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UNFCCC Before and After Paris – What’s Necessary for an Effective Climate Regime?

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Abstract

What can reasonably be expected from the UNFCCC process and the climate conference in Paris 2015? To achieve transformative change, prevailing unsustainable routines embedded in socio-economic systems have to be translated into new and sustainable ones. This article conceptualises the UNFCCC and the associated policy processes as a catalyst for this translation by applying a structural regime model. This model provides an analytical distinction of *rules* (norms and shared meaning) and *resources* (economic resources as well as authoritative and allocative power) and allows to conceptualise agency on various levels including beyond the nation states. The analysis concludes that the UNFCCC’s narrow focus on emissions targets, which essentially is a focus on *resources*, has proven ineffective. In addition, the static division of industrialized and developing countries in the Convention’s annexes and the consensus-based decision-making rules have impeded ambitious climate protection. The article concludes that the UNFCCC is much better equipped to provide *rules* for climate protection activities and should consciously expand this feature to improve its impact. .

Policy relevance

The international community is negotiating a new global climate agreement, to be adopted at the Conference of the Parties (COP 21) in December 2015 in Paris and to be applicable from 2020. This article analyses the successes and limitations the UNFCCC has had so far in combating climate change and it develops recommendations how to enhance efforts within and beyond the framework of the Convention. From our analysis we derive two main recommendations for an effective and *structurally* balanced treaty: First, multi-dimensional mitigation contributions going beyond emission targets could strongly improve countries’ ability to tailor their contributions around national political discourses. Second, the UNFCCC regime should be complemented with another treaty outside of the UNFCCC framework. This ‘Alliance of the Ambitious’ would allow the pioneers of climate protection to move ahead and enjoy the benefits of co-operation. The dynamics generated through such a club approach could be fed back into the UNFCCC, leading to increased ambition by others in future commitment cycles.

Key words

climate regime, Paris agreement, mitigation commitments, climate clubs, structural regime model

1 Introduction

What can reasonably be expected from the UNFCCC process and the climate summit in Paris (COP 21)? The 2007-2009 attempt to adopt a comprehensive climate agreement at the Copenhagen conference, with extremely high expectations to solve issues in one sweep, failed dramatically and made clear that the hopes and expectations with regard to the UNFCCC process were over-stretched. However, claiming a complete failure might be equally naive. While so far insufficient to achieve the below 2°C target, the UNFCCC has nonetheless induced a large variety of mitigation activities around the globe (Dubash et al., 2013; Fankhauser, Gennaioli and Collins, 2015).

After the Copenhagen conference, proposals were made to improve the multilateral process through internal reform (cf. Dubash and Rajamani, 2010; Winkler and Beaumont, 2010) and in fact the negotiation mode has changed to some extent. Copenhagen attempted to solve the climate crisis with a ‘big bang’ (Winkler and Beaumont, 2010, p. 640) and through a ‘top-down’ approach. This time Parties are following a ‘bottom-up’ model (Dubash and Rajamani, 2010, p. 594), in which countries pledge what they are able or willing to contribute. Yet, the Intended Nationally Determined Contributions (INDCs) that have so far been announced fall far short of bringing the world on a below 2°C trajectory (Climate Action Tracker, 2015), let alone 1.5°C as some have called for (Hansen et al., 2008).

It therefore appears reasonable and indeed timely to reflect on the deficiencies of the current approach: In view of the global political realities the UNFCCC’s potency appears to be much more limited than many had hoped. Or were the wrong approaches chosen to fully exploit its potential impact? This article argues that, in fact, both views have some merit.

The UNFCCC process is conceptualized in this article as more than an intergovernmental process in which diplomats meet and nation states negotiate. The UNFCCC conferences have become a forum for civil society, businesses, and a large scientific community. Furthermore, it is increasingly obvious that the UNFCCC serves as a fulcrum for an increasing number of transnational governance initiatives (Bulkeley et al., 2014). Combating climate change needs transformative change of all major socio-economic systems globally (IPCC, 2014a). For these transformations, the UNFCCC process and its associated policy processes have a catalyst function to translate the physical challenge of global climate change into the socio-economic systems around the globe. This ‘catalysing role’ is also anchored in the self-conception of the UNFCCC as expressed, for example, in 2007, when the Bali Action Plan recognised this function (UNFCCC, 2008, para 1b-vii).

In order to capture the wider effects of the UNFCCC process, a structural regime model (Arts, 2000) is applied to analyse and understand its complexities. This model will be laid out in section 2. On this basis, three central hypotheses will be explored:

- The UNFCCC process has not been effective (enough) in catalysing mitigation action compatible with a below 2°C trajectory because its historical focus on emission targets has been too narrow.
- The UNFCCC has insufficiently mobilised mitigation action as the static division of industrialized and developing countries in the Convention's annexes and the consensus based decision-making rules have effectively impeded more ambitious climate protection by a subset of parties.
- Still, the UNFCCC has been successful in stimulating action whenever it provided legitimisation and/or rules for action at the national level, e.g. via the recognition of Nationally Appropriate Mitigation Actions (NAMAs), or whenever it served as a catalyst for public attention towards the issue of climate change, e.g. by providing a coordination hub for civil society.

Building on the structural regime model laid out in section 2, section 3 will discuss if and how the UNFCCC process has historically contributed to catalysing mitigation action in the past. The focus of the analysis is solely on mitigation and not on adaptation. Informed by the analysis of section 3, section 4 will derive two central recommendations: [1] The UNFCCC process could maximise its catalytic effect by inter alia encouraging multi-dimensional mitigation contributions (section 4.1) and [2] the Paris agreement should be complemented with a 'fast track', a club of forerunner countries, outside of the Convention (section 4.2).

2 Analytical Framework

Socio-economic systems are not guided by individuals (or individual institutions) alone but instead emerge from multiple interactions of the systems' constituents (Holtz et al., 2008). In order to alter behaviour and achieve transformative change, prevailing unsustainable routines have to be translated into new and sustainable ones. *Routines* here denotes practices that are not discursively reflected upon (Arts, 2000, p. 529). This article conceptualises the UNFCCC and the associated policy processes as a catalyst for this translation.

