






COMMENT




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The Paris Agreement's inherent tension between ambition and compliance

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Parties to the Paris Agreement face mounting social pressure to raise their ambition, thereby reducing the gap between individual pledges and collective temperature goals. Although crucial for inciting positive change, especially given that the Paris Agreement lacks an enforcement mechanism, it is also important to consider social pressure's potential negative unintended consequences. First, it might undermine the Paris Agreement's celebrated flexibility, which allows countries to design their Nationally Determined Contributions according to domestic conditions and capabilities. Second, it might result in widespread noncompliance by inciting pledges that the countries concerned prove unwilling or even unable to fulfill. Should that happen, confidence in the Paris Agreement and its institutions might falter. Further research is therefore needed to identify the scope conditions for social pressure to work effectively in the domain of international climate policy.

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Introduction

Despite three decades of climate negotiations, the world will face a global temperature increase of 2.6 °C above pre-industrial levels by 2100 even if all current unconditional climate pledges should be fully implemented (UNEP 2022). However, demands for more ambitious commitments are mounting. In the run-up to the COP26 in Glasgow in 2021, for instance, the UN Climate Change Synthesis Report was referred to as a “red alert for our planet” by UN Secretary General António Guterres (UN SG/SM 2021). Against this backdrop, COP26 was largely about reducing the gap between individual climate pledges and collective climate goals and allegedly involved convincing “some highly reluctant countries to agree on a timetable of swift revisions” (Harvey 2021a).¹ Moreover, the President of COP26, Alok Sharma, said the UK would continue pressuring governments to further deepen their commitments even if they had already done so (Harvey 2021b). Similarly, at COP27 in Sharm el Sheik in 2022, the first high-level ministerial roundtable on pre-2030 ambition issued a “collective call to urgently ramp up climate action and support” (UNFCCC 2022).² In his closing statement, moreover, Guterres repeated his demand from 2021 for more ambition: “...let’s be clear. Our planet is still in the emergency room. We need to reduce emissions now ... the world still needs a giant leap on climate ambition” (UN Web TV 2022).

In contrast to the Kyoto Protocol’s “top-down” approach, where emission targets were collectively negotiated internationally, a key feature of the Paris Agreement is the flexibility of self-determined pledges to reduce emissions. While many countries have reinforced their targets to cut global greenhouse gas (GHG) emissions by 2030, member states are still exposed to increasing social pressure to raise their ambition. Social pressure is one of several instruments used in international relations to influence states’ policies and behavior. International organizations, individual states, and NGOs may attempt to exert social pressure when other instruments, like economic sanctions or military intervention, are too costly or unacceptable.

Social pressure may take different forms;³ however, it is essentially about the use of non-material (often verbal) incitements to approve of good behavior and criticize bad behavior. Following Green and Gerber (2010, p. 331), we define social pressure as “communications that play upon a basic human drive to win praise and avoid chastisement”. When exerting social pressure, the sender is urging the receiver to adhere to a particular norm (or treaty), indicating that the receiver’s policies and behavior will be monitored and publicized (Green and Gerber 2010, p. 332).

In international climate politics, exerting social pressure implies acclaiming states that honor the Paris Agreement, while publicly criticizing climate laggards. It is commendable that various actors, including states and international organizations, media, environmental organizations, and research institutes, exert social pressure by engaging in public debates, publicizing successes and failures, and scrutinizing the climate efforts of fore-runners and laggards. Given that the Paris Agreement has no enforcement mechanism and that implementing strong enforcement measures is politically infeasible in the realm of international politics, social pressure may be one of the few tools these actors can use to incite positive change. Indeed, social pressure can have a positive effect on state compliance with the Paris Agreement, by, for example, influencing the domestic public, mobilizing public support, or making states outdo one another in climate change mitigation. However, it may also have negative unintended consequences, which we focus on here.

