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Building Authority and Legitimacy in Transnational Climate Change Governance: Evidence from the Governors' Climate and Forest Task Force

Monica Di Gregorio^{1,6} Kate Massarella^{1,2}, Heike Schroeder^{3,4}, Maria Brockhaus⁵ and Thuy Thu Pham⁶

1. Sustainability Research Institute, University of Leeds
2. Sociology of Development and Change, Wageningen University
3. School of International Development, University of East Anglia
4. Institute for Advanced Sustainability Studies, Potsdam
5. Department of Forest Sciences and Helsinki Institute of Sustainability Science (HELSUS), University of Helsinki
6. Center for International Forestry Research (CIFOR)

Abstract

Transnational climate change initiatives have increased in number and relevance within the global climate change regime. Despite being largely welcomed, there are concerns about their ability to deliver ambitious climate action and about their democratic legitimacy. This paper disentangles the nature of both authority and legitimacy of a specific form of transnational networks, transgovernmental networks of subnational governments. It then investigates how a major transgovernmental initiative focusing on tropical forests, the Governors' Climate and Forests Task Force, attempts to command authority and to build and maintain its legitimacy. The paper illustrates the particular challenges faced by initiatives formed primarily by jurisdictions from the Global South. Three major trade-offs related to authority and legitimacy dimensions are identified: first, the difficulty of balancing the need for increased representation with performance on ambitious climate goals; second, the need to deliver effectiveness while ensuring transparency of governance processes; and third, the limited ability to leverage formal authority of members to deliver climate action in local jurisdictions, while depending on external funds from the Global North.

Keywords: transnational climate change governance; climate change mitigation; legitimacy; authority; forests; transgovernmental networks

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1. Introduction

The number of transnational climate change initiatives (TCCIs) has accelerated in recent decades, shifting the global climate change regime from one based on formal treaties to a transnational regime complex that includes networks of public and private actors engaged across borders in climate actions to advance public goals (Abbott, 2012; Betsill et al., 2015; Bulkeley et al., 2014a; Kuyper et al., 2018; Roger et al., 2017). The 2015 Paris Agreement formally recognises the value of climate initiatives led by actors other than nation states and encourages independent climate action by ‘non-Party stakeholders’, including ‘civil society, the private sector, financial institutions, cities and other subnational authorities’ and invites them to ‘scale up their efforts’ (UNFCCC, 2016). Initiatives vary in focus from mitigation to adaptation measures and may have specific sectoral foci (Hale, 2016).

The performance of these initiatives has so far been mixed, which raises questions about whether such initiatives can command and deliver substantial global climate change solutions (Hale and Roger, 2014). Two deeply interlinked features of power, namely *authority* – the likelihood to command obedience – and *legitimacy* – the moral acceptance of authority –, are indispensable to effective governance (Uphoff, 1989), and scholars have questioned the extent to which TCCIs possess these features (Bäckstrand and Kuyper, 2017; Bulkeley et al., 2014a; Koppell, 2008).

The sources of authority and legitimacy differ across TCCIs, depending on who the members are (Nasiritousi et al., 2016; Pattberg and Stripple, 2008). With regards to sources of authority there is a fundamental difference between private or hybrid (joint private and public) transnational initiatives and transgovernmental networks (TGNs) that include exclusively public actors. Only TGNs can draw on individual members’ legal authority. TGNs differ also in terms of legitimacy from hybrid networks, because TGNs are less representative of society at large, yet in many cases members are democratically elected. Composition of transnational initiatives also affects the main functions that they specialize in, which may in turn affect their legitimacy and ability to deliver public goals (Bulkeley et al., 2014a). TGNs formed exclusively by subnational governments are less numerous than private and hybrid networks, but their number has grown over time.

This paper contributes to filling two knowledge gaps regarding the role of subnational governments in transnational climate change governance. First, it identifies how TGNs formed exclusively by subnational public actors exert authority and claim legitimacy and how input and output-oriented legitimacy interact in these initiatives. Second, the study offers a global rather than exclusively or mainly northern perspective of TCCIs through an in-depth investigation of the Governors’ Climate and Forests Task Force (GCF), which is the main TGN bringing together subnational governments around climate mitigation in tropical forests.

The paper first investigates the main sources of authority and legitimacy claims of TGNs and highlights features that distinguish them from hybrid and private initiatives. It distinguishes between the legal and extra-legal sources of authority of individual members and of the collective network entity and focuses on the two dimensions of legitimacy. It then investigates these in the case study of the GCF. After presenting the methods, the paper explores the sources of authority that the GCF draws on, how it legitimizes its governance activities and associated challenges. The discussion identifies and explores three key trade-offs emerging from analysis across the two dimensions of legitimacy and related to uneven political geographies.

2. Theoretical Framework

2.1. Authority in Transgovernmental Climate Change Networks

Authority can be defined as ‘the ability to induce deference in others’ (Avant et al., 2010, p.9; Koppell, 2008: 178). Such deference confers power, indicating that authority in practice reflects the institutionalization of power. The global governance literature discusses a variety of typologies of authority (Avant et al., 2010; Barnett and Finnemore, 2004; Lake, 2010; Zürn et al., 2012). One broad distinction is between legal and extralegal sources of authority (Simon et al., 1991). Legal or formal authority is a form of institutional authority, which is linked to the position or function that an entity has in society according to existing legal norms and pertains to public actors (Avant et al., 2010; Uphoff, 1989). For example, the right of governments or bureaucrats to demand obedience derives from legal norms that define the jurisdiction of their respective office (Spencer, 1970). Entities that hold legal authority also hold sanctioning power and are known as actors that are ‘in authority’ (Barnett and Finnemore, 2004; Hickmann, 2016). In the case of subnational governments, their legal authority is delegated to them by nation states, so it is also a form of delegated authority (Avant et al., 2010).

We can distinguish between ‘individual’ authority of members and ‘collective’ authority of TCCIs (Keohane 2002, p.12 in Benner et al., 2004; Caron, 1993). TCCIs lack collective legal authority, because they represent a new mode of governance that is not part of a national or international legal framework. There are, for example, no transnational authority or accountability rules (Dryzek, 2000; Lövbrand et al., 2009). However, one important quality sets TGNs aside from private and hybrid TCCIs: similarly to global governance organizations established by nation states, such as the United Nations Framework Convention on Climate Change (UNFCCC), TGNs can derive collective authority from the individual legal authority that their members, who are governmental actors, hold within their jurisdictions (Eilstrup-Sangiovanni, 2016; Spencer, 1970). In other words, TGNs can leverage the legal authority of members to transform the platform’s intentions into actual policy decisions to be implemented and enforced within members’ jurisdictions.

However, the breadth of legal authority of a subnational government depends on the extent of delegation granted by its nation state. In other words, it depends on the level of autonomy of the subnational government, which in turn is based on ‘a) the territory over which a regional government exercises authority; b) the depth of that authority, and c) the sphere of action over which it exercises authority’ (Hooghe et al., 2010, p.11). Subnational governments from federal nation states have broader legal authority compared to those from less decentralised ones. Members who have more autonomy also gain more from participation in TGNs and have a higher ability to take independent climate action (Bulkeley et al., 2014a).

While TGNs can draw on the individual legal authority of their members, the network collectively relies primarily on extralegal sources of authority (Bäckstrand and Kuyper, 2017; Grant and Keohane, 2005; Pattberg and Stripple, 2008). Extralegal sources of authority are available to all TCCIs, whether transgovernmental, private or hybrid in nature. And, unlike formal authority, these sources of authority depend on forms of power that are more malleable to being built and constructed by actors themselves. Avant et al. (2010) distinguish between: expert authority, including various claims to expertise based on knowledge and past experiences; principled authority, based on widely accepted moral principles or noble ideas; and capacity-based authority, based on perceived competence and the ability to mobilize material and symbolic resources. Actors that effectively draw

on extralegal sources of authority are also called 'an authority' (Flathman, 1980). To a large extent extralegal sources of authority depend on the ability of actors to control and deploy information, knowledge and values (Betsill and Bulkeley, 2006; Kuyper et al., 2018).

