Tackle climate change, harmonization be damned?

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Abstract In order to meet the goals of the Paris Agreement, countries must make increasingly ambitious commitments to mitigate climate change. While this is often called for on the international level, countries must also harmonize their national policies with their increasingly ambitious international commitments. Yet, the ability of countries to do so varies. In this article, we discuss the normative implications of encouraging a norm of harmonization, i.e., whether vertical policy harmonization should be encouraged or whether disharmony should be accepted as a technical feature of the global climate change regime. We do not find a clear-cut answer as vertical policy harmonization provides (non-)consequentialist benefits (e.g., increased emission reductions, facilitate trust) and disadvantages (e.g., incentivizes unambitious commitment-setting). Following this, we conclude that we ought to be less dismissive than seems fitting at first sight as to simply insist that commitments must be kept is too short-sighted.

1. Introduction

Global climate governance is a complex interplay of international and national policy processes. At the international level, countries communicate their commitments to climate change mitigation via their Nationally Determined Contributions (NDCs). At the national level, countries are to adopt and implement policies with the aim of achieving the commitments outlined in their NDCs. However, there is no guarantee that countries' international pledges and national policies harmonize with each other. In fact, the latest synthesis report of the International Panel on Climate Change highlights that countries' current national policies fall short of achieving the mitigation commitments outlined in their NDCs (Lee et al., 2023). In order to achieve the global temperature targets of the Paris Agreement, countries not only need to increase the ambition of their NDCs but also adopt national policies that live up to their NDCs. We call this vertical policy harmonization: aligning countries' national mitigation policies with their international commitments (Kammerer et al., 2021).

In practice, there are many reasons why deviations between international commitments and national measures crop up. In the run-up to international climate conferences, governments prepare and communicate their NDCs. Though their content and the process by which they are developed varies, NDCs are generally the product of political will, economic capacity, domestic interests, estimates of future developments, and current policies. In order to implement these NDCs, i.e., to have their words followed by action, countries must then adopt policies – or more broadly plans, laws, and other measures at the (sub)national level. However, such policy change is a complex task and requires the support of various (non-)state actors and constituencies. There is no guarantee that a country complies with the commitments it communicated in its NDC, especially given the absence of enforcement mechanisms and the reliance on 'naming and shaming' measures at the international level. Take for example Switzerland, a country that pushes for and commits to ambitious mitigation measures at the international

level, yet often struggles to do the same at the national level (Ingold and Pflieger, 2016). Despite the support of a majority of the Swiss Parliament, voters rejected Switzerland's flagship climate act and thus jeopardized Switzerland's ability to comply with its international commitments. Regardless of countries' initial promises, and whether or not they were made in good faith, the act of keeping those promises is at the mercy of a myriad of factors (e.g., the public's political will, the government's institutional settings, domestic interests) that can effectuate or hinder policy change. These are all hard to predict in advance.

Within this context, we ask: is there anything problematic, from a normative perspective, about the disharmony between international pledges and national policy?

Answering this question may seem straightforward. A climate activist said the obvious out loud when she noted: "I don't think it's a particularly radical demand to ask governments to keep their promises" (10 vor 10 - Fokus Interview mit Klimaaktivistin Luisa Neubauer, 2023). However, in the case of countries falling short of – or overshooting – their climate pledges, the case is not as clear as it might seem at first sight. Of course, promises ought to be kept as a matter of general moral principle. But how strict is this principle? And are the climate commitments of countries really akin to promises? Such a framing in terms of keeping promises is characteristic of a non-consequentialist perspective: the question is not whether a norm of sticking to one's NDC can be expected to produce good or bad results. Rather, the question is whether there is something wrong *in itself* with breaking a commitment. The main alternative is a consequentialist perspective. In the current context, this means examining whether a strong norm of sticking to one's NDC is conducive or not for the specific consequence, i.e., the goal of successfully mitigating climate change. We take this consequentialist perspective to ultimately provide the key criterion for normatively evaluating vertical disharmony: if a norm that strongly insists on countries living up to their commitments does serve the goal of mitigating climate change, then it should be embraced. If, however, it does not effectively further, or even hampers the fight against climate change, then this forcefully puts the norm into question. In contrast to viewing deviations between international commitments and national policy simply as broken promises and hence as straightforwardly problematic, such a consequentialist benchmark could in principle conclude that disharmony is not a bug but a feature of the global policymaking community muddling its way through to a solution.

In taking this consequentialist stance – and in raising the question about the normative status of vertical disharmony in the first place – this article covers new ground. The climate policy literature on NDCs has so far focused on issues such as the probability of limiting global warming by 2°C, if not 1.5°C, under countries' current NDCs (e.g., Liu and Raftery, 2021), the credibility of the commitments in countries' NDCs (e.g., Victor et al., 2022), the reasons why countries exhibit diverging national and international ambitions (e.g., Liefferink and Wurzel, 2017), or the efficacy of different means – such as shaming or sanctions – for closing the gap between commitments and policies (Tingley and Tomz, 2021). In general, this literature has implicitly taken it for granted that harmony between a country's NDC and national policies is desirable. In contrast, this article raises the normative question of whether harmony is desirable in the first place, and if so, why it is desirable. The philosophical arguments we devised should not be seen as adding a further mosaic stone to an already established debate. Rather, the considerations we adduce should be seen as an attempt to get the ball rolling on framing and structuring a new debate.

In principle, our discussion could end up casting disharmony as bad, acceptable, or (at least as a theoretical option) desirable. In any of these three cases, there is the additional question of which *agent*

must take action on disharmony. It is not enough to label disharmony as bad, acceptable, or desirable; at the end of the day, an agent (or multiple agents) must be singled out as bearing the responsibility for implementing the resulting upshots: resisting, embracing, or possibly even promoting disharmony. Two types of agents stand out as most relevant for bringing about the required level of harmonization (though in this article, we generally refrain from taking a stance on their respective importance). Firstly, the countries who exhibit disharmony themselves: They can either adjust their words or their actions, i.e. they can affect the level of harmonization by either adjusting their own commitments to match their actual national policy or by adjusting their national policy so as to match their commitments. Secondly, the global community: by promoting certain norms, the global community can either take a stance against disharmony or else choose to be accepting of or even positive about disharmony. In practice, "taking a stance" can mean many things: such as informal negative reactions to disharmony, material disadvantages for countries that fail to achieve harmonization, or public naming and shaming. In other words, the global community and its members can act as 'norm entrepreneurs' (Sunstein, 1996).

The questions discussed in this article bear relevance beyond the domain of climate policy, which is just a particularly clear – and relevant – case of the more widespread problem of countries not living up to their international commitments, e.g. in the field of foreign aid (Aldasoro et al., 2010; Nunnenkamp and Thiele, 2013), trade liberalization (Haftel and Thompson, 2013; Tang and Wei, 2009), or respect for international law (Schulz and Levick, 2023; Simmons, 2009). Climate change offers a unique opportunity to analyze this general problem because of how plainly it structures the issue at stake: countries are more easily comparable than in other domains since they are explicit about their commitments by submitting an NDC, and these NDCs need to be regularly updated. Climate change is thus an ideal test case for assessing the importance of pushing for harmony between a country's words and actions. This article does double duty by providing arguments that allow for abstracting from the specific case of climate policy and are applicable to other policy domains.

