors tend to perform rather “soft” activities (except for implementation), whereas state actors assume rather “hard” functions within partnerships. However, by differentiating between societal subsectors, we could find more nuanced differences. For state actors, we see national governments to be primarily responsible for funding, while IGOs and subnational actors often appear to orchestrate partnerships, yet most likely at different levels. For non-state actors, we find partners from research and education to provide expertise and engage in communication, while business actors mostly represent their interests and provide funding to partnerships. Finally, implementation seems to be a joint effort between state and non-state actors, with NGOs taking a particularly prominent role in this regard.

4.4. Governance functions

Table 5 shows the governance functions that partnerships perform, listed by stakeholder type of the leading partner. To relate our results to findings from the previous section, we decided to focus also here on CSSPs only. On average, we find that most CSSPs are concerned with convening and facilitating participation (74%) as well as implementation (73%). Convening and facilitating participation serves a variety of purposes, such as, inter alia, coordination of stakeholders, ensuring accountability and legitimacy, capacity building and knowledge exchange (Betsill and Milkoreit, 2020). According to Betsill and Milkoreit (2020, p.78), it “enables the fulfillment of other governance functions if and to the extent that the agent is not willing or able to provide these on its own”. Thus, this being an important governance function of CSSPs was expected given their nature of combining partners from different societal subsectors. Implementation was rated “very important” by the

majority of CSSPs, independent of the type of lead partner (except for subnational actors, excluding cities). Interestingly, this contrasts results from Pattberg et al. (2012), who found that partnerships most often focus on institution-building rather than on implementation. We find rulemaking and regulation (33%) as well as standard setting and certification (36%) to be functions less often assumed by CSSPs. Overall, our results suggest that partnerships for the SDGs are predominantly concerned with “getting everyone on board” and “getting things done”.

Regarding NGO-led CSSPs, we find that all functions were rated “very important” by at least 60%, except standard setting/certification (30%) and rulemaking/regulation (32%). Implementation (87%), knowledge dissemination and capacity building (both 81%) were rated as core functions of these partnerships. This again confirms the important contribution of NGOs in converting the SDGs into tangible action on the ground. For CSSPs led by IGOs, we find implementation (90%), knowledge production (80%) and capacity building (75%) to be primary functions. Comparing this to main activities that IGOs perform as individual actors in partnerships (see Fig. 8), our results suggest that many partnerships are established and orchestrated by IGOs as lead partners, with a focus on providing information and expertise to implementing partners on the ground. Similarly, we find that governments leading CSSPs do so primarily by funding implementation (89%) and capacity building efforts (78%). These partnerships further rank second in rule-making and regulation (44%) after other partnerships led by subnational actors (50%). This was expected, as these rather hard governance functions typically performed by state actors. When research and education partners take the leading role, we find, as expected, knowledge production (80%) and dissemination (70%) as well as implementation (80%) to be the main governance functions of these partnerships. This corroborates our argument regarding evidence-based SDG implementation in MSPs, especially under the auspice of partners from the research community. Business-led MSPs are mostly concerned with implementation (92%) as well as capacity building (85%). Since we found that business actors themselves are not primarily involved in implementation (see Fig. 8), their role as lead partners appears to be focused on financing projects implemented by others. On the other hand, business-led CSSPs rank first in standard setting and certification (46%), most likely related to partnerships concerned with private certification schemes.



Fig. 8. Activities assumed by partners in CSSPs. The figure shows the three most frequent activities of partners involved in CSSPs by subsector (n = 114). Percentages relate to the number of actors from the respective sector.

4.5. SDG coverage

An analysis of the SDGs covered by MSPs shows that 56% address two or more SDGs in their work. Interestingly, we find that CSSPs more often than ISSPs address multiple SDGs (59% vs. 42%). Since these results are based on the goals selected to reflect the partnerships' main purpose, this suggests that partnerships involving different stakeholder types are more likely to consider interrelations between the goals in practice.

As Fig. 9 shows, SDG 4 (*quality education*) and, as expected, SDG 17 (*partnerships for the goals*) are frequently addressed by both CSSPs and ISSPs. We find CSSPs to address a variety of goals more frequently than ISSPs, i.e., SDG 13 (*climate action*), SDG 11 (*sustainable cities and communities*), SDG 15 (*life on land*), SDG 16 (*peace, justice and strong institutions*), SDG 10 (*reduced inequalities*), and SDG 5 (*gender equality*). Notably, we find no ISSP focusing on SDG 7 (*clean and affordable energy*). In contrast, SDG 2 (*zero hunger*), SDG 3 (*good health and well-being*) and SDG 14 (*life below water*) are more frequently addressed by ISSPs. This

indicates a need to foster collaboration between different societal subsectors in these issue areas.

Leaving SDG 17 (*partnerships for the goals*) as referring to the means of implementation aside, CSSPs' work mostly contributes to SDG 13 (*climate action*; 36%), SDG 4 (*quality education*; 35%), and SDG 5 (*gender equality*; 27%). The focus on SDG 13 is noteworthy, given that implementation efforts at the national level were found to prioritize mainly socio-economic goals (Biermann et al., 2022a). CSSPs thus seems to play an important complementing role for integrated SDG implementation. The relatively high focus on quality education (SDG 4) and gender equality (SDG 5) supports this argument, as both goals can be considered cross-cutting issues enabling the attainment of other SDGs (Glass and Newig, 2019; Leal Filho et al., 2022). SDG 9 (*industry, innovation and infrastructure*), SDG 10 (*reduced inequalities*) and SDG 12 (*responsible consumption and production*) are least addressed by CSSPs. It has been noted that SDGs 10 and 12 are generally under-researched (Biermann et al., 2022a), which may explain to some extent the limited attention given to these goals. Previous studies have further shown that SDG 9 is

Table 5

Governance functions of CSSPs by stakeholder type of lead partner (in %). The cells depict the share of CSSPs that rated a governance function as “very important”.