How can one understand the mechanisms behind the catalytic influence of the UNFCCC and the associated policy processes? To answer this question this article will apply a structuralist regime model (Arts, 2000). Structuration Theory argues for a duality of agency and structure, 'agents and structures are not kept apart but [...] are mutually constitutive of each other' (Stones, 2005, p. 21). Individual behaviour is co-determined by the structures in which all agents operate and in turn actions change or reproduce structures (ibid., p. 20). These structures are defined as rules and resources. Rules are the cognitive, interpretive frames and cultural norms within which actors operate. Resources are economic resources as well as authoritative and allocative power (Stones, 2005; Arts, 2000). In order to analyse the prevailing structures in more detail, Giddens develops a more fine-grained terminology: He further differentiates resources and rules: Resources stand for *domination* (control/power) and rules represent *legitimation* (norms) and *signification* (meaning) (Giddens, 1984, see Figure 1). In acting, the agent reproduces these structures of *domination*, *legitimation* and *signification* and hence closes the cycle of structuration. While all social conduct is guided by rules and resources, they in turn only exist in human action and memory. Structure and agency therefore constantly reproduce each other. It is this cycle of structuration that determines the routines which, in turn, co-determine socio-economic systems and lock in unsustainable practices.

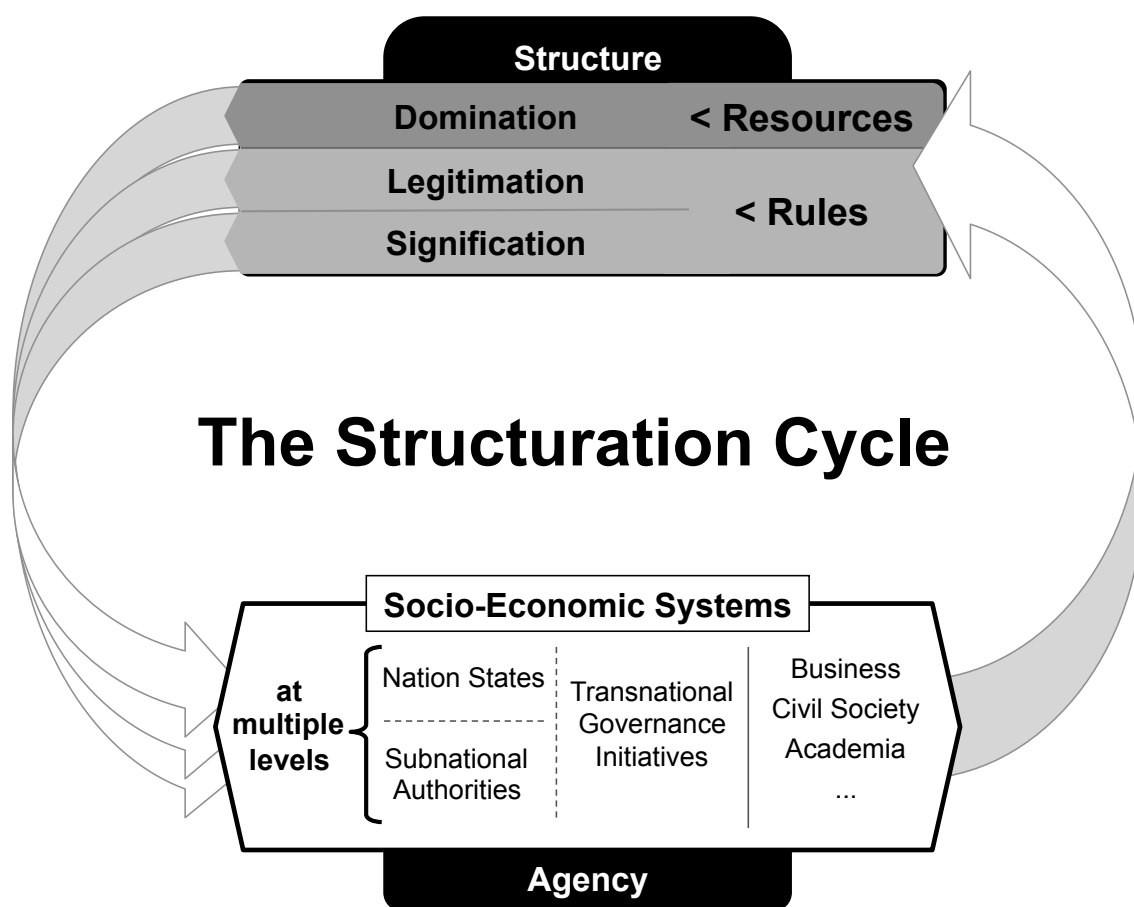


Figure 1: Schematic illustration of the Structuration Cycle.

But how does the structuration cycle apply to the UNFCCC? The UNFCCC is not the only formal regulatory system that addresses climate change related issues (e.g. Keohane and Victor, 2011; Abbott, 2012; Bulkeley et al., 2014; Jordan et al, 2015), but there are also numerous informal norms and cognitive routines that structure socio-economic systems around the globe. The UNFCCC is just one – albeit important – element within this overall structure that guides everyday behaviour of agents in the various socio-economic systems. The UNFCCC’s institutional system is a central hub within the wider climate change governance complex and an important focal point for governance initiatives at all levels (see figure 2).