Finally, different types of authority overlap and impact each other (Avant et al., 2010). For example, how autonomy of subnational governments translates into authority does not just depend on the breadth of their legal authority, but on their capacity-based authority linked to local administrative, technical and financial resources, which differ across countries and regions (Rondinelli, 1981). Consequently, subnational governments from poorer countries might face more difficulties exerting authority compared to members from richer countries (Bulkeley et al., 2014b). Finally, TGNs in the climate change domain claim authority vis-à-vis different actors, including international actors, national governments, their own members and their local constituencies. Trade-offs across diverse claims mean they might be more successful at legitimizing the network vis-à-vis some compared to other actors.

2.2. Input-oriented Legitimacy as Accountability of Transgovernmental Climate Change Networks

Authority is inextricably linked to the concept of legitimacy, yet the link is not trivial (Hickmann, 2016; Hurrelmann et al., 2007). For one, legitimacy is a main source of authority. The exercise of authority, understood as a form of power that does not entail coercion (cf. Koppell, 2008), requires some form of legitimation (Allen, 2003; Bulkeley, 2012; Uphoff, 1989). Broadly speaking, we can understand legitimacy as 'a generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs and definitions' (Suchman, 1995: 574). Consequently, whether something is legitimate depends on the interaction between a specific community and prevalent norms in an issue area (Bernstein, 2011, 2012; Koppell, 2008). This sociological meaning of legitimacy is sometimes contrasted to its normative understanding. An institution is legitimate in a normative sense, when it 'has the right to rule', while it is legitimate in a sociological sense 'when it is widely *believed* to have the right to rule' (Bäckstrand, 2012, p.513; emphasis added). A common (normative) understanding of legitimacy refers to the need for democratic legitimacy (Bäckstrand and Kuyper, 2017). From a sociological perspective, the focus on democracy goes back to it being 'the central principle in contemporary politics that justifies authority' (Bernstein, 2012, p.149). Yet, there are other foundations of legitimacy including efficiency, expertise, transparency, accountability and popularity (Agnew, 2005).

One of the main critiques of TCCIs, whether advocacy initiatives or TGNs, is that they lack both input and output-oriented legitimacy (Kuyper et al., 2018; Scharf, 1997). Input-oriented legitimacy relates to procedural aspects of legitimacy and one of its main elements is accountability. Accountability refers to being liable to be called into account. It involves a flow of information between an actor and a forum. If the actor meets the forum's expectations, the latter will legitimise the former, if not, sanctions might be imposed (Bovens, 2007). Accountability requires mechanisms to ensure transparency in decision making, including access to information, a wide representation of stakeholders, and availability of monitoring and related sanctioning mechanisms, which can be used as indicators for input legitimacy (Bäckstrand, 2008; Biermann and Gupta, 2011; Kuyper et al., 2018; Lövbrand et al., 2009; Zelli and van Asselt, 2013). We can distinguish between internal accountability to members of a TGN and external accountability to parties outside the initiative (Bäckstrand, 2006). External accountability can be upwards, e.g. to donors, or downwards, to stakeholders affected by

its decisions. For individual government actors, electoral accountability is crucial, as constituencies use their vote to provide or withdraw support depending on the government's performance. However, electoral accountability does not apply to TGNs as collective entities. Consequently, accountability mechanisms for TGNs need to rely on other approaches. Wide and balanced representation is crucial for external accountability and might be particularly challenging for TGNs for three reasons. First, TGNs are considered elite networks and often the general public and members' local constituencies have limited information about how decisions are made and might therefore lack transparency. Second, TGNs have limited stakeholder representation being exclusively formed by public actors (Bäckstrand, 2008). And third, gender representation is often a challenge for networks formed by elected officials, but is crucial for legitimacy vis-à-vis the global institutions such as the United Nations, which recognise gender equity as a human right and as one of the Sustainable Development Goals (Clayton et al., 2019; UNGA, 2015).

In these circumstances, a plurality of collective accountability mechanisms varying from electoral to non-electoral, hierarchical to non-hierarchical and horizontal to vertical are required (Benner et al., 2004). Examples of such internal and external accountability mechanisms include internal rules or delegation used to reward or punish agents, normative accountability rules administered through processes of deliberation, networked forms of accountability based on monitoring and peer review, and institutional accountability, where institutional frameworks are used to demand justifications (Green, 2014; Kuyper et al., 2017). Internally, horizontal forms of peer accountability and externally, public reputational accountability are particularly important for TGNs (Bäckstrand, 2008; Benner et al., 2004).

2.3. Output-oriented Legitimacy as Performance of Transgovernmental Climate Change Networks

TGNs, as other TCCIs, are also thought to have low output-oriented legitimacy (Bäckstrand, 2006; Lövbrand et al., 2009). In its simplest interpretation, output legitimacy focuses on performance or the (perceived) ability of institutions to deliver collective goals and support problem solving capacity (Scharf, 1997). Yet the extent to which TCCIs contribute directly to climate targets such as emission reductions is debated, as often they focus on indirect and 'soft and intangible results' including information sharing, capacity building, target setting, funding seeking, direct action, monitoring and certification and rule setting (Jordan et al., 2015; Pattberg and Widerberg, 2015, p.693; Andonova et al., 2009). In this paper, we focus on the performance around three of these functions that TCCIs specifically value: information sharing; capacity building; and target setting (Bulkeley et al., 2014a). While these are often precursors of direct climate action, they are not just output indicators of performance (Chan et al., 2018), as both information sharing and capacity building represent outcomes in their own right.

Information sharing is an important means of internal governance that facilitate norm diffusion and is a primary vehicle for peer to peer policy learning in TGNs. It is also used externally to exert political leverage (e.g. through lobbying), but the external function is usually more important for NGOs and hybrid advocacy networks than for TGNs (Bulkeley et al., 2014a). Capacity building and implementation are important aims for networks seeking to provide resources for climate action, such as the initiative Cities for Climate Protection (Andonova et al., 2009). The network enables pooling of resources, leveraging of diverse sources of international finance and reduces transaction costs of peer to peer capacity building activities (Bulkeley et al., 2014a). The third function of target

setting is a core activity of TGNs and is often a precursor to direct climate action. In comparison to private and hybrid networks, TGNs have a stronger target setting role and tend to set climate action targets that go beyond national ones (Bulkeley et al., 2014a; Michaelowa and Michaelowa, 2017). While TGNs rely primarily on extralegal forms of authority and soft policy instruments, such as voluntary agreements for target setting, individual members can leverage their legal authority to implement targets within their jurisdictions (Andonova et al., 2009). But the extent to which commitments to climate action are verifiable relies on the capacity and transparency of self-reporting. Some scholars suggest that TGNs in particular can effectively support regulations and treaties and make governments more effective (Raustiala, 2002). Yet overall, evidence of TCCIs delivering extensive climate action remains disappointing not just for private and hybrid, but also for subnational government networks, while intangible results such as improved information exchanges and policy learning are more evident (Jordan et al., 2015; Pattberg and Widerberg, 2015).