	NGO/ CSO (n = 319)	IGO (n = 119)	Research and Education (n = 156)	Business and Industry (n = 146)	National Government (Agencies) (n = 81)	Subnational Actors (excl. Cities) (n = 56)	Other/Not applicable (n = 16)	Mean
Direct action/ Implementation	87	90	80	92	89	0	75	73
Capacity building	81	75	40	85	78	50	75	69
Knowledge production	70	80	80	46	56	0	92	61
Knowledge dissemination/ Campaigning	81	65	70	69	56	50	83	68
Consulting/Policy advice	70	65	20	38	56	50	83	55
Lobbying/Advocacy	60	30	20	31	56	0	75	39
Standard setting/ Certification	30	40	40	46	44	0	50	36
Convening/Facilitating participation	74	65	60	69	67	100	83	74
Rulemaking/Regulation	32	35	20	15	44	50	33	33
Monitoring/Review	64	65	40	46	67	50	50	55
Funding/Sponsoring	62	65	40	69	67	50	33	55

highly synergistic with many other goals (Coenen et al., 2022). Consequently, there appears to be untapped potential for partnerships to create additional co-benefits in SDG implementation by focusing more synergistic action on SDG 9.

We further took a closer look at the SDGs addressed in combination by CSSPs to examine whether they contribute to integrated SDG achievement by considering interrelations between the goals. Fig. 10 shows a heat map of SDG pairs addressed jointly in any combination of two or more goals selected as reflecting a partnership’s *primary objectives* in the survey’s two-stage selection process.

We find that CSSPs most often address the nexus between quality education and gender equality (SDGs 4 and 5). By targeting these cross-cutting issues jointly, partnerships contribute to integrating both policy domains by combining resources, skills, and knowledge from different stakeholder types in action on the ground. Eliminating gender disparities in education further constitutes a leverage to increase women empowerment and reduce poverty, particularly in countries of the Global South. This is underlined by an observable joint focus on SDG 5 and SDG 1 (*poverty eradication*). SDG 17 (*partnerships*) and SDG 13 (*climate action*) are equally often addressed in combination. This indicates that partnerships work on fostering collaborative action for climate protection, thereby complementing (still insufficient) state-led efforts. SDG 13 is further frequently addressed in combination with SDG 11 (*sustainable cities and communities*). Since cities are both severely affected by climate change and major polluters, collaborative efforts to address both goals simultaneously are crucial to reducing their adverse environmental impact with a parallel view on securing sustainable socio-economic development. In sum, among the most frequent SDG nexuses addressed, we find a dominance of SDG 13 (climate action), SDG 5 (gender equality) and SDG 4 (education). The SDGs least frequently addressed jointly, in contrast, often include SDG 12 (responsible production and consumption) and SDG 10 (reducing inequalities).

We compared our results to a study by Pradhan et al. (2017), who statistically analyzed synergies and trade-offs among the SDGs. With this, we aim to assess whether the patterns we see in partnership approaches to SDG implementation correspond to previously identified interlinkages between the goals. Among the SDG pairs most often addressed in our sample, we find two of the top ten synergistic SDGs identified by Pradhan et al. (2017, p.1174). These relate to the city-climate-nexus (SDGs 11 and 13; synergy pair 1), as well as to the poverty-gender-nexus (SDGs 1 and 5; synergy pair 3). In contrast, four of the least addressed SDG pairs in our sample are among the top ten trade-off SDGs identified by Pradhan et al. (2017). All these concern SDG 12 (*responsible consumption and production*), in combination with

SDG 10 (*reduced inequalities*; trade-off pair 1), SDGs 1 (*no poverty*; trade-off pair 2), SDG 6 (*clean water and sanitation*; trade-off pair 3) and SDG 3 (*good health and well-being*; trade-off pair 4). According to Pradhan et al. (2017), SDG 12 to show the most trade-offs with other goals.

Overall, we find that CSSPs are more likely than ISSPs to address multiple SDGs, thus fostering integrated SDG implementation. However, we find that partnerships focus more often on synergistic SDG pairs, while those that potentially involve many trade-offs – e.g., related to SDG 12 – are less often addressed jointly. Based on our results, we suggest encouraging effective CSSPs for potentially conflicting goals in order to reduce trade-offs and other unintended consequences which might be overlooked in silo approaches. As argued above, the combination of knowledge, resources and skills from different societal sub-sectors render these partnerships particularly suitable to do so. We acknowledge that effectively dealing with trade-offs certainly requires strong coordination between partners. Unfortunately, many partnerships might not be sufficiently equipped with the resources to fulfill this potential, as some indicated explicitly in our survey. On the other hand, more partnerships addressing highly synergistic SDG pairs in combination could further increase co-benefits in implementation efforts. While many of the most synergistic pairs identified by Pradhan et al. (2017) are at least moderately covered by CSSPs in our sample, we find untapped potential regarding other goals, such as e.g., SDG 3 (*good health and well-being*). According to Pradhan et al. (2017), SDG 3 has synergies with many other SDGs, which is however not fully reflected in the work of CSSPs (see Fig. 10). While this may be due to a perception of health care as the primary responsibility of the state, unconventional and cross-sectoral approaches could foster progress on SDG 3 and many other goals simultaneously (ibid.; Buse and Hawkes, 2015).