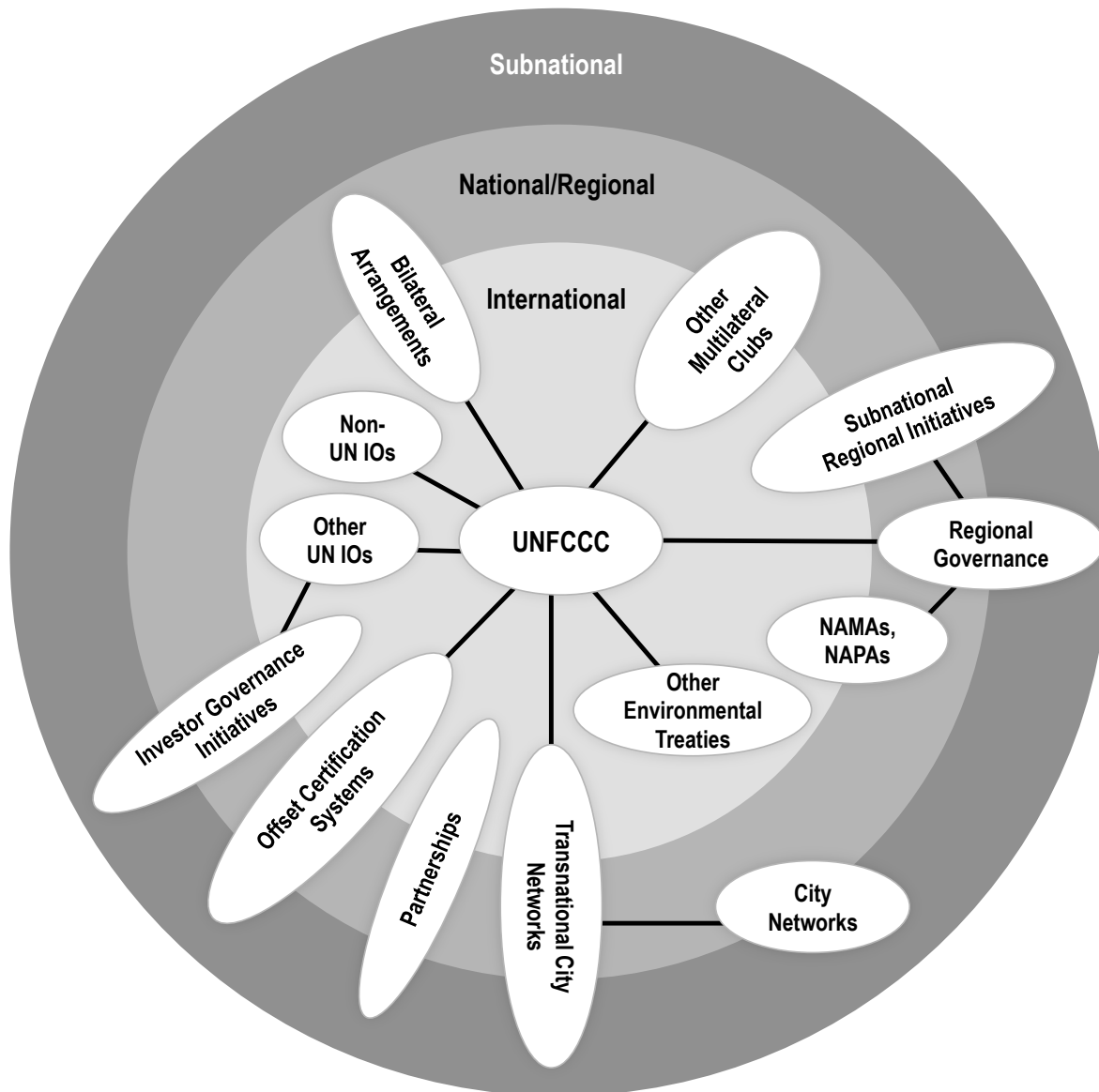


Figure 2: UNFCCC in the wider climate governance landscape. (IPCC, 2014b, p. 1013)

The UNFCCC structures agency at various levels and through various channels. It structures agency at the level of the nation states and through the nation states, through the implementation of treaties and subsequent implementing decisions in the respective national laws of the parties to the treaty. But the UNFCCC also structures the behaviour of the other constituents of socio-economic systems directly by providing shared meaning (*signification*) and norms (*legitimation*) to transnational and subnational institutions as well as to corporations, consumers and citizens.

Structuration, however, is not a one-way street from the UNFCCC to the socio-economic systems it is meant to govern. The UNFCCC process can be understood to undergo repeated cycles of structuration by itself (Arts, 2000). The key actors in the negotiations, government

officials, diplomats and ministers, but also participants from civil society, business organisations, international organisations, and academia, all draw on rules and resources embedded in their respective structures. Thus, on the one hand, the UNFCCC process and its outcomes shape to some extent the structure of socio-economic systems around the globe. On the other hand, the actors within the UNFCCC are also bound to routines and structures they have acquired in their respective socio-economic contexts. This is why political dynamics at the national level are so important for international climate policy.

Due to the duality of structure and agency the conceptualization of the relevant agents is necessarily complex, but this complexity helps to explore the complex reality of international climate policy: Nation states play a key role both as agents within the UNFCCC negotiations and in providing structure to the constituents of the socio-economic systems worldwide. The same holds true, to a lesser degree, for transnational climate change governance initiatives and subnational authorities.

The virtue of the structuralist regime model is that it allows to conceptualize the constituents of socio-economic systems as agents. ‘Their behaviour is co-determined by a set of routines or practices that actors and institutions use and that create and reinforce [...] particular technological system[s]’ (Foxon, 2013, p. 11). Ultimately, it is this set of routines and practices that needs to be transformed. Based on the structuralist regime model, the following sections derive new insights about the ways and means the UNFCCC process can and cannot contribute to the required transformation.

3 Assessment of the UNFCCC Process

The following section will discuss how and by which types of structure the UNFCCC process has co-determined the behaviour of governments, large energy firms, industrial corporations and other actors in climate relevant socio-economic systems worldwide. The scope of the assessment is limited to climate change mitigation. The structure of the analysis deviates from the thematic building blocks of the UNFCCC negotiation process and instead follows from the logic of the theoretical framework discussing examples of domination, signification, and legitimation as well as agency associated with the UNFCCC process.

3.1 Structure

There are a number of elements or aspects of the UNFCCC's agenda that relate to rules and resources. The subsequent section will describe a selection of these elements in order to discuss how the UNFCCC process has historically addressed both and to what extent this has served to structure the behaviour of agents at different levels. Note that the analytical categories cannot be unambiguously separated from each other in every case. However, the distinction of rules and resources, and further differentiation into *domination*, *signification* and *legitimation* help to focus the analysis on specific aspects and carve out the interactions more clearly (Stones 2005).

In section 3.1.1 we discuss how the UNFCCC has focussed strongly on emission targets and how this focus corresponds to the structure of *domination*. In section 3.1.2 we focus on four aspects in which the UNFCCC has contributed to the establishment of shared meaning and norms (*signification* and *legitimation*): the definition of climate change as a pollution problem (*signification*), the 2°C limit as a norm that guides climate action (*legitimation*), the principles of the convention (*legitimation*), and informal mandates to initiate climate change mitigation (*legitimation* with aspects of *signification*). The discussion is certainly neither comprehensive nor exclusive.

3.1.1 Resources: The Structure of Domination

The structure of *domination* includes 'both control over economic, or allocative power resources and authoritative resources' (Stones, 2005, p. 17). However, the latter is of limited relevance for a process under the United Nations. There is no such thing as a global law enforcement branch. This section therefore focuses on economic and allocative power.