We proceed according to the following structure. The following section introduces the problem in more detail and describes how it plays out in climate policy. Section three evaluates disharmony according to a first and non-consequentialist criterion: whether disharmony between an NDC and national policy is akin to breaking a promise in problematic ways. Section four evaluates disharmony according to a second and consequentialist criterion: whether a norm of discouraging disharmony is a service or disservice to the goal of fighting climate change. Section five examines whether there might be further relevant considerations in addition to the (non-)consequentialist considerations of the previous two sections. And finally, we conclude by noting that there is no clear-cut answer to our question, which implies that disharmony not to be as obviously lamented as it might seem at first sight.

2. NDCs and Disharmony

In this section, we provide more background on the challenge of policy disharmony. Policy harmonization in general is the process of "making the regulatory requirements or governmental policies of different jurisdictions identical, or at least more similar" (Leebron, 1996: 66). Traditionally it has been discussed as a horizontal process, often in reference to globalization or Europeanization (e.g., Majone, 2014; Viguier, 2001), yet we focus on its vertical dimension. In the context of climate change mitigation, Kammerer et al. (2021) develop an index of vertical policy harmonization which is the first such tool to measure the gap between international commitments, as outlined in countries' NDCs, and national policies.

There is a difficult question – which we will return to in the following section – about how NDCs should be understood. At the one end of the spectrum, they could be understood as stern promises. At the other end of the spectrum, they could be understood as mere non-committal descriptions of a country's vague expectation of its future actions. While neither extreme position is convincing, the most plausible position, somewhere in the middle, is hard to pin down. We will often describe them as commitments. This is despite the fact that the C in NDC was deliberately changed from standing for 'commitment' to 'contribution' at the 2013 Warsaw Conference of Parties (COP) to avoid NDCs being legally binding (Biniaz, 2016). Similarly, the definitive word 'fulfill' was deleted in relation to NDCs (Dimitrov et al., 2019). But this does not make the NDCs substantially different from previous commitments made under the United Nations Framework Convention on Climate Change (UNFCCC) framework since all commitments thus far have been unenforceable, either in principle or in practice (Barrett, 2008; Depledge, 2022). In the Paris Agreement, NDCs are described as contributions that the country "intends to achieve" and the explicit wording is that countries "shall pursue domestic mitigation measures, with the aim of achieving the objectives of such contributions" (Paris Agreement, 2015: 4). The difficulty of understanding the negotiators' intentions in choosing such wording, of decoding the legalese in such formulations, and of grasping countries' mutual and implicit understanding of the gravity of their commitments makes the moral analysis of the present article more important. This analysis partly builds on a pre-existing interpretation of the strength of pledging involved in an NDC (e.g., Depledge, 2022) and can also further shape such an interpretation. That is, we hold NDCs as a genuine but not overly strict commitment.

Disharmony can occur in both directions: national-level commitments can surpass or fall short of those outlined in a country's NDC. In the following, we describe this as countries overdelivering or underdelivering on their commitments, respectively. This classification involves an interpretive difficulty. Some NDCs – such as those of China, the EU, and Switzerland – explicitly present their goal as a *minimum* commitment, while others commit to achieving a certain goal *exactly*, i.e., to achieve neither more nor less than the goal they committed to. In surveying NDCs we found that a majority of the commitments of Annex I countries are specified as a minimum, and a majority of non-Annex I countries as an exact goal (see Figure 1 and supplementary material).[1] In cases where countries present their goal as a minimum commitment, there can, strictly speaking, be no overdelivering. If the goal is to reduce emissions by at least 40% and the country achieves a 50% reduction it hasn't overdelivered on its promise; that is, it did not deviate from what it promised given the only stated boundary was a minimum commitment. However, countries that commit to achieving 40% emissions reductions without a minimum qualification (e.g. "at least") and who then reduced their emissions by 50% have overdelivered.[2] For the sake of avoiding an over-encumbered discussion of disharmony, we generally word our arguments such as to apply most straightforwardly to countries who committed to do an exact amount, i.e. to countries who can in principle overdeliver. But the arguments can be fully applied, *mutatis mutandis*, to countries that commit to a minimum goal.

[INSERT FIGURE 1]

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[1] In climate policy, the distinction between Annex I and Non-Annex I maps crudely unto the developing and industrialised countries.

[2] It could be debated, however, whether some countries who do not explicitly qualify their commitment as constituting a lower boundary may not *implicitly* mean their commitment to be that of the minimum.

This matters because we evaluate the normative status of overdelivering in the same breath as instances of underdelivering. It may not be obvious that subsuming both under the heading of disharmony is a sensible strategy. In contrast to underdelivering, overdelivering may seem straightforwardly unproblematic, and in fact positively supererogatory. But while overdelivering may score unambiguously positively in terms of climate mitigation, it should not be taken for granted that it scores well across the board. This is so for two reasons. First, while overdelivering may be a clear win in terms of responsibility towards future generations it may fail others, in particular one's own contemporaries. There are factions that are generally opposed to climate action in the national arena, and they care about national policy *not* exceeding commitments. Furthermore, businesses and nations make long-term plans that may be based on legitimate expectations about the level of mitigation effort that a given nation has committed to. The plans may be sub-optimally adapted if the nation in question overdelivers. Second, some mitigation measures are controversial and, hence, NDCs could at least in principle include measures for which it is not clear that 'more is better' (e.g., increasing the share of nuclear power, implementing carbon border adjustment measures, reducing livestock farming, exclusively promoting the domestic clean technology sector). For the purposes of this paper, we thus settle on defining disharmony as doing both less or more than one has committed to do (with the caveat that doing more is not technically possible in cases where the commitment is framed as achieving a minimum). This simplifying assumption can be problematic in cases where doing more than one has committed to is an unambiguously positive, supererogatory act.

We broadly categorize disharmony into three groups: technical disharmony, political disharmony, and deliberate disharmony. In order to distinguish deliberate disharmony from the other two types, we ask whether the initial commitment was made with the intention to follow through or whether it was a commitment which was never really expected to be carried out. In principle one could measure this by asking agents to bet on how the trajectory of action will look like: if, at the time of committing, the expectation of their actions ultimately deviates from the actions they committed to, then our taxonomy counts the disharmony as deliberate. If not, it counts as either technical or political disharmony. In instances where the commitment was initially made with the full intention to follow through, we can further distinguish whether the disharmony arose because of factors beyond its control or whether it was due to political will deviating from the expected trajectory. Here we take changes of political will to constitute an active choice by the country in question. More precisely, the choice to deviate from the initial commitment is taken by the government in response to the citizenry's change in political preferences.[3] In this sense, technical disharmony is disharmony that is not under the control of the country in question whereas countries can be held responsible for instances of political and deliberate disharmony. In a simple analogy, deliberate disharmony corresponds to a person promising a friend to send a book by Saturday but never actually intending to do so. Political disharmony corresponds to initially intending to do so but then changing one's mind as they later realize it is in their own interest to keep it. Technical disharmony corresponds to sending the book but the mail service delivering the package a day late or early. Table 1 displays potential reasons why a country might over- or underdeliver within these three types of disharmony. Moreover, some types of disharmony are additionally put in relation to countries' positions in global climate governance, as developed by Liefferink and Wurzel (2017); this is further explained below.