Finally, we examined which constellations of stakeholder types most frequently address which SDGs. Results show that CSSPs formed solely among non-state actors (including NGOs, research and education, and business and industry) most often work on SDG 4 (*quality education*; 48%), SDG 13 (*climate action*; 39%) and SDG 5 (*gender equality*; 35%). For those eight purely public CSSPs in our sample (including national governments, IGOs, cities, other subnational actors), we find SDG 1 (*no poverty*), SDG 8 (*decent work and economic growth*), SDG 10 (*reduced inequalities*), SDG 11 (*sustainable cities and communities*), SDG 13 (*climate action*), SDG 14 (*life under water*) and SDG 17 (*partnerships for the goals*) all covered by two partnerships each (corresponding to 25%). Notably, purely public partnerships do not address many goals at all, such as SDG 2 (*zero hunger*), SDG 5 (*gender equality*), SDG 6 (*clean water and sanitation*), SDG 7 (*clean and affordable energy*), SDG 9 (*industry, innovation and infrastructure*), SDG 12 (*responsible consumption and production*) and SDG 16 (*peace, justice and strong institutions*). However, as purely public CSSPs

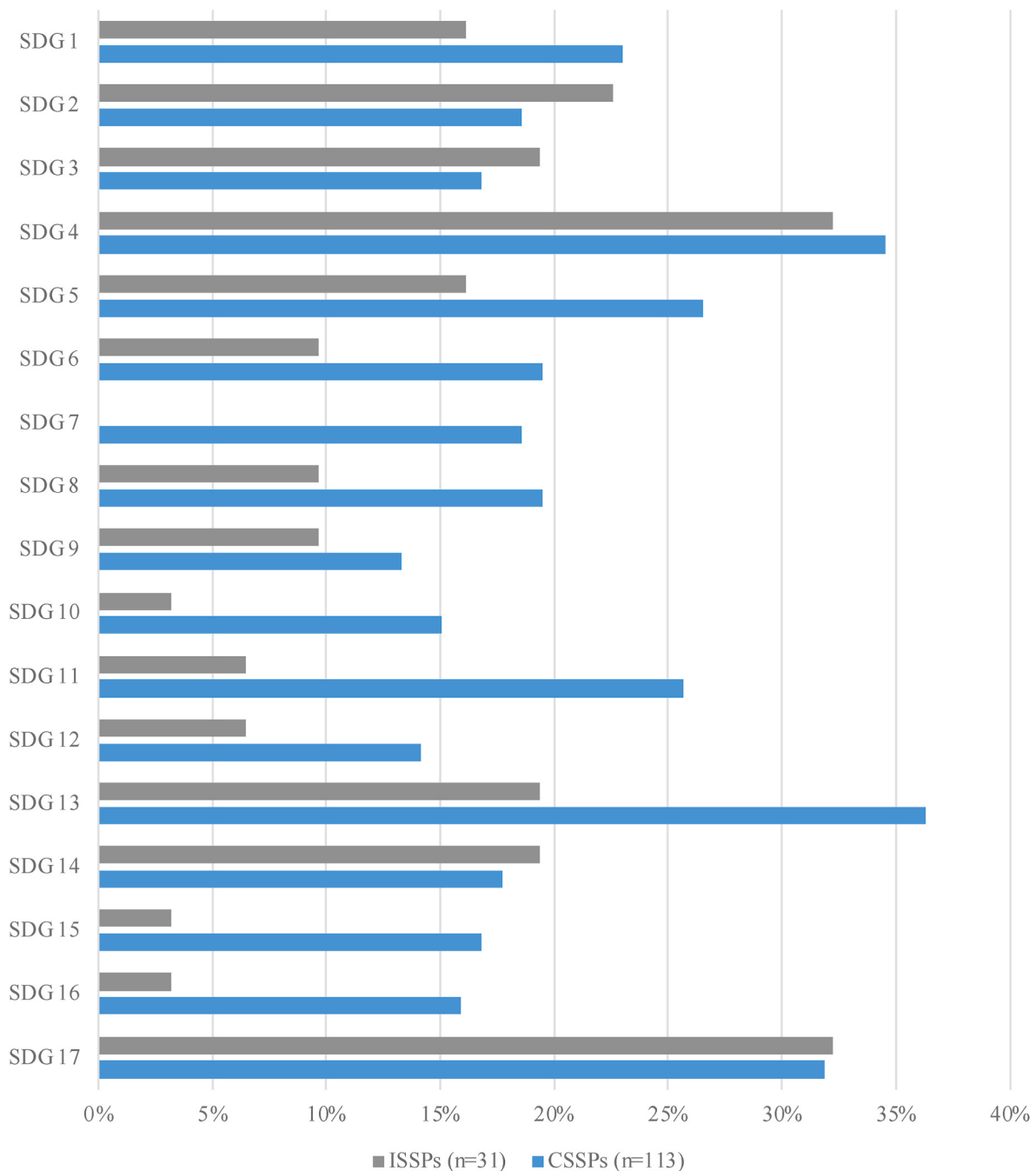
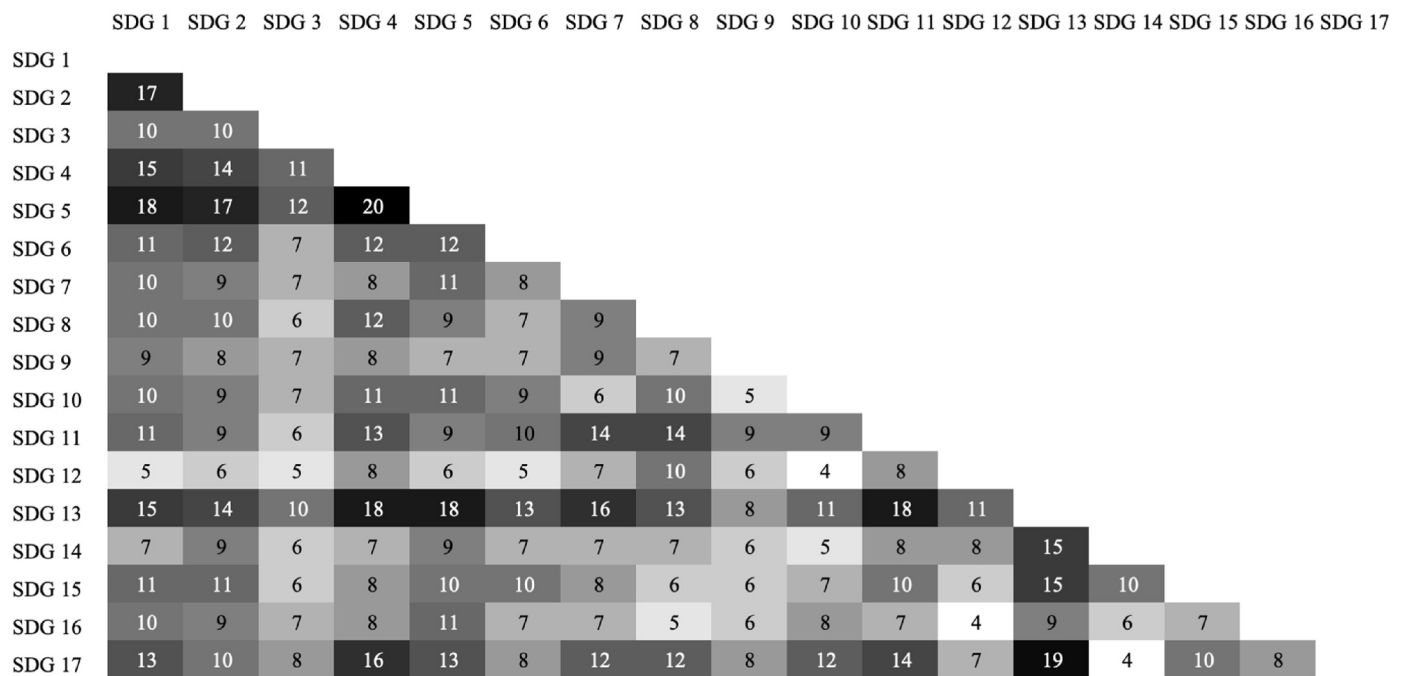