Honoring the Paris Agreement requires that member states (1) gradually enhance the ambition level of their countries’ Nationally Determined Contributions (NDCs) and (2) implement these

NDCs. Therefore, social pressure may target the members’ ambition level, their implementation record, or both. However, raising the level of ambition in one’s NDC is considerably easier than implementing the policies needed to fulfill this more ambitious NDC. Moreover, countries⁴ will likely be more reluctant to exert social pressure to implement policies, since such pressure may draw unwanted attention to their own implementation record. Finally, countries are more likely to give in to social pressure for enhanced ambition (which is visible immediately) than to social pressure for improved implementation (which only becomes visible in a more or less distant future when a subsequent government must take the blame for any non-compliance). These imbalances imply that strong social pressure concerning ambition may result in an increasing compliance gap.

The literature on ambition and compliance under the Paris Agreement is rapidly growing. Some scholars have focused on whether current pledges are sufficiently ambitious to reach the agreement’s collective goals (e.g., Zhang 2017). Others have studied how state and non-state actors might help review ambition and compliance (e.g., van Asselt 2016). Yet others have debated the alleged tradeoff between climate ambition and compliance (e.g., Torstad, 2020; Victor et al. 2022). And still others have considered how social pressure influences public support for NDC compliance (Tingley and Tomz 2022). We contribute to this rapidly growing literature by providing the – to our knowledge – first discussion of how strong social pressure concerning ambition might cause a compliance gap that could prove difficult or even impossible to bridge.

We first review how the initial, positive reception of the Paris Agreement praised its inherent flexibility. Second, we explain how strong social pressure for strengthening climate ambition might constrain this celebrated flexibility and contribute to reinforcing an already mounting gap between what parties promise and what they deliver. Third, we examine what a significant compliance gap might entail for confidence in the Paris Agreement’s institutions. Fourth, we explicate why closing such a compliance gap might prove infeasible. Finally, we conclude and offer some recommendations.

The strength of the Paris Agreement: flexibility

Celebrated as “the world’s greatest diplomatic success” (Harvey 2015), the Paris Agreement has been characterized as a “landmark” (Bodle et al. 2016), a “historic achievement” (Rajamani 2016), a “climate diplomacy masterpiece” (Obergassel et al. 2016), and “a model of effective global governance” (Slaughter 2015). This diplomatic success was largely ascribed to the agreement’s novel approach, which offers extensive flexibility for member countries and enables each party to freely choose the ambition level of its NDC. According to Victor (2015), this new approach was “organized around the idea that every country has its own national interests and needs the flexibility to align what it does globally with what is doable locally.” Similarly, in the words of Keohane and Oppenheimer (2016, p. 146), the agreement enables countries to tailor their NDCs to match “the interests and views of domestic constituents,” thereby avoiding strict targets that might be “difficult to meet and...embarrassing to miss.”

The extensive flexibility of the Paris Agreement quickly resulted in nearly full participation, and the agreement entered into force less than a year after its adoption. By July 2023, it had 198 signatories and 195 parties (UNFCCC, n.d.a). To become effective, however, it must deliver not only high and stable participation, but also deep (and gradually deeper) commitments to reduce emissions as well as (reasonably) high compliance rates. Notably, it must satisfy *all* these three conditions (Barrett 2008; Dimitrov et al. 2019).

Because current pledges are insufficient to meet the agreement's collective goals, scholars, politicians, and environmentalists have understandably focused on the need for increasing ambition. Indeed, by establishing long-term temperature goals, the Paris Agreement is designed to spur gradually increasing ambition in the parties' NDCs. In contrast, the high-compliance condition has so far received much less consideration. This relative lack of attention is concerning because compliance could well prove to be "the Achilles' heel of the Paris Agreement" (Bang et al. 2016, p. 210).

Pledge-and-review for deeper cooperation

While Paris offers flexibility concerning ambition, it is rigid regarding procedural commitments: all parties must pledge their NDCs and report on their progress every five years. Peer review of collective goal attainment is conducted by nation states within the Global Stocktake, while technical expert review of individual goal attainment occurs under the Enhanced Transparency Framework, which is intended to "build trust and confidence that all countries are contributing their share to the global effort" (UNFCCC, n.d.b).

According to the UN Synthesis Report, though most parties submitting updated NDCs in 2020–2021 increased their ambition, many NDCs remain shallow and should therefore be relatively easy to fulfill. At least partly for this reason, political leaders and environmental NGOs understandably seek to pressure countries to submit deeper NDCs. For example, shortly after COP26 former UK Prime Minister Boris Johnson vowed:

We are the world COP-holders for another year. We will push for more ambitious goals, stronger plans, and better implementation – and so we further narrow [the] gap to 1.5 degrees. We will work with partners across the world. We will work tirelessly: we will never give in. This is Global Britain in action (cited in Craig 2021).