Table 1. Three categories of disharmony and their typical reason

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[3] This distinction is especially relevant in democratic states, but less so in autocratic regimes.

Commitment:	With initial intention to keep		Without initial intention to keep
Outcome:	**Technical Disharmony**	**Political Disharmony**	**Deliberate Disharmony**
Overdelivering	Typical reason: complexities arising from multi-level governance (e.g., differing domestic and international timelines) *Pusher*	Typical reason: increasing political will for climate action	Typical reason: Avoiding accountability *Pioneer*
Underdelivering	Typical reason: complexities arising from multi-level governance (e.g. differing domestic and international timelines) *Laggard*	Typical reason: decreasing political will for climate action	Typical reason: Image seeking *Symbolic Leader*

Before we describe each of the three types of disharmony in more detail, we note some points. First, in describing these types, we include the temporal dimension as the governance processes of the multi-level climate change regime constantly evolve over time. The inclusion of time will make the characterizations and potential reasons of disharmony more apparent. Second, it should be noted that these types of disharmony can in principle occur on top of each other. For example, a country might deliberately overpromise because an outgoing administration wants to bind the incoming administration (deliberate disharmony). Later on, the new administration might take even less climate action than expected because the public's policy preferences changed in the face of rising energy prices (political disharmony). Conversely, the public might unexpectedly galvanize around climate action in which case the deliberate disharmony (previous administration's overpromising) and the political disharmony (the public's increasing preference for climate action) would cancel each other out. That is to say, the type of disharmony a country exhibits can change over time. Third, the reasons that drive disharmony are manifold and thus any taxonomy, including ours, is a simplification of a complex reality.

Technical disharmony refers to the fact that some disharmony is an unavoidable feature of dynamic processes, such as governing climate change mitigation on multiple levels, as it is close to impossible for a country's words to match its actions on each level and at every point in time. Take for example, Country A and B as shown in Figure 2. Over time, both countries have consistently increased the ambition of their NDC and national policies. However, the point in time at which countries increase their commitment at the international level and at which they adopt measures at the national level can differ. Countries can, more-or-less, update their national policies at any point in time, whereas the process at the international level under the Paris Agreement occurs every five years.[4] Consequently, countries experience pockets of (dis)harmony over time. This highlights the discrepancy between international and national climate policymaking processes and the disharmony that emerges, hence technical disharmony. Moreover, we see that Country A is more ambitious than Country B, yet both countries

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[4] In principle, NDCs can be updated at any point in time as long as the update reflects a progression in ambition (Taibi et al., 2020).

exhibit the same pattern of disharmony. In other words, both ambitious and unambitious countries can experience technical disharmony. As such, technical disharmony is a systematic and unavoidable feature, rather than being under the control of countries.

[INSERT FIGURE 2]

Following this, we conclude that technical disharmony should not be at the center of attention when discussing the normative implications of vertical (dis)harmony, but rather a contextual characteristic to keep in mind. This is because normative questions arise only to the extent that outcomes can be affected ("ought implies can"). And to the extent that it is impossible to perfectly match international pledges and national actions at each point in time with even the best of intentions, technical disharmony only matters to the extent that the level of initial promises should take into account factors beyond one's control. When one promises to send a book by a certain date, one has to take into account the lack of full reliability of the postal service. In the case of climate policy, deviations due to technical disharmony tend to be marginally relevant within the normative debate surrounding the merits of vertical (dis)harmony. As such, it is not key to the discussion as it is unavoidable and affects ambitious and non-ambitious countries equally. In the following sections, we mostly focus on political and deliberate disharmony.

Political disharmony refers to cases where countries make good faith commitments (i.e., with the initial intention to keep them) at the international level at t_1, but then fail to adopt national mitigation policies that meet these commitments at t_2 because of changing political winds at the national level. Under this category, we do not assume that countries are invariably disharmonized, and may in fact be harmonized at one point in time. Yet, they are generally disharmonized over time given the country's failure to keep their international promises at the national level. Such changes of political will can be hard to foresee and they may stem from the interplay of changing public opinion, unexpected outcomes of complex institutional constraints (e.g., bicameralism, judicial review, citizen referendums), power dynamics of domestic interests (e.g., the fossil fuel industry and other emission-intensive sectors), a decline of issue salience (e.g., an apathetic public), or external shocks (e.g., financial crises or pandemics). These factors make it hard for a country's current policymakers to reliably represent the country's future level of commitment to climate action. Such factors may even interact with one another to stymie policy change that is presumably requisite for a country to comply with its own international commitments.

Deliberate disharmony describes a situation in which a country commits to more or less ambitious mitigation action at the international level than what it ultimately intends to adopt. This is labeled deliberate as the country makes promises to the international community that they, at some level, know to contrast with their own willingness. This could be in bad faith, but it must not. Both over- and underpromising can happen on the basis of legitimate or even noble motives. When overpromising arises as an attempt to inflate a country's image on the international stage such countries act merely as symbolic leaders as described further below. However, in principle such overpromising could also be a praiseworthy attempt to push – or 'trick' – oneself (and others) beyond the current boundaries of political will despite the full awareness that it comes with the risk of later reputational costs. Similarly, underpromising can be rooted in different motives. Given the Paris Agreement's focus on "naming and shaming", a country may decide to insulate itself from international pressure by simply promising so little that it will hardly fail to achieve it. For some countries, this may signal an excessive sense of sovereignty and a lack of collaborative spirit. But other countries, especially those of the Global South, may justifiably

view scrutiny of their national efforts as offensive given that they have hardly contributed to the climate challenge whereas large and rich emitters have sidestepped transparency in the past.

In addition to categorizing disharmony, we suggest here that technical and deliberate disharmony relate to the different positions countries take in global climate change governance as analyzed by Liefferink and Wurzel (2017). That is, whether they are leaders, laggards, or pioneers.[5] Our ability to tie political disharmony to one of these positions is obfuscated by the fact that political disharmony is typically driven by a government's response to the populace's changing political will. Thus, the government is not actively positioning itself but rather its position in global climate governance is a side effect of changing domestic political will. Nevertheless, we propose that technical and deliberate disharmony are related to contrasting positions. Technically disharmonized countries can be said to be leaders or laggards, depending on their ambitiousness, as they exhibit relatively similar levels of ambition at both levels (see countries A and B in Figure 2). Deliberately disharmonized countries intentionally over- or underpromise; those that overpromise with an eye to increase their international reputation are acting as symbolic leaders, given that their commitments are mere "displays of window-dressing" (Liefferink and Wurzel, 2017: 954). In the case of underpromising, countries are said to be pioneers (Liefferink and Wurzel, 2017). Such countries are driven by various factors (e.g., problem pressure and salience, regulatory competition) to adopt ambitious measures at the national level that go beyond the commitments laid out in their international pledges as they "may feel constrained by slower partners and/or followers, and thus try to 'go it alone'" (Liefferink and Wurzel, 2017: 954; Wurzel et al., 2019). Understanding how these positions relate to disharmony, can provide further insight as to why, and in which direction, a country is disharmonized.