Fig. 9. SDGs addressed by MSPs. The figure shows the percentage of CSSPs (n = 113) and ISSPs (n = 31) addressing the respective SDG as “main purpose” of their action.

represent only 7% in our sample, results should be treated with caution. Lastly, when both state and non-state actors are involved, the SDGs addressed most often concern climate action (SDG 13; 34%), partnerships (SDG 17; 31%), education (SDG 4; 30%) and gender equality (SDG 5; 25%). Thus, results suggest that education, climate action, gender equality and the enhancement of collaborative implementation efforts are topics that are driven forward particularly through cooperation with or among non-state actors in collaborative governance arrangements for SDGs. Again, this underlines the relevance of involving a diverse set of state and non-state actors in SDG implementation efforts since they assume different yet complementary roles and governance functions in fostering global sustainable development.

4.6. Effectiveness

Finally, we asked respondents to evaluate the success of their partnership in pursuing its objectives. We find that CSSPs are rated more successful compared to ISSPs, with 51% of CSSPs rated “very successful”, meaning that most or all objectives were achieved. Still 40% reported their partnership to be “somewhat successful” (some of the objectives were achieved), while only 9% of CSSPs are judged as “hardly successful” (none or few of the objectives were achieved). By contrast, only 39% of ISSPs were rated “very successful”, 42% reported “somewhat successful” and 19% reported “hardly successful”. We acknowledge that self-reported success does not constitute an objective measurement of effectiveness and encourage future research to validate our findings, e.g., by building on previous research on external and



SDG Abbreviation

- | | | |
|-------------------------------|--|--|
| 1. No poverty | 7. Affordable and clean energy | 13. Climate action |
| 2. Zero hunger | 8. Decent work and economic growth | 14. Life below water |
| 3. Good health and well-being | 9. Industry, innovation and infrastructure | 15. Life on land |
| 4. Quality education | 10. Reduced inequalities | 16. Peace, justice and strong institutions |
| 5. Gender equality | 11. Sustainable cities and communities | 17. Partnerships for the goals |
| 6. Clean water and sanitation | 12. Responsible consumption and production | |

Fig. 10. SDGs addressed jointly by CSSPs. The heat map displays the frequency with which two SDGs are addressed jointly by CSSPs ($n = 113$). Data relates to the SDGs included in any combination of goals (two or more) indicated as the partnerships' primary objectives.

internal conditions for success (see [Pattberg and Widerberg, 2016](#); [Horan, 2019](#)). However, our results suggest a positive impact of collaboration between different societal subsectors on partnership effectiveness.

To provide a more detailed assessment, we further analyzed which organizational and institutional characteristics relate to self-reported effectiveness of CSSPs (see [Table 6](#)). First, we find that CSSPs that are still active are evaluated much more successful than those that already ceased their activity. 38% of inactive partnerships were rated “hardly successful”, compared to only 7% of active CSSPs. On the one hand, it could be that active partnerships are still in an early phase in which it may be difficult to adequately assess success. On the other hand, the relatively high proportion of inactive CSSPs rated hardly successful could also indicate that they have ceased operations prematurely due to problems such as insufficient funding.

We find no clear relationship between annual project budget and (self-reported) effectiveness. While partnerships with a budget of USD 100,001–250,000 are most often evaluated “highly effective” (67%), so are still 50% of CSSPs with no budget at all. Similarly, and in accordance with previous findings (see [Dzebo, 2019](#)), we find no clear link between (self-reported) effectiveness and number of staff.

