ACCLIMATE

Accelerating Climate Action: Navigating towards a Low-Emissions, Climate-Resilient Future

Reflection of the GST in NDCs and National Policies

part of D5.2 Report & article manuscript on GST follow-up

WP5–Enhancing international cooperation

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EC Summary Requirements

1. Changes with respect to the DoA

The deliverable was submitted with some slight delay on 9 September instead of 31 August 2026. The reason was that the coding of NDCs was more complex than anticipated and required an additional round of quality assurance and correction.

2. Dissemination and uptake

The results in this deliverable could in particular be used by UNFCCC negotiators from the EU and non-EU countries to inform their negotiations on the design and implementation of the second Global Stocktake. The results could also be useful to the scientific community to advance its work on the effectiveness of the Global Stocktake and of UNFCCC process in general. The deliverable will be disseminated via the project's website and social media channels. The team will explore options for presenting its findings to the EU's UNFCCC delegation. In addition, the deliverable will be presented at the 2026 Earth System Governance conference in Bath and will be further developed into an article manuscript for a peer-reviewed journal.

3. Short summary of results

This report examines how the first Global Stocktake (GST1) can facilitate the implementation of global climate commitments, paying particular attention to the transition away from fossil fuels (TAFF). An analysis of 113 nationally determined contributions (NDCs), complemented by case studies of Brazil, the EU, and Nigeria, reveals that, while GST1 is widely recognised, it is unevenly operationalised. Its outcomes are often reflected in NDCs without explicit attribution or concrete targets and measures. Meanwhile, domestic economic structures, development priorities, political institutions and access to finance strongly influence implementation.

4. Evidence of accomplishment

This report.

Preface

The overall objective of ACCLIMATE is to achieve enhanced integrated national and international strategies for climate-resilient, low-emission development. ACCLIMATE will contribute to improving the transparency, consistency, and clarity of GHG emission reduction commitments and create appropriate tools by developing an assessment framework for mitigation commitments. Working in a bottom-up manner with national experts within an international consortium comprising high-emitting countries from the Americas, Asia and Europe, as well as low-emitting countries from West Africa, ACCLIMATE will identify needs for improvements of NDCs and long-term strategies. A focus will be set on adequacy, fairness and feasibility, as well as on needs for improving current policies and measures to actually achieve NDCs and long-term objectives.

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Executive Summary

The first Global Stocktake (GST1) marked a significant step in international climate governance by identifying concrete transformations required to achieve the goals of the Paris Agreement, including tripling renewable energy capacity, doubling the rate of energy efficiency improvements, and transitioning away from fossil fuels in energy systems in a just, orderly and equitable manner. The critical challenge is now to translate these global signals into national commitments, domestic policies and implementation.

This paper examines this challenge from two complementary perspectives. First, it assesses how the mitigation outcomes of GST1 have been reflected in the latest generation of nationally determined contributions (NDCs) and domestic climate policies. The analysis covers 113 NDCs submitted by 31 May 2026 and complements this assessment with in-depth case studies of Brazil, the European Union (EU) and Nigeria. Second, focusing specifically on the transition away from fossil fuels (TAFF), the paper examines opportunities for international cooperation and identifies options for the EU and its Member States following the First Intergovernmental Conference on Transitioning away from Fossil Fuels in Santa Marta, Colombia, in April 2026.

The analysis finds that GST1 has become a widely recognised reference point within the Paris Agreement's ambition cycle, but that recognition has only partially translated into implementation. Almost all analysed NDCs refer to the Global Stocktake, while the substantive themes covered by GST1 appear even more widely. However, uptake of individual GST outcomes varies considerably, and explicit references are frequently not accompanied by quantified targets, concrete policies or implementation measures. Renewable energy and energy efficiency, economy-wide targets, and the transition away from fossil fuels are among the most frequently addressed outcomes, whereas calls to strengthen 2030 targets and provisions concerning long-term strategies receive considerably less attention. Overall, GST1 has therefore functioned more as a common frame of reference than as a detailed blueprint for national implementation.

The case studies demonstrate that the influence of GST1 is strongly mediated by national circumstances. Brazil, the EU and Nigeria all display substantial alignment with GST1, but domestic economic structures, development priorities, institutional frameworks, access to international finance and political dynamics determine how its outcomes are interpreted and implemented. Brazil integrates climate action into its broader development strategy while linking higher ambition to international support. Nigeria explicitly maps its NDC to GST outcomes but maintains natural gas as a transition fuel given its strong economic dependence on hydrocarbons. In the EU, GST1 largely reinforces an already advanced domestic climate architecture, providing institutional anchoring, political leverage and international legitimacy rather than fundamentally redirecting climate policy. These cases underline that international signals alone are insufficient: implementation depends on whether they can be translated into nationally relevant pathways that address economic, political and social constraints.

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Part 1: Reflection of the GST in NDCs and National Policies

Introduction

The Parties to the Paris Agreement have completed the first cycle of submitting nationally determined contributions (NDCs), consideration of their collective progress under the Agreement's Global Stocktake (GST), and subsequent submission of new NDCs. In the theory of change that underlies the Paris Agreement, the five-yearly cycle of GSTs and subsequent new NDCs is intended to be the central transmission belt between global objectives and domestic implementation: According to its Art. 2.2, each Party shall maintain successive NDCs and "Parties shall pursue domestic mitigation measures, with the aim of achieving the objectives of such contributions." Furthermore, according to Art. 2.9, "9. Each Party shall communicate a nationally determined contribution every five years (...) and be informed by the outcomes of the global stocktake referred to in Article 14." Art. 14.3 similarly stipulates that the outcome of the GST "shall inform Parties in updating and enhancing (...) their actions and support", and also in enhancing international cooperation.

The outcome of the first GST arguably marked a milestone in the institutional development of global climate governance. For three decades, the UNFCCC process had been focused on establishing adequate GHG emission disclosure and reduction obligations. Starting with COP26 in Glasgow, the UNFCCC process has moved towards more directly addressing the sectors and systems that are generating GHG emissions (Obergassel et al., 2025). This process culminated in the decision concluding the first GST, which calls on Parties to transition away from fossil fuels by 2050, and, by 2030, to halt and reverse deforestation and forest degradation, triple globally installed renewable energy capacity and double global energy efficiency improvements. The GST decision also includes a number of unquantified objectives such as phasing down the use of coal power, reducing road transport emissions, phasing out inefficient fossil fuel subsidies, and others (UNFCCC, 2023).

This paper seeks to answer two questions. First, to what extent have these mandates from the GST decision actually informed the new round of NDCs and associated domestic mitigation measures as envisaged by paragraphs 2 and 14 of the Agreement? And second, which conclusions can be drawn for the design and implementation of the second Global Stocktake?

To answer these questions, the paper undertakes an analysis at two levels. First, the paper conducts a large-n review of the new round of NDCs to determine the extent to which the GST outcome is picked up. Second, the paper undertakes a small-n in-depth analysis of the framework conditions and political processes which led to the inclusion (and its specific nature) or non-inclusion of the GST outcome in the new NDCs and domestic policies in three low, middle, and high-income Parties: Brazil, the EU, and Nigeria.