Finally, there are links between input and output legitimacy. Some scholars suggest that the two dimensions tend to reinforce each other (Zürn, 2000), while others suggest trade-offs between the two (Risse, 2006). As an example, input-oriented requirements for consensus can reduce problem solving output legitimacy, if this entails high transaction costs and more limited ability to find solutions. There can also be trade-offs between effectiveness and popularity of solutions (Scharpf, 2009). While output legitimacy seems generally most pressing, democratic input remains important even when problem solving capacity is high, suggesting that output and input legitimacy are not substitutes (Scharpf, 1999; Strebel et al., 2019). The relationship between the two dimensions remains a key area of inquiry, which we explore later in the paper.

3. Case Study: The Governors' Climate and Forests Task Force

The empirical analysis focuses on the main TGN working on climate and tropical forests formed exclusively by subnational governments, the majority of which are from the Global South: The Governors' Climate and Forests Task Force (GCF). Nine subnational governments (2nd tier governments, such as states, provinces or regions) from Brazil, Indonesia and the US established GCF in 2009. At the time of this study it had grown to 38 members from 10 countries including 9 members from Brazil, 7 each from Indonesia, Mexico, and Peru, 2 each from the USA and the Ivory Coast, and one from Nigeria, Spain, Colombia and Ecuador. The aim of the GCF is to establish jurisdictional programmes on Reducing Emissions from Deforestation and Forest Degradation (REDD+) and Low Emission Development (LED) through access to performance-based funding to support combating deforestation within members' jurisdictions. REDD+ is a price-based policy instrument aimed at addressing climate change mitigation in the land use sector that relies on developed countries paying compensation to developing countries for activities that encompass avoided deforestation including forest conservation, enhancement of carbon stock and sustainable forest management (Campbell, 2009).

The members of the GCF are the heads of subnational governments, or governors. They appoint delegates who often represent them in the GCF and are generally high level civil servants working on the environment. At the time of the study, five people based at the University of Colorado, Boulder formed the GCF secretariat, which facilitates the everyday management of the platform. Brazil, Mexico, Peru and Indonesia, who have multiple jurisdictions represented in the GCF, also each have a country coordinator affiliated with a domestic NGO that supports members' networking efforts at national and regional levels. A number of the GCF members have pioneered anti-deforestation

actions in their jurisdictions, despite limited financial support from international finance for subnational REDD+ programmes (Boyd et al., 2018). The GCF was established with support from the Gordon and Betty Moore Foundation and the David and Lucile Packard Foundation, and over the years received funding from USAID, Climateworks, the Climate and Land use Alliance, the Rockefeller Brothers Fund and the Norway International Climate and Forest Initiative. The funding supports the work of the GCF secretariat and most of the GCF activities. All members meet once a year for the GCF annual meeting and many participate in global events such as the UNFCCC COPs as well as ad hoc exchange and working group activities. Country coordinators organize regional level meetings and activities. One round of USAID funding supported capacity building activities of members. At the time of the study, no funds had been dispersed through the initiative to support implementation activities of jurisdictional approaches, but the GCF secured extensive additional funding of 25 US\$ million from Norway targeted at future implementation of jurisdictional REDD+/LED activities and managed by UNDP.

4. Methods

The empirical analysis is based on text analysis of the GCF documents, such as governance and stakeholder policies, declarations, strategic plans, and members' speeches at GCF events, semi-structured interviews and a short survey on the GCF's goals with GCF related actors. A total of 38 interviews with the GCF delegates (33) from all countries represented in the task force at the time, one vice-governor, the GCF secretariat (3) and one supporting organization were undertaken between 2017 and 2018. They were coded using a mix of deductive and inductive coding categories (Saldana, 2013). The pre-determined categories referred to themes that the GCF itself indicated among its aims and roles as identified from the analysis of GCF internal documents.

The analysis focuses on investigating how the GCF exerts its authority, how it seeks to maintain its legitimacy through consensus, accountability (transparency, representativeness and monitoring) and 'soft' performance functions (information-sharing, capacity building and target setting), and the challenges it faces. Interviews did not include a broader set of stakeholders such as actual and potentially affected parties and constituencies at jurisdictional level. Thus, the focus in this paper is on how the GCF delegates and members themselves frame, value and experience such claims, and how the GCF as a platform aims to construct and maintain its own authority and legitimacy vis-à-vis diverse constituencies. In other words, this is a study on the GCF's outlook from within. It is not an assessment of the GCF's authority and legitimacy from the point of view of its stakeholders.

5. Results

5.1. The Building of the GCF's Authority

The GCF claims authority from both legal and extralegal sources and it primarily targets global climate change actors, including UNFCCC institutions, foreign governments, intergovernmental organizations and large-scale businesses. Specifically, it draws on three sources linked to members' individual *legal authority*: members' *autonomy* in political decision making of its, the *principle of subsidiarity* justifying their autonomy, and the significance of the GCF's *territorial representation*. But such claims also face challenges as we discuss below.

First, the GCF draws on the political *autonomy* of individual *members* to claim authority. For example, it underlines that the governors, being heads of local governments, have legal authority to develop and enact policies in their jurisdictions: as elected representatives of local constituencies, they take '*real political risk*' and '*have to face re-elections*' (secretariat interview). Most governors are directly elected and their governments tend to have high levels of autonomy. But members from federal states like Brazil, Nigeria and Mexico, have more autonomy, than those from decentralized states such as Indonesia or unitary ones such as Colombia. Indonesian members indicated that their dependence on national approval presents an obstacle to direct cooperation with donors (delegates 25 and 29). Thus, the lower level of autonomy of some members impacts the ability of the GCF to claim authority vis-à-vis global climate change actors.

Second, the GCF defends members' claims to autonomy invoking the *principle of subsidiarity*, which justifies extensive delegation of legal authority to local governments. One delegate stated:

'It's just like I always say: when a problem arises in the environment, no one goes to Brasilia, in the case of Brazil, to complain. They go to the states. What I think is highly important is the relevance of the GCF, this dialogue with the subnational states, which is where the problems are occurring.' (delegate 8)

It implies that problems are best solved at the local level, because local governments have the best knowledge and understanding of local needs. Such claims can be used to demand a seat at the table in international venues, but also to claim or demand enhanced autonomy vis-à-vis national governments, which can at times lead to tensions.

And third, the GCF refers to the breadth of members' *territorial representation* to claim authority. It widely publicizes that members' jurisdictions cover:

'over one-third of the world's tropical forests - including all of the legal Brazilian Amazon, more than 85% of the Peruvian Amazon, and over 60% of Indonesia's tropical forests', and the equivalent of '4.9 Mill square kilometers of forest' and '55 billion tonnes of forest carbon' (GCF, 2019a).

This signals to global actors working on climate and forests that they should engage with the GCF. Yet, the GCF's territorial representation of tropical forests is uneven, with only three African members and none from the Congo Basin, the largest African tropical forest region. Thus, limited autonomy of some members and skewed representation of tropical forests reduces the GCF's ability to most effectively draw on members' legal authority.

The GCF also draws on extralegal sources of authority. In particular, *expert-based* and *capacity-based* authority are key to claims of leadership in climate and forest action, which the GCF uses extensively in authority claims vis-à-vis the global climate change regime. The GCF puts substantial efforts into facilitating enhanced visibility and exposure of members in the role of leaders of climate action in forests. In one of the GCF delegate's words: '*We see ourselves as the leaders of the Amazonian region when it comes to taking care and protecting the environment*' (delegate 10). Yet, the level of leadership varies among members and depends on local governments' attitudes towards climate change commitments. According to delegates, claims of leadership have both a pull and push effect among members. On one hand, leadership of key jurisdictions drives other members to strive to achieve the same high level of ambition. On the other, decision making processes internal to the GCF push members towards more ambitious commitments for climate action and to report on progress (delegate 1). However, for many jurisdictions a limit to capacity-based authority is resource

availability, as indicated by another delegate: *'The leadership issue is: How could you lead, how could you do something, if you do not have funds?'* (delegate 19). Further, the GCF's dependence on external funding, means that donors can in part dictate how funding is used as opposed to members being able to make decisions based on their own needs and preferences.