In contrast, our results show regular communication and monitoring to be positively related to partnerships' self-reported effectiveness. While 50% of CSSPs who do not monitor their activities were rated “hardly successful”, 52% of those who do monitor reported meeting all or most of their objectives. Additionally, CSSPs without regular communication among partners were most often rated “hardly successful” (38%). Nevertheless, a higher frequency of exchange does not

necessarily seem to be better: Those that communicate (bi-)weekly (68%) or (bi-)monthly (54%) were most often rated “very successful”, compared to 30% communicating daily. Overall, our results support the argument that effective monitoring, reporting, and evaluation are crucial for partnership success by enabling organizational learning, increasing transparency and legitimacy, and helping meet internal and external demands for disclosure and accountability ([Pattberg and Widerberg, 2016](#)).

Finally, results show considerable differences in CSSP (self-reported) effectiveness depending on the type of lead partner. Remarkably, 90% of IGO-led CSSPs were reported to be very successful. Again, this indicates that IGOs often function as effective orchestrators of partnerships, providing “personnel and resources to support, steer and transform an initiative from idea to practice” ([Dzebo, 2019](#), p.458). Similarly, CSSPs led by national governments were mostly reported to meet all or most of their objectives (67%). Powerful lead partners such as IGOs or governments may not only be important in terms of resource provision, but most likely also add credibility and legitimacy to partnerships, thereby positively influencing their effectiveness. However, previous studies caution against large power asymmetries ([Pattberg and Widerberg, 2016](#)), and underline that a clear commitment of powerful, influential partners is key to success (*ibid.*, [Beisheim, 2012](#)). In contrast, business-led CSSPs and those led by research and education partners report low levels of effectiveness. While those critical of for-profit organizations' involvement in sustainability governance might interpret these findings as pointing to SDG-washing activities, low levels of (self-reported) effectiveness could also relate to more ambitious goal setting or more critical assessments of success in these partnerships. As

Table 6

Effectiveness of CSSPs. The table shows the relationship between organizational and institutional characteristics of CSSPs and their self-reported effectiveness.

	n	Hardly successful	Somewhat successful	Very successful
Activity status				
Active	113	7%	41%	52%
Inactive		38%	25%	38%
Budget				
No budget	113	6%	44%	50%
Less than USD 25,000		18%	27%	55%
USD 25,001–100,000		5%	48%	48%
USD 100,001–250,000		–	33%	67%
USD 250,001–1,000,000		–	53%	47%
More than USD 1,000,000		14%	36%	50%
Unknown/No answer		25%	38%	38%
Staff (people actively involved)				
1–5	113	17%	34%	48%
6–20		3%	31%	66%
21–50		–	58%	42%
51–200		9%	45%	45%
More than 200		9%	45%	45%
Unknown		50%	–	50%
Communication frequency				
Daily	91	20%	50%	30%
Weekly/Bi-weekly		8%	24%	68%
Monthly/Bi-monthly		–	46%	54%
3–5 times per year		6%	56%	38%
Once or twice per year		20%	40%	40%
None/not regularly		38%	25%	38%
Monitoring				
Yes	113	5%	43%	52%
No		50%	10%	40%
Lead partner				
NGO/CSO	113	11%	43%	47%
IGO		–	10%	90%
Research and Education		10%	70%	20%
Business and Industry		15%	62%	23%
National Government (Agencies)		11%	22%	67%
Subnational Actors (excl. Cities)		–	50%	50%
Other/Not Applicable		8%	42%	50%

we cannot draw a definitive conclusion based on the results of our study, we encourage future research to explore our findings in more detail.

5. Conclusion

In this article, we analyzed the emerging collaborative governance architecture for SDG implementation by means of a survey of 192 MSPs listed on the UN partnership platform. Compared to previous research, our results indicate that partnerships for sustainable development have become more inclusive over time, involving more non-state actors overall, and as leading partners. In particular, we find a strong increase in NGO involvement and leadership. We further note that distinguishing between CSSP and ISSPs as different types of MSPs yields additional insights, accounting for nuanced differences between diverse societal subsectors involved instead of focusing on broader categories such as the public and private sector only. Looking at the activities that state actors perform within MSPs, we find that national governments mostly provide funds, while IGOs and sub-national actors seem to orchestrate partnerships at different levels. For non-state actors, results show that NGOs are primarily involved in direct implementation, research/education partners provide expertise, and business actors fund partnerships. Our findings thus confirm the idea of a “reconfiguration of authority” (Hickmann, 2017) in global sustainability governance, where state action remains central, but is complemented by efforts of non-state actors. Main governance functions assumed by MSPs can be summarized with “getting everyone on board” and “getting things done”, i.e., focusing on convening and facilitating participation as well as implementation on the ground. Our findings on SDGs coverage show that CSSPs more frequently than ISSPs address multiple SDGs, which suggests a relatively strong ‘nexus’-orientation by partnerships involving actors from different societal subsectors. Their cross-subsector nature combining

diverse skills, resources and knowledge of the partners involved seems especially important in this regard. Future research should however assess whether MSPs deliberately consider and, more importantly, actually mitigate trade-offs in the nexuses they address. Our results further suggest an important complementary role of MSPs for SDG implementation, as they often address frequently under-represented and cross-cutting sustainability goals such as climate action (SDG 13), quality education (SDG 4) and gender equality (SDG 5). However, we find untapped potential regarding SDG pairs that potentially involve many trade-offs, such as those concerning SDG 12 (*sustainable consumption and production*) and SDG 10 (*reduced inequalities*). Here, collaboration between different societal subsectors could be particularly helpful in advancing integration between the goals with an eye towards mitigating potential negative spillovers. Finally, we find MSPs to be relatively well institutionalized, which positively relates to their (self-reported) effectiveness. Results further show that leadership by IGOs or national governments are conducive to success, most likely through orchestration efforts and the provision of resources. Overall, our results indicate a positive impact of cross-subsector collaboration for partnership effectiveness. Importantly, we acknowledge the limited representativeness of our sample and encourage future research to reassess our results, both through in-depth analyses and large-n studies applying objective measures of effectiveness.

