

OPINION

Climate transparency's unmet promises: A necessary stocktaking

Aarti Gupta^{1,2*}, Harro van Asselt^{3,4}, Max van Deursen¹, Rohan Agarwal¹, Robbert Biesbroek¹, Romain Weikmans^{5,6}, Rahwa Kidane¹, Heather Jacobs^{1,4}, Sumit Prasad⁷, Robert Bergsvik¹, Emilie Broek¹, Ellycia Harrould-Kolieb⁸, Hyeyoon Park⁹

 Wageningen University & Research, Wageningen, The Netherlands, 2 Climate Change Leadership Group, Uppsala University, Uppsala, Sweden, 3 University of Cambridge, Cambridge, United Kingdom,
University of Eastern Finland, Joensuu, Finland, 5 Université Libre de Bruxelles, Brussels, Belgium,
Finnish Institute of International Affairs, Helsinki, Finland, 7 Council on Energy, Environment and Water, New Delhi, India, 8 University of Melbourne, Melbourne, Australia, 9 University of Stirling, Stirling, United Kingdom

* aarti.gupta@wur.nl

The launch of the Paris Agreement's enhanced transparency framework (ETF) in 2024 has been heralded with much fanfare. At the latest meeting of the Conference of the Parties (COP) to the United Nations Framework Convention on Climate Change (UNFCCC) in Baku, Azerbaijan, slogans calling for all countries to engage in a timely manner with the ETF were plastered all over the venue.

This ETF calls on countries to report on their progress in meeting their nationally determined contributions, and is often referred to as the 'backbone' of the Paris Agreement [1]. In an era of voluntary climate pledges, mandatory transparency is seen as vital to revealing whether countries adhere to their commitments.

Such transparency is associated with multiple promises, notably that it will enhance accountability and mutual trust, facilitate improved domestic climate action, and help developing countries to access climate finance [2]. Strikingly, there is little empirical research on whether these promises have been realized.

Transparency requirements in the global climate regime date back to the 1990s. However, we know very little about what decades of transparency have delivered, even as ever more resources are devoted to expanding these reporting and review infrastructures. Fig 1 illustrates the central place of transparency in the UNFCCC, showing how transparency has been the most prominent agenda item in climate negotiations over three decades, and that the largest share of the UNFCCC Secretariat's core budget in 2024 was allocated to its transparency division.

With the launch of the ETF, it is imperative to assess whether the widely touted benefits of transparency have been realized thus far. Here we critically interrogate three core assumed benefits from engaging in UNFCCC transparency arrangements.

Claim 1: Transparency enhances accountability and trust

A first claim is that engaging in UNFCCC transparency arrangements enhances accountability and builds trust. The reasoning is that if transparency can shed light on



Citation: Gupta A, van Asselt H, van Deursen M, Agarwal R, Biesbroek R, Weikmans R, et al. (2025) Climate transparency's unmet promises: A necessary stocktaking. PLOS Clim 4(4): e0000613. <u>https://doi.org/10.1371/journal.</u> pclm.0000613

Editor: Jamie Males, PLOS Climate, UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND

Published: April 24, 2025

Copyright: © 2025 Gupta et al. This is an open access article distributed under the terms of the <u>Creative Commons Attribution License</u>, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Funding: AG, MvD, RA, RBe, HP acknowledge funding support from the Netherlands Organization for Scientific Research (NWO) to the TRANSGOV project (grant number 406.18. SW.045). HvA, HJ, RW and EHK acknowledge funding support from the Academy of Finland to the TRANSCLIM project (decision 333126). RBi and EB acknowledge funding support from NWO (VI.Vidi.211.132). RK



acknowledges funding support from the Wageningen Postdoctoral Talent Fellowship. The funders had no role in study design, data collection and analysis, decision to publish, or preparation of the manuscript.

Competing interests: The authors have declared that no competing interests exist.

who is doing what, this allows countries to hold each other accountable for their (in) action.