On this basis, the paper concludes with a set of recommendations for how the design and implementation of future iterations of the GST may be adapted to enhance its impact.

Methodology

Large-n analysis of NDCs

The analysis examines how the mitigation outcomes outlined in Decision 1/CMA.5, specifically paragraphs 28 (a-h), 33, 35, 36, 37, 39, 40, and 42 (see Table 1), have informed the NDCs 3.0. In the first step, this study analyses to what extent and how the different paragraphs are addressed in the new NDCs. The methodological framework employed in this analysis builds upon the approach proposed by Beuermann et al. (2026). We adopted the same overall analytical procedure, but we expanded the scope of the analysis significantly by incorporating a larger dataset of NDCs (113 NDCs compared to 75 NDCs), by analysing an additional paragraph (paragraph 35) of the GST outcome,

by analysing response patterns in NDCs, and by analysing correlations between operative language and NDC uptake. Furthermore, while the analysis by Beuermann et al. (2026) was to a large extent based on a combination of the use of the large language model Gemini Notebook and a human review procedure of the results, for this study, each NDC was coded manually by a researcher, and no LLM tools were employed for the coding.

Table 1. Analysed GST Paragraphs

Paragraph of the GST decision	**Paragraph topic**
28a	Tripling renewable energy capacity and doubling energy efficiency improvement by 2030
28b	Coal-power phase down
28c	Zero- and low carbon fuel
28d	Transition away from fossil fuels in energy systems by 2050
28e	Zero- and low emission technologies, CCS, hard-to-abate, hydrogen
28f	Non carbon dioxide emissions, methane
28g	Road transport, infrastructure, vehicles
28h	Phase-out fossil fuel subsidies
33	Nature and ecosystems, biodiversity, end deforestation and forest degradation by 2030
35	Oceans and coastal ecosystems
36	Lifestyle, consumption & production, circular economy
37	Revisit and strengthen 2030 targets
39	Economy-wide targets aligned with 1,5°C
40	Long-term low-emission development strategies (LT-LEDS)
42	Communicate and revise LT-LEDS

In the second step, the analysis discusses to what extent Parties could have been expected to address these different elements in their NDCs based on legal language used in the different paragraphs. This discussion builds on a recent publication by Pérez Català et al. (2026) which analyses the mitigation outcomes of the first Global Stocktake (GST1) and concludes that the language of the respective mitigation outcome paragraphs differs considerably in terms of its political and normative strength. The authors tested whether the actual take-up in NDCs correlates with the legal language for a limited sample of seven NDCs and finds no correlation. The present study goes beyond Pérez Català et al. (2026) by testing the correlation for all NDCs 3.0 submitted until 31 May 2026.

Our data selection was based on the UNFCCC NDC 3.0 list (UNFCCC, n.d.). Due to the submission deadline of this Deliverable, we had to limit our analysis to the 113 NDCs that were submitted until 31 May 2026. The analysis was conducted based on the English versions of the NDCs or, where no official English version was available, on machine-translated versions of the documents. All non-English NDCs were translated using DeepL Professional. Due to the poor machine readability of the available document version, the NDC of Burundi was analysed in its original language (French) by a French-speaking researcher.

Coding procedure

The analysis was guided by a structured coding framework. For each NDC, a systematic document search was conducted using the search function of the PDF reader in combination with a predefined list of keywords developed for each GST paragraph. The keyword list was iteratively refined during the coding process (see Annex). The keyword search served to identify potentially relevant passages, which were subsequently reviewed manually to determine whether they met the coding criteria. The final coding decisions were therefore based on manual assessment of the researchers rather than automated text searches.

Coding categories

The coding framework consists of a set of general questions and paragraph-specific questions. First, each NDC was assessed for any reference to the GST. A positive assessment was assigned when the document explicitly referred to the "Global Stocktake", the abbreviation "GST", or an equivalent expression in the respective language. The translation of the NDC of Belarus, for instance, uses the term “the global review”(Республики Беларусь, 2025, p. 7) or “periodic global inventory” (Республики Беларусь, 2025, p. 10).

Secondly, the analysis examined whether the Parties utilised the Information Necessary for Clarity, Transparency and Understanding (ICTU) template established under Decision 4/CMA.1 (UNFCCC, 2018). This is because the ICTU format is mandatory for second and subsequent NDCs (UNFCCC, 2018). Its use was recorded as positive even when only partially applied (e.g. where subsection 4(c) was omitted).

Third, the analysis assessed whether the Global Stocktake is explicitly referenced in subsection 4(c) of the ICTU template, which requests Parties to explain how the outcomes of the Global Stocktake informed the preparation of the NDC.

After those more general questions, each NDC was assessed for any reference to specific paragraphs of the GST mitigation outcome. For each of the selected GST mitigation outcomes (paragraphs 28(a–h), 33, 35, 36, 37, 39, 40, and 42 of Decision 1/CMA.5), three separate coding questions were applied:

1. Whether the respective paragraph or its content is explicitly referred to in ICTU subsection 4(c);
2. Whether the respective paragraph or its content is explicitly referred to elsewhere in the NDC outside subsection 4(c); and
3. Whether the substantive topic of the respective GST paragraph is reflected in the NDC without any explicit reference to the Global Stocktake.

A coding decision was considered positive for the first two questions when either the paragraph number is explicitly cited or when wording closely corresponding to the respective GST paragraph is used in the context or referring to the GST. The third question captured cases in which the substantive issue addressed by the GST paragraph is reflected in the NDC without linking it explicitly to the Global Stocktake.

Assessment of the substantive integration of GST outcomes

Beyond assessing whether NDCs explicitly referred to the GST and its individual outcomes, the analysis examined the extent to which such references were accompanied by concrete elements of climate action. This additional assessment of the Party's NDC was conducted for all paragraphs mentioned in the context of the GST, either in ICTU subsection 4(c) or elsewhere in the document.

As analysed by Pérez Català et al. (2026), literature had proposed a broad range of very detailed indicators and policy measures which Parties could use to address the GST outcomes in their NDCs. However, Pérez Català et al. (2026) as well as our analysis of all active NDCs found that these policy measures and, especially, the indicators proposed in the literature have mostly not been used in NDCs. We therefore adopted a more simplified approach. Instead of mapping the actual NDCs against the policy measures and indicators suggested by literature, we only analysed whether the references to the GST outcomes include concrete policies and measures and/or quantified national targets or only general statements.

First, we assessed whether Parties translated references to the GST into concrete policies and measures. A positive assessment was assigned when the NDC identifies specific actions, policy instruments, or named policy frameworks supporting the implementation of the relevant mitigation objectives. This included, for example, references to specific laws, regulations, strategies, programmes, or other clearly identifiable policy measures. Second, we examined whether NDCs containing explicit GST references included measurable targets. A positive assessment was assigned when the NDC includes quantifiable target elements, such as percentage values or specific target years indicating when an objective should be achieved. This included, for example, reduction targets, sectoral targets, or other quantified objectives that allow progress towards implementation to be assessed. Third, we assessed whether GST references are limited to general statements without specifying concrete implementation pathways. Such cases were identified where NDCs acknowledge the importance of the GST or express general commitments but do not provide corresponding policies, measures, or measurable targets. This assessment allowed for a distinction between NDCs that merely acknowledge the GST and those that translate its outcomes into more specific climate actions.