Similarly, UN Secretary General Antonio Guterres, assuming "the role of the globe's exhorter-in-chief for bolder climate action" has criticized rich nations and demanded higher ambition (Dennis 2021). The day before COP26 ended, Guterres tweeted "...We cannot settle for the lowest common #ClimateAction Denominator. I appeal to all countries to increase ambition in mitigation, in adaptation, and in finance" (Guterres 2021). A year later at COP 27 in Sharm el-Sheikh, still dissatisfied with the progress after only 26 countries increased their target between the two summits, Guterres warned: "We are on a highway to climate hell with our foot on the accelerator. [...] We need urgent #ClimateAction" (Guterres 2022).

Numerous other examples show how international organizations, NGOs, and prominent individuals alike demand higher ambition. Using hashtags such as #ClimateAction; #Emissions-Gap, #WorldIsWatching, #TogetherForOurPlanet, etc., Twitter users, from ordinary citizens to high-profiled individuals, NGOs, business groups, think tanks, trade unions, and substate authorities, urge reluctant country leaders to pledge more ambitious commitments.⁵ Moreover, non-state actors do much more than name and shame on Twitter; they use a range of instruments, from lobbying policymakers through organizing protests and demonstrations to offering concrete technical solutions for, say, adaptation and financing, to convince states to increase their ambition (see, e.g., Kuyper et al. 2018).

While social pressure is necessary and indeed part of the very foundations of the Paris Agreement, overdoing it might result in countries no longer feeling free to set their NDC ambition based on what they consider "doable locally." Instead, their ambition level might become – at least partly – a product of what others

expect or even require of them. Consider the case of Chad. In 2015, Chad announced an extremely ambitious NDC – to reduce its GHG emissions 71% by 2020. Apparently, this overly ambitious pledge was "rushed by other countries", while the national authorities "did not gather all the data to reflect [their] national and achievable contribution" (King 2016). This climate plan was unattainable, as correctly predicted by Chad's climate envoy Hamid Abakar Souleymane already in 2016. Consequently, the country submitted a significantly *less* ambitious revised NDC in 2021, pledging to reduce its GHG emissions "only" 19.3% by 2030 (UNDP Climate Promise, n.d.).

Brazil is another example of what effectively amounts to procedural noncompliance with the Paris Agreement's requirement that every new NDC shall be no less ambitious than its predecessor:

Against a backdrop of rising emissions from deforestation, a record-breaking year for forest fires in the Amazon, and increasing international scrutiny over Brazil's climate action, Brazil has submitted an updated Paris Agreement NDC that effectively weakens its already insufficient climate action targets for 2025 and 2030. Brazil's targets to reduce emissions by 37% and 43% from 2005 levels by 2025 and 2030 respectively are unchanged on paper, but an increase in the base year emissions used as a reference means that Brazil can continue to increase its emissions and still meet its targets" (CAT 2022).

Chad and Brazil are not alone in having made commitments that they later have found difficult or even impossible to achieve. Indeed, a number of developing countries, in collaboration with Western donors, have allegedly submitted unrealistic targets devised without stakeholder consultations or data analysis (Pashley 2016). These examples illustrate how social pressure might constrain the flexibility that was deemed so important for the agreement's initial success.

The compliance gap

While social pressure might bring about a positive change by imposing social and material costs on a target government, using social pressure to drive up NDCs' ambition levels beyond what is doable locally might also result in considerable noncompliance.⁶ Although full compliance is neither a necessary nor a sufficient condition for effectiveness (Raustiala and Slaughter 2002), no agreement can be *very* effective without a reasonable compliance level (Dimitrov et al. 2019).

Another potentially detrimental consequence of widespread noncompliance with pledges is fading confidence in the agreement and its institutions.⁷ Greta Thunberg's statements are illustrative: "Words that sound great [have] so far not led to action. Our hopes and ambitions drown in...empty promises" (cited in Carrington 2021).