To assess whether these expectations have materialized thus far via pre-ETF transparency arrangements, the example of reporting on climate finance flows is instructive. Despite the strengthening of transparency requirements regarding climate finance provided by developed countries over time, greater clarity about the nature and extent of these flows remains elusive [5]. Doubts persist about the accuracy, methodological robustness, and verifiability of self-reported climate finance provided [6]. With no commonly agreed definition of climate finance, reporting by developed countries has largely failed thus far to help hold these countries accountable or enhanced mutual trust. The ETF now requires developed countries to provide additional information on their 'assumptions, definitions, and methodologies' relating to finance provided [7], but it does not resolve longstanding accounting and comparability issues [8].

A second illustration relates to the international review processes intended to scrutinize self-reported information by countries. Strikingly, these review processes are expressly designed to exclude political judgement about whether a given country's self-reported climate actions can be considered ambitious or fair, nor are there any multilaterally agreed parameters for what constitutes ambitious or fair individual climate efforts. Hence vital preconditions for accountability—an agreed standard of performance and a judgement that the standard is met—are both lacking. This prevailing situation [9] is set to continue under the ETF. As these illustrations suggest, furthering accountability and trust through UNFCCC transparency arrangements risks remaining more myth than reality.

Claim 2: Transparency facilitates domestic climate action

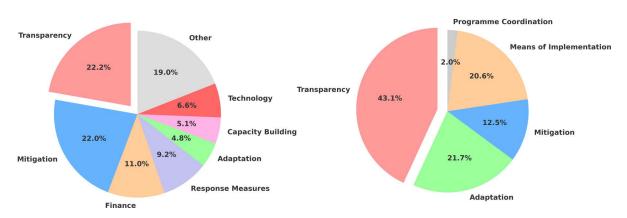
A second claim is that engaging in UNFCCC transparency arrangements leads to improved domestic decision-making [10]. The assumption is that reported information is useful for developing ambitious and tailored domestic policies. Again, there is little assessment or evidence that these promises are materializing in practice.

Two examples illustrate this point. First, if improved reporting were linked to enhanced domestic action, one may expect to see high levels of ambition from those extensively reporting, yet no such pattern is discernible [11]. Climate ambition is fueled by multiple factors, hence no direct causal link to transparency can be posited. This claimed benefit nonetheless is consistently advanced within the global climate regime as a rationale to urge particularly developing countries to enhance their reporting. The perspective of one developing country, India, in calling out this claim is instructive here. In one of its pre-ETF UNFCCC transparency reports, India points to the lack of enhanced ambition from developed countries, notwithstanding their years of extensive reporting, stating that'... if MRV [measuring, reporting and verification, i.e., transparency] is to perform the function of ... increasing effort and ambition in mitigation, then decades of MRV advocacy by the Annex-I [developed country] Parties must be deemed to have produced scant results by their own standards' [12].



a) UNFCCC Negotiations: Topics on the Agenda (1995-2019) b

b) UNFCCC Secretariat: Core budget allocation to programme areas (2024)





https://doi.org/10.1371/journal.pclm.0000613.g001

Second, if transparency is to improve domestic climate action, it needs to be related to domestic priorities. Yet this is not always the case. There is a strong mitigation focus to UNFCCC transparency arrangements, including in the ETF, aligned with developed country priorities [1]. Yet such a focus may not be relevant for all countries. It may push least developed countries (LDCs) with very low emissions, for example, to divert scarce resources and capacities to generating mitigation-related data at the expense of adaptation reporting, although the latter is more aligned with their own priorities [8]. In short, there remains a dire need for context-specific empirical scrutiny of the claim that engaging with UNFCCC transparency arrangements facilitates improved domestic decision-making and climate action.