Quality assurance

In order to guarantee the traceability and replicability of the analytical results, all coded passages were documented in a structured database together with the corresponding coding decisions. This documentation enables each assessment to be traced back to the relevant section of the respective NDC. As a quality assurance measure, an independent researcher reviewed a random sample of the analysed NDCs using the same coding framework. The results were compared with the original coding decisions, and any discrepancies were discussed and resolved jointly to ensure the consistent application of the coding criteria.

Small-n in-depth case studies

The selection of Brazil, the EU and Nigeria does not aim to achieve statistical representatives but to maximise variation within the constant of the institutional framework of the Paris Agreement. The EU represents a high-capacity, deeply institutionalised system. Brazil represents a relatively diversified emerging economy country. Nigeria represents a finance-constrained and externally dependent context that is completely dependent on the exploitation of fossil fuels. This approach allows for analytical generalisation building on identification of causal

mechanisms rather than statistical representativeness (Beach & Pedersen, 2019), which allows identification of whether a common causal process operates across diverse settings.

The in-depth case studies build on the large-n analysis on the extent to which the GST outcome is reflected in the new NDCs of the selected countries. Second, the team compared the new NDCs with the previous round of NDCs from the three Parties to identify to what extent the GST topics had already been addressed in the previous round and what had changed. Third, the team conducted an online search of publicly available documents from the domestic NDC development processes in the three selected Parties to identify to which extent the GST and its outcome had actually been a topic in the domestic discussions. The team in particular looked for official NDC stakeholder consultation documentations, public interventions from civil society and other organisations, and news reporting.

In addition to the analysis of the NDCs and related documents, the team also tried to identify to what extent the GST had also played a role in recent domestic policy initiatives. To this end, the team reviewed key recent domestic climate policy initiatives that had been launched since the conclusion of the GST in December 2023.

Finally, the results from the document analyses were validated and expanded by conducting semi-structured interviews per Party with national officials, civil society representatives and other national experts. Interview partners were identified by snowball sampling. An initial list of potential participants was created by the authors based on their pre-existing contacts. During the interviews, interview partners were inter alia asked whether they would recommend further experts to be involved. The authors aimed to gain different perspectives, including participants from academia, governments, businesses, civil society and international organisations. In total, 16 individuals were contacted by email and 9 of them ultimately agreed to be interviewed, two from Nigeria, four from the EU, and three from Brazil.

The interviews were semi-structured, following a set of pre-defined questions but with the flexibility to pursue emerging lines of enquiry. The interview questions were informed by the results of the desk research undertaken as outlined above. Interview responses were analysed qualitatively and structured according to the main topics of this article: 1) reasons for how the GST is/is not picked up in the NDCs, 2) reflection of the GST in domestic policies, 3) suggestions for the design and implementation of the second GST.

How is the GST outcome reflected in new NDCs?

This section provides an overview of the extent to which the mitigation-related outcomes of GST1 are reflected in the latest round of NDC submissions.

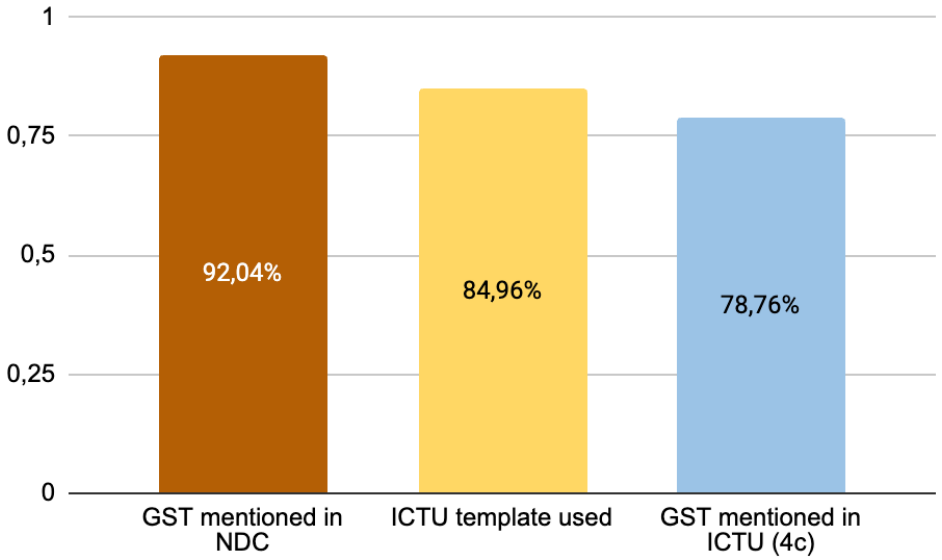


Figure 1. General mention of Global Stocktake in NDCs and use of the ICTU template

Figure 1 shows that of the 113 NDCs analysed, 104 (92%) mention the term "GST" or "Global Stocktake", which is exactly the same result as that reported in previous research by Beuermann et al. (2026) . 96 Parties (85%) use the ICTU template, and of these, 89 (79%) mention the GST in the ICTU subsection 4c: "How the Party's preparation of its nationally determined contribution has been informed by the outcomes of the Global Stocktake, in accordance with Article 4, paragraph 9 of the Paris Agreement."

Conversely, this means that nine analysed NDCs do not mention the GST at all, namely those of Côte d'Ivoire, Ethiopia, Sierra Leone, Tunisia, Venezuela, Zimbabwe, Burkina Faso, Burundi and Holy See. Similarly, seventeen Parties do not use the ICTU template.