Based on our findings, we would like to conclude with an appeal to the UN system. First, we strongly encourage the UN to make the underlying data of their partnership platform readily available to the public, especially to advance research, knowledge generation, and ultimately, SDG implementation. Second, there appears to be much room for improvement regarding the monitoring, review and follow-up of partnerships registered. Currently, transparency and accountability seem limited, with data often being missing, incomplete or outdated.

Further, some of the partnerships we contacted during our research process were not even aware of their listing on the platform, and others commented in the survey about the lacking support on behalf of the UN. Additionally, sound monitoring, review and follow-up could help reduce the opportunity for SDG- or blue-washing. Third, greater engagement with partnerships registered on the platform could accelerate SDG achievement. For example, drawing on scientific research, the UN could actively promote the establishment of MSPs for SDGs potentially involving many trade-offs and steer them towards nexus approaches to improve integrated implementation of the goals. They could further help to connect partnerships with a similar issue focus to foster resource and knowledge sharing. We recognize that all of this requires political will and sufficient resources. Yet, operating a transparent and accountable partnership platform – rather than using it as a vehicle for showcasing (sometimes questionable or inexistent) action – could help increase credibility and legitimacy, and mobilize more effective partnerships that as we have shown can serve important complementary functions in efforts to achieve the SDGs.

Declaration of competing interest

The authors declare the following financial interests/personal relationships which may be considered as potential competing interests: Simon Ruf is employed by the German Federal Foreign Office. His contributions to the article were made in a personal capacity and do not stand in connection with his professional affiliation.

Data availability

Data will be made available on request.

Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.esg.2023.100182>.