3. Non-Consequentialist Perspective: The Importance of Keeping Commitments

Having set the stage, we can now turn to asking whether disharmony is bad, or whether it is possibly acceptable or even desirable? In this section, we take a non-consequentialist perspective and note that there is one very straightforward problem about disharmony: keeping commitments is obviously an ethical desideratum. The most prominent philosophical encyclopedia starts the entry on promises, the paradigm form of a commitment, by observing that few moral judgments are "more intuitively obvious and more widely shared than that promises ought to be kept" (Habib, 2014). If a country promises to reduce emissions and then does not follow through, this is simply and plainly wrong, at least *prima facie*. Given that countries rely on each other's public commitments in their joint effort to solve the climate challenge, the general idea behind *pacta sunt servanda*, one of the most basic principles in contract law and international law, similarly expresses the blunt case for living up to one's climate pledges.

However, as clear as the case for keeping commitments may seem, there are six considerations that diminish its weight. The first and the last are the most relevant.

First, commitments are on a spectrum. Our moral vocabulary distinguishes between a host of different kinds of commitments ranging from sworn oaths on the one hand to mere heads-ups on the other hand.

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[5] Liefferink and Wurzel (2017) propose that countries can be categorized by their diverging internal and external ambitions. Leaders exhibit high levels of commitment domestically and internationally, that is they take "the lead domestically and actively seeks to push other states to follow its example" (Liefferink and Wurzel, 2017: 954). On the other hand, laggards exhibit low levels of internal and external commitment and pioneers exhibit low levels of commitment externally despite having ambitious domestic goals.

Between them is a fine-grained spectrum of promises, assurances, pledges, written or oral "words", etc. The moral importance of sticking to these various kinds of commitments in the absence of legal enforcement is on a corresponding sliding scale: they all generate *some* reason to follow through, but some do so more than others. Much weight, then, rests on how stringent NDCs are, and this, in turn, depends on how stringent countries mutually interpret them to be. It is hard to know how nations *precisely* understand NDCs.[6] While it is clear that they are less stringent than promises, it is equally clear that they are understood to carry *some* moral seriousness beyond what is captured by the literal wording "contribution". Otherwise, no sense could be made of the expectation of "naming and shaming" as a response to the failure to live up to an NDC.

A second reason why the demand to keep commitments doesn't simply settle the issue becomes apparent when examining countries' agency more closely. A common reason for countries not living up to their commitments lies in the internal fragmentation of countries, especially if they are weak, disorganized or failing states. But the general challenge is also present in the case of any democratic country and even more so in the case of countries attributed with a multiplicity of institutional entry points (e.g., federations) by which various actors can exercise (in)formal veto powers (e.g., Baker, 2023). States are said to be collective agents but in fact the label "agent" is only appropriate if certain conditions are fulfilled. Such conditions can be spelled out in various ways, for example in terms of the presence of well-ordered decision-making processes which enable the rational pursuit of the agent's goals (see e.g., Pettit, 2006; Smiley, 2023). Insofar as the internal organization of a state renders it simply unable to follow a coherent trajectory of actions, the problem is more fundamental than breaking a commitment: there is no agent in the first place who is conceptually able to make, or keep, commitments. This problem can be framed as a gradual matter: *to the extent* that some states lack agency, their commitments should not be *fully* taken as commitments in the first place. And, to this extent they should also not be seen as broken. While this line of reasoning takes off *some* pressure from *some very few* countries to follow through on what seem like "their" commitments, the issue should not be overstated. After all, most countries are keen themselves to be treated as having agency.

In a related but different vein, Fleming (2020) has recently developed a novel theory of treaty repudiation. His key line of argument is applicable to NDCs just as it is to treaties. He notes that there is a difference between treaties and contracts in private law. While both are entered voluntary – by states in the case of treaties, by individuals and corporations in the case of contracts – treaties bind citizens involuntarily. Hence, treaties must be responsive to the views of the citizenry (cf. Garcia-Gibson, 2021). If the will of the people changes over time, this gives a reason to default on one's treaty obligations which is not present in the case of private contract law (cf. also Wallimann-Haber, 2019: 31–33). Of course, this reason is often not sufficient to justifiably repudiate a treaty. But in principle it can be whereas the changing views of an individual or the changing policies of a corporation can never be a reason for failing to fulfil a contract. In contrast to our previous point that states may not count as genuine agents as they do not always have sufficiently well-ordered processes that facilitate coherent decision-making over time, Fleming (2020) emphasizes that state agents *ought not* let considerations of consistency over time needlessly trump responsiveness to popular views. This is relevant to the case of NDCs. Governments are not only faced with the imperative to stick to the pronouncements of past governments acting in the name of their country, but must also be responsive to the views of people presently making up the country. This lightly weakens the case for delivering on one's NDC in certain cases. Though, admittedly Fleming's reasoning can also be taken to imply that countries should not

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[6] Empirical research has been done by Victor et al. (2022) on how insiders assess the credibility of NDCs.

enter treaties or make commitments in the first place: if the changing views of the citizenry are a reason for not following through, why commit at all?

A third reason why the demand to keep commitments has somewhat less force than it might seem at first sight is rooted in the fact that one reason for keeping promises is fairness. If various agents make promises to each other and *some* of them break them, the promise-breakers are unfairly free-riding on the other promise-keepers whose conscientiousness upholds the institution of promising (cf. Habib's (2014) presentation of Rawls' views). Promise-breaking by me is particularly bad if others would not have made their promises in the first place – and invested the effort to keep them – had they expected me to not keep my own promises. If, however, no one lives up to their promises, then there is no unfairness involved in failing to keep one's word. And in contexts where a significant fraction of agents are breaking their promises, one reason for promise-keeping – fairness – is diminished. NDCs could be seen as such a context: disharmony between words and actions is, in fact, widespread and thus the fairness-based reason for any one agent to follow through is reduced (Kammerer et al., 2021). It should, however, be noted that the fairness-based reason for sticking to one's commitments is primarily a context-independent, general reason. There is only limited scope for fine-tuning the weight of this reason depending on the context at hand.

Fourth, as mentioned in section 2, for the purposes of this paper, we do not assume that doing more than one has committed to is unambiguously positive. However, in the real world, there are of course such cases. And in these cases, the evaluation of disharmony based on the consideration of living up to one's commitments keeping is asymmetric: it speaks against underdelivering but not against overdelivering.

Fifth, only voluntary commitments must be kept (or, alternatively, only voluntary promises are genuine promises in the first place). NDCs are of course generally voluntarily committed to – article 4 of the Paris Agreement plainly and simply says that it is each party's own business to "prepare, communicate and maintain successive nationally determined contributions that it intends to achieve" (Paris Agreement, 2015: 4). The tremendous keenness of sovereign countries to avoid outside interference is one of the central drivers behind the design of the Paris Agreement. However, voluntariness is not an either/or but it can occur on a sliding scale. Hence, one could add: *to the extent* that sheer pressure is one factor behind the NDCs of *some* – in particular powerless – countries, there is a slightly diminished reason to live up to them.