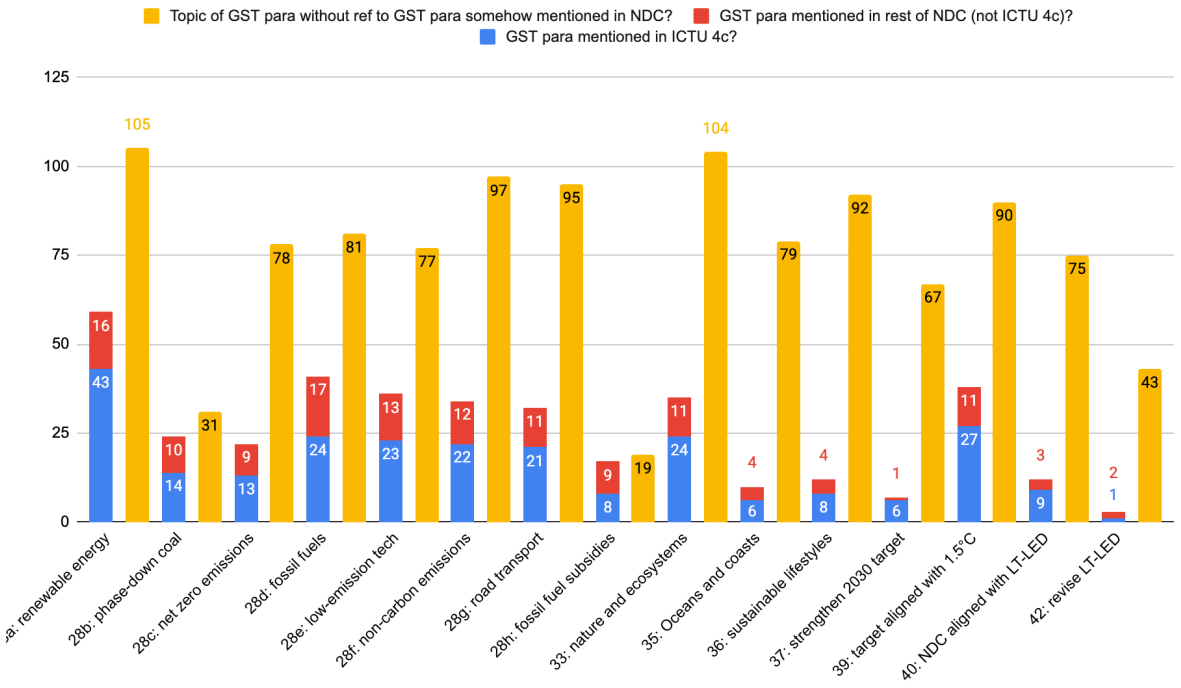


Figure 2. Take-up of GST outcome by explicit paragraph mentioning in comparison to mentioning the topics without reference to the GST

Figure 2 presents the frequency with which the analysed GST paragraphs are mentioned across the NDC in three described categories: explicitly mentioned by number or wording within the ICTU subsection 4c (blue bar), explicitly mentioned by number or wording elsewhere in the NDC/outside the ICTU structure (red bar) or just as a topic addressed, but without clear reference to the GST paragraph (yellow bar).

To compare the explicit paragraph mentions (blue and red) with topic-level mentions (yellow) the red and the blue bars are stacked, so that their combined height represents the total number of explicit mentions of the respective paragraphs. Since some Parties mention some paragraphs twice (once inside the ICTU structure and once elsewhere in the NDC, outside the structure), each Party can only be counted with one mention per paragraph, in order to avoid double counting within the same NDC. Mentions inside ICTU subsection 4c form the base of the stacked bar (blue). Mentions outside ICTU are added on top (red) but only for those Parties not already counted in the blue segment. This stacking allows the total number of explicit mentions to be compared directly with the number of topic-level mentions for the respective paragraph.

Across the explicit mentions (blue and red bar), the three most frequently addressed paragraphs are 28a (tripling renewable energy and doubling energy efficiency), 39 (economy-wide target aligned with 1.5°C) and 28d (transition away from fossil fuels).
A more detailed analysis of the explicit references to GST paragraphs in subsection 4c of the ICTU template in the NDCs (blue bar) reveals that paragraph 28a is mentioned most frequently at 43 times This is followed by paragraph 39, at 27 times, and paragraphs 28d and 33 with 24 mentions each. Paragraph 28e (low-emission technologies) and 28f (non-carbon-dioxide emissions) also form part of the top five and are mentioned 23 and 22 times inside the ICTU 4c subsection.

At the other end of the spectrum, the least frequently explicitly mentioned paragraphs (red and blue) are 42 (revise LT-LED), 37 (strengthen 2030 target), 35 (oceans and coastal ecosystems), 36 (circular economy) and 40 (NDC aligned with LT-LED). Paragraph 35 and 36 thereby address sector-specific dimensions of climate action: While Paragraph 35 concerns the preservation and restoration of ocean and coastal ecosystems (and its low-level of engagement might be explained with the fact that some Parties are landlocked), paragraph 36 addresses the transition to sustainable lifestyles and consumption and production patterns, including circular economy approaches. In contrast, 37, 40 and 42 concern the broader planning architecture and ambition-raising mechanisms.

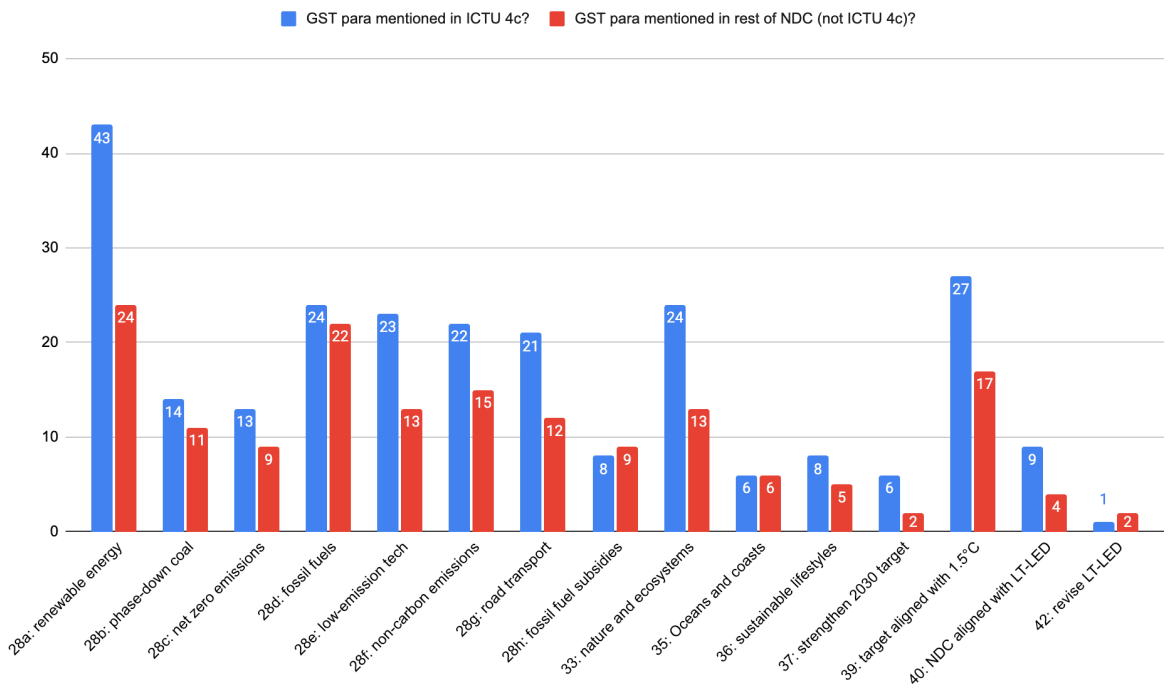


Figure 3. Take-up of GST outcome by explicit paragraph mentioning inside and outside the ICTU template

Figure 3 compares the paragraph mentions inside the ICTU 4c section with those outside the ICTU and therefore includes double mentions in the same NDC as well. It is shown that, outside the ICTU section, i.e. elsewhere in the NDC (red), the paragraphs are generally mentioned slightly less frequently, but with an overall similar distribution pattern.

