

The State Practice of Science-Referencing in NDCs 3.0

**ELEVATE-ProClima
Report 2026**



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ELEVATE-ProClima

Enhance and Leverage the Architecture on Evidence for proteção climática

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I. Aims and Scope of the Project

The ELEVATE-ProClima project seeks to enhance the capacity of Conferences of Parties (COPs) under the United Nations Framework Convention on Climate Change (UNFCCC) to review the implementation of the Convention and the Paris Agreement in line with best available science. According to Article 7(2) UNFCCC, the

Conference of the Parties, as the supreme body of this Convention, shall keep under regular review the implementation of the Convention and any related legal instruments that the Conference of the Parties may adopt, and shall make, within its mandate, the decisions necessary to promote the effective implementation of the Convention.

To this end, it shall:

- (a) Periodically examine the obligations of the Parties and the institutional arrangements under the Convention, in the light of the objective of the Convention, the **experience gained in its implementation and the evolution of scientific and technological knowledge**;
- (b) Promote and facilitate the exchange of information on measures adopted by the Parties to address climate change and its effects, taking into account the differing circumstances, responsibilities and capabilities of the Parties and their respective commitments under the Convention [...]²

Due to the often slow or even stalling negotiations at COPs, there have been various calls for 'COP reform' from different stakeholders in the process. Over the years, COPs have been criticised for their failure to drive the international community's capability to utilise science and facilitate effective collaboration with meaningful outcomes. In 2025, one initiative to accelerate the pace of progress through international cooperation culminated in the launch of the so-called Santa Marta process which comprises a series of conferences, led by the governments of Colombia and the Netherlands, and including some but not all States in the formation of a coalition of the willing. Our experience during COP30 suggests that decision-making during the negotiations and science-informed policy-making of Parties could be enhanced, through a closer interaction between negotiators and NGO representatives, in particular from academia.

In 2025, with an official deadline of February that was later extended towards COP30,³ Parties to the Paris Agreement had to submit nationally determined contributions (NDCs) covering the period up until 2035, so called NDCs 3.0. These new NDCs were the first submissions that followed the conclusion of the first global stocktake (GST) at COP28 in Dubai, 2023.⁴ According to Article 4(9) and Article 14(3) of the Paris Agreement, these NDCs must be informed by the evidence of the GST outcome and the findings on progress in implementing the Paris Agreement.

¹ The extensive work undertaken as part of this analysis would not have been possible without the contributions of Durham University staff, we thank Kate Morris, Ashraf Osman, Irina Sakharova, Sol Meckievi, Tetiana Marienkova.

² Emphasis added by the authors.

³ See the timeline available

at [https://www.europarl.europa.eu/RegData/etudes/BRIE/2025/775905/EPRS_BRI\(2025\)775905_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/BRIE/2025/775905/EPRS_BRI(2025)775905_EN.pdf), at 3.

⁴ Decision 1/CMA.5, FCCC/PA/CMA/2023/16/Add.1.

II. Methodology

The objective of the analysis was to assess the gradual integration of IPCC evidence, science generally, and the concept of best available science specifically, into NDCs 3.0. We considered the *articulations of Parties* in their NDCs as a *form of state practice*. In so doing, we focussed on the linguistic references and did not attempt to assess the actual integration of science into policies or the progress made with respect to the implementation of policies. This state practice is nevertheless important to understand how Parties interpret their obligation to submit a science-informed NDC. By entering into the Paris Agreement, Parties accepted the obligation to prepare, submit and maintain an NDC. Earlier research has already shown that Parties submit NDCs with the intention to fulfil a legal obligation and that the submission constitutes a legally relevant act that is binding for the individual Party. NDCs can thus be categorised as prescribed, qualified, unilateral acts in international law.⁵

Therefore, referencing the IPCC or best available science in the NDC is relevant state practice. Together with a corresponding '*opinio juris sive necessitatis*', i.e., the view that the practice is legally required conduct (as opposed to politically useful), the practice contributes to the formation of customary international law concerning *how* the obligation to submit a science-informed NDC is fulfilled.