While the GCF's claims to authority are not without challenges, these efforts seem to have translated into the institutionalization of power of the platform. The participation of the UNFCCC Secretary General in opening a GCF meeting and Norway's recent extensive funding for the GCF's implementation of jurisdictional REDD+ activities are a clear recognition of the authority of the GCF on the part of the global climate change regime.

5.2. GCF's Input Legitimacy Challenges: Accountability in Policy and Practice

We identified three main challenges the GCF faces regarding accountability of internal procedures that threaten input legitimacy: skewed geographic diffusion processes, skewed internal representation and a transparency challenge. We discuss each one in turn.

First, in terms of *internal* procedures, the GCF operates on the basis of consensus - a classical legitimising approach in TCCI (Bulkeley et al., 2014a) - with a backup option of a two-thirds majority vote if consensus is not reached (GCF, 2009). With respect to internal procedures on *representation*, current members can nominate new members to be approved for formal membership by consensus. This approach is likely to facilitate country and region-specific diffusion processes. At the same time it presents a challenge to reach out to more distant geographic areas, which can contribute to explain the regional clustering of the GCF initiative.

Second, *gender representation* of the GCF members is a major challenge, with only one female governor out of 38. Given that members are elected politicians, underrepresentation of women reflects broader gender imbalances in political office within each country. In this case, individual electoral legitimacy clashes with the need for improved gender representation at the platform level. Female representation improves slightly reaching 15% among delegates, 25% in the 2019 executive committee, and is close to 50% in the secretariat. The GCF responded to the gender equity challenge by championing women leaders among governors and delegates at international events and through the institution in 2019 of its first gender awareness and action meeting contributing to the development of the GCF's first gender policy.

Third, the interviews revealed how the delegation of functions to the secretariat at times runs the risk of reducing *transparency* in internal procedures (delegates 3, 7, 15, 17, 18, 36). Concerns related to how to best delegate management decisions to the secretariat, how to allocate funding between administrative and members' activities, and how to select regional coordinators. Although the roles and main tasks of members, secretariat and coordinators are codified in the GCF's governance documents, the perceived lack of transparency is partly due to the lack of codified procedures for some of the secretariat's routine and minor tasks and management decisions. One delegate expressed this difficulty in the following way: *'I don't know if it's a matter of process, but I do know that it's very difficult for you to standardize a process when you have so many different actors'* (delegate 6). To tackle this challenge, the GCF has been successfully experimenting with the use of internal committees and working groups, but challenges remain. Ensuring transparency in the secretariat's procedures is all the more important, given that the secretariat has key agenda setting influence, is the major

conduit to donors, and is based in the US, a donor country and a country where the GCF might aim to recruit new members to fund REDD+/LED activities.

With regards to *external accountability*, upward accountability to donors is largely ensured through grant related reporting procedures. Yet downward accountability to local stakeholders remains a challenge. Below we discuss two related elements: how the GCF has codified mechanisms of downward accountability in its governance policies and how external accountability has played out in practice.

Codification of ‘stakeholder engagement policy’ of the GCF started in 2010 in response to a petition from NGOs from Indonesia and lists four principles for stakeholder engagement: 1. Transparency, entailing that ‘the GCF information and processes are clearly described, disseminated and publicly available’; 2. Inclusivity, indicating that ‘relevant stakeholders are engaged in the GCF activities’; 3. Timeliness, ensuring that ‘information is prepared and disseminated with reasonable time for stakeholder evaluation’; and 4. Accountability, indicating ‘stakeholder views are accurately captured and their acceptance or rejection in the decision-making process is evident’ (GCF, 2010). Up to 2014, stakeholder involvement policy mentioned exclusively non-governmental organizations (GCF, 2010; 2014a: 6). Since 2015, major GCF policy documents explicitly specify indigenous peoples, local communities and smallholders. Actual engagement of the GCF with indigenous peoples’ representatives started around 2014 (see GCF, 2014b) (supporter 38) and by 2017 had become one of two top priorities of the GCF strategy, alongside the engagement with the private sector on sustainable supply chains. Both were formalized at the 2017 GCF annual meeting in Bonn during COP 23. However, as exemplified in the 2010 document, external accountability and inclusivity remain quite vaguely defined, limited in scope beyond the focus on indigenous peoples and largely unidirectional (GCF, 2010, 2015). In other words, the GCF presents principles of external accountability largely as broad aspirational goals, which could weaken legitimacy.

A major practical challenge for input-oriented legitimacy is that delegates understand *inclusivity* and *participation* in different ways. Some interpret it as communicating the GCF’s work to indigenous and local communities to gain support for the governors and the platform (delegate 31). Others underline the role the GCF as a platform for indigenous peoples and communities to be listened to (delegates 2, 8, 9, 11, 29). And some delegates indicate the need for capacity building activities for local governments to step up engagement with local communities and indigenous people (delegate 11). The slow progress within the GCF on indigenous peoples’ engagement is in part due to challenges of members from countries, such as Indonesia, that do not formally recognize indigenous peoples (supporter 38, delegate 6). Importantly, the GCF seems also to be serving the function to ‘sensitize’ members to scale up their individual engagement with indigenous peoples (interview with secretariat). One delegate indicated that *disclosure of information* is helpful at facilitating the GCF’s external accountability (delegate 33). The GCF maintains an online database and has developed members’ profiles; 30 of 38 are currently published on the GCF website (GCF, ND), which lists characteristics and achievements of each jurisdiction in relation to climate action and anti-deforestation objectives. The self-reporting mechanism supports legitimacy through reputational accountability levers in the same way as self-regulatory commitments.

5.3. The Building of the GCF's Output Legitimacy: Information-sharing, capacity building and target setting

This section investigates how the GCF has built and maintains its output legitimacy vis-à-vis members and external actors and what main challenges it faces. It focuses on three key 'soft' outcomes of TGNs: information-sharing, capacity building and target setting (Bulkeley et al., 2014a). The GCF has been quite effective as an information sharing platform for members, but has been struggling with regards to external information sharing, aimed at publicizing and raising the GCF's profile with potential funders and global climate actors. In relation to internal information sharing across jurisdictions, this is a key governance function and explicit aim of the GCF (GCF, 2015) and the main benefit of the GCF membership according to delegates:

'the exchange of information and experiences worldwide that is worth its weight in gold. Knowing how you do it, what successes you have and what failures you can have in the world to fight against desertification, soil degradation, deforestation, is very important' (delegate 21)

Peer to peer learning from the most advanced jurisdictions from Brazil, Mexico and California is extremely valued, as is the role of country coordinators in facilitating regional level knowledge exchange. Moreover, *'integrating, learning [from] other experiences'* is most useful *'not just from a technical standpoint, but from a political angle as well'* (delegate 4) and aligns with the aim of the GCF to function at both political and technical levels. Effective delivery of its internal information-sharing role boosts the GCF's output legitimacy in the eyes of members.

Yet information sharing and dissemination aimed at exerting influence on external actors has been less successful. Even within jurisdictions, key administrators often do not know about the existence of the GCF (delegate 13). While delegates acknowledge that the GCF provides increased opportunities for face to face access to international actors during annual meetings and COP events and recognize coordinators and the secretariat as catalysts for external information sharing, interviewees agree more could be done to promote the work of the GCF at national and international levels to more effectively leverage funding for climate initiatives within jurisdictions. In the past, a major constraint was lack of funding for external information outreach (interview with secretariat).