Mention of the topics of GST paragraphs in NDCs without explicit reference to the GST

In comparison with explicit references to GST paragraphs in NDCs, Figure 2 shows that the corresponding topics (yellow bar) are mentioned considerably more often. For instance, the subject of renewable energy is frequently addressed in the NDCs, yet there is no reference to the GST decision.

For most GST paragraphs, the frequency with which the topic is mentioned without an explicit reference to the relevant paragraph (yellow bar) is two to four times greater than the frequency with which the paragraph is mentioned explicitly (stacked blue and red bar). Of the 15 paragraphs analysed, eleven are mentioned by topic 75 or more times compared to only seven paragraphs (stacked blue and red bar) reaching 25 or more explicit mentions.

The topic engagement (yellow bar) is particularly high for renewable energy (28a), nature and ecosystems (33), non-carbon emissions (28f), and road transport (28g). While Parties frequently address these topics in their NDCs, they do so predominantly without direct reference to the outcomes of the GST.

An outstanding finding is the two exceptions 28b (phase down of coal power) (31 mentions) and 28h (phase down of fossil fuel subsidies) (19 mentions), which are far less frequently mentioned by topic than all other paragraphs.

From Reference to Substance: Parties' Engagement with GST Paragraphs

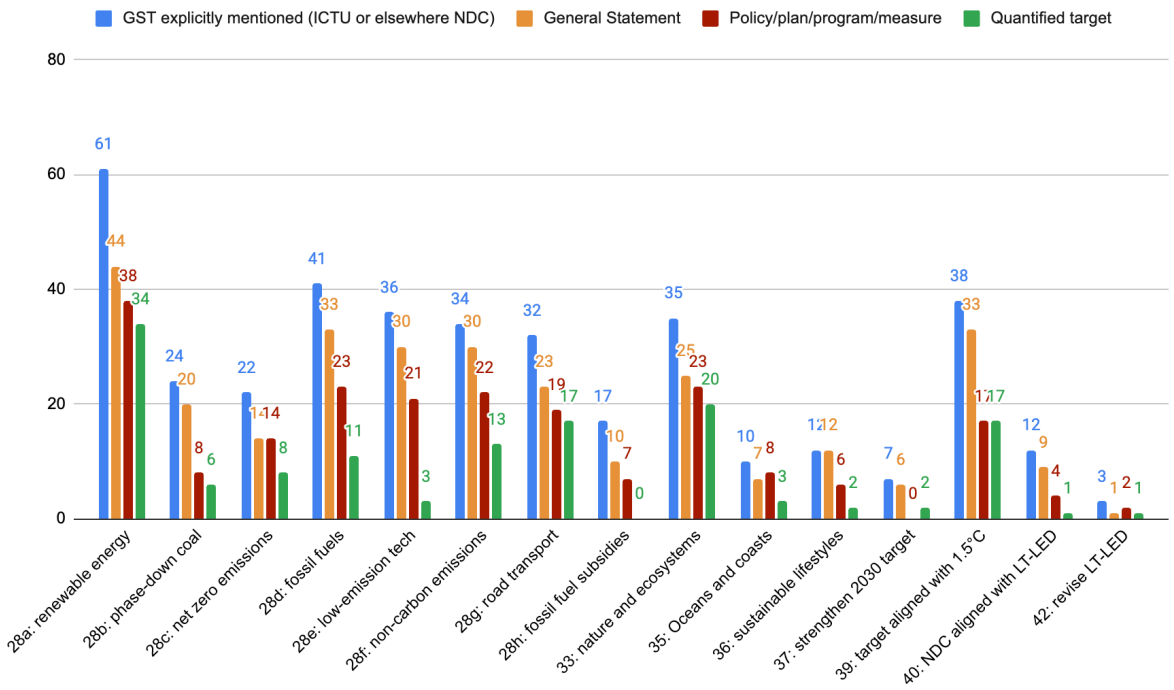


Figure 4. Level of Engagement with GST Topics

While Figure 2 and 3 show where and how Parties refer to the GST paragraphs, Figure 4 shows how explicit the engagement with each GST paragraph is substantiated. For each paragraph it sets the explicit mentions, in ICTU subsection 4c or elsewhere in the NDC (combined in the blue column), against the policies (dark red column), quantified targets (green column), and general statements (orange column) that accompany them.

The figure shows consistent ranking among the three categories. General statements are the most common, accompanying explicit GST references in total 297 times across 15 paragraphs, compared to 212 policies, plans or measures and only 138 quantified targets. The same ranking of the categories of references holds almost everywhere in the distribution, independent of how often the paragraph itself is referenced. Renewable energy and energy efficiency (28a), the most frequently engaged paragraph, is accompanied by 44 general statements but only 34 quantified targets. The paragraph addressing the transition away from fossil fuels (28d) is reflected in 33 general statements but only 11 quantified targets. In aggregate, the fifteen paragraphs are referenced explicitly 384 times, but only 138 of the references carry a quantified target.

The share of explicit GST references that is accompanied by a quantified target varies considerably across GST paragraphs, and this share does not depend on how often a paragraph is referenced. It is highest for nature and ecosystems (paragraph 33), where 20 of the 35 explicit references are quantified, and comparatively high for road transport (28g) and renewable energy (28a).

At the other end of the spectrum is the paragraph on phasing out inefficient fossil fuel subsidies (28h), for which no Party sets a quantified target. Here, both topic engagement and quantitative targets are low. For the technology-related and long-term paragraphs, by contrast, engagement is considerably higher, but rarely translates into quantified targets. Thirty-six NDCs explicitly refer to the GST paragraph on low-emission technologies (paragraph 28e), yet only three include a corresponding quantified target. Similarly, twelve NDCs explicitly refer to the GST paragraph on alignment with LT-LEDS (paragraph 40), but only one includes a quantified target. Thus, even GST paragraphs that are frequently referenced may be accompanied by very few quantified targets.

Together with Figure 2 and 3, the results show a consistent asymmetry. Parties are much more likely to name a GST outcome and voice general support for it than to back that support with concrete policies or targets.

Further Findings: Patterns

Several patterns can be found across the NDCs beyond the coded categories. These patterns were not the target of the coding, but are still interesting for the analysis, specifically as they mirror the findings from above. At the level of the individual NDC, they show the same gap between engagement with GST paragraphs and commitment to concrete measures and policies. Two patterns, namely inverted engagement and empty claims, particularly reoccurred across numerous GST paragraphs in the NDCs, and will be presented here. It is important to note that they are not the only patterns in the dataset, and the Parties named under each are illustrative rather than a complete list.

Inverted engagement describes how Parties adopt the transformatory vocabulary of the GST but invert its claim to a reaffirmation of the status quo. This pattern appears particularly often on the fossil fuel paragraphs, transitioning away from fossil fuels (28d), and phasing out fossil fuel subsidies (28h). Brunei for example, presents their efforts in their NDC as a "just and orderly transition" which is a reference to paragraph 28d (phase-down of fossil fuels in energy systems) while "maintaining a responsible approach to the continued role of the oil, gas, and petrochemical industries" (Government of Brunei Darussalam, 2025, p. 19). The reference here qualifies a commitment to continuity rather than signalling a departure from it. Similar patterns can also be found in the NDCs of Saudi-Arabia, Russia and Qatar.