CMA 5 (Dubai, 2023) adopted decision 1/CMA.5 on the outcome of the first GST, 'which shall inform Parties in updating and enhancing, in a nationally determined manner, their actions and support in accordance with the relevant provisions of the Paris Agreement as well as in enhancing international cooperation for climate action.'⁶ The GST decision accentuates the requirement to integrate best available science into national ambition, decision 1/CMA.5:

Commits to accelerate action in this critical decade on the basis of the best available science, reflecting equity and the principle of common but differentiated responsibilities and respective capabilities in the light of different national circumstances and in the context of sustainable development and efforts to eradicate poverty. [6]

Reaffirms the nationally determined nature of nationally determined contributions and Article 4, paragraph 4, of the Paris Agreement and encourages Parties to come forward in their next nationally determined contributions with ambitious, economy-wide emission reduction targets, covering all greenhouse gases, sectors and categories and aligned with limiting global warming to 1.5 °C, as informed by the latest science, in the light of different national circumstances. [39]

Our analysis proceeds against the backdrop of the NDC 3.0 Synthesis Report 2025.⁷ In addition, we considered the definition of the concept of best available science as it emerges from the International Court of Justice's (ICJ) Advisory Opinion (AO) on Climate Change.⁸

⁵ P. Minnerop, 'Nationally Determined Contributions Post-Global Stocktake: The Making of Prescribed Qualified Unilateral Acts in International Law', 58(1) (2024) Vanderbilt Journal of Transnational Law 45-117, 76.

⁶ According to Article 14, para. 3 Paris Agreement.

⁷ FCCC/PA/CMA/2025/8, UN SYR, available at https://unfccc.int/sites/default/files/resource/cma2025_08.pdf [hereinafter UN SYR 2025].

⁸ International Court of Justice, Advisory Opinion on the Obligations of States in respect of Climate Change, 23 July 2025, ICJ Reports 2025, available at <https://www.icj-cij.org/case/187> [hereinafter ICJ AO Climate Change].

In its NDC 3.0 Synthesis Report 2025, the UNFCCC found that:

A total of 88 per cent of Parties indicated that the preparation of their NDCs 3.0 was informed by the outcomes of the first GST, with 80 per cent of Parties providing information on how this was the case, covering the elements of mitigation, adaptation, means of implementation, response measures, loss and damage and international cooperation (...). Reported approaches to considering the GST outcomes as part of NDC 3.0 preparation include enhancing mitigation and adaptation ambition, aligning the NDC 3.0 with the best available science, broadening the scope of action covered, including new sectoral targets and approaches, and taking into account cross-cutting issues, such as stakeholder engagement and just transition. Of the Parties that provided information, 27 per cent included detailed quantitative or qualitative information on how implementing their domestic climate targets or measures will contribute to the global efforts called for or goals set out in the outcomes of the first GST.⁹

The report shows that a total of 66 per cent of Parties developed their NDC 3.0 targets based on the information of the first GST, including the best available science, with 44 per cent of Parties emphasising their commitment to 'keeping the 1.5 °C temperature goal within reach, 23 per cent indicating that their NDC 3.0 targets are aligned with a 1.5 °C pathway and 14 per cent highlighting that they have come forward with economy-wide emission reduction targets covering all GHGs, sectors and categories in response to the outcomes of the first GST.'¹⁰

The report does not specifically assess how the formulation of more ambitious mitigation targets were informed by either the IPCC, science, or the concept of best available science.

The ICJ references the notion of best available science for mitigation and for adaptation obligations. It does so with respect to the assessment of Parties' best efforts against the standard of due diligence,¹¹ in the context of the determination of significant harm to the climate system,¹² and the requirement to conduct an Environmental Impact Assessment.¹³ The ICJ considered that it was necessary to rely 'primarily on the IPCC reports, which participants agree constitute the best available science on the causes, nature and consequences of climate change.'¹⁴ The Court observed that the 'adverse effects of climate change on the climate system have been acknowledged by the United Nations, including UNEP, and its specialized agencies, such as the WMO, WHO and the IMO.'¹⁵

According to the ICJ, the IPCC reports represent 'best available science' and they confirm that cumulative greenhouse gas (GHG) emissions are the primary source of risks arising from anthropogenic climate change.¹⁶ The Court found the risk of significant harm to the climate system indisputably established:

All States contribute to that risk, albeit to significantly differing degrees, and all States are affected by the cumulative effects of GHG emissions, depending on their respective situations. Climate change therefore poses a quintessentially universal risk to all States. This risk is of a general and urgent character, requiring the identification of a corresponding general standard of conduct, to be applied subject to the principle of common but differentiated responsibilities and respective capabilities.¹⁷

⁹ UN SYR 2025 (n 7), para. 91.