Capacity building is a second main function of the GCF, which has contributed to enhanced legitimacy both among members and among other jurisdictional actors. Its focus is on empowering and strengthening the capacity of civil servants to implement REDD+/LED projects (GCF, 2015). This includes provision of financial resources and expertise. Capacity building happens both informally through the GCF meetings and interactions with other members and formally through specific training activities. Effective capacity building activities included scientific and technical training and workshop activities supporting the development of subnational REDD+ strategies, indicators and standards (e.g. delegates 2, 15, 24, 27, 28, 31) and support for the project proposal development to access funding (delegates 18, 19, 30). At the same time, many delegates underline the need for further training in technical aspects of REDD+ implementation, including methodologies, MRV systems, safeguards, planning, communication with international governmental and private sector actors, proposal development and accessing funding (delegates 4, 5, 9, 11, 12, 14, 18, 26, 27, 33). Importantly, capacity building is not just seen as a way to build expertise and reduce transaction costs, but also to steer behaviour of local government actors to boost the profile of climate action in forests beyond those directly involved in the GCF and to facilitate supportive interactions with local communities and indigenous peoples (delegates 8, 16, 26, 28, 29, 30, 31). Consequently, capacity

building can enhance output legitimacy both internally and in the eyes of external actors within members' jurisdictions. Additional dedicated funds could enhance its impact.

The third function of target setting is at the heart of the GCF's activities and aims to support the development and delivery of jurisdictional anti-deforestation agendas. This target is crucial for output legitimacy vis-à-vis external actors. A major milestone in this direction was reached in 2014 when the GCF issued the Rio Branco Declaration, where 22 member signatories vowed to:

'Reaffirm our commitment to reduce tropical deforestation, protect the global climate system, improve rural livelihoods, and reduce poverty in our jurisdictions.' (GCF, 2014b: 1).

The declaration then specifies that: *'If adequate, sufficient, and long-term performance-based funding is available ... we commit to reducing deforestation by 80% by 2020.'* It also indicates that the GCF pledges to share a *'substantial'* part of benefits with *'forest-dependent communities, smallholders and indigenous peoples'* and calls for *'support from partners to develop clear and transparent mechanisms for securing and delivering performance-based benefits'*. At the time of this study, 35 out of 38 members of the GCF had signed the Rio Branco Declaration. At its 2019 annual meeting in Caquetá, Colombia, the GCF (2019b) defined *'successful jurisdictions'* as those achieving *'zero-net deforestation at the jurisdictional level'*. Part of an *'incremental approach'*, it further stated that recognition and rewards should go to jurisdictions that are *'taking meaningful steps to address deforestation and forest recovery'*, which are formalized into three level: a) formal political commitments; b) actions, including policies and programs; c) measurable declines in deforestation rates, increases in recovery rates, increases in agricultural and forest productivity and improved social inclusion and livelihoods for farmers and forest-dependent communities. In short, the GCF's policy statements reveal challenges in convincing all members to commit to explicitly ambitious targets and actions that are not exclusively dependent on external support.

A recent study indicates that half of the 30 jurisdictions of the GCF that were compared have made some progress towards the Rio Branco Declaration commitment, but only four are likely to achieve the 80% reduction target by 2020 (Stickler et al., In press). The 2019 zero-net deforestation definition has not yet translated into a specific commitment and remains an aspirational goal. Currently, 17 out of 38 members are signatories of the New York Declaration on Forests, which aims to halve the rate of loss of natural forests globally by 2020 and end natural forest loss by 2030. But only 5 of the GCF jurisdictions are engaged in formal zero-deforestation contractual partnership with companies (Stickler et al., In press). Delegates themselves assessed soft results linked to information sharing and capacity building as *'quite effective'* compared to halting deforestation which was assessed only as *'slightly effective'* (survey data). Perceived limited tangible results could jeopardize output legitimacy of the platform, both in the eyes of current and prospective members as well as external actors.

6. Discussion

Below we discuss three main trade-offs related to authority and dimensions of legitimacy for TGNs that emerged from the above analysis of the GCF and that hamper the delivery of effective and equitable climate action (Biermann and Gupta, 2011). We also reflect on uneven political geographies shaping those TGNs whose actors are predominantly from the Global South.

6.1. Uneven political geography: Trade-offs between input and output legitimacy

The low level of representation of Congo Basin jurisdictions limits the extent to which the GCF can claim authority based on worldwide territorial representation of tropical forests. But, what can explain this uneven political geography? While developing countries receive most climate investments, most of these investments go to East Asia and the Pacific, followed by Latin America and the Caribbean. Sub-Saharan Africa only received 2.6 % of total climate investments in 2015-2016 (Oliver et al., 2018). Developing and least developed countries tend to have limited climate policies, participate less in TCCIs, and their subnational governments might simply follow the same patterns (Bulkeley et al., 2014a; Roger et al., 2017; Stadelmann and Castro, 2014). However, countries such as the Democratic Republic of Congo and Cameroon have received extensive Overseas Development Assistance (ODA) for national REDD+ programmes (Gray, 2017; Maniatis et al., 2013). More likely, low levels of autonomy of subnational governments in the region and associated with limited local capacity, and resources for climate action reduce incentives for participation (Eckersley, 2017). A recent study suggests that, overall, Asian and Latin American 2nd tier governments have higher levels of autonomy, and consequently more authority regarding REDD+, than African ones (Busch and Amarjargal, 2020). Further, at present, the GCF is missing an African regional leader able to facilitate recruitment through policy diffusion processes. Such 'dynamic of affinity' could emerge through successful experiences from jurisdictions that are culturally similar (Jordan and Huitema, 2014, p.391). Yet, the lack of participation might also be due to marginalization of the African continent, already observed in other climate change initiatives, such as CDM projects, as well as in the broader global political economy (Compagnon, 2012). But, while actively pursuing recruitment of African jurisdictions might enhance the input legitimacy of the GCF, it might not necessarily increase output legitimacy. Expansion of the platform could reduce the ability to build authority through symbolic leadership resources, if broader representation leads to a 'race to the bottom' that limits the ambition of target setting and climate action (Abbott, 2012; Keohane and Victor, 2011). This reveals a possible trade-off between broad representation, which enhances input legitimacy, and performance, which enhances output legitimacy. In addition, attention to uneven political geographies is also required with regards to the inner working of the GCF platform itself, because power inequalities that are present in the broader global climate change regime (Okereke, 2010) might in part be mirrored in the roles of different GCF actors, the composition of the platform, and the dependence on external funding.

6.2. Managing internal and external governance processes: Trade-offs and synergies between output and input legitimacy

Internally, the GCF faces a trade-off between effectiveness of day-to-day management of activities (and associated output legitimacy) and transparency, which contributes to internal accountability (and associated input legitimacy). Limited codification of day-to-day management activities of the secretariat allows swift decisions, contains communication costs, and facilitates negotiation across members with different interest; thus strengthening effectiveness of the platform, its output legitimacy and ultimately its authority (Shaw, 1998). But if the need to maintain effective management decisions translates into lack of transparency, this will undermine accountability and legitimacy of internal governance processes (Bäckstrand, 2006). As the GCF grows, consensus-based decision making also becomes more challenging, and new internal peer- to-peer accountability mechanisms and new forms of delegation and monitoring will need to be devised (Benner et al., 2004; Kuyper et al., 2017; Widerberg and Pattberg, 2017). We are not suggesting that trade-offs

between effectiveness and accountability are inevitable, to the contrary. Evidence around EU processes has shown that enhancing input legitimacy can also contribute to effectiveness (Lindgren and Persson, 2010; Verweij and Josling, 2003). Norway's new funding contribution to the GCF provides resources to improve internal communication procedures that enhance two-way communication and coordination of a high number of members scattered around the globe. These resources can allow to simultaneously enhance accountability and effectiveness of the platform.