Empty claims mean the party addresses the substance of a GST paragraph in aspirational language while committing to nothing concrete. Monaco for instance states that "the best energy is the energy we do not consume"; and "the supply of electricity from renewable sources is a priority for the Government" (Principauté de Monaco, 2025, p. 31), but does not present any concrete measures or targets to achieve progress on the goals of the connected GST paragraphs. Other Parties whose engagement remains at this level are Mozambique, Cuba, Nauru, the Central African Republic, and São Tomé and Príncipe.

Further Findings: Cluster

In addition to these patterns, which relate to individual paragraphs and show specific characteristics, Parties can further be grouped into clusters according to the level on which they relate the GST to their NDC overall.
It is important to notice that these clusters do not imply that all NDCs within a given cluster are identical.
Rather, clusters represent an attempt to identify particularly recurring characteristics and group Parties according to whether they share them. Nevertheless, each NDC is unique and numerous NDCs do not fall in any of the three clusters described below. Furthermore, additional clusters may well exist beyond the three identified here at first sight, and clusters may overlap, as some Parties show different notable characteristics at the same time.

The dominant cluster is characterised by *dense thematic substance but a complete absence* of GST references. Parties which fall into this cluster present thematic content for at least ten of the 15 paragraphs analysed and

sometimes underline this content with policies and measurable targets, without citing the respective GST paragraph or reproducing its wording. Consequently, as their engagement remains limited at topic level, any measures, policies or strategies they present were not counted in this analysis due to the coding rules.
This cluster includes amongst others Cabo Verde (12/15 topics mentioned), China (11/15 topics mentioned), Mexico (12/15 topics mentioned), Mauritania (13/15 topics mentioned) and Zimbabwe (11 topics mentioned).

In contrast a second notable cluster consist of Parties that *genuinely refer to a vast majority* (at least ten) of the 15 analysed GST paragraphs in their NDC, by citing paragraph numbers and/or by reproducing GST language, and underline this engagement with policies and measures for at least five topics.
This cluster includes, amongst others, Switzerland (13 mentioned, 9 underlined), EU (11 mentioned, 11 underlined), Canada (10 topics mentioned, 9 underlined), United Kingdom of Great Britain and Northern Ireland (10 topics mentioned, 6 underlined) and Vanuatu (11 mentioned, 5 underlined).

The requirement that at least five explicitly mentioned paragraphs have to be substantiated *excludes* Parties like Norway from this cluster, even if they explicitly mention a majority of paragraphs. In the extreme case of Norway, one of the shortest NDCs, eleven paragraphs were explicitly mentioned, but none of them substantiated.

Between these two poles of mentioning the topic without any GST reference and genuinely referring to a majority of GST-paragraphs lies a cluster of Parties, showing only *partial explicit referenc*e to the GST in their NDC. Parties which mention at least two topics explicitly, while mentioning at least another five at topic-level, fall into this cluster. Examples of this cluster include Morocco (5 explicit mentions, 7 at topic-level), Nauru (2 explicit mentions, 8 at topic level) and Mauritius (2 explicit mentions, 10 at topic level).

During the process of cluster formation a special case was observed, which does not constitute a whole cluster, but nevertheless is worth noting. In this case, four Parties, namely Ukraine, Nepal, Morocco and Monaco *exclusively focus on the "energy package" in sub-paragraphs 28a-h*, while not mentioning any of the other analysed paragraphs. This suggests that, for these Parties, GST engagement is concentrated entirely on the energy sector, rather than being distributed across the broader thematic range covered by the GST.

Correlation between operative language and NDC Uptake

As noted above, Pérez Català et al. (2026) conclude that the language of the respective mitigation outcome paragraphs differs considerably in terms of its political and normative strength. The study raises the question of whether outcomes of GST1 mitigation formulated with stronger political and normative language are more likely to be incorporated into Parties' NDCs than those using weaker operative language. Provisions employing stronger verbs of intent, including "decides," "shall," "requests," "calls on," and "should" are interpreted as carrying greater political weight. The authors therefore argue that such provisions may be more likely to warrant substantive reflection in Parties' NDCs. By contrast, provisions framed with softer language such as "encourages," "invites," or "notes" leave considerably more discretion to Parties and appear, consequently, less likely to be directly transposed into national commitments (see Table 2 below).

Table 2. Classification of the GST mandates[1]

	Mitigation Section	Operative Verb	Interpretation
28a	Renewable energy	calls on Parties	Relatively strong mandates
28a	Energy efficiency	calls on Parties	
28b	Coal power phase-down	calls on Parties	
28c	Net zero emission energy systems	calls on Parties	
28d	Transitioning away from fossil fuels	calls on Parties	
28e	Zero- and low-emission technologies	calls on Parties	
28f	Non-CO2 emissions	calls on Parties	
28g	Road transport	calls on Parties	
28h	Fossil fuel subsidies	calls on Parties	
37	2030 targets in NDCs	requests Parties	
42	LT-LEDS	urges Parties	
35	Oceans and coastal ecosystems	invites Parties	Weaker mandates
39	ambitious, economy-wide emission reduction targets, covering all greenhouse gases, sectors and categories; 1.5 °C alignment	encourages Parties	
40	LT-LEDS Alignment	encourages Parties	
33	nature, ecosystems and deforestation, forest degradation	emphasizes	
36	Sustainable lifestyles, sustainable consumption and production and circular economy	notes	

The present analysis, drawing on a much larger sample with 113 NDCs, tests the hypothesis put forward by Pérez Català et al. (2026) but found no evidence to support it. As was also the case in the study by Pérez Català et al. (2026), we could not observe that paragraphs containing stronger language (e.g. paragraphs 28 "calls on the Parties") are more likely to be substantively addressed in the analysed NDCs than those paragraphs with weaker language (see Figure 5).

[1] The table below does not contain all paragraphs of the mitigation section as some paragraphs are mere statements.