Sixth, there is a more radical challenge to the idea that a country's commitment to reduce emissions strengthens the moral importance of doing so. The idea behind the radical challenge is of a philosophical but simple nature. Independently of any country's commitments to reduce emissions, justice already morally requires countries to do so. If a country's commitment to reduce emissions does not go beyond the level that justice requires of it, the commitment does not increase the moral importance of reducing emissions at all. (To the contrary, in cases where a country's commitment is less than justice requires of it, there is even a reason to *deviate* from its commitment in the direction of doing more than it has said it would do). Tacking on a commitment to move in the direction of what one ought to do anyway hardly changes the normative situation.[7] Promises can only change the normative situation if they are supererogatory promises, i.e., promises to go beyond the call of duty. Consider an analogy. Two neighbors share a backyard. Assume for the sake of the argument that distributive justice requires them

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[7] For a contrasting perspective, see Moellendorf (2016).

to split the work of raking the leaves in the backyard equally. If one neighbor makes an explicit commitment to actually do their fair share of the work, such a commitment does not increase the importance of actually doing so. The importance is grounded already in the requirements of distributive justice and supplementing it by a commitment does not add anything. *A fortiori*, if one of the neighbors currently only does a quarter (rather half of the work), a commitment to increase their contribution to a third of the work does not have any moral relevance. Such a commitment may even be seen as repugnant given that it frames staying below the fair share as a live option. In the same sense, countries making a commitment to merely reduce the gap between the status quo and what justice minimally requires of them can be seen as repugnant, too. Regardless of whether it should be seen as repugnant or not, it does not add a new moral reason to reduce their emissions. The reason to reduce emissions is already fully given as a matter of justice.

In order for this argument to have practical relevance, there must be countries whose NDCs commit them to less climate action than justice requires of them. This is plausibly the case. The collective global mitigation effort falls short of what is required in order to do justice to future generations (Roser and Seidel, 2016: 90–92), and if all countries were to harmonize their commitments upwards, the collective effort of current commitments would still fall short of limiting global warming to 2˚C or 1.5˚C (Lee et al., 2023). Liu and Raftery estimate that "on current trends, the probability of staying below 2 °C of warming is only 5%" and "if all countries meet their nationally determined contributions and continue to reduce emissions at the same rate after 2030, it rises to 26%" (2021: 1). On top of the collective effort being too small, this collectively insufficient effort is not even shared fairly. Countries of the Global North are failing in particular (e.g., Holz et al., 2018; Roser and Seidel, 2016). This is not surprising given that the underlying architecture of the Paris Agreement and NDC system does not enforce a fairly shared collective effort in achieving this overarching goal, but merely asks countries to explain how they consider their NDC to be fair and ambitious in the light of their national circumstances (UNFCCC, 2018: 11). Thus, in effect, most countries' NDCs amount to a commitment to do less than justice would require of them. Hence, while there is much reason for them to do more than they currently do – this reason is not that they committed to it but rather that justice requires it of them. Therefore, deviations from their commitments do not matter much *per se*.

Let us summarize the upshot of this section. At first sight, there seems to be a strong case for a country to live up to its NDC for the simple reason that commitments ought to be kept. However, there are six reasons why this case is not as solid as it might seem. Chief among them are the first of the listed reasons – i.e. that NDCs are a weaker form of commitment than, say, a promise – and the last reason – i.e. that if justice requires a country to increase its effort anyway, then slapping on a commitment to do so does not change the normative situation. Thus, given that commitment-keeping is not as solid a basis for harmonizing national climate action with international pledges as it might seem, we now turn to further reasons for countries to stick to their NDC.

4. Consequentialist Perspective: The Importance of Mitigating Climate Change

If the commitment per se does not have as much weight as it initially seems, this gives us the liberty to take up a more consequentialist perspective. That is, discussing whether the practice of making and keeping commitments comes with morally important benefits and outlining the potential positive and negative effects of entrenching a norm of harmonization.

The effects we have in mind here are the effects on climate mitigation: does it help or hamper the collective effort to reduce emissions if we insist on harmonizing international pledges and national actions? If the world is on fire – i.e. if climate action is failing in multiple, essential ways to bring about justice (cf. Heyward and Roser, 2016) – paying attention to other criteria than harmonization's contribution to mitigation might seem like a luxury. In fact, the consequentialist perspective taken up in the current section might be the key consideration even if there were – contrary to the previous section's argument – strong intrinsic reasons to keep commitments. In a slogan: tackle climate change, harmonization be damned.

It is an empirical question whether pushing for harmonization serves the goal of mitigation or not. Unfortunately, there are no clear answers at present. This is so because it is hard to disentangle the effects of harmonization on mitigation from the many other causal factors affecting mitigation. This is especially so given the time lag between policy outputs (e.g., political commitments to emission reductions) and policy outcomes (e.g., the observable reduction in emissions) and given that the harmonization of policy outputs at different levels, particularly in the context of the global climate change regime, involves policy processes evolving at different points in time (see technical disharmony). Moreover, it may be practically difficult to assess whether promises are being kept as countries may opaquely report shaky or wrong data (e.g., Mooney et al., 2021). Nonetheless, a number of plausible effects can be identified even if we lack empirical evidence regarding the size of these effects.

For those underachieving on their international commitments, working toward harmonization by adjusting their actions to their pledges would obviously be positive. This is the simple and straightforward case we have in mind when thinking of putting pressure on countries who committed to ambitious climate action but then struggle to keep up with their own stated goals. Though, of course, pushing for harmonization strictly speaking could in principle also be achieved by overdeliverers reducing their efforts. In this case, harmonization would be counterproductive for mitigating climate change.

However, there are a number of problems with this simple take. It omits indirect effects of calling for harmonization. These may be larger in size than the direct effect. Of these five indirect effects only the second speaks for strengthening the call for harmonization and the other four speak against it.

First, taking dynamic effects on future commitment-setting into account makes the issue more difficult. A strong norm of harmonization could lead countries to deliberately make low commitments so as to increase the probability of achieving them. These low commitments, in turn, could lead to less ambitious action over time. Thus, pushing for harmonization could have a counterproductive effect in terms of tackling climate change. The threat of being judged due to disharmony could have a chilling effect on setting high targets in the first place. Even if these targets have merely been set at a low level in order to avoid accountability rather than in order to avoid action, they could end up serving as an actual benchmark for setting national policy – a benchmark which is lower than it would have been in the absence of international accountability.

Second, if countries generally follow through on their commitments, this creates trust among negotiators. Such trust is a big factor in making international negotiations run more smoothly. This effect is relevant in any context, not just in climate policy: the production of trust – which in turn facilitates social coordination and cooperation – is typically seen as a key feature of promises (cf. for example the prominence given to trust in the introduction to Habib's (2014) discussion of promises). Given that the

absence of efficient, collaborative and harmonious global decision-making procedures are a key bottleneck for coming up with a just response to climate change, building trust is a weighty consideration in favor of sticking to one's NDC.

Third, pushing for harmonization removes leeway for messy processes. Such processes that come with a certain amount of – often merely technical – disharmony. The complex national and international paths towards a climate solution are inevitably unpredictable and rumple. It calls for the art and science of muddling through (Lindblom, 1959). Scrupulously requiring actions and commitments to correspond at each stage in time constrains the flexibility that is necessary to successfully navigate this difficult territory. Being too stringent might thus hamper the achievement of an ambitious climate outcome.