With regards to external accountability, input legitimacy of the GCF will increasingly depend on how individual members and the network are able to provide meaningful access to external stakeholders. As a TGN of subnational governments, downward accountability and engagement with indigenous peoples, local communities, smallholders, and local civil society actors is particularly important for the GCF to legitimize jurisdictional REDD+ (Lyster, 2011). Yet the transnational as well as public nature of the platform make it difficult to facilitate effective participation of local stakeholders (Bäckstrand, 2008; Bäckstrand and Kuyper, 2017; Belfer et al., 2019; Schroeder, 2010). In addition, legal frameworks, and colonial and post-colonial legacies on indigenous peoples' rights differ by country and impact the authority of individual members to make decisions on engagement (Aguilar-Støen, 2015; Peluso, 1993). Jurisdictions with a history of positive engagement can contribute to sensitize other members, but at the same time less attuned members might instead limit the ambition of the GCF stakeholder engagement agenda. Commitments to inclusivity in the GCF (GCF, 2014a) will need to be further defined and operationalised through dedicated mechanisms that work alongside the network that actively supports a sensitizing agenda. In this case, increased input legitimacy is likely to reinforce output legitimacy, because more inclusive processes will deliver jurisdictional REDD+/LED solutions that work better locally (Corbera and Schroeder, 2011).

While enhancing transparency and participation of stakeholders is in line with ODA aims, the GCF's high dependence on ODA makes it difficult in practice to ensure the required long-term financial sustainability to support these activities (Carlsson et al., 1997; Streck, 2011). It also creates multiple and possibly contrasting accountability demands between donors, members and other stakeholders (Groves and Hinton, 2004). This can result in tensions that can limit the authority of the platform. If, in the future, carbon-offset funding will support jurisdictional REDD+ programmes, it becomes even more important that the GCF does not forgo downward accountability to local stakeholders for upward accountability to globalized carbon markets (Bäckstrand, 2008; Gupta et al., 2012).

6.3. Target setting choices and effectiveness: Failure to draw on legal authority to enhance output legitimacy

Finally, a major constraint to the output legitimacy of the GCF is the conditionality of its goal to reduce deforestation by 80% by 2020 on '*adequate, sufficient, and long-term performance-based funding*' (GCF, 2014b: 1). By setting a goal that requires external support to be achieved, the GCF failed to fully leverage the individual legal authority of members to directly contribute to climate action. In other words, it lost the main advantage that TGNs have over private or hybrid networks (Betsill and Bulkeley, 2004). As a consequence, the GCF's legitimacy depends on its ability to attract substantial external financial resources to deliver on its commitments. In the worst-case scenario, it can be interpreted as a way for some members to enhance their reputation, while business as usual continues unabated (Bulkeley et al., 2014a).

Meanwhile, Norway's recent US\$ 25 million funding for implementation, could change the direction of future prospects of the GCF's jurisdictional REDD+ and LED implementation. The California

Tropical Forest Standard endorsed on 19th September 2019 could also lead to future links to carbon markets if approval goes ahead (Bang et al., 2017). The latter might translate into Northern GCF members, California in particular, funding other GCF members' jurisdictional REDD+ programmes in the future. The GCF could, however, also set additional (lower) jurisdictional-level emission reduction or anti-deforestation targets to be pursued even in the absence of external support. Targets could take into account individual members' circumstances, while supporting or enhancing national targets. This approach would distinguish itself from the GCF's 'incremental approach' formalized at the 2019 annual meeting in Caquetá, which calls for rewarding 'political commitments' of jurisdictions. Instead it would be an approach based on 'leading by example' leveraging the legal authority of jurisdictions to take direct climate action. And it would also contribute to mobilize internal as well as external support (Karlsson et al., 2011). This is not to say that setting and delivering on such independent targets will be straightforward. Other hybrid initiatives, such as the New York Declaration on Forests, show that failure to deliver on promises might still jeopardize output legitimacy (Hsu et al., 2015; NYDF Assessment Partners, 2019).

7. Conclusion

The last decades have seen the emergence of a variety of TCCLs. However, TGNs whose members are mainly from the Global South are quite rare and face unique opportunities and challenges with regard to asserting their authority and maintaining their legitimacy. Authority and legitimacy are important because they impact the ability of networks to support and deliver effective and equitable climate change responses. Our study offers four insights on some major challenges and trade-offs. First, as a theoretical contribution we argue that while TGNs can draw on individual members' legal authority to deliver climate action locally, they also face major difficulties in delivering input legitimacy. Their public nature means that to ensure accountability they must overcome the constraint of limited stakeholder representation. This requires proactive steps to develop effective processes to provide meaningful access to external actors, particularly local constituencies. Second, empirical evidence shows that the level of autonomy and availability of resources affects participation in TGNs and the ability of subnational governments from the Global South to take independent climate action. Yet, those with fewer resources are likely to gain most from peer-to-peer information sharing and capacity building activities provided by these networks. Those TGNs that depend on international aid to support the organization, coordination and delivery of climate action have to overcome additional barriers to build and maintain their collective authority, as resource constraints make it more challenging to deliver transparency of procedures as well as effectiveness. Third, external accountability demands from donors or carbon markets might not necessarily be in line with demands from local constituencies and reconciling the two might prove challenging, running the risk of demands from less visible or less powerful actors being neglected in practice. However, trade-offs between input and output legitimacy are not inevitable. Careful allocation of resources to strengthen internal accountability can also reinforce effectiveness, and a balanced approach that considers both upward and downward accountability can strengthen input legitimacy. Finally, while a major aim of TGNs is to empower participants to contribute to climate change responses, evidence on skewed geographic and gender representation indicates a need for proactive ways to avoid further disenfranchising those that have long been excluded.

REFERENCES

- Abbott, K.W. (2012) The transnational regime complex for climate change. *Environment and Planning C: Government and Policy* 30, 571-590.
- Agnew, J. (2005) Sovereignty Regimes: Territoriality and State Authority in Contemporary World Politics. *Annals of the Association of American Geographers* 95, 437-461.
- Aguilar-Støen, M. (2015) Global forest conservation initiatives as spaces for participation in Colombia and Costa Rica. *Geoforum* 61, 36-44.
- Allen, J. (2003) *Lost geographies of power*. Blackwell, Malden, MA ; Oxford.
- Andonova, L.B., Betsill, M.A., Bulkeley, H. (2009) Transnational climate governance. *Global Environmental Politics* 9, 52-73.
- Avant, D.D., Finnemore, M., Sell, S.K. (2010) *Who governs the globe?* Cambridge University Press, Cambridge.
- Bäckstrand, K. (2006) Multi-stakeholder partnerships for sustainable development: rethinking legitimacy, accountability and effectiveness. *European Environment* 16, 290-306.
- Bäckstrand, K. (2008) Accountability of networked climate governance: The rise of transnational climate partnerships. *Global Environmental Politics* 8, 74-102.
- Bäckstrand, K., (2012) Democracy and global environmental politics, in: Dauvergne, P. (Ed.), *Handbook of global environmental politics*, 2nd ed. Edward Elgar, Cheltenham.
- Bäckstrand, K., Kuyper, J.W. (2017) The democratic legitimacy of orchestration: the UNFCCC, non-state actors, and transnational climate governance. *Environmental Politics* 26, 764-788.
- Bang, G., Victor, D.G., Andresen, S. (2017) California's cap-and-trade system: Diffusion and lessons. *Global Environmental Politics* 17, 12-30.
- Barnett, M.N., Finnemore, M. (2004) *Rules for the world: international organizations in global politics*. Cornell University Press, Ithaca, N.Y. ; London.
- Belfer, E., Ford, J.D., Maillet, M., Araos, M., Flynn, M. (2019) Pursuing an indigenous platform: Exploring opportunities and constraints for indigenous participation in the UNFCCC. *Global Environmental Politics* 19, 12-33.
- Benner, T., Reinicke, W.H., Witte, J.M. (2004) Multisectoral networks in global governance: Towards a pluralistic system of accountability. *Government and Opposition* 39, 191-210.
- Bernstein, S. (2011) Legitimacy in intergovernmental and non-state global governance. *Review of International Political Economy* 18, 17-51.
- Bernstein, S., (2012) Legitimacy problems and responses in global environmental governance, in: Dauvergne, P. (Ed.), *Handbook of global environmental politics*, 2nd ed. Edward Elgar, Cheltenham.
- Betsill, M., Dubash, N.K., Paterson, M., van Asselt, H., Vihma, A., Winkler, H. (2015) Building productive links between the UNFCCC and the broader global climate governance landscape. *Global Environmental Politics* 15, 1-10.
- Betsill, M.M., Bulkeley, H. (2004) Transnational networks and global environmental governance: The Cities for Climate Protection Program. *International Studies Quarterly* 48, 471-493.
- Betsill, M.M., Bulkeley, H. (2006) Cities and the multilevel governance of global climate change. *Global Governance: A Review of Multilateralism and International Organizations* 12, 141-159.