¹⁰ ICJ AO Climate Change, para. 92.

¹¹ Id. para. 254 (mitigation), para. 258 (adaptation).

¹² Id. para. 278.

¹³ Id. para. 298.

¹⁴ Id. para. 74.

¹⁵ Id.

¹⁶ Id. paras. 72-87.

¹⁷ Id. para. 137.

The Court added that this interpretation was consistent with Article 4, paragraph 1, of the Paris Agreement, which requires that mitigation measures be based on the 'best available science'.¹⁸

The ICJ further considered that a stringent standard of due diligence was applicable to the obligation to pursue domestic mitigation measures:

'on account of the fact that the best available science indicates that the "[r]isks and projected adverse impacts and related losses and damages from climate change escalate with every increment of global warming (very high confidence)" (IPCC, 2023 Summary for Policymakers, p. 14, Statement B.2) [...].'¹⁹

This standard of due diligence is not static, as it may become more demanding in the light of new scientific or technological knowledge.²⁰

This is the first time that the ICJ has emphasised that the IPCC assessment reports constitute best available science. This finding is supported by the Advisory Opinion on Climate Change of the International Tribunal for the Law of the Sea (ITLOS).²¹

On that basis, the IPCC reports can currently be conceptualised as best available science, and, importantly, *not only for a specific treaty regime but for a global challenge*, applicable across treaty regimes.

For our analysis, we examined the NDCs 3.0 using the following three questions:

- 1. How has the Party articulated references to the IPCC?**
- 2. Has the Party referenced science?**
- 3. Has the Party referenced the concept of best available science?**

For the first question, we undertook a qualitative assessment of all 119 NDCs 3.0 received by the UNFCCC Secretariat in the official NDC 3.0 register, by end of April 2026. Results for question one are provided in Table 1 and results for questions two and three are merged and provided in Table 2. Table 3 provides a statistical analysis of the correlation between findings from Table 1 and Table 2.

For the engagement with IPCC evidence, we made four qualitative differentiations of **substantial engagement, partial engagement, minimal engagement** and **no mention**.

Substantial engagement is defined as referencing the IPCC in formulating an ambitious mitigation target that responds to the GST outcome decision and sets an *ambitious, economy-wide emission reduction targets, covering all greenhouse gases, sectors and categories and aligned with limiting global warming to 1.5 °C, as informed by the best available science*. For example, the enhanced ambition would need to be demonstrated by referencing the IPCC reports to explain how the Party has aligned its national target with a global 1.5°C trajectory. In light of the ICJ's AO Climate Change, we specifically assessed references against the use of best available science (also referred to in the following as BAS).

Partial engagement is defined as referencing the IPCC guidelines for the accounting for GHG emissions, the application of global warming potentials and for the GHG inventory but not mentioning the IPCC in the context of setting an ambitious target or carbon budget.

Minimal engagement is defined as referencing the IPCC without explaining how the IPCC influenced the submission, for example, where references are provided only in footnotes.

No mention includes NDCs 3.0 where the IPCC is not referenced.

¹⁸ ICJ AO Climate Change, para. 224.

¹⁹ Id. para. 254.

²⁰ Id. para. 284.

²¹ ITLOS AO Climate Change, 21st May 2024, para. 212.

We categorise the number of Parties by percentage and use the categories as employed by the UNFCCC Secretariat in the first NDC Synthesis Report, 2022.

There, the following was defined:

The following terms are used in this report according to the percentage of Parties whose NDCs mention particular information: 'a few' for less than 10 per cent; 'some' for 10–40 per cent; 'many' for 41–70 per cent; 'most' for 71–90 per cent; and 'almost all' for more than 90 per cent.²²

For the second question, we examined the references to science generally, including notions such as best available or latest science, best available scientific knowledge, or latest information.