In general terms, any commitment/contribution under the UNFCCC may be framed as obligations of result and/or as obligations of conduct. That is, commitments/contributions may refer to what countries are supposed to achieve and/or to what they are supposed to do (Bodansky, 2012). The UNFCCC has so far mostly focused on results in terms of emission targets. Emission targets are the core of the Kyoto Protocol and in the Cancún Agreements all major emitters have pledged some form of emission targets. There also is a strong drive by industrialised countries that all countries, in particular all major emitters, should adopt emission targets under the Paris agreement (Ott et al., 2014b). And indeed, the vast majority of INDCs, 89 out of 126, are emission targets (UNFCCC, 2015a).

Framing commitments/contributions in terms of emission targets transforms the ‘carbon space’ into a valuable resource, effectively commodifying it (Liverman, 2004). Limiting emissions in such a way creates a scarce resource around which a distributional conflict emerges (Hourcade and Shukla, 2013; Moomaw and Papa, 2012). While the commodification is most visible in the Kyoto Protocol’s tradable quantified limitation and reduction obligations (QELROs), non-tradable emission targets in principle have the same effect of transforming the hitherto freely available sink capacity of the atmosphere into a managed resource. This understanding is reflected in policy-makers’ frequent statements of concern about overly restricting national access to ‘carbon space’, which is seen as prerequisite for economic well-being and development (Moomaw and Papa, 2012).

Furthermore, similar to the Kyoto Protocol the Paris agreement may well contain provisions for Parties to trade reductions in one form or another. In this form, emission targets are equivalent to giving countries money. Stiglitz opines that, ‘if emissions were appropriately restricted, the value of emission rights would be a couple trillion dollars a year – no wonder that there is a squabble over who should get them’ (Stiglitz, 2010).

Hence, the emission target approach can be construed as an attempt to establish a new structure of *domination* – a new resource management system – at the international level. This has led to a situation in which political incentives strongly point in the direction of adopting weak rather than strong commitments/contributions, in order to preserve development space and/or to maximise the volume of sellable emission units (Moomaw and Papa, 2012; Sterk and Hermwille, 2014).

The move away from Kyoto-style binding and collectively agreed QELROs towards a bottom-up approach in which countries make non-binding pledges may well reflect the inability to effectively draw on structures of *domination*, that is, defining, allocating, and exercising control over resources, at the international level. The consensus-based decision making rules

of UNFCCC and the Kyoto-Protocol further aggravate this problem (see discussion in section 3.2 below).

3.1.2 Rules: Structures of Legitimation and Signification

The subsequent section will discuss structural rules as media of *legitimation* and *signification* (Giddens, 1984), that is, norms and shared meaning. Both have been co-determined in and through the UNFCCC process. The UNFCCC process, on the one hand, has been a place where norms that prescribe standards of behaviour and may produce sanctions (Arts, 2000) have been negotiated in the past (*legitimation*). On the other hand, the UNFCCC process has had a profound impact on the political discourses on climate change at the national level as a place at which common definitions are negotiated and collective meaning is produced (*signification*).

Thus, the UNFCCC is directly lending *legitimation* to policy makers at the national level and is *significant* by making ‘communication between humans possible and defining meaningful behaviour in specific action contexts’ (Arts, 2000, p. 525). Often, *legitimation* and *signification* are mutually constitutive of each other: the establishment of shared meaning often establishes a norm to behave in a certain way, and vice versa.

The definition of climate change as a pollution problem As noted in the previous section, the UNFCCC has so far mostly focused its efforts on GHG emissions. The UNFCCC has provided shared meaning (*signification*) to the global community by setting the standard for a common metric and global system of GHG inventories. This provides a common language to track the development of global GHG emissions and engage in a discussion about the appropriateness of mitigation contributions by individual countries and the global community. Article 4 of the Convention requires all parties to ‘[d]evelop, periodically update, publish and make available to the Conference of the Parties [...] national inventories of anthropogenic emissions by sources and removals by sinks of all greenhouse gases [...] using comparable methodologies’ (United Nations, 1992, Art. 4 para 1a). The information requirements are detailed in Article 12 and further specifications have been agreed at subsequent COPs. Without a common language as the UNFCCC set, a meaningful negotiation of climate change issues is hardly imaginable. The GHG accounting systems has provided the basis for the adoption and tracking of emission targets under the Kyoto Protocol and Cancún Agreements.

On the flip side, the focus on emissions has strongly monopolised the narrative which climate policy is based on. It may be fundamentally sub-complex to see climate change solely through the lens of emissions because it frames climate change as an environmental problem. However, as historically nearly all economic activity has been associated with GHG emissions, fram-

ing commitments/contributions in terms of emission targets directly triggers the perspective of seeing climate protection as an economic burden and impediment to development, as can be seen by frequent statements of concern about access to ‘carbon space’ or ‘development space’. Climate change is thus arguably fundamentally a development problem much more than an environmental problem. Industrialised countries will have to fundamentally redevelop their economies and developing countries will have to develop fundamentally different from how industrialised countries have developed (Moomaw and Papa, 2012; Sterk et al., 2013).

The UNFCCC recognises that ‘economic and social development and poverty eradication are the first and overriding priorities of the developing country Parties’ (UNFCCC, Art. 4.7) In practice, however, as in the CDM, the sustainable development objective is usually treated as a ‘co-benefit’. While ‘often referred to and argued with, [co-benefits] are rarely measured, quantified, or monetized, and even less frequently do they enter the quantitative decision-making frameworks applied to climate change. They often just remain at the rhetorical or discourse levels, even though their inclusion may substantially influence the outcomes of decision processes.’ (Ürge-Vorsatz, Herrero, Dubash, and Lecocq, 2014, p. 550).

The 2°C limit as a normative foundation of climate action: The ultimate objective of the UNFCCC according to its Article 2 (‘to prevent dangerous anthropogenic interference with the climate system’) is the normative foundation for international climate negotiations and policies (United Nations, 1992, Art. 2). The establishment of the goal to limit average global temperature increase below 2°C was meant to provide political operationalization of the term ‘dangerous’. While contentious at first, it has become a consensual objective globally, agreed and adopted at COP 16 in Cancún. It guides action on climate change by a wide range of actors beyond the state level (WBGU, 2014; Leach, 2015).

However, the political response to this consensus is still far from adequate. This is why many have argued in favour of a further operationalization of the Convention’s objective by adoption of long-term emission targets or emission budgets (e.g. Bodansky and Diringer, 2014; Haites, Yamin and Höhne, 2014; Oberthür and Wyns, 2014).