Biermann, F., Gupta, A. (2011) Accountability and legitimacy in earth system governance: A research framework. *Ecological Economics* 70, 1856-1864.

Bovens, M. (2007) Analysing and assessing accountability: A conceptual framework 1. *European Law Journal* 13, 447-468.

Boyd, W., Stickler, C., Duchelle, A., Seymour, F., Nepstad, D., Bahar, N., Rodriguez-Ward, D., (2018) Jurisdictional approaches to REDD+ and low emissions development: Progress and prospects. Working Paper. Washington, DC: World Resources Institute.

Bulkeley, H. (2012) Governance and the Geography of Authority: Modalities of Authorisation and the Transnational Governing of Climate Change. *Environment and Planning A: Economy and Space* 44, 2428-2444.

Bulkeley, H., Andonova, L.B., Betsill, M.A., Hale, T., Newell, P., Paterson, M., Roger, C., Vandever, S.D. (2014a) *Transnational climate change governance*. Cambridge University Press, Cambridge.

Bulkeley, H., Andonova, L.B., Betsill, M.A., Hale, T., Newell, P., Paterson, M., Roger, C., Vandever, S.D., (2014b) The uneven geography of transnational climate change governance, in: Bulkeley, H., Andonova, L.B., Betsill, M.A., Hale, T., Newell, P., Paterson, M., Roger, C., Vandever, S.D. (Eds.), *Transnational climate change governance*. Cambridge University Press, Cambridge.

Busch, J., Amarjargal, O. (2020) Authority of second-tier governments to reduce deforestation in 30 tropical countries. *Frontiers in Forests and Global Change* 3.

Campbell, B.M. (2009) Beyond Copenhagen: REDD plus, agriculture, adaptation strategies and poverty. *Global Environmental Change* 19, 397-399.

Carlsson, J., Somolekae, G., Van de Walle, N. (1997) *Foreign aid in Africa : learning from country experiences*. Nordiska Afrikainstitutet, Uppsala.

Caron, D.D. (1993) The legitimacy of the collective authority of the Security Council. *American Journal of International Law* 87, 552-588.

Chan, S., Falkner, R., Goldberg, M., van Asselt, H. (2018) Effective and geographically balanced? An output-based assessment of non-state climate actions. *Climate Policy* 18, 24-35.

Clayton, A., O'Brien, D.Z., Piscopo, J.M. (2019) All male panels? Representation and democratic legitimacy. *American Journal of Political Science* 63, 113-129.

Compagnon, D., (2012) Africa's involvement in partnerships for sustainable development: holy grail or business as usual?, in: Pattberg, P.H. (Ed.), *Public-private partnerships for sustainable development: emergence, influence and legitimacy*. Edward Elgar, Cheltenham; Northampton, Ma.

Corbera, E., Schroeder, H. (2011) Governing and implementing REDD+. *Environmental Science & Policy* 14, 89-99.

Dryzek, J.S. (2000) *Deliberative democracy and beyond : liberals, critics, contestations*. Oxford University Press, New York.

Eckersley, P. (2017) A new framework for understanding subnational policy-making and local choice. *Policy Studies* 38, 76-90.

Eilstrup-Sangiovanni, M., (2016) Power and purpose in transgovernmental networks: insight from the global nonproliferation regime, in: Avant, D.D., Westerwinter, O. (Eds.), *The new power politics: networks and transnational security governance*. Oxford University Press, Oxford, UK.

GCF, (Governors' Climate & Forests Task Force), (2009) *Joint Action Plan (2009-2010)*. GCF, Boulder, CO.

- GCF, (Governors' Climate & Forests Task Force), (2010) Guidance document on stakeholder involvement for the Governors' Climate and Forests Task Force. GCF, Boulder, CO.
- GCF, (Governors' Climate & Forests Task Force), (2014a) GCF Governance Policy. GCF, Boulder, CO.
- GCF, (Governors' Climate & Forests Task Force), (2014b) Rio Branco Declaration: Building partnerships and securing support for forests, climate, and livelihoods. GCF, Rio Branco, Brazil.
- GCF, (Governors' Climate & Forests Task Force), (2015) GCF 2020: Governors' Climate and Forests Task Force strategic plan. GCF, Boulder, CO.
- GCF, (Governors' Climate & Forests Task Force) (2019a) About: GCF Task Force, <https://www.gcftf.org/about>. Accessed: 10 May 2019, 2019.
- GCF, (Governors' Climate & Forests Task Force), (2019b) A call for collaboration from the private sector on behalf of tropical forest government leaders. GCF, Caquetá, Colombia.
- GCF, (Governors' Climate & Forests Task Force) (ND), <https://www.gcftf.org>. Accessed: 10 February 2020.
- Grant, R.W., Keohane, R.O. (2005) Accountability and abuses of power in world politics. *American Political Science Review* 99, 29-43.
- Gray, I. (2017) Marketization as political technology: unintended consequences of climate finance in the Democratic Republic of Congo. *Economy and Society* 46, 545-575.
- Green, J.F. (2014) Rethinking private authority: agents and entrepreneurs in global environmental governance. Princeton University Press, Princeton.
- Groves, L.C., Hinton, R.B. (2004) Inclusive aid: Changing power and relationships in international development. Earthscan, London.
- Gupta, A., Lövbrand, E., Turnhout, E., Vijge, M.J. (2012) In pursuit of carbon accountability: the politics of REDD+ measuring, reporting and verification systems. *Current Opinion in Environmental Sustainability* 4, 726-731.
- Hale, T. (2016) "All Hands on Deck": The Paris Agreement and nonstate climate action. *Global Environmental Politics* 16, 12-22.
- Hale, T., Roger, C. (2014) Orchestration and transnational climate governance. *Review of International Organizations* 9, 59-82.
- Hickmann, T. (2016) Rethinking authority in global climate governance: How transnational climate initiatives relate to the international climate regime. Routledge, London.
- Hooghe, L., Marks, G., Schakel, A.H. (2010) The rise of regional authority: A comparative study of 42 democracies. Routledge, London.
- Hsu, A., Moffat, A.S., Weinfurter, A.J., Schwartz, J.D. (2015) Towards a new climate diplomacy. *Nature Climate Change* 5, 501.
- Hurrelmann, A., Schneider, S., Steffek, J. (2007) Legitimacy in an age of global politics. Palgrave Macmillan, Basingstoke.
- Jordan, A., Huitema, D. (2014) Policy innovation in a changing climate: Sources, patterns and effects. *Global Environmental Change-Human and Policy Dimensions* 29, 387-394.
- Jordan, A.J., Huitema, D., Hilden, M., van Asselt, H., Rayner, T.J., Schoenefeld, J.J., Tosun, J., Forster, J., Boasson, E.L. (2015) Emergence of polycentric climate governance and its future prospects. *Nature Clim. Change* 5, 977-982.