However, the Paris Agreement speaks of best available science and implies a qualitative difference and a specific conceptualisation of the scientific information that should inform the implementation of the Agreement. The legal requirement to use *best available science* is strengthened in decision 1/CMA.5. The ICJ AO Climate Change not only confirms that best available science can be conceptualised, but it also offers its own interpretation of the concept. Consequently, for the third question, we narrowed the search to establish which NDCs 3.0 explicitly reference best available science.

The following methodological limitations are acknowledged.

Our focus rested on the articulation of state practice in the NDCs 3.0. Most importantly, we could not, based on NDC 3.0 references to the IPCC or the notion best available science, validate the scientific information that was provided. Rather, we use the references as a form of state practice in response to the requirement to implement the Paris Agreement in light of best available evidence, and more specifically, the interpretation of the specific provision of Article 4(9) that NDCs 3.0 must be informed by the outcomes of the global stocktake, as a mandatory requirement for Parties.

Some NDCs 3.0 in the 'partial' category describe how their target is ambitious, and there is variation in each of the categories, and especially for 'partial'. In order to be categorised as 'substantial', it would be necessary for the NDC 3.0 to reference the IPCC evidence as a factor that influenced the ambition of the mitigation target.

Finally, our team has been working with data that spans multiple languages. We acknowledge the risk of translational errors due to linguistic nuances and human errors. We abstained from using generative AI for the analysis and for the writing of this report.

²² NDC Synthesis Report 2022, FCCC/PA/CMA/2022/4. Many Parties (55 per cent) identified 1 January 2021 as their starting date for NDC implementation; some others (31 per cent) indicated that they started implementing their NDC in or before 2020; and a few Parties (3 per cent) mentioned starting implementation in 2022, id.

III. Key Findings

Science

The following three tables present the findings of our systematic analysis of 119 NDC 3.0 submissions. They address three analytical questions set out in the methodology: first, a qualitative assessment of the extent to which Parties engage with the IPCC, second, whether Parties explicitly refer to science, and third, specific references to best available science. Engagement with the IPCC and BAS are legally connected for the implementation of the Paris Agreement, with the IPCC reports representing comprehensive and authoritative restatements of the best available science about climate change at the time of their publication.²³

1. How has the Party articulated references to the IPCC?

Table 1 shows how the 119 Parties engage with the IPCC. Engagement is divided into four categories: substantial, partial, minimal, and no mention, ranked from the highest engagement to the lowest. The final column assigns a simple numerical score (0 to 3) to allow comparison across groups. A higher score means stronger engagement.

TABLE 1. IPCC Engagement Level Distribution

IPCC Engagement Level	n	% of Total	Cumul. %	Engagement Score (0–3)
Substantial	29	24.4%	24.4%	3.00
Partial	71	59.7%	84.1%	2.00
Minimal	13	10.9%	95.0%	1.00
No mention	6	5.0%	100.0%	0.00
TOTAL NDCs 3.0	119	100.0%	100.0%	2.03

Note: Engagement Score reflects ordinal coding: Substantial = 3, Partial = 2, Minimal = 1, No mention = 0. Mean score (2.03) is weighted by n.

The findings demonstrate a significant variation in the level of IPCC engagement across the data set. The most common level is partial (71 Parties, 59.7 per cent), meaning that many Parties acknowledge IPCC to some degree but fall short of full engagement with respect to formulating an ambitious target. Some Parties (29, 24.4 per cent) reach substantial engagement. Some Parties (13 Parties, 10.9 per cent) engage minimally, and a few make no mention of the IPCC (6 Parties, 5 per cent).

²³ ICJ AO Climate Change, para. 284.

2. Has the Party referenced science generally / the concept of best available science specifically?

Table 2 shows the distribution of science and BAS citations across IPCC engagement levels for all 119 NDCs 3.0. 'Science Generally' counts all parties referencing science at least once; 'BAS Yes' is strictly limited to explicit citations of best available science.

TABLE 2. Science and Best Available Science (BAS) Engagement by IPCC Level

IPCC	Substantial	Partial	Minimal	No mention
NDCs 3.0	29	71	13	6
Science Generally	21	53	5	4
BAS Yes	14	16	0	1

Note: 'Science Generally' includes all parties referencing science in their NDC 3.0. 'BAS Yes' describes where parties specifically cite best available science. Column totals reflect the number of parties at each IPCC engagement level (n = 119).