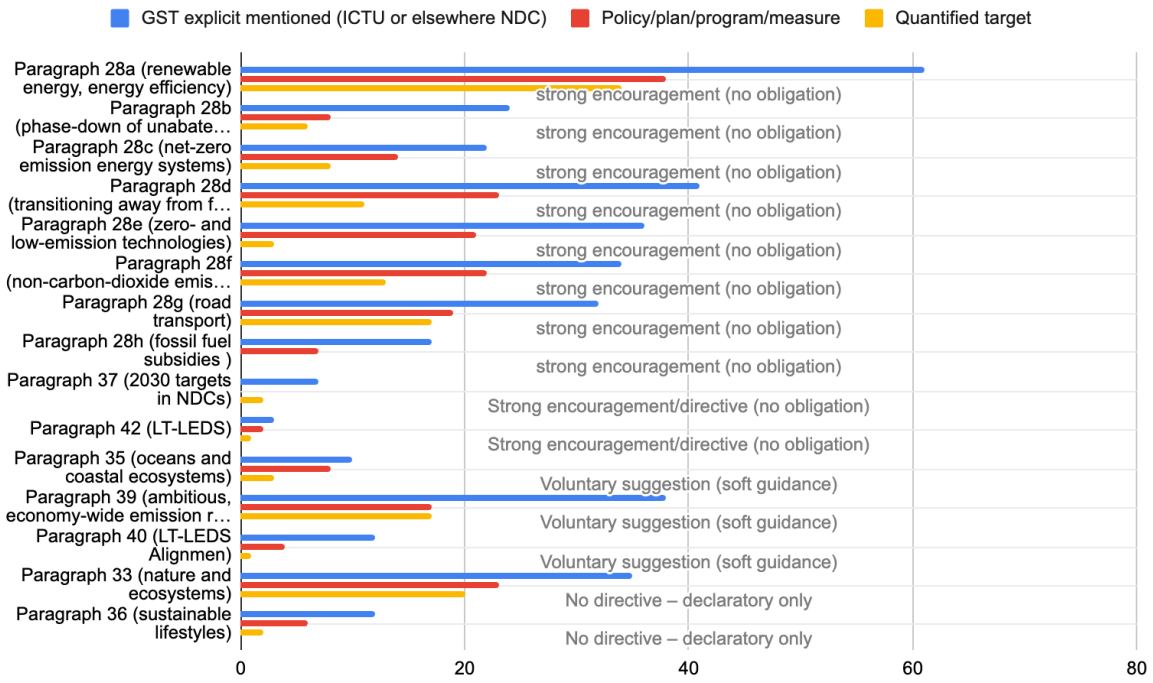


Figure 5. Influence of the language of the operative verbs on NDC uptake

Country Case Studies

Brazil Case Study

Brazilian NDC

The Brazilian NDC takes up the GST decision extensively (Brazil, 2024). The Brazilian NDC uses the ICTU template and contains an extensive subsection (4c), in which the country explains how the NDC is informed by the outcomes of the GST1. As shown in Figure 6 below, the Brazilian NDC refers to the majority of the analysed paragraphs explicitly, except for 28b (coal phase-down) and 28h (phase out inefficient fossil fuels subsidies), 35 (oceans and coastal ecosystems), 36 (sustainable lifestyles), 37 (strengthening its 2030 target), 40 and 42 (LT-LEDS).

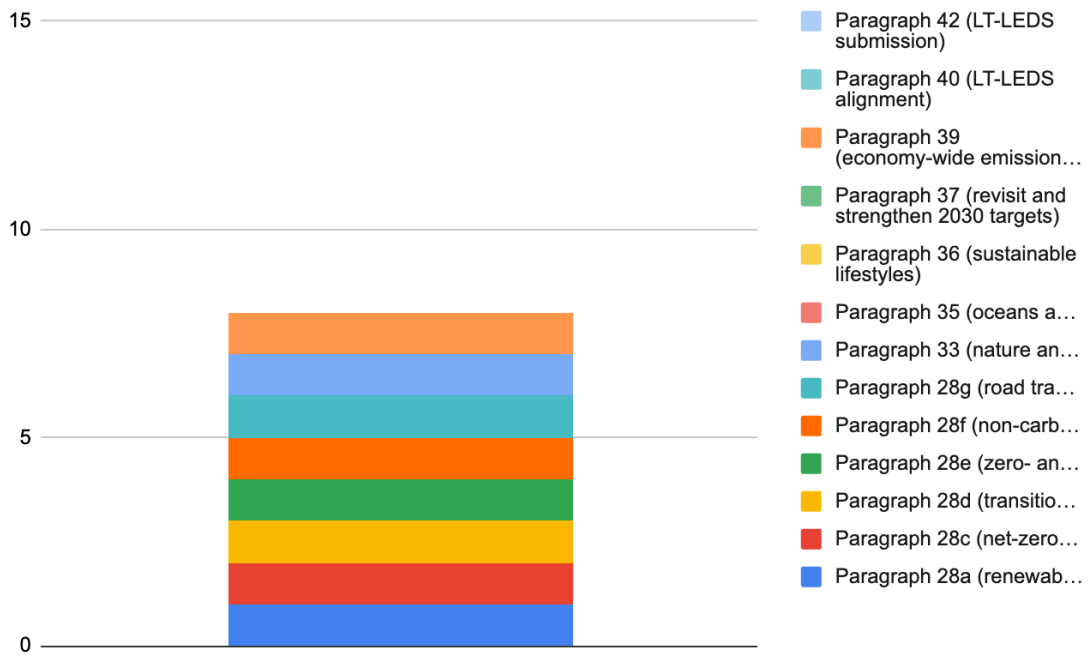


Figure 6. Explicit mentions of GST paragraphs in Brazilian NDC (8 out of 15 analysed paragraphs explicitly cited)

The NDC refers to large number of concrete policies and measures such as references to Funds, the Ecological Transformation Plan and the National Climate Plan, in particular in relation to renewable energy and energy efficiency (GST para 28a), cleaner fuels (28c), accelerating technologies such as carbon capture and storage (CCS) and hydrogen (28e), reduction of non-CO2 gases (28f), reduction from road transport emissions (28g), and reducing deforestation (33). Oceans (para 35) and circulatory (para 36) are not explicitly referenced but the topics are mentioned in general statements. The NDC includes quantified targets to increase the share of biofuels in transport (para 28g).

On transitioning away from fossil fuels (GST para 28d), the NDC includes a general statement that "Brazil would welcome the launching of international work for the definition of schedules for transitioning away from fossil fuels in energy systems [...]" (Brazil, 2024, p. 30) and other general statements but no specific policies or targets.

Brazil declares that it has an economy-wide emission reduction target (with reference to para 39), but does not address the question of strengthening its 2030 target (para 37), nor reference a LT-LEDS (para 40).

Comparison to the previous NDC

The previous NDC did not cover most of the mitigation topics addressed in the GST outcome decision. Of the GST topics, only the following were mentioned in the archived document: renewable energy sources (28a), decarbonisation of the transport sector (28g), deforestation (33), economy-wide targets, national circumstances (39), and the "long-term objective of achieving carbon neutrality in 2050" (Brazil, 2023, p. 11) (40). Ten of the 15 analysed topics cannot be found, whereas only five topics are missing from the new NDC.

The new NDC is therefore much stronger in terms of specific sectoral targets to be achieved and measures to be pursued. In the previous NDC, deforestation was the only topic with measures and targets.

Document Review of NDC Development Process

The Brazilian NDC was coordinated by the Interministerial Committee on Climate Change (CIM) and the National Focal Point to the UNFCCC (Brazil, 2024, p. 26). The Brazilian NDC is based on the results obtained from the review of the National Climate Plan (Brasil Participativo, 2024).

The public consultation on the National Climate Plan was conducted through the Brasil Participativo Platform and involved 24,544 participants, who submitted a total of 4,278 comments. Of these, 2,769 comments were directed to the Sectoral and Thematic Adaptation Plans, 722 to the National Adaptation Strategy, and 785 to the National Mitigation Strategy. Although these contributions remain publicly accessible on the platform, no consolidated document was identified that compiles and systematizes all submissions received. Accessing the contributions requires navigating through the Climate Plan documents individually and opening each paragraph to view the comments associated with it. The absence of a consolidated database or search functionality that would allow contributions to be filtered by keyword limits the systematic identification of references to the GST across the full set of submissions.