The seemingly overly ambitious pledges submitted in 2020–2021 through the wave of net-zero pledges illustrate the point. This wave was – at least partly – caused by international social pressure from the EU, the UK, and the US prior to the 2021 Biden Climate Leaders' Summit and COP26. It seems that at least some of the countries making net-zero pledges by 2050 or 2060 did so without much consideration of their pledge's feasibility. For example, Australia long refused to follow other countries' examples, and their 2050 pledge allegedly came only after considerable social pressure (Lai 2021).

It will take decades before one can determine if such long-term pledges will be fulfilled (which obviously makes them rather convenient for current policymakers). However, according to UN Secretary General Guterres, serious noncompliance is already

taking place: “Some government and business leaders are saying one thing – but doing another. Simply put, they are lying. And the results will be catastrophic” (i24NEWS–AFP 2022).

A significant distance between what countries promise and what they deliver might lower confidence in the Paris Agreement. Should compliance levels prove very low, countries might even cease taking their own and others’ NDCs seriously. At worst, such a development might cause some to contemplate withdrawal. Laggards might do so because of frustration regarding a growing gap between what they are able to deliver and what NGOs, international organizations, and ambitious states expect of them. Meanwhile, frontrunners, despairing over laggards’ non-compliance, might ponder forming alternative cooperation forums they see as more effective.

Noncompliance with ambitious targets is most likely in countries with low financial and administrative capacity, that is, in emerging economies. Perhaps partly for this reason, emerging economies often condition their pledges on additional international support. An example of such support is the Just Energy Transition Partnership, launched by South Africa, France, Germany, the UK, the US, and the EU. The aim is to accelerate South Africa’s decarbonization and help her reach compliance with her updated NDC (EC 2021).

However, developed countries have thus far failed to supply the USD100 bn per year by 2020 that was initially pledged in Copenhagen 2009, reiterated in Cancun 2010, and reaffirmed in Paris in 2015. Even if developed countries were to fulfill this promise, it would only amount to a fraction of what is needed for emerging economies to deliver on ambitious emissions reduction targets (e.g., CarbonBrief 2022). In addition, emerging economies also need funding for adaptation and for addressing loss and damage.

Equally worrying is that developed countries, including some that exert social pressure on others, face serious problems of their own in meeting their self-selected pledges. A case in point is the UK committing to a 68% cut in emissions by 2030 and a 78% cut by 2035, in addition to its 2050 NetZero target, during its presidency of COP 26. “In targets, the UK is indeed a world leader. However, [...] the Government is failing in much of its implementation”, writes Lord Deben, the Chairman of the Climate Change Committee (CCC) in the Foreword to the 2022 Progress in Reducing Emissions, submitted to the Parliament in June 2022. The Foreword highlights a significant risk of noncompliance with national and international obligations for climate change mitigation (CCC 2022). And the UK is not alone. In Norway, experts agree with the vast majority of voters that the country’s target of 55% reduction in emissions by 2030 is unrealistic (Blaker 2023). Moreover, UNEP (2021: IV) reports that “G20 members as a group do not have policies in place to achieve even the NDCs, much less net zero.”⁸

Why closing the compliance gap might prove infeasible

Noncompliance with ambitious NDCs is *least* likely in countries linked to the EU ETS, partly because the EU’s NDC is not particularly ambitious (Robiou Du Pont and Meinshausen 2018), and partly because the EU possesses significant enforcement mechanisms, providing it with comparative advantages in implementing ambitious pledges. By combining capacity building measures with penalties and other incentives, the EU possesses a unique institutional structure, with the Court of Justice of the European Union as a last resort (Tallberg 2002).

In contrast, the Paris Agreement is often criticized for lacking enforcement mechanisms. Some observers argue that for the agreement to reach its collective goals, enforcement mechanisms need to be introduced. For example, Wal van Lierop, an award-

winning business leader in innovation and cleantech, contends that: “If the Paris Agreement is to be anything more than a symbolic gesture, we need more than carbon taxes. We need clear targets and enforcement mechanisms that hold the biggest emitters...accountable” (van Lierop 2019).