References

- Andonova, L.B., 2014. Boomerangs to partnerships? Explaining state participation in transnational partnerships for sustainability. *Comp. Polit. Stud.* 47 (3), 481–515. <https://doi.org/10.1177/0010414013509579>.
- Andonova, L.B., Levy, M.A., 2003. Franchising global governance: making sense of the Johannesburg Type II Partnerships. In: Stokke, O.S., Thommessen, O.B. (Eds.), *Yearbook of International Co-operation on Environment and Development*. Earthscan, Oxford, UK.
- Andonova, L.B., Hale, T., Roger, C., 2017. National policy and transnational governance of climate change: substitutes or complements? *Int. Stud. Q.* 61 (2), 253–268. <https://doi.org/10.1093/isq/sqx014>.
- Bäckstrand, K., 2006. Multi-stakeholder partnerships for sustainable development: rethinking legitimacy, accountability and effectiveness. *Eur. Environ.* 16 (5), 290–306. <https://doi.org/10.1002/et.425>.
- Bäckstrand, K., 2008. Accountability of networked climate governance: the rise of transnational climate partnerships. *Glob. Environ. Polit.* 8 (3), 74–102. <https://doi.org/10.1162/glep.2008.8.3.74>.
- Bäckstrand, K., 2012. Are partnerships for sustainable development democratic and legitimate? In: Pattberg, P., Biermann, F., Chan, S., Mert, A. (Eds.), *Public-private Partnerships for Sustainable Development: Emergence, Influence and Legitimacy*. Edward Elgar, Cheltenham, UK.
- Bäckstrand, K., Kuyper, J.W., Linnér, B.O., Löfbrand, E., 2017. Non-state actors in global climate governance: from Copenhagen to Paris and beyond. *Environ. Polit.* 26 (4), 561–579. <https://doi.org/10.1080/09644016.2017.1327485>.
- Beisheim, M., 2012. *Partnerships for Sustainable Development: Why and How Rio+20 Must Improve the Framework for Multi-stakeholder Partnerships*. RP 3. Stiftung Wissenschaft und Politik. German Institute for International and Security Affairs.
- Beisheim, M., Liese, A., 2014. Transnational Partnerships: Effectively Providing for Sustainable Development? Palgrave Macmillan, Basingstoke.
- Beisheim, M., Simon, N., 2016. Multi-stakeholder partnerships for implementing the 2030 agenda: improving accountability and transparency. In: Analytical Paper for the 2016 ECOSOC Partnership Forum. German Institute for International and Security Affairs, Berlin. Retrieved from: <https://www.un.org/ecosoc/sites/www.un.org/ecosoc/files/files/en/2016doc/partnership-forum-beisheim-simon.pdf>.
- Beisheim, M., Simon, N., 2018. Multistakeholder partnerships for the SDGs: actors' views on UN metagovernance. *Glob. Gov.* 24, 497–515.
- Bennich, T., Weitz, N., Carlsen, H., 2020. Deciphering the scientific literature on SDG interactions: a review and reading guide. *Sci. Total Environ.* 728, 138405. <https://doi.org/10.1016/j.scitotenv.2020.138405>.
- Betsill, M., Milkoreit, M., 2020. The performance of agency in earth system governance. In: Betsill, M., Benney, T., Gerlak, A. (Eds.), *Agency in Earth System Governance*. Cambridge University Press, Cambridge.
- Biermann, F., Abbott, K., Andresen, S., Bäckstrand, K., Bernstein, S., Betsill, M., Bulkeley, H., Cashore, B., Clapp, J., Folke, K., Gupta, A., Gupta, J., Haas, P., Jordan, A., Kanie, N., Klavánková-Oravská, T., Lebel, L., Liverman, D., Meadowcroft, J., et al., 2012. Transforming governance and institutions for global sustainability: key insights from the Earth System Governance Project. *Curr. Opin. Environ. Sustain.* 4, 51–60. <https://doi.org/10.1016/j.cosust.2012.01.014>.
- Biermann, F., Hickmann, T., Sénit, C.A., Beisheim, M., Bernstein, S., Chasek, P., Grob, L., Kim, R.E., Kotzé, L., Nilsson, M., Ordoñez Llanos, A., Okereke, C., Pradhan, P., Raven, R., Sun, Y., Vijje, M.J., van Vuuren, D., Wicke, B., 2022a. Scientific evidence on the political impact of the sustainable development goals. *Nat. Sustain.* <https://doi.org/10.1038/s41893-022-00909-5>.
- Biermann, F., Hickmann, T., Sénit, C.A. (Eds.), 2022b. *The Political Impact of the Sustainable Development Goals. Transforming Governance through Global Goals?*. Cambridge University Press, Cambridge, UK.
- Boas, I., Biermann, F., Kanie, N., 2016. Cross-sectoral strategies in global sustainability governance: towards a nexus approach. *Int. Environ. Agreements Polit. Law Econ.* 16 (3), 449–464. <https://doi.org/10.1007/s10784-016-9321-1>.
- Bowen, K.J., Cradock-Henry, N.A., Koch, F., Patterson, J., Hähä, T., Vogt, J., Barbi, F., 2017. Implementing the “Sustainable Development Goals”: towards addressing three key governance challenges – collective action, trade-offs, and accountability. *Curr. Opin. Environ. Sustain.* 26 (27), 90–96. <https://doi.org/10.1016/j.cosust.2017.05.002>.
- Brinkerhoff, D.W., Brinkerhoff, J.M., 2011. Public-private partnerships: perspectives on purposes, publicness, and good governance. *Publ. Adm. Dev.* 31, 2–14.
- Buse, K., Hawkes, S., 2015. Health in the sustainable development goals: ready for a paradigm shift? *Glob. Health* 11 (1), 13. <https://doi.org/10.1186/s12992-015-0098-8>.
- Chan, S., Boran, I., van Asselt, H., Iacobuta, G., Niles, N., Rietig, K., Scobie, M., Bansard, J., Delgado Pugley, D., Delina, L., Eichhorn, F., Ellinger, P., Enechi, O., Hale, T., Hermwille, L., Hickmann, T., Honegger, M., Hurtado Epstein, A., La Hoz Theuer, S., et al., 2019. Promises and risks of nonstate action in climate and sustainability governance. *Wiley Interdiscip. Rev. Clim. Change* 10 (3), 1–8. <https://doi.org/10.1002/wcc.572>.
- Coenen, J., Glass, L.-M., Sanderink, L., 2022. Two degrees and the SDGs: a network analysis of the interlinkages between transnational climate actions and the Sustainable Development Goals. *Sustain. Sci.* 17, 1489–1510. <https://doi.org/10.1007/s11625-021-01007-9>.
- Dahlmann, F., Stubbs, W., Raven, R., Porto de Albuquerque, J., 2020. The ‘purpose ecosystem’: emerging private sector actors in earth system governance. *Earth Syst. Gov.* 4, 100053.
- Dzebo, A., 2019. Effective governance of transnational adaptation initiatives. *Int. Environ. Agreements Polit. Law Econ.* 19, 447–466. <https://doi.org/10.1007/s10784-019-09445-8>.
- Esparcia, J., Moseley, M., Noguera, J., 2000. *Exploring Rural Development Partnerships in Europe. An Analysis of 330 Local Partnerships across Eight EU Countries*. University of Valencia, Valencia, ES.
- Glass, L.-M., Newig, J., 2019. Governance for achieving the Sustainable Development Goals: how important are participation, policy coherence, reflexivity, adaptation and democratic institutions? *Earth Syst. Gov.* 2, 100031. <https://doi.org/10.1016/j.esg.2019.100031>.
- Gusmão Caiado, R.G., Leal Filho, W., Quelhas, O.L.G., Luiz de Mattos Nascimento, D., Ávila, L.V., 2018. A literature-based review on potentials and constraints in the implementation of the sustainable development goals. *J. Clean. Prod.* 198, 1276–1288. <https://doi.org/10.1016/j.jclepro.2018.07.102>.
- Haywood, L.K., Funke, N., Audouin, M., Musvoto, C., Nahman, A., 2019. The sustainable development goals in South Africa: investigating the need for multi-stakeholder partnerships. *Dev. South Afr.* 36 (5), 555–569. <https://doi.org/10.1080/0376835X.2018.1461611>.
- Hickmann, T., 2017. The reconfiguration of authority in global climate governance. *Int. Stud. Rev.* 19, 430–451.
- Horan, D., 2019. A new approach to partnerships for SDG transformations. *Sustainability* 11, 4947. <https://doi.org/10.3390/su11184947>.
- Jayasooria, D., 2016. Sustainable development goals and social work: opportunities and challenges for social work practice in Malaysia. *J. Human Rights Soc. Work* 1 (1), 19–29. <https://doi.org/10.1007/s41134-016-0007-y>.
- Leal Filho, W., Kovaleva, M., Tsani, S., Tircă, D.-M., Shiel, C., Dinis, M.A.P., Nicolau, M., Sima, M., Fritzen, B., Lange Salvia, A., Minhas, A., Kozlova, V., Doni, F., Spiteri, J., Gupta, T., et al., 2022. Promoting gender equality across the sustainable development goals. *Environ. Dev. Sustain.* <https://doi.org/10.1007/s10668-022-02656-1>.
- Liu, J., Hull, V., Godfray, H.C.J., Tilman, D., Gleick, P., Hoff, H., Pahl-Wostl, C., Xu, Z., Chung, M.G., Sun, J., Li, S., 2018. Nexus approaches to global sustainable development. *Nat. Sustain.* 1, 466–476. <https://doi.org/10.1038/s41893-018-0135-8>.
- Moreno-Serna, J., Purcell, W.M., Sánchez-Chaparro, T., Soberón, M., Lumberreras, J., Mataix, C., 2020. Catalyzing transformational partnerships for the SDGs: effectiveness and impact of the multi-stakeholder initiative el día después. *Sustainability* 12, 7189. <https://doi.org/10.3390/su12177189>.
- Nasiritousi, N., Hjerpe, M., Linnér, B.-O., 2016. The roles of non-state actors in climate change governance: understanding agency through governance profiles. *Int.*