Claim 3: Transparency facilitates access to finance

A third claimed benefit from engaging in UNFCCC transparency arrangements, particularly for developing countries, is that it can help these countries to secure climate finance. The assumption is that information on needs and gaps relating to climate actions is valuable to generate and share internationally, as a way to attract financial flows to address such needs [13]. Yet there is little empirical evidence supporting this claim.

For one, studies reveal that current climate finance does not bypass countries with a poor track record in reporting. For example, Kenya and the Philippines are among the highest recipients of climate finance [14] but have submitted very few UNFCCC transparency reports. Also, when countries do report information on climate-related needs, there is no guarantee that international support follows. LDCs have reported a broad swath of needs in existing transparency reports [15], yet finance flows to these countries remain inadequate. For poor countries, reporting on needs remains a complex and costly exercise that has not yet resulted in increased access to international finance.

Transparency's promises: Tailor expectations to political realities or revamp the system

In short, the promises of transparency in the form of enhanced accountability and trust, enhanced domestic climate action, or greater flows of finance, cannot be said to have materialized thus far. In large part, this is because the scope and practices of UNFCCC transparency systems are circumscribed by broader political conflicts underpinning the global climate regime, relating to who needs to act, what constitutes ambitious or fair action, and who needs to pay. These conflicts are also reflected in the design of the ETF, including in its alignment with the mitigation priorities of developed countries [1]. As such, high expectations of benefits from transparency, particularly for developing countries, may need to be tempered.



To realize the promises of transparency, a new approach is needed that prioritizes precisely those aspects that are currently excluded or deprioritized. To enhance accountability, trust and enhanced domestic decisions and actions, transparency systems would need, at least, to generate *comparable* information from developed countries, and *targeted* information from developing countries.

Comparable transparency is needed from the highest historical emitters (mostly developed countries) regarding their current and planned climate actions, and whether these can be considered ambitious and fair. This comparability is vital to furthering accountability, yet it hinges not on providing ever more detailed information, but rather on multilateral agreement around certain core parameters of climate targets (e.g., common base years), which can then be reported upon, facilitating comparison of individual climate effort. Similarly, greater clarity around what constitutes climate finance would help. Yet in the absence of multilaterally agreed parameters of these contested political issues, no matter how detailed the reporting gets, comparability of individual efforts is likely to remain out of reach, also under the ETF.

Targeted transparency, on the other hand, could serve developing countries better. For example, countries with very low emissions could choose to report on their core climate priorities, such as adaptation. Yet even such targeted transparency can only yield benefits if it is taken up and acted upon by relevant actors and intended recipients of this information within the broader climate regime. Such targeted transparency is, however, largely precluded within UNFCCC transparency arrangements, with its universalizing mitigation focus for all.

In conclusion, we argue that there is an urgent need now to assess benefits and burdens from engaging with UNFCCC transparency arrangements, including requirements of the ETF now unfolding. We do not have to wait until all countries have generated new transparency reports at considerable effort, to examine whether the ETF is fit for purpose and likely to deliver on its promises, and for whom.

Author contributions

Conceptualization: Aarti Gupta, Harro van Asselt.

Formal analysis: Max van Deursen, Rohan Agarwal, Robbert Biesbroek, Romain Weikmans.

Funding acquisition: Aarti Gupta, Harro van Asselt.

Supervision: Aarti Gupta, Harro van Asselt, Max van Deursen, Robbert Biesbroek.

Visualization: Rohan Agarwal.

- Writing original draft: Aarti Gupta, Harro van Asselt, Max van Deursen, Romain Weikmans, Rahwa Kidane, Heather Jacobs, Sumit Prasad.
- Writing review & editing: Aarti Gupta, Harro van Asselt, Max van Deursen, Robbert Biesbroek, Romain Weikmans, Rahwa Kidane, Heather Jacobs, Sumit Prasad, Robert Bergsvik, Emilie Broek, Ellycia Harrould-Kolieb, Hyeyoon Park.