Fourth, setting aspirational goals that are slightly over and above a country's realistic expectations is an important psychological and practical resource for increasing ambition. It's a matter of political skill to strategically set the goal neither too much nor too little above the realistic prediction so as to draw some additional political will from oneself from the discrepancy.[8] Setting a high goal does not just create psychological pull directly but also indirectly by deliberately creating a fear of criticism from other countries in case of failure. If, instead, we insisted on always rigorously synchronizing pledge and reality, exploiting this psychological mechanism and accountability-based commitment device would be made impossible.

Fifth, setting overambitious goals countries can signal willingness to cooperate in solving the global public goods problem of climate change (Wurzel et al., 2019). Such mutual signaling can create a positive dynamic at negotiations. Aykut et al. (2021) describe the approach of the Paris Agreement as 'incantatory governance' – and some actors believe such communicative devices to be effective. They cite Laurence Tubiana, one of the Paris Agreement's architects, who presents the treaty as a "self-fulfilling prophecy", whereby positive narratives "by producing a convergence of rational anticipations […] contribute as much to change as the agreement itself" (Aykut et al., 2021: 524). Vilifying any mismatch between NDCs and national-level targets takes away the freedom of countries to set targets which are higher than what they will realistically achieve. Such vilification of disharmony foregoes the signaling benefits of overpromising. Critics of such overpromising lament that "talk is cheap" – and, they say, at the end of the day it is action that counts. However, the fact that talk is cheap precisely speaks in its favor: if talk ultimately comes with real-world benefits and if talk hardly costs anything, this indicates that talk sometimes has a good cost-benefit ratio.

In the context of the fourth and fifth point – i.e. the motivational benefits and the signaling benefits of setting aspirational goals – *conditional* NDCs are especially interesting. Conditional NDCs allow countries to commit to ambitious action conditional upon the action of others, such as financial support. They are used widely and in particular by countries of the Global South (see Figure 3). This combines the advantage of setting in motion the beneficial psychological dynamic of high goals with the advantage of mitigating the risk of disappointing oneself and others of ultimately falling short of achieving them.

Unfortunately, it is very hard to assess what the net effect is of all these various channels through which encouraging harmonization has positive and negative effects on a just climate outcome. It is, however,

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[8] In the completely different context (poverty eradication at the household level), Lybbert and Wydick (2018) ask precisely this question – which is familiar to common sense but less so to scientific exploration – about the optimal level of aspiration. For the related question of hope, see Roser (2020) who applies it to the climate context.

noteworthy that there is a genuine possibility that pushing for harmonization might be counterproductive in terms of tackling climate change.

[INSERT FIGURE 3]

5. Further considerations

So far we have discussed two strands of arguments for evaluating disharmony: first, the general moral principle that commitments ought to be kept and, second, the effects of a norm of harmonization has on emission reductions. These two considerations, especially the latter, are key when it comes to normatively assessing disharmony. While neither of them provided a case for *welcoming* disharmony neither gave *strong* reasons against disharmony.

In principle, one could adduce countless further considerations. For the sake of completeness, we single out three examples and quickly scan their merits. (The first fits into a consequentialist box while the latter two are based on a more non-consequentialist perspective).

The first is simply a generalization of the last section's consequentialist perspective. Mitigation is not the only goal of global policymaking. Even within climate policy, there are further goals: adaptation to climate change and responding to loss and damage from climate change. And outside climate policy, there are innumerable further important ambitions for humanity, such as eradicating global poverty or fighting biodiversity loss. In particular, there are a number of challenges that share structural features of the climate challenge, such as its global, long-term nature, its risk profile encompassing non-negligible and hard to quantify tail risks, etc. Examples include antibiotic resistance, artificial intelligence, nanotechnology, engineered pandemics, etc. While climate change occupies too little space in the public consciousness compared to the myriad of short-term challenges facing the globe, these other long-term challenges arguably occupy too little space compared to climate change. In a certain sense, climate change is likely the first of a number of similar challenges in store for the coming decades and millennia. And the institutions and processes that humanity builds to confront the climate challenge will have a large effect on humanity's ability to tackle these further challenges.

One among many features of these institutions and processes are the attitudes humanity builds up towards harmonization. The indirect, long-term effects that pushing for harmonization has on humanity's ability to solve further problems might be ultimately its most consequential effect. The aspect that stands out here is that effective international cooperation is key for tackling a host of future challenges. Effective international cooperation is furthered by countries knowing they can trust each other to follow through on commitments and by governments feeling the pressure to improve their competence to follow through on commitments. Thus, while there might be a number of 'short-term' benefits to being relaxed about disharmony (e.g., to allow countries to have wiggle room for muddling through and make fast progress on climate change) the long-term effects might point more clearly to the benefits of insisting on harmonization.

A second additional consideration for judging disharmony focuses on legitimacy. This is a non-consequentialist consideration. It is based on the observation that pushing for harmonization between international commitments and national action can be interpreted as a shift of weight from the decision processes at the national level to decision processes at the international level. After all, harmonization

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means that national mitigation policies should be adjusted to the pledges made in the international arena. Contrarily, if the importance of harmonization is downplayed, more weight is given to policymaking at the national level since accountability in the face of the global community is made less salient. This observation brings up the question whether decision-making at the international level or the national level is preferable, in particular which level of decision-making exhibits more legitimacy (see Chapter 20 in Roser and Seidel, 2016).

On the one hand, there is a clear case to be made that decision-making at the international level is *more* legitimate: the climate policy of any given country affects everyone on earth, not just the country itself. Given that the rest of the earth is of course better represented in international negotiations than in national decision-making, this is a significant win in terms of the all-affected principle for inclusion in democratic decision-making. Also, some of the democratic deficits on the national level are made up at the international level. For example, disenfranchised groups from undemocratic countries or underrepresented groups from democratic countries (such as indigenous peoples) sometimes have better access to international conferences than to the standard decision-making processes at the national level. However, there are also countervailing considerations. National decision-making is more legitimate to the extent that – at least in democracies – the chain of delegation from the voter to the national decision-maker is shorter than from the voter to the bureaucrats developing the NDC and to the negotiators representing a country's views in international decision-making. In the latter case, democratic authorization and accountability is more diluted. Of course, the dilution can be counteracted by aiming for an inclusive and participatory process in developing the NDCs. Nations are, in fact, invited to do so and specify the "[d]omestic institutional arrangements, public participation and engagement with local communities and indigenous peoples, in a gender-responsive manner" that were involved in creating the NDC (UNFCCC, 2018: 9). While it is extremely hard to make any confident pronouncements, the first consideration might be more relevant than the second. In other words: the lack of global input into national climate policy is a graver legitimacy deficit than the chain of delegation being one or two chain links longer. In case this is correct, pushing for more harmonization is a win in terms of legitimacy.