The principles of the Convention – the precautionary principle and common but differentiated responsibilities and respective capabilities (CBDR-RC): These two central principles provide ample evidence for the *signification* function of the UNFCCC (United Nations, 1992, Art. 3 paras 1 and 3).

The UNFCCC as an outcome of the Rio process was the first prominent international treaty in which the precautionary principle was formally adopted and the climate change debate contributed greatly to establishing and diffusing the precautionary principle into a wide range of

jurisdictions (Jordan and O’Riordan, 1999). It has had a profound impact on the routines of environmental policy making as it introduced ‘new ideas that point the way to a more preventative, source-based, integrated, and biocentric basis for policy’ (Jordan and O’Riordan, 1999, p. 33).

As for CBDR-RC, according to the UNFCCC, ‘The Parties should protect the climate system for the benefit of present and future generations of humankind, on the basis of equity and in accordance with their common but differentiated responsibilities and respective capabilities. Accordingly, the developed country Parties should take the lead in combating climate change and the adverse effects thereof’ (United Nations, 1992, Art. 3 para 1). This abstract concept itself is hardly contentious within the negotiations, but its operationalization has been a core conflict ever since the UNFCCC process started. Differentiation between countries has been operationalized through a static and binary division of the traditional industrialised countries – listed in Annex I to the convention – and developing countries referred to as non-Annex I countries. A long list of alternative approaches for differentiation has been discussed in the literature (e.g. Höhne, den Elzen and Weiss, 2006; den Elzen, Brouns, Winkler and Ott, 2007; Bear et al., 2008; Pan and Chen, 2009; WBGU, 2009; Kanitkar et al., 2010; Brazil, 2014; Ngwadla and Rajamani, 2014; Winkler and Rajamani, 2014), but to date none of these has been agreed upon politically.

The approach in the Kyoto Protocol to not require commitments from non-Annex I countries deviated from the conventional wisdom of environmental law-making. Most environmental protocols, take the Montreal Protocol or the protocols to the Biodiversity Convention as examples, require taking on specific obligations by all Parties upon ratification (Gehring, 1994; Ott, 1998). The Kyoto Protocol does not.

The consequences of the approach were rather detrimental, because this allowed countries that never had any intention to engage in serious climate protection to join the protocol – and consequently to use every possibility at hand to prevent progress (Depledge, 2008). And, most destructively, it incorporated the deep schism of the convention between ‘Annex I’ and ‘non-Annex I’ countries into the Kyoto Protocol. The absence of commitments for developing countries was the main reason (or excuse) for the USA to never ratify the Kyoto Protocol.

The issue of differentiation continues to dominate the negotiations of the Paris agreement under the Ad-hoc Working Group on the Durban Platform (ADP). The group of like-minded developing countries (LMDCs)¹ has demanded that industrialised countries should adopt legally binding commitments without any conditions attached while mitigation contributions by developing countries should continue to be voluntary and conditional on the provision of sup-

port by industrialised countries. Industrialised countries in turn have held that all countries should be obliged to offer an unconditional mitigation contribution (with the possibility to indicate further efforts, subject to the provision of support). On the content of contributions, developing countries have demanded that industrialised countries should adopt economy-wide emission reduction targets while developing countries' contributions should be allowed to be diverse in nature, in accordance with respective national circumstances. By contrast, industrialised countries have demanded that all major economies should be required to adopt economy-wide emission targets (Ott et al., 2014a; 2014b).

Despite a compromising proposal promoted by Brazil (Brazil, 2014), no consensus was reached in Lima (UNFCCC, 2015b). The scope and content of intended nationally determined contributions (INDCs) has been completely left to the discretion of Parties to determine by themselves. Similarly, the formal negotiating text for Paris was completed at the subsequent ADP meeting in Geneva in February 2015, but essentially by foregoing actual negotiations and instead allowing each Party to insert its preferred language into the document, leaving many alternative options on the table (UNFCCC, 2015c; see also Ott et al., 2014b).

The issue therefore remains unresolved and continues to loom large. The case of the principle of CBDR-RC exemplifies how strong and lasting a *legitimizing* structure can be – in this case to the detriment of the negotiation process and hence the catalytic function of the international process.

The informal, normative mandate to govern climate change mitigation: The UNFCCC has contributed to an increased uptake of national mitigation policies and strategies. The share of countries that have some form of climate mitigation policy in place increased from 23 per cent in 2007 to 39 per cent in 2012 (Dubash et al., 2013).²

At the national level, the upswing of mitigation policies is likely due to a combination of *domination* and *legitimation*. While they are not sufficient with what would be required to achieve the below 2°C target, emission targets do exist and need to be implemented. Such *domination*-based UNFCCC influence does, however, not explain the broad array of mitigation initiatives by sub-national and non-state actors, such as the establishment of emission trading systems in various US states, Canadian provinces and Japanese cities, the Covenant of Mayors, or the growing carbon divestment campaign (Bulkeley et al., 2014).

While it is difficult to unequivocally attribute these developments to the UNFCCC process, it is very likely that international climate policy and the prominence of the UNFCCC process contributed to this development (Dubash et al., 2013; Fankhauser, Gennaioli and Collins, 2015) '[C]limate change has attracted much interest [...]; so much in fact, that climate change

has been accused of being somehow discursively hegemonic by subsuming, absorbing or crowding out work on other environmental issues' (Bulkeley et al., 2014, p. 9).

The UNFCCC has also lent *legitimation* in a more direct form. The process of 'Nationally Appropriate Mitigation Actions' (NAMAs) specifically encourages developing countries to develop climate mitigation policies and measures. The term NAMA was first introduced as part of the Bali Action Plan (UNFCCC, 2008). In fact the exact formulation of this concept was the crunch issue of the 2007 COP in Bali (Ott, Sterk and Watanabe, 2008). Since then the concept has undergone substantial formalisation and institutionalisation within the UNFCCC (Coetzee and Winkler, 2014).

The 'nationally appropriate' part of the NAMA concept is of particular interest from another perspective: The special reference to appropriateness and the further specification that NAMAs should be conducted in the context of sustainable development has led developing countries to integrate climate change mitigation policies with other sustainable development issues (Coetzee and Winkler, 2014). In this aspect the difficulty to separate the dimensions of structure becomes apparent. The focus on "nationally appropriate mitigation actions in the context of sustainable development" creates a norm to integrate climate policy with other national policies and politics (*legitimation*), but it also creates an opportunity for policy makers to frame the proposed climate policies in a way that is more compatible with the respective national political discourse than a policy that is exclusively framed in terms of reducing emissions (*signification*).