- Environ. Agreements Polit. Law Econ. 16 (1), 109–126. <https://doi.org/10.1007/s10784-014-9243-8>.
- Newig, J., Challies, E., Cotta, B., Lenschow A. A., Schilling-Vacaflor, A., 2020. Governing global telecoupling toward environmental sustainability. *Ecol. Soc.* 25 (4), 21. <https://doi.org/10.5751/ES-11844-250421>.
- Nilsson, M., Chisholm, E., Griggs, D., Howden-Chapman, P., McCollum, D., Messerli, P., Stafford-Smith, M., 2018. Mapping interactions between the Sustainable Development Goals: lessons learned and ways forward. *Sustain. Sci.* 13 (6), 1489–1503. <https://doi.org/10.1007/s11625-018-0604-z>.
- Pattberg, P., Strippel, J., 2008. Beyond the public and private divide: remapping transnational climate governance in the 21st century. *Int. Environ. Agreements Polit. Law Econ.* 8, 367–388. <https://doi.org/10.1007/s10784-008-9085-3>.
- Pattberg, P., Widerberg, O., 2016. Transnational multistakeholder partnerships for sustainable development: conditions for success. *Ambio* 45, 42–51. <https://doi.org/10.1007/s13280-015-0684-2>.
- Pattberg, P., Biermann, F., Chan, S., Mert, A. (Eds.), 2012. *Public-private Partnerships for Sustainable Development: Emergence, Influence and Legitimacy*. Edward Elgar, Cheltenham, UK.
- Pradhan, P., Costa, L., Rybski, D., Lucht, W., Kropp, J.P., 2017. A systematic study of sustainable development goal (SDG) interactions. *Earth's Future* 5 (11), 1169–1179. <https://doi.org/10.1002/2017EF000632>.
- Stafford-Smith, M., Griggs, D., Gaffney, O., Ullah, F., Meyers, B., Kanie, N., O'Connell, D., 2017. Integration: the key to implementing the sustainable development goals. *Sustain. Sci.* 12 (6), 911–919. <https://doi.org/10.1007/s11625-016-0383-3>.
- Stibbe, D., Prescott, D., 2020. *The SDG Partnership Guidebook: A Practical Guide to Building High-Impact Multi-Stakeholder Partnerships for the Sustainable Development Goals*. The Partnering Initiative and UNDESA. Retrieved from. <https://sdgs.un.org/publications/sdg-partnership-guidebook-24566>.
- Stott, L., Murphy, D., 2020. An inclusive approach to partnerships for the SDGs: using a relationship lens to explore the potential for transformational collaboration. *Sustainability* 12 (19), 7905. <https://doi.org/10.3390/su12197905>.
- Szulecki, K., Pattberg, P., Biermann, F., 2012. Partnerships for sustainable development in the energy sector: explaining variation in their problem-solving effectiveness. In: Pattberg, P., Biermann, F., Chan, S., Mert, A. (Eds.), *Public-private Partnerships for Sustainable Development: Emergence, Influence and Legitimacy*. Edward Elgar, Cheltenham, UK.
- United Nations, 2015. *Transforming our World: the 2030 Agenda for Sustainable Development* (A/RES/70/1). Retrieved from. <http://undocs.org/A/RES/70/1>.
- United Nations, 2022. The partnership platform. Available at: <https://sdgs.un.org/partnerships>.
- Utting, P., Zammit, A., 2009. United nations–business partnerships: good intentions and contradictory agendas. *J. Bus. Ethics* 90 (1), 39–56.
- Valencia, S.C., Simon, D., Croese, S., Nordqvist, J., Oloko, M., Sharma, T., Buck, N.T., Versace, I., 2019. Adapting the sustainable development goals and the new urban agenda to the city level: initial reflections from a comparative research project. *Int. J. Urban Sustain. Dev.* 11 (1), 4–23. <https://doi.org/10.1080/19463138.2019.1573172>.
- van Zanten, J.A., van Tulder, R., 2021a. Towards nexus-based governance: defining interactions between economic activities and Sustainable Development Goals (SDGs). *Int. J. Sustain. Dev. World Ecol.* 28 (3), 210–226. <https://doi.org/10.1080/13504509.2020.1768452>.
- van Zanten, J.A., van Tulder, R., 2021b. Improving companies' impacts on sustainable development: a nexus approach to the SDGs. *Bus. Strat. Environ.* 30, 3703–3720. <https://doi.org/10.1002/bse.2835>.
- Weitz, N., Carlsen, H., Nilsson, M., Skånberg, K., 2018. Towards systemic and contextual priority setting for implementing the 2030 agenda. *Sustain. Sci.* 13 (2), 531–548. <https://doi.org/10.1007/s11625-017-0470-0>.
- Widerberg, O., Boran, I., Chan, S., Deneault, A., Kok, M., Negacz, K., Pattberg, P., Petersson, M., 2022. Finding synergies and trade-offs when linking biodiversity and climate change through cooperative initiatives. *Glob. Policy* 1–5. <https://doi.org/10.1111/1758-5899.13158>.
- United Nations, 2023. Progress Towards the Sustainable Development Goals: Towards a Rescue Plan for People and Planet. Retrieved from. <https://hlpf.un.org/sites/default/files/2023-04/SDG%20Progress%20Report%20Special%20Edition.pdf>.