A third example of a further consideration focuses on the role duties of the people who make international commitments. This consideration only has minor relevance for NDCs, but since it tackles the issue from a completely different angle, we mention it here as well. The professions of bureaucrat, negotiator and policymaker come with certain role duties (e.g., Hardimon, 1994). They are often in a principal-agent relationship with (parts of) the government, and ultimately the citizenry. They have the duty neither to commit to anything that contradicts their mandate – whether this be an implicit and general mandate or an explicit one, narrowly circumscribing their task – nor to exploit any vagueness or wiggle room according to their personal view rather than the presumed view of those they work for. Disharmony can result from individual bureaucrats, negotiators, and policymakers – who are, after all, much more exposed to the urgency of solving climate change through their job – getting carried away and in numerous minor ways committing to more ambitious action than is politically feasible at the national level. To the extent that disharmony results from an ethically undesirable flouting of their role duties, there is an obvious reason against welcoming disharmony.

This point about role duties is likely a small part of the overall puzzle in the evaluation of disharmony. It is particularly small in the case of NDCs. They are not created on the spot by negotiators wielding large discretion. To the contrary: they emerge from a lengthy process at the national level involving numerous

agencies and individuals. However, the possibility of disharmony arising out of negotiators overstepping their roles is relevant for other items in climate negotiations, as well as for other areas of international policymaking.

In the preceding sections, we have outlined various lines of reasoning that speak for or against the harmonization of international commitments and national policies; Table 2 provides an overview of these normative arguments.

Table 2. Overview of the Normative Arguments

Non-Consequentialist Perspective	Keeping one's commitments is an ethical desideratum, yet the moral weight of this consideration is potentially diminished in the case of NDCs by 1. The stringency of the NDCs is unclear 2. Fragmentation may limit states' ability to make commitments in the first place 3. Fairness-based reasons for keeping commitments are diminished if a significant fraction of agents break their commitments 4. Overdelivering on commitments is not necessarily problematic 5. Some commitments may have been made under pressure 6. The committed level of action may be demanded by justice anyway
Consequentialist Perspective	Harmonization is desirable 1. If it contributes to emission reductions, though this empirical question remains open 2. As it can facilitate trust amongst countries and negotiations Harmonization is undesirable / disharmony is acceptable 1. Harmonization can remove leeway for the inherently messy processes of the multi-level governance of a global problem 2. Harmonization may incentivize countries to set low commitments 3. Harmonization can remove the aspirational & signaling benefits of "overambitious" targets
Further Considerations	1. A norm of harmonization could potentially benefit humanity's ability to address other, and future, global problems 2. Harmonization shifts some weight from national to international decision-making processes, which is a net-win in terms of legitimacy 3. Disharmony may arise from negotiators, policymakers, or bureaucrats stepping away from their role duties

6. Conclusion

Examining harmonization from a normative perspective does not provide us with a clear-cut answer as to whether it should be encouraged, and if it should, to what extent. We suggested that the consequentialist criterion is key. Alas, the upshots from applying this yardstick remain quite unclear. While pushing harmonization in a typical case (i.e., a country not living up to its international promises) might lead to more intergenerational justice through increased emission reductions, the all-things-considered effects are harder to discern once we take countervailing effects into account. From a non-consequentialist perspective the case is a bit clearer: all of the arguments speak for embracing a norm of harmonization. However, none of them provides particularly strong reasons for doing so. The overall upshot is thus blurrier than we might have hoped. However, the blurriness itself makes for one clear conclusion: we should be less dismissive than seems fitting at first sight. The typical *prima facie* response to simply insist that commitments must be kept – period – is too shortsighted.

In global climate governance, acknowledging that deviating from international pledges is not necessarily undesirable affords room for reassessing the design of NDCs and the surrounding apparatus. Considering that effective climate change mitigation is the paramount consideration, while accounting for the psychological utility of setting ambitious goals, such a system could invite optimal levels of disharmony between international pledges and national policies while promoting (or ideally enforcing) a

strong norm of harmonization between those pledges and the goals of the Paris Agreement. In other words: an inflexible determination to close the emissions gap might require a somewhat flexible approach to the implementation gap. This could take shape in variety of ways. Otto et al. (2015) suggests countries' international pledges could be made "anti-fragile" by tying them to an index of attributable anthropogenic warming that is constantly updated, making commitments responsive to the evolving economic and climate realities and thus removing uncertainty as a roadblock for ambitious commitment-setting. Yet another proposal would be to go beyond the incrementalism of annual COP and hold super-COPs that constrain countries' bargaining window and makes them "approach their true bottom lines in talks [...] thereby aligning climate negotiations with states' true national interests" and in doing so enabling the "collective sprint" required to address climate change (Manulak, 2023: 2; 7).

However, if we are to return to the current architecture of global climate governance what might one infer from the conclusion that deviating from one's commitments is not necessarily undesirable – i.e., how might we optimize the social norm around harmonization under current circumstances? One possibility is to reinforce the practice of "naming and shaming", the primary tool by which countries' are held accountable to their international pledges under the Paris Agreement. Rather than a blanket reinforcement of this mechanism, we argue that our conclusions imply a differentiated implementation of naming and shaming especially for those countries underdelivering on their promises for political or deliberate reasons (see Section 2). Empirically, this has merit; Tingley and Tomz (2021) demonstrated that naming and shaming proved most effective in instances of the partial compliance of climate commitments under the Paris Agreement, whereas the effect size was smaller than for those in full (non-)compliance. We believe our assessments are an encouragement for policymakers, and civil society actors alike, to trust their intuition as to when to engage in naming and shaming and which types of disharmony to direct it at. There can be too much or too little of it. Rather than assuming that any ever-so-slight deviation from one's commitment should be unfailingly decried as a matter of strict principle, a context-sensitive assessment is in fact justified. The importance of keeping one's promises does not simply settle the issue from the outset, despite initial impressions to the contrary.

We have provided encouragement to view these judgement calls as an art rather than science. Practicing the art of critically assessing individual cases of disharmony and of shaping the general norms around it can build on the framework we have provided. Such nuance should not be mistaken for lukewarmness. Rather, the normative evaluation should take its main guidance throughout from a North Star: the effects on long-term emission reductions.