References

- 1. van Deursen M, Gupta A. Is Enhanced Transparency the "Backbone" of the Paris Agreement? A Critical Assessment. Transnational Environmental Law. 2025;14(1):41–68.
- 2. Alcobé F, Assié R, Blessing J, Diop M, Eguren L, Essus C, et al. Technical Paper Benefits of Climate Transparency. Berlin: Partnership on Transparency in the Paris Agreement and the United Nations Framework Convention on Climate Change; 2023 Oct. Sponsored by the Deutsche Gesellschaft für Internationale Zusammenarbeit, the German Federal Ministry for Economic Affairs and Climate Action and the International Climate Initiative. Available from: https://unfccc.int/sites/default/files/resource/Benefits-of-Climate-Transparency_2023.pdf
- 3. Allan JI, Bhandary RR. What's on the agenda? UN climate change negotiation agendas since 1995. Clim Policy. 2024;24(2):153-63.
- 4. Decision 19/CP.28, Administrative, financial and institutional matters, Table 1, UN Doc. FCCC/CP/2023/11/Add.2. 15 March 2024.
- 5. Bergsvik R, Gupta A, Weikmans R, Möller I. Is transparency furthering clarity in multilateral climate governance? The case of climate finance. Int Environ Agreem. 2024;24(4):565–88.
- Roberts JT, Weikmans R, Robinson S-A, Ciplet D, Khan M, Falzon D. Rebooting a failed promise of climate finance. Nat Clim Chang. 2021;11(3):180–2.



- 7. Decision 18/CMA.1, Modalities, procedures, and guidelines for the transparency framework for action and support referred to in Article 13 of the Paris Agreement, Annex, UN Doc. FCCC/PA/CMA/2018/3/Add.2. 19 March 2019, para 121.
- 8. van Deursen M, Gupta A. Transparency is what states make of it: whose climate priorities are reflected in the Paris Agreement's enhanced transparency framework? Clim Policy. 2024;24(9):1293–308. <u>https://doi.org/10.1080/14693062.2024.2341945</u>
- 9. Gupta A, Van Asselt H. Transparency in multilateral climate politics: Furthering (or distracting from) accountability? Regul Gov. 2019;13(1):18–34.
- 10. Weikmans R, Asselt HV, Roberts JT. Transparency requirements under the Paris Agreement and their (un)likely impact on strengthening the ambition of nationally determined contributions (NDCs). Clim Policy. 2020;20(4):511–26.
- 11. Weikmans R, Gupta A. Assessing state compliance with multilateral climate transparency requirements: 'Transparency Adherence Indices' and their research and policy implications. Clim Policy. 2021;21(5):635–51.
- 12. Ministry of Environment, Forest and Climate Change, Government of India. Third Biennial Update Report to the United Nations Framework Convention on Climate Change. New Delhi: Ministry of Environment, Forest and Climate Change, Government of India; 2021 Dec, at 322. Available from: https://unfccc.int/documents/268470
- **13.** Initiative for Climate Action Transparency. Developing Countries Use Climate Finance Transparency as a Catalyst for Climate Action. 2023 Dec [cited 2024 Jul 29]. In: ICAT Knowledge Hub [Internet]. Available from: https://climateactiontransparency.org/cop28-developing-countries-use-climate-finance-transparency-as-a-catalyst-for-climate-action
- 14. Gabbatiss J. Why climate-finance 'flows' are falling short of \$100bn pledge. 2021 Oct 25 [cited 2024 Jul 29]. In Carbon Brief International Policy Blog [Internet]. Available from: https://www.carbonbrief.org/analysis-why-climate-finance-flows-are-falling-short-of-100bn-pledge/.
- 15. Umemiya C, Louhisuo M. IGES Biennial Update Report (BUR) Database [dataset]. 2024 Feb 21 [cited 2025 Apr 3]. Institute for Global Environmental Strategies. Available from: https://pub.iges.or.jp/pub/iges-bur-database