The last instance of *legitimation* through the UNFCCC to be highlighted in this section is the guiding role of the UNFCCC in the context of emerging transnational climate change governance initiatives. In recent years, a diverse range of initiatives have emerged that aim to govern climate change in one way or the other. Bulkeley et al. (2014) have established a database of 60 such initiatives. These initiatives are receiving more and more scholarly interest (e.g. Keohane and Victor, 2011; Abbott, 2012; Bulkeley et al., 2014; Falkner, 2015; Jordan et al. 2015). But what is the role and function of the UNFCCC in this emerging governance system? It has been argued that on the one hand the lack of adequate governance from the multi-lateral process has led private and public actors from various levels to search for ways to make up for this lack of governance. On the other hand, transnational governance initiatives may allow actors to better assert their interests in a complex governance process (Bulkeley et al., 2014).

A Google search for the term 'UNFCCC' performed on the websites of the 60 initiatives identified by Bulkeley et al. (2014) reveals that 60 per cent of them directly reference the UN-

FCCC. The level of engagement, of course, varies. For example, the delegations from ICLEI – Local Governments for Sustainability and the World Business Council for Sustainable Development (WBCSD) regularly participate in the UNFCCC negotiations and even have presented their activities in the recent high-level event on enhancing implementation of climate action convened by the Peruvian Minister of the Environment, Manuel Pulgar-Vidal, on the occasion of COP 20 in Lima (IISD Reporting Services, 2014).

3.2 Agency

Central to Structuration Theory is the idea of the duality of structure and agency. The two are perceived to be inseparable. Agency is as much needed to institutionalise and reinforce structure as structure is necessary to both enable and direct agency. As discussed above, agency here refers to various levels: nation states, sub-national authorities, transnational governance initiatives, businesses, and civil society.

As noted above the UNFCCC has contributed to an increased uptake of mitigation policies and strategies. However, agency, specifically on the national level, has so far been far from sufficient to comply with the below 2°C limit (UNEP, 2014). Apparently, there are limits for early and ambitious agency originating from the UNFCCC / Kyoto Protocol system.

One reason for this lies in the Kyoto Protocol's legal structure, outlined in section 3.1.1. above, which differs from other environmental regimes (Ott et al., 2014b). In effect, the Parties in Kyoto missed the chance to create an ambitious 'club' but relegated the protocol to the same status as its mother treaty, the UNFCCC. Since the countries did not have to pay an 'entrance fee' upon ratification of the Kyoto Protocol, it also failed to create an exclusive 'club good' whose benefits could be enjoyed only after own duties had been fulfilled. The Kyoto mechanisms would easily have lent themselves to this purpose, but instead of tying participation in the mechanisms to the adoption of commitments, the CDM was made freely available to all Non-Annex I Parties without conditions.

In contrast to this approach, the very successful Montreal Protocol (and other protocols) is characterized by a careful balance between rights (trade in regulated substances, support) and duties (differentiated phase-out schedule for substances prescribed in the treaty), which the Kyoto Protocol lacks because it provides for rights without specifying duties.

The second aspect that prevents a strong agency role of the Kyoto Protocol is the fact that both convention and protocol adhere to a consensus model for decision-making. There are some provisions in the treaties on majority voting for the adoption of amendments, annexes or protocols, but these decisions only take effect for those Parties that subsequently ratify them (Oberthür and Ott, 1999). It is also unclear whether these provisions can be used in the ab-

sence of a voting procedure: due to the resistance of Saudi Arabia and other OPEC countries, Rule 42 of the Rules of Procedure, which would provide for majority voting, has never been adopted (Oberhür and Ott, 1999, p. 45; Depledge 2008; Kemp, 2014). As a result, by default, every decision in the work of all bodies of the regime must be taken by consensus. This provides ample blocking opportunities for countries that oppose meaningful action on climate change or that pursue a different agenda according to their own interests.

Although some actors have certainly been more active than others in preventing a progressive evolution of the regime, the inability to come up with an adequate response to climate change cannot be blamed on specific countries, but must be attributed to the approach as such. Transformations on a global scale are with high probability not the result of universal approaches encompassing all states. Rather, pioneers are required for developing technical and social innovations (see below, section 4.2).

On the other hand, changes happening elsewhere do not seem to be adequately reflected within the UNFCCC process, like for example the enormous digression of prices for renewable energy technologies and their strong uptake not only in industrialized but increasingly in emerging and developing countries (REN21, 2014). It is therefore necessary to think of means to short-cut the feedback loops of this outside dynamic; to think of ways how outside activities can resonate within the UNFCCC regime and thus contribute to increasing global ambition.

Recently, Workstream 2 (WS2) of the Ad-hoc working group on the Durban Platform (ADP) has emerged as a place where positive experiences with climate change mitigation can be fed into the UNFCCC process. It has become a forum of open exchange on mitigation opportunities with extensive rounds of technical expert meetings (TEMs). WS2 has established a mode of collaboration new to the UNFCCC process, allowing actors from the sub-national level to contribute their experiences. At the recent COP in Lima it was decided to continue this process in an improved and more focussed way (Ott et al., 2014a). If it develops as planned, a continued WS 2 or a similar platform could well be a place where positive experiences with climate change mitigation can create resonance within the UNFCCC regime and create momentum for more ambitious mitigation commitments.

Structural problems within the UNFCCC have limited its effectiveness in mandating climate change mitigation action, particularly on the level of the nation states where its primary focus lies. Also, it is only beginning to recognize climate action by non-state actors. In the context of structuration, however, both are necessary.

4 Recommendations for Paris and beyond

Based on the analysis provided above this section will derive recommendations both for the structure of the mitigation component of the Paris agreement (section 4.1) as well as for climate action outside of and complementary to the UNFCCC process (section 4.2).

4.1 Multi-Dimensional Mitigation Contributions

As discussed in chapter 3, the UNFCCC has so far been predominantly based on the *domination* mode of governance as defined by Giddens and others, transforming GHG emissions into a new scarce resource by framing contributions in terms of GHG targets and making them tradable. For the Paris agreement, Parties did not agree on any restrictions on the content and scope of INDCs. In practice, however, the emission-based narrative is dominant. The vast majority of INDCs, 89 out of 126, are emission targets (UNFCCC, 2015a).