Out of the 119 NDCs 3.0, 83 reference science at least once, while 36 NDC 3.0 provide no reference to science. BAS is referenced in 31 NDCs 3.0. Most NDCs 3.0 (88 Parties, 73.9 per cent) make no reference to BAS at all. Of the 88 NDCs 3.0 with no explicit mention of BAS, some refer to 'best available techniques' or 'international modelling practices'. In line with our methodology, we excluded these as they are not sufficiently specific.

There is a strong correlation between references to science and some form of engagement with the IPCC, 74 NDCs 3.0 out of 100 with at least partial IPCC engagement reference science (74 percent). Further, a specific reference of BAS in the submission significantly increases the likelihood that the submission either partially or substantially engages with the IPCC. 14 BAS-adopting Parties reach the threshold of substantial engagement of IPCC, and 16 show a partial engagement with the IPCC, only one Party references BAS but does not reference the IPCC.²⁴

Therefore, there is a statistically relevant link between references of BAS and the substantial engagement with IPCC science.

²⁴ We excluded references to the IPCC that were only provided in a list of bibliographical data.

Taken together the findings in both Table 1 and Table 2, Parties that frame their NDCs 3.0 around the BAS standard have higher level of IPCC engagement, with the strongest co-occurrence in the substantial category.

We addressed the question whether this observed pattern reflects a genuine and systemic characteristic of NDC 3.0 state practice, or whether it could be due to randomised sampling. Table 3 presents the full co-occurrence of BAS citations and IPCC engagement level and addresses this question directly.

Table 3 captures the correlation between IPCC engagement levels and BAS citation for all 119 NDCs 3.0 percentages in relation to each IPCC engagement category.

TABLE 3. IPCC Engagement Level × BAS Citation — Contingency Table

IPCC Level	BAS Yes	Yes %	BAS No	No %	Total
Substantial	14	48.3%	15	51.7%	29
Partial	16	22.5%	55	77.5%	71
Minimal	0	0.0%	13	100.0%	13
No mention	1	16.7%	5	83.3%	6
TOTAL	31	26.1%	88	73.9%	119

Note: A chi-square test indicated a significant association between IPCC engagement level and BAS citation ($\chi^2(3) = 12.75$, $p = .005$). As three cells had expected counts below 5, we additionally ran a Monte Carlo chi-square ($p = .005$) and a Freeman–Halton exact test ($p = .004$), both confirming the robustness of the result.

The analysis confirms that the association between BAS adoption and IPCC engagement is statistically significant: there is less than 1% probability that the observed pattern arose by chance alone ($\chi^2(3) = 12.75$, $p = 0.005^{**} < 0.01$). The finding is driven principally by the substantial engagement category, where BAS-adopting Parties appear considerably more often than what would be expected if the two variables were unrelated.

3. Discussion

In identifying those NDCs 3.0 with substantial engagement, we looked for a clear articulation of how the IPCC is explicitly used to substantiate the ambition of targets. The EU provided an example of an NDC 3.0 with **substantial** IPCC engagement,

The EU's emission reductions are compatible with science and the Intergovernmental Panel on Climate Change (IPCC) Sixth Assessment Report pathways and the call for deep, rapid and sustained reductions in global GHG emissions of 43% by 2030 from 2019 levels.²⁵

The NDC 3.0 then further details the sectors covered that are in accordance with IPCC guidelines.²⁶ The EU's submission references the IPCC 19 times in total, in the context of methodologies and metrics, emissions and sectors and references the IPCC when detailing how the NDC 3.0 is fair and ambitious.

Brazil's NDC 3.0 provides an example where IPCC references are provided in the context of an ambitious target, and we therefore included it in the category of **substantial** engagement. However, this is also a less clear-cut case, given that the NDC 3.0 does not articulate the scientific evidence as clearly as the above example of the EU's NDCs 3.0. It states that:

Brazil's ambitious commitment for 2035 underscores its resolve to contribute to the global mobilization against climate change, in the spirit of a dynamic approach to historical responsibility. Consistent with the principles of fairness and climate justice, Brazil has come forward in its NDC 3.0 with ambitious, economy-wide, absolute emission reduction targets, covering all greenhouse gases, sectors and categories and aligned with limiting global warming to 1.5° C, as informed by the latest science, in the light of different national circumstances.²⁷

The majority of NDCs 3.0 demonstrated **partial** engagement with the IPCC. An NDC 3.0 that fell within this category may have referenced the IPCC mainly in the context of GHG inventories but would not articulate how the IPCC informed the ambition of the mitigation target.