However, any attempt to introduce enforcement mechanisms in the Paris Agreement would face severe obstacles. First, while the parties are legally bound to submit new and more ambitious NDCs every five years, they are not obligated to comply with them. It would hardly make sense to enforce NDC compliance without first making compliance legally binding. Still, an amendment of Paris that makes compliance binding is unlikely. Generally, the global recession following the COVID pandemic, the ongoing Ukraine war, increasing energy prices, and an unstable geopolitical situation would likely reinforce parties’ reluctance to be legally committed to costly climate measures. More specifically, such an amendment would meet particular opposition by the United States. US ratification would necessitate the Senate’s advice and consent, which requires a two-thirds majority. Given the current polarization in US politics, mobilizing the support of a two-thirds majority is politically infeasible. The US position was made clear in Paris, when the US delegation issued a last-minute protest, insisting on replacing the term “shall” with “should” regarding NDC implementation (Vidal 2015). Then Secretary of State, John Kerry, later remarked:

The bottom line is that when I looked at [the use of the term “shall”], I said, “We cannot do this, and we will not do this. And either it changes, or President Obama and the United States will not be able to support this agreement” (cited in Keating 2015).

Second, even if the parties were to make NDC compliance legally binding, it would be a tall order to get all parties’ consent to changing Article 15.2, which states that the compliance mechanism “shall be...non-adversarial and non-punitive”.

Finally, even in the unlikely case that both of the first two obstacles were overcome, it would be extremely challenging to negotiate an enforcement mechanism capable of incentivizing parties to comply with highly ambitious (and hence very costly) NDCs. For such a mechanism to be adopted, countries like the US and China must consent, and these countries would unlikely do so unless granted exemption or otherwise guaranteed that they would not risk being humiliated before the entire world by an international enforcement body. The best we can hope for, therefore, is domestic enforcement.

Conclusion and recommendations

To reach the Paris Agreement’s temperature goals, the parties must deliver very large emissions reductions within a few decades. It is therefore commendable that state and non-state actors exert social pressure to increase reluctant countries’ ambition. However, one should also bear in mind that social pressure might tempt political leaders to promise emission cuts they (or their successors) are unwilling or even unable to deliver. Thus, social pressure may be counterproductive in two respects: it may lead to widespread noncompliance and to fading trust in the Paris Agreement. Therefore, it is essential for further research to determine whether and if so, how and what types of social pressure work in the domain of international climate policy. Similar work has been done in, inter alia, social psychology, electoral studies, and international relations research on naming and shaming in relation to international human rights treaties. We need rigorous, evidence-based studies with clear implications for social-pressure strategies that will support, rather than undermine, the further implementation of the Paris Agreement.

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Notes

- 1 COP26 was the most important climate summit since the Paris Agreement was adopted in 2015, as member states were expected to update and strengthen their NDCs for the first time.
- 2 See also the COP 27 High-level ministerial round table on pre-2030 ambition (UNFCCC 2022).
- 3 Social pressure may take different forms, such as shaming (e.g., Hafner-Burton and Tsutsui 2005; Risse and Sikkink 1999), expert theorization (e.g., Simmons et al. 2008), or ranking and performance indicators (Kelley and Simmons 2015).
- 4 Non-state actors also exert social pressure, but only states are parties to and can implement the Paris Agreement. Our focus is therefore on states.
- 5 For example, in the period 7–14 January 2023, 27902 tweets with a hashtag #ClimateAction were posted (the number was generated using tweetbinder.com)
- 6 This is evident from research on the role of social pressure to alter behavior in social psychology, political science (e.g., voter turnout) and international relations (e.g., human rights violations) which finds some evidence for positive change, but also reports that exerting social pressure on individuals and states alike can backfire (e.g., Bailey 2008; Hafner-Burton 2008; Mann 2010).
- 7 This expectation is in line with research on naming and shaming in the context of human rights which argues that shaming can also backfire by eroding norms it is supposed to uphold (Tingley and Tomz 2022; Carnegie and Carson 2018)
- 8 However, worth noting is that ten G20 members (Argentina, China, EU27, India, Japan, Russia, Saudi Arabia, South Africa, Turkey, and the United Kingdom) are likely to implement their unconditional NDCs under current policies (UNEP, 2021: XVIII).

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The authors declare no competing interest.

Ethical approval

This article does not contain any studies with human participants performed by any of the authors.

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