As argued in section 3.1.2, the climate regime does need a reference to emissions. All climate policy ultimately needs to be measured against the yardstick of whether aggregate global emissions are being reduced. To make this judgement, transparent and verifiable economy-wide national emission accounting by at least all major emitters is crucial.

However, the historical and current focus on emission targets may restrict the ability of policy makers to frame their contributions in narratives that are compatible with national political discourses (Moomaw and Papa, 2012; Sterk and Hermwille, 2014). That is, the focus on emissions impedes achieving shared meaning (*signification*) among the national and international levels. Opening up the UNFCCC discourse to a broader perspective would probably be especially relevant for developing countries, which have, as the Convention recognises, economic and social development and poverty eradication as first and overriding priorities. Starting from development objectives may therefore be the easiest way for many developing countries to engage in mitigation action (Winkler et al., 2002; Moomaw and Papa, 2012). To enhance the potential of the UNFCCC to provide shared meaning and legitimation for political action, emission targets should therefore be complemented by other types of contributions.

First, it seems recommendable to adopt contributions related to economic inputs such as energy sources, in particular to improving the energy productivity of economies and decreasing the CO₂ intensity of energy provision (Verbruggen, 2011). Improving energy productivity and scaling up clean energy may dovetail more directly with what is seen as being in the national interest than emission targets. Framing climate objectives as energy policy challenges may therefore improve policy makers' ability to draw on *signification*: Experience indicates that

overachieving clean energy targets is often seen as a prompt for doing more, while overachieving emission targets is seen as an invitation to rest on one's laurels. The EU has achieved its Kyoto target for 2020 seven years ahead of schedule (EEA, 2014) and nonetheless does not strengthen it. By contrast, the Chinese solar target for 2015 was initially set at 5 GW and was then repeatedly raised to 10 GW, 15 GW, 21 GW and subsequently 35 GW (Parkinson, 2013). Likewise, India has recently quintupled its solar energy target for 2022 from 20 GW to 100 GW (Reuters, 2015).

Second, it may be recommendable to also include selected policy instruments in contributions. International recognition could contribute to an increase of *legitimation* to implement these policy instruments on the national level (and subnational levels). In principle, governments have a large toolbox at their disposal, ranging from economic and fiscal policies to standard setting to 'soft' instruments such as information campaigns, all of which could be made the subject of countries' contributions. Some analysts indeed argue that the climate regime should shift fully to a policy-based approach, negotiating policies and measures instead of emission targets (see e.g. Victor, 2011). However, coordination of policies and measures was tried but ultimately failed in the original Kyoto Protocol negotiations because they are potentially more prescriptive than quantitative targets (Oberthür and Ott, 1999, p.103ff). Nonetheless, some key policy levers, for example the phase out of fossil fuel subsidies, recommend themselves for special attention and are already subject of international discussions. According to the International Monetary Fund (IMF) just removing these subsidies globally could reduce global CO₂ emissions by 13 per cent (IMF, 2013). Ideally, countries should commit to 'climate budget reform' (Verbruggen, 2011), progressively phasing out fossil fuel subsidies and phasing in levies on fossil fuels and/or emissions. The speed and form of the budget reform would be left to countries to determine, but progress would be monitored internationally.

A multi-dimensional approach combining various types of conduct- and result-based contributions could also be more failsafe than focusing only on one single approach (Sterk and Hermwille, 2014). Former EU Climate Commissioner Hedegaard opined that, '[d]uring the economic crisis we had more than one target and that has helped us a lot. Imagine if we had only had a CO₂ target and the ETS (Emissions Trading System) during this crisis. Would Europe have continued to have such a strong focus on energy efficiency and renewables? I don't believe it.' (EurActiv, 2013).

The INDCs do indicate some movement in this direction. While the vast majority contains only emission targets, 16 combine emission targets with other targets, and 18 contain only

non-GHG targets and/or actions. India provides one example why combining several types of contributions has the potential for enhancing emission reductions. According to the Climate Action Tracker (2015), the renewables target India has submitted in its INDC implies significantly stronger emission reductions than its emission target. According to their calculations, the emission intensity target would lead to emissions of 5.6-5.7 Gt CO₂-eq. in 2030, while the renewables target would lead to 4.9-5 Gt CO₂-eq.

In summary, multi-dimensional mitigation contributions would help integrate climate change mitigation with other aspects of sustainable development. This would allow policy makers to create narratives that are compatible with the respective national political discourses, thus providing shared meaning (*signification*) that helps to promote acceptance for the proposed measures and hence increases the chances of effective implementation (e.g. Winkler et al.; 2002; Sterk et al., 2013; Schmitz, 2015).

4.2 A Fresh Start – Promoting Agency in a Club

Assuming that the Paris agreement will not be sufficient to drive down GHG emissions to levels compatible with the 2 °C limit (let alone 1.5 °C), a significant mitigation gap (UNEP, 2014) will persist also after 2020. So far, the UNFCCC does not adequately mandate agency on climate change. Section 3.2 has discussed that it is not possible to form an ambitious ‘break-out group’ within the framework of the UNFCCC against the opposition of other countries. Still, leadership on climate mitigation action, in particular leading by example, will be necessary (Schwerhoff, 2015). Therefore, this section discusses the option of a fresh start, complementing the current process of the climate regime with a second track: the establishment of a climate club outside of the UNFCCC where pioneer countries can join forces and harvest the benefits of mutual assistance and co-operation in the climate-friendly transformation of their economies and societies (Ott, 2011).

There has been some discussion on the pros and cons of an international ‘club approach’ in recent years, and its difference from a global or universalistic approach has been assessed in terms of speed, ambition, participation and equity (cf. Aldy et al., 2003; Biermann et al., 2009; Keohane and Victor, 2011, Weischer et al., 2012; Falkner, 2015; Nordhaus, 2015). The pioneer climate club envisaged here would, in contrast to other proposals, be set up with the explicit objective to fast-track progress. A group of leadership countries could provide for the possibility of quick reactions in the face of ever-faster change by, for example, adopting rules of procedure that allow for majority voting and fast-track decision making. Since this initiative would involve the adoption of binding rules on issues of economic importance, the appropriate legal base appears to be a treaty under international law. Negotiations on such a new

climate treaty outside of the UNFCCC should be initiated shortly after the conclusion of COP 21 in Paris.