This does not categorically mean that IPCC assessments have not been used in the formulation of targets, rather that the extent to which the IPCC evidence informs the definition of an ambitious target has not been articulated in the NDC 3.0.

Other NDCs 3.0 categorised as having partial engagement refer to national ministries and government bodies when determining mitigation targets.

NDCs 3.0 that reference 'IPCC sectors' in an apparent acknowledgement of their significance but provide no further information are categorised as **minimal** engagement.

Across the NDCs 3.0 we assessed, most Parties that invoke BAS provide no definition. Only Canada specifies the types of scientific sources that constitute BAS:

In assessing the best available science to inform the target, the Government of Canada considered peer-reviewed research, major international and domestic assessment and synthesis documents, and scientific observations and data, including Canada's GHG inventory.²⁸

²⁵ European Union (2025). *Nationally Determined Contribution of the European Union and its Member States (NDC 3.0)*.

Submission to the UNFCCC NDC 3.0 Registry, 20 February 2025, p. 4. See [DK-2025-11-05 EU NDC 3.0.pdf](#).

²⁶ Ibid, p. 34-44.

²⁷ Federative Republic of Brazil (2024). *Second Nationally Determined Contribution (NDC 3.0) to the Paris Agreement*. Brasília: Government of Brazil. Submitted to the UNFCCC, November 2024, p. 39. [Brazil_Second Nationally Determined Contribution \(NDC 3.0\) November2024.pdf](#).

²⁸ Canada NDC 3.0 Annex 2, available at [Canada's 2035 Nationally Determined Contribution ENc.pdf](#).

The relationship between BAS and the IPCC is not consistent across parties: some treat them as synonymous, while others, including the EU, treat IPCC outputs as one element within a broader BAS standard. The EU's NDC 3.0 is specific in using the emissions reductions as required by the IPCC, mentioning the 43% by 2030 from 2019 level target. It should be noted that BAS is referred to once in the context of the EU's climate target setting:

'In order to propose the EU 2040 climate target, the European Commission considered the best available and most recent scientific evidence, including the latest reports of the IPCC and the ESABCC; [...]'²⁹

This indicates that the EU does not view the IPCC reports as fully equivalent with BAS. In particular, it differentiates between 'best available' and 'most recent' scientific evidence, for which the IPCC reports are one source.

As has been mentioned earlier, many of the NDC 3.0 submissions will have been prepared before the ICJ's AO Climate Change in which the Court clarified that IPCC assessment reports constitute comprehensive and authoritative restatements of the best available science, at the time of the publication of the reports. The present analysis reflects state practice that precedes this clarification.

Our analysis shows that overall, only a limited number of NDCs 3.0 reference BAS as a concept. Equally small is the number of NDCs 3.0 that we categorise as having substantially engaged with the IPCC. This substantial engagement requires that the submission references the IPCC in the context of setting an ambitious and economy-wide target, i.e. submissions that provide a benchmark by referencing the IPCC to underpin mitigation ambition. By contrast, most NDCs 3.0 that reference the IPCC only partially, will use the IPCC accounting guidelines for GHG inventories, the global warming potential, and reference indicators, but not as a point of reference to substantiate the ambition of their mitigation target.

Many of the NDCs 3.0 in the substantial engagement category also reference BAS and we established that this co-occurrence is statistically relevant. Our finding suggests that BAS is an emerging standard that provides a strong indication of at least partial engagement with the IPCC, and a statistically significant increase in the likelihood to find that the submission engages substantially. We derive from this state practice that using BAS as required in the Paris Agreement coheres in these NDCs 3.0 with a reference to the IPCC at the point of target-setting. However, only a small number of NDCs 3.0 (11.8 per cent) frame their forward-looking targets up to 2035 with references to both the IPCC and BAS.