- Karlsson, C., Parker, C., Hjerpe, M., Linnér, B.-O. (2011) Looking for leaders: Perceptions of climate change leadership among climate change negotiation participants. *Global Environmental Politics* 11, 89-107.
- Keohane, R.O., Victor, D.G. (2011) The regime complex for climate change. *Perspectives on Politics* 9, 7-23.
- Koppell, J.G.S. (2008) Global governance organizations: Legitimacy and authority in conflict. *Journal of Public Administration Research and Theory* 18, 177-203.
- Kuyper, J., Bäckstrand, K., Schroeder, H. (2017) Institutional accountability of nonstate actors in the UNFCCC: Exit, voice, and loyalty. *Review of Policy Research* 34, 88-109.
- Kuyper, J., Schroeder, H., Linnér, B.-O. (2018) The evolution of the UNFCCC. *Annual Review of Environment and Resources* 43, 343-368.
- Lake, D.A. (2010) Rightful Rules: Authority, Order, and the Foundations of Global Governance. *International Studies Quarterly* 54, 587-613.
- Lindgren, K.-O., Persson, T. (2010) Input and output legitimacy: synergy or trade-off? Empirical evidence from an EU survey. *Journal of European Public Policy* 17, 449-467.
- Lövbrand, E., Rindeljall, T., Nordqvist, J. (2009) Closing the legitimacy gap in global environmental governance? Lessons from the emerging CDM market. *Global Environmental Politics* 9, 74-100.
- Lyster, R. (2011) REDD+, transparency, participation and resource rights: the role of law. *Environmental Science & Policy* 14, 118-126.
- Maniatis, D., Gaugris, J., Mollicone, D., Scriven, J., Corblin, A., Ndikumagenge, C., Aquino, A., Crete, P., Sanz-Sanchez, M.-J. (2013) Financing and current capacity for REDD+ readiness and monitoring, measurement, reporting and verification in the Congo Basin. *Philosophical Transactions of the Royal Society B: Biological Sciences* 368, 20120310.
- Michaelowa, K., Michaelowa, A. (2017) Transnational climate governance initiatives: Designed for effective climate change mitigation? *International Interactions* 43, 129-155.
- Nasiritousi, N., Hjerpe, M., Linnér, B.-O. (2016) The roles of non-state actors in climate change governance: understanding agency through governance profiles. *International Environmental Agreements: Politics, Law and Economics* 16, 109-126.
- NYDF Assessment Partners, (2019) Protecting and restoring forests: a story of large commitments yet limited progress. Five year assessment report. Climate Focus, Amsterdam, Netherlands.
- Okereke, C. (2010) Climate justice and the international regime. *Wiley Interdisciplinary Reviews: Climate Change* 1, 462-474.
- Oliver, P., Clark, A., Meattle, C., (2018) Global climate finance: An updated view 2018. Climate Policy Initiative, San Francisco, CA.
- Pattberg, P., Stripple, J. (2008) Beyond the public and private divide: remapping transnational climate governance in the 21st century. *International Environmental Agreements-Politics Law and Economics* 8, 367-388.
- Pattberg, P., Widerberg, O. (2015) Theorising global environmental governance: Key findings and future questions. *Millennium-Journal of International Studies* 43, 684-705.
- Peluso, N.L. (1993) Coercing conservation: The politics of state resource control. *Global Environmental Change* 3, 199-218.
- Raustialia, K. (2002) The architecture of international cooperation: Transgovernmental networks and the future of international law. *Virginia Journal of International Law* 43, 1-92.

Risse, T., (2006) Transnational governance and legitimacy, in: Benz, A., Papadopoulos, Y. (Eds.), *Governance and democracy: comparing national, European and international experiences*. London : Routledge, 2006.

Roger, C., Hale, T., Andonova, L. (2017) The comparative politics of transnational climate governance. *International Interactions* 43, 1-25.

Rondinelli, D.A. (1981) Government decentralization in comparative perspective: theory and practice in developing countries. *International Review of Administrative Sciences* 47, 136-145.

Saldana, J. (2013) *The coding manual for qualitative researchers*, 2nd ed. ed. SAGE, Los Angeles ; London.

Scharf, F.W. (1997) Economic integration, democracy and the welfare state. *Journal of European Public Policy* 4, 18-36.

Scharpf, F.W. (1999) *Governing in Europe : effective and democratic?* Oxford University Press, New York.

Scharpf, F.W. (2009) Legitimacy in the multilevel European polity. *European Political Science Review* 1, 173-204.

Schroeder, H. (2010) Agency in international climate negotiations: the case of indigenous peoples and avoided deforestation. *International Environmental Agreements: Politics, Law and Economics* 10, 317-332.

Shaw, J. (1998) The Treaty of Amsterdam: Challenges of flexibility and legitimacy. *European Law Journal* 4, 63-86.

Simon, H.A., Smithburg, D.W., Thompson, V.A. (1991) *Public administration*. Transaction Publishers, New Brunswick, NJ.

Spencer, M.E. (1970) Weber on legitimate norms and authority. *The British Journal of Sociology* 21, 123-134.

Stadelmann, M., Castro, P. (2014) Climate policy innovation in the South – Domestic and international determinants of renewable energy policies in developing and emerging countries. *Global Environmental Change* 29, 413-423.

Stickler, C., David, O., Chan, C., Ardila, J.P., Bezerra, T. (In press) The Rio Branco Declaration: Assessing progress towards a near-term voluntary deforestation reduction target in subnational jurisdictions across the tropics. *Frontiers in Forests and Global Change* In Press.

Strebel, M.A., Kübler, D., Marcinkowski, F. (2019) The importance of input and output legitimacy in democratic governance: Evidence from a population-based survey experiment in four West European countries. *European Journal of Political Research* 58, 488-513.

Streck, C., (2011) Financing mechanisms for climate change mitigation, in: Hale, T., Held, D. (Eds.), *Handbook of transnational governance: Institutions and innovations*. Polity, Cambridge.

Suchman, M.C. (1995) Managing legitimacy: Strategic and institutional approaches. *The Academy of Management Review* 20, 571-610.

UNFCCC (2016) Decision 1/CP.21, Adoption of the Paris Agreement. United Nations Framework Convention on Climate Change, Bonn, Germany.

UNGA, United Nations General Assembly, (2015) *General Assembly Resolution A/RES/70/1: Transforming our world: the 2030 Agenda for Sustainable Development*. United Nations, New York: United Nations; 2015.

Uphoff, N. (1989) Distinguishing power, authority & legitimacy: Taking Max Weber at his word by using resources-exchange analysis. *Polity* 22, 295-322.

Verweij, M., Josling, T.E. (2003) Deliberately democratizing multilateral organization. *Governance* 16, 1-21.

Widerberg, O., Pattberg, P. (2017) Accountability challenges in the transnational regime complex for climate change. *Review of Policy Research* 34, 68-87.

Zelli, F., van Asselt, H. (2013) Introduction: The Institutional Fragmentation of Global Environmental Governance: Causes, Consequences, and Responses. *Global Environmental Politics* 13, 1-13.

Zürn, M. (2000) Democratic governance beyond the nation-state: The EU and other international institutions. *European Journal of International Relations* 6, 183-221.

Zürn, M., Binder, M., Ecker-Ehrhardt, M. (2012) International authority and its politicization. *International Theory* 4, 69-106.