This ‘Alliance of the Ambitious’ would be open to unite ambitious countries to effectively combat climate change irrespective of their differentiation as Annex-1 or Non Annex 1 country under the UNFCCC. This distinguishes the present proposal from ‘minilateralist’ approaches (cf. Falkner, 2015) where smaller groups of ‘relevant’ countries are supposed to move faster than the universal process under the UNFCCC. Additionally to nation states, the agreement could be open to sub-national and non-state entities, including for example federal states.

Apart from the question of membership, there are a number of other issues that will have to be addressed when establishing such a treaty (Ott, 2014). It has to be decided, for example, whether a quantitative target approach is chosen and, if so, whether these targets are aiming at emissions as in the present regime or at, for example, energy input. Other questions include the benefits (club goods) associated with becoming a member beyond the exchange of information or financial support. For countries where climate change mitigation already ranks high on the political agenda, the establishment of an ambitious climate club could provide an opportunity for policy makers to publicly position themselves as international climate champions, something which is hardly possible within the current institutional landscape.

However, such political reasoning will have to be supported by economic ‘carrots’: Should such a club, for example, establish special conditions for trade in certain climate relevant goods for its members, a strategy that was successfully employed by the Montreal Protocol? For the UNFCCC, some have proposed that only countries with absolute caps on economy-wide, sectoral or jurisdictional emissions should be allowed to participate in international emissions trading mechanisms (EDF, 2014). A variant for a club outside the UNFCCC could be an agreement among its members to not trade emission units with non-members. The larger the club, the more this would constitute an incentive for non-members to join. And finally, the necessity of measures to safeguard the competitiveness of the participating countries’ industrial sector needs to be explored, whether or not, for example, a carbon border adjustment is required (c.f. Frankel, 2009; Nordhaus, 2015).

Such a club of forerunners would provide agency for climate policy and could help injecting some of the much-needed dynamic that is so far lacking. However, the question remains how such forerunner clubs and other initiatives at sub-national level or through transnational governance initiatives can feed back into the multinational process so that the positive dynamics generated at various levels are allowed to spill-over and contribute to raising the ambition inside the UNFCCC.

It therefore seems recommendable to institutionalise a formal framework in which initiatives outside of UNFCCC can engage inside the UNFCCC process (see also Ott et al., 2014a; 2014b). Such a framework should fulfil at least four central functions: [1] It should collect information and record the various initiatives, [2] it should mobilise and inspire new and enhanced actions, [3] it should support the exchange of information and enable networking, and [4] it should assess the impact of the various initiatives collectively (Chan and Pauw, 2014).

Some of these functions are being fulfilled already through various databases such as the UNFCCC's NAZCA platform launched at COP 20 in Lima (UNFCCC, 2015d). Also, current negotiations under the ADP's Workstream 2 provide a solid basis (UNFCCC, 2015e) on which such a framework could build. For the pre-2020 period parties have proposed to continue and strengthen the Technical Expert Meetings connecting them with other existing activities such as the Technology Executive Committee, the Climate Technology Centre and Network (CTCN), the Durban Forum on capacity-building, the CDM Executive Board and the operating entities of the Financial Mechanism. The draft further designates the Secretariat to synthesise the outcomes of the TEMs into meeting reports and/or summaries for policy makers. Moreover two 'high-level champions' shall be appointed to facilitate the scaling-up of climate change mitigation initiatives. Last but not least, annual high-level events in conjunction with each session of the COP strengthens high-level engagement on the implementation of policy options and actions arising from the TEM process.

If adopted, the TEMs process and the associated high-level events short-cut a feedback process which otherwise would reach UNFCCC only very indirectly: through political momentum that may build up on the national level and through the process of national communications and biennial update reports. Though, in order to have an effect not only on the near-term emission reductions, the proposed process would need to be institutionalised more firmly under the Convention and, of course, not only for the period 2016-2020 but permanently.

5 Conclusions

One cannot reasonably expect more from the UNFCCC process and the climate summit in Paris (COP 21) than they can actually deliver. It is not the one and only instrument that will solve the climate crisis for good. One has to recognize that the global UN regime is just one element within a wider governance architecture (Keohane and Victor, 2011) – albeit the most universal and most comprehensive.

Based on a structural regime analysis this article has concluded that the UNFCCC is currently not very well equipped for an approach based on resource allocation, negotiating the size and distribution of the remaining ‘carbon space’. The narrow focus on emission targets has supported the dominance of a win-lose narrative: either economic development wins or climate protection (Moomaw and Papa, 2012; Sterk et al., 2013; Ott et al., 2014b). Under these circumstances, a meaningful commitment to effective climate mitigation has hitherto been politically impossible.

The UNFCCC is, however, much better equipped to provide shared meaning (*signification*) and especially *legitimation* to climate protection activities and should be used as such. It should provide *legitimation* for initiatives on mitigating climate change on all governance levels, not only nation states, and it should seek to coordinate these initiatives in order to maximise their effect.

From our analysis we have derived two main recommendations for an effective and *structurally* balanced treaty:

[1] Multi-dimensional contributions could strongly improve countries’ ability to tailor their mitigation actions around national political discourses, thus maximizing their context-specific signification and legitimation to the socio-economic systems under their governance.

[2] The UNFCCC regime should be complemented with another treaty outside of the UNFCCC framework. This ‘Alliance of the Ambitious’ would allow the pioneers of climate protection to move ahead and enjoy the benefits of co-operation. If positive dynamics generated through such a club approach were fed back into the UNFCCC, this could lead to increased ambition by others in future contribution cycles.

Climate change governance is already happening at multiple levels; wide ranges of instruments are at play. Abbott argues that ‘the benefits of institutional complexity could be increased, and the costs reduced, through non-hierarchical “orchestration” of climate change governance’ (Abbott, 2012, p. 571). The role of the UNFCCC, through deliberately providing legitimation and signification, could and should be to conduct this orchestra.

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¹ The group of like-minded developing countries includes China, India, and other Asian countries such as Pakistan and the Philippines, countries in the Organization of Petroleum Exporting Countries such as Saudi Arabia, and some Latin American countries such as Bolivia and Venezuela

² Dubash et al. (2013) focus on policies at the national level that are explicitly linked to climate change mitigation objectives. Their survey includes climate change legislation as well as climate strategies or coordinating bodies that have been established for the dedicated purpose. No normative judgment of adequacy has been included.