Therefore, the awareness of best available science as a concept, one that NDCs 3.0 are legally required to reflect, remains scarce across our data set. According to the ICJ's AO Climate Change, the standard of BAS is currently defined by the IPCC reports.

Based on these findings, our recommendation is that awareness of the requirement of referencing BAS in the implementation of the Paris Agreement should be significantly enhanced, including through the next global stocktake. These linguistic references to BAS provide important points of intervention for further analytical assessments, where additional qualitative research can be undertaken to evaluate the full extent to which BAS has informed the NDC 3.0. Furthermore, the important linkage between BAS and substantial engagement with the IPCC must be emphasised and be made more prominent in NDC 3.0 drafting, to ensure that NDCs 3.0 set *ambitious, economy-wide emission reduction targets, covering all greenhouse gases, sectors and categories and aligned with limiting global warming to 1.5 °C, as informed by the best available science.*

²⁹ European Union NDC 3.0 (n 25), at p. 43.

IV. ELEVATE-ProClima at COP30

According to official data, over 56,000 delegates attended COP30 in person, making it one of the largest climate summits in the history of the UNFCCC. Only COP28 in Dubai was larger with over 80,000 attendees. Out of 198 Parties to the UNFCCC, 194 registered their delegations for COP30. Over 11,300 observers registered, the largest delegation came from the International Chamber of Commerce.

We prepared for the direct interaction with delegations at COP30 with a survey. The ability to carry out work in Belem was influenced by the size of our team, which, with three members, was comparably small. Our experience was that those delegations from developing and least developed countries were significantly more likely to share their views and be open for a conversation. While work with other NGO representatives was extremely successful, interactions with delegations remains challenging.

This illustrates for us that NGO engagement at COPs depends on using established routes into the system whereas forging new avenues is comparably more difficult. To forge an academia-negotiator dialogue, direct support through Party delegates

is required. This could take various forms, such as participation of negotiators in our UNFCCC side events, or including academic representatives in pavilion events. The ability to interact with pavilion staff is limited due to Parties convening their own events.

We were successful in convening one major UNFCCC side event on

Implementing evidence-based NDCs 3.0 through integrated, gender-responsive Just Transitions.

The panel discussed how the first global stocktake is shaping NDCs 3.0 in light of the best available science, with a focus on evidence-based implementation, gender-responsive approaches, and just transitions.

'Our project proved extremely relevant at COP30 where the newly submitted NDCs 3.0 and gender responsiveness featured as key themes.'

Petra Minnerop

Image below of Durham University's official side event. Presenters, from left to right, included: Petra Minnerop, Irene Chekwoti, Mari Sundli Tveit, Marlene Achoki (Co-Host), Elisa Morgera and Ram Das.



Durham University's Ocean Pavilion Event at COP30

Durham University hosted an event in the Ocean Pavilion on **New Research Frontiers in Law and Science: From the Deep Sea to Rising Sea Levels.**

Panellists included: Pam Pearson, Director of the International Cryosphere Climate Initiative; Dr Filipa Bessa, a marine biologist from the University of Coimbra; Prof Elisa Morgera, UN Special Rapporteur on Human Rights and Climate Change; and Ana Paula De Souza, Human Rights Officer at the OHCHR. Concluding remarks were provided by U.S. Senator Sheldon Whitehouse (Rhode Island).

The discussion was chaired by Prof Petra Minnerop and structured around three guiding questions:

1. How can stringent due diligence standards for NDCs 3.0 be determined and operationalised from a science/law perspective?
2. How should we define 'appropriate action' from a science perspective, to protect the climate system from GHG emissions?
3. How can new thresholds be identified for GHG emissions - and when are they unlawful?

Key takeaways from event:

- There is enough science available, including from the IPCC, to define economy-wide NDC 3.0 targets that are aligned with the long-term temperature goal of the Paris Agreement of 1.5°C - the new consensus target.
- Countries that articulate capacity limits to include science in NDCs 3.0 should receive the support they need in monitoring and reviewing their targets and progress. Providing this support flows from the obligation of international cooperation under international law.

'Congratulations on this excellent event! It was a privilege to be on such a panel.'

Pam Pearson
Director, International Cryosphere Climate Initiative Reports (ICCI)





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