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Figure 1. Qualifications of NDC Commitments
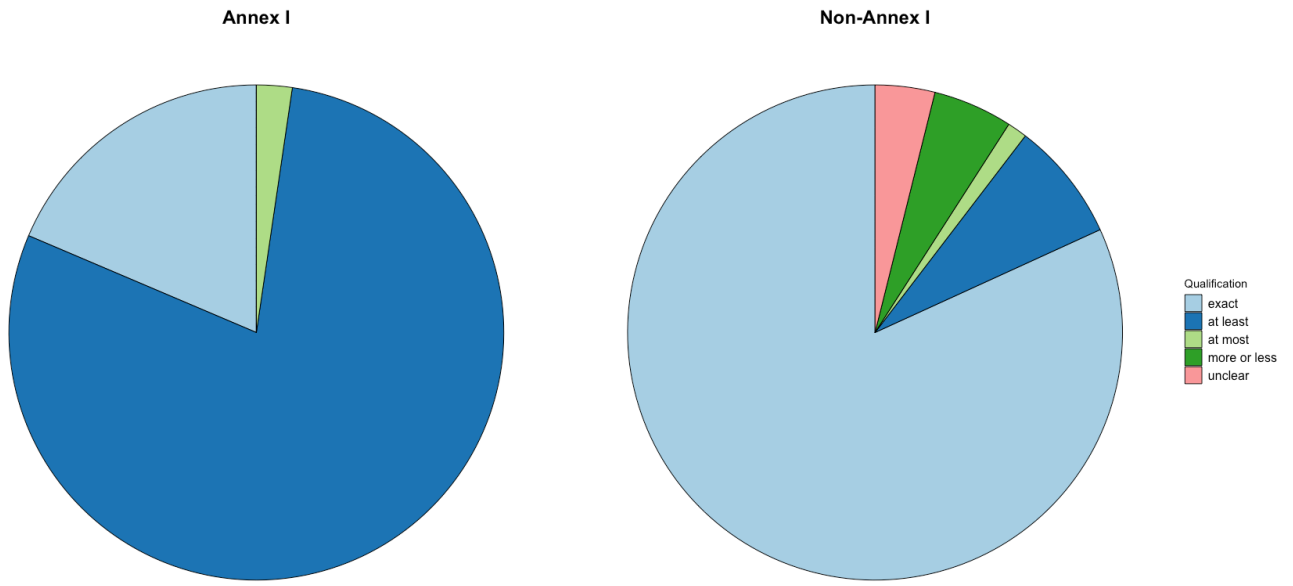
numbers based on IGES NDC Database v. 7.7
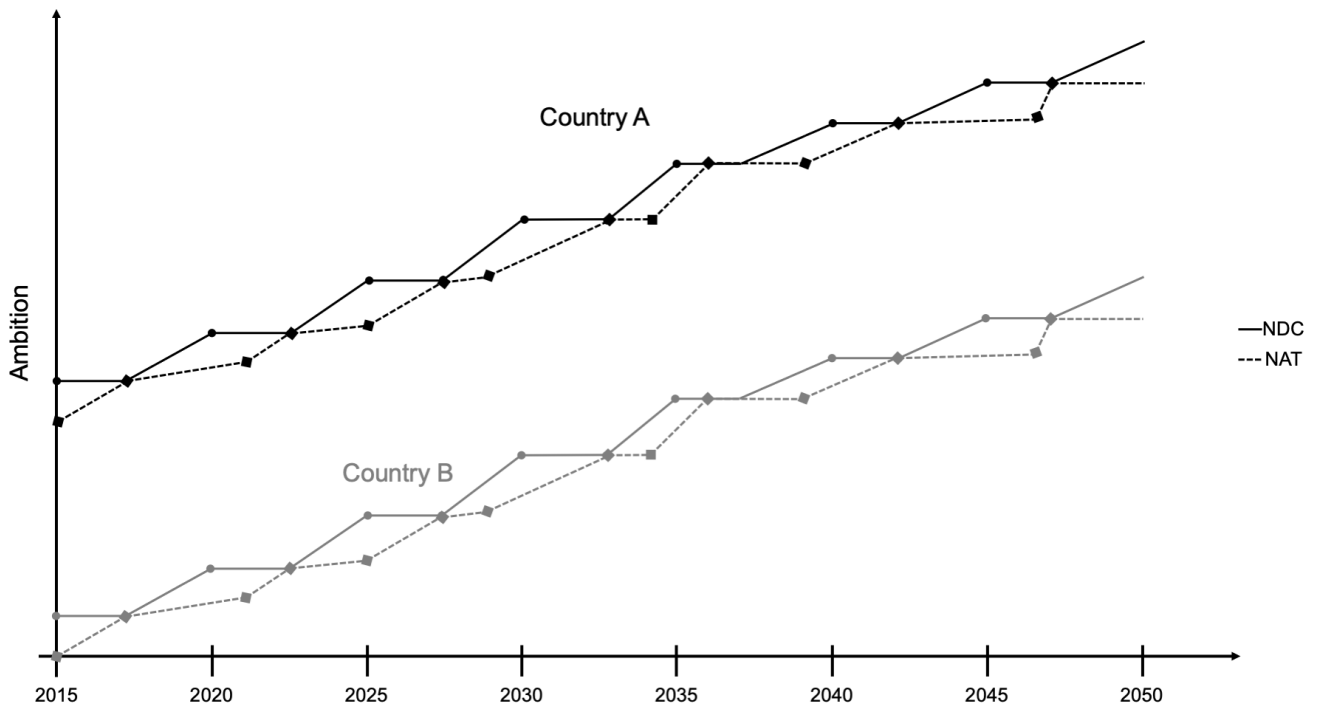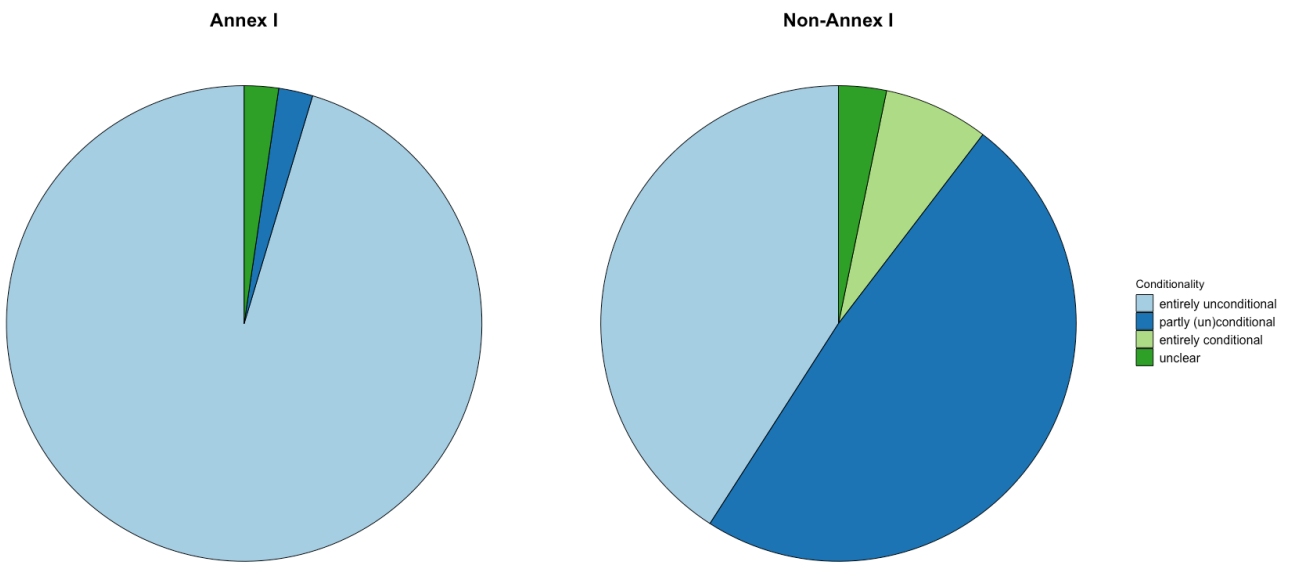
Figure 2. Technical Disharmony

Figure 3. Conditionality of NDC Commitments

Annex I

Non-Annex I

Conditionality
- entirely unconditional
- partly (un)conditional
- entirely conditional
- unclear

numbers based on IGES NDC Database v. 7.7