In addition to the public consultation on the documents mentioned above, during the first phase of the Participatory Climate Plan process in 2024, civil society was invited to submit up to three proposals each and vote on up to ten proposals submitted by other participants. A total of 1,292 proposals were submitted during this stage. Unlike the document consultation process, this section of the platform allows keyword searches. However, no references to the GST were identified among the proposals submitted by civil society.

During these domestic discussions, the Brazilian NGO Observatório do Clima published its own proposal for Brazil's new NDC, which had among its priorities achieving the GST1 outcomes (Climate Observatory (Observatório do Clima), 2024, p. 2). It therefore proposes pathways and targets for phasing out fossil fuels (28d) and for meeting the goal of tripling renewable energy generation and doubling energy efficiency (28a). Although the Climate Observatory presented its proposal to different ministries within the Brazilian Federal Government, no evidence was found that its NDC proposal was incorporated into the final text.

GST reflection in Brazilian mitigation policies

Since the conclusion of GST1, Brazil has adopted several domestic climate policies. Table 3 presents the main policy initiatives adopted after GST1 that were selected based on their relevance to the themes addressed by the GST1.

Table 3. Major domestic climate policies adopted in Brazil since the GST1.

Domestic Climate Policy	Date of launch
National Climate Plan	March 15, 2026
Ecological Transformation Plan (New Brazil)	Aug, 2023
National Energy Transition Policy	Aug 26, 2024
Fuel for the Future Law	Oct 24, 2024
New Industry Brazil Program	Jan 22, 2024

The National Climate Plan, approved in December 2025, is the main instrument through which Brazil's NDC is expected to be implemented. The document includes measurable economy-wide emissions reduction targets aligned with Brazil's updated NDC and acknowledges the role of international monitoring processes, including the GST, in informing future policy updates and revisions (Brazil, 2025, p. 48). However, the reference to the GST is general and is not associated with measurable targets, sector-specific commitments, or concrete domestic implementation measures explicitly linked to GST outcomes or decision paragraphs. Nonetheless, in comparison to the NDC, the National Climate Plan establishes a stronger dialogue with the GST outcomes (Interview B-1, B-2, B-3).

The other domestic policies identified, including the Ecological Transformation Plan, the National Energy Transition Policy, the Fuel for the Future Law and the New Industry Brazil Program, do not formally mention the GST. Nevertheless, several measures contained in these policies are substantively aligned with broader GST priorities, particularly those related to energy transition, industrial decarbonization and sustainable fuels. No alignment is observed regarding the phase-out of coal (GST para 28b), the phase-out of inefficient fossil fuel subsidies (GST para 28h), the absence of an explicit strengthening of the 2030 targets in response to the GST's call to revisit and enhance ambition (para 37), and paragraphs 40 and 42 related to Long-Term Low-Emission Development Strategies (LT-LEDS).

Why is the GST reflected the way it is in Brazil?

Brazil's NDC refers to the GST in broad and general terms. For instance, the document states that Brazil remains committed to pursuing the goals of the Paris Agreement "in accordance with the outcomes of the GST concluded at COP28" (Brazil, 2024, p. 10). However, the NDC does not explicitly translate GST outcomes through quantified targets, nor does it anchor its commitments to specific GST paragraphs or decisions. Nevertheless, many of the priorities emerging from the GST are substantially reflected in the policies and plans presented throughout the NDC, indicating a clear substantive alignment. The only notable exceptions are the absence of any reference to the phase-out of coal (GST para 28b) and the inefficient fossil fuel subsidies (GST para 28h), the lack of an explicit strengthening of 2030 targets in response to the GST's call to revisit and enhance ambition (GST para 37), and the absence of a long-term strategy (LTS), whose submission is called for under paragraphs 40–42. Understanding this approach requires looking beyond the text of the NDC itself and considering the broader political and diplomatic rationale underpinning Brazil's climate strategy, particularly in light of its position as a developing country.

Brazil approaches climate policy through the lens of economic and social development, framing environmental commitments as part of a broader national strategy aimed at promoting sustainable development. In this context, climate action is not treated as a standalone environmental agenda, but rather as a cross-cutting component of national development planning. Themes of particular relevance for a developing country, such as poverty reduction, industrial modernisation, energy security, food production, and social inclusion, are therefore closely connected to Brazil's national climate policies. The Ecological Transformation Plan, referenced in the country's NDC, stands out as a flagship example of a public policy initiative designed to foster economic development aligned with sustainability and decarbonisation, while explicitly incorporating the social dimensions necessary for a just transition, particularly within the context of developing economies.

This perspective is reflected in the country's NDC, which anchors climate commitments within an integrated strategy for economic and social development. Rather than positioning climate action as a separate environmental agenda, the NDC embeds mitigation and adaptation efforts alongside broader national priorities, including economic growth, social development, and sectoral transformation. It presents a wide range of policies and plans across multiple sectors of the economy, from energy and land use to industry, transport, and agriculture, demonstrating that Brazil's development trajectory is inherently climate-compatible. Within this framing, climate action is portrayed not as a constraint on economic growth, but as a driver of economic transformation, competitiveness, and sustainable development.

The National Climate Plan, which is the main instrument through which the NDC is to be implemented, acknowledges the role of international monitoring processes, including the GST, in informing future policy updates and revisions (Brazil, 2025, p. 48). In May 2026, the Brazilian Government launched the proposal of a monitoring system called "IndicaClima" designed to track the implementation of the Climate Plan 2024–2035 and will therefore serve as the primary tool for tracking NDC achievements. The platform integrates data from multiple existing systems with the aim of avoiding duplication of efforts, streamlining information flows, and strengthening the overall coherence of Brazil's climate public management framework. Although the GST was neither explicitly referenced in the public materials related to the platform nor during its official launch, IndicaClima Platform will in practice constitute a critical piece of the evidence base required by the multilateral climate system, supporting the

Biennial Transparency Report and, through it, the next GST. In this sense, the platform represents an important and concrete connection between Brazil's domestic implementation architecture and its international climate accountability obligations.

The interviewees agreed that the NDC reflects political dynamics and negotiations within the Brazilian government, as well as sectoral interests, resulting in the selective incorporation of the GST outcomes (Interview B-1, B-2, B-3). It was mentioned that a discrepancy exists between Brazil's international commitment and its domestic implementation. The limited implementation of climate policy can be attributed to Brazil's political polarization, ideological disputes, governance challenges, and structural constraints (Interview B-2). It was recommended to have a greater engagement of implementation actors (Interview B-1, B-2, B-3).

The way the NDC is structured, without anchoring its objectives to GST outcomes or conditioned targets, also reflects Brazil's long-standing diplomatic tradition of asserting sovereign autonomy in face of international pressures and prioritizing its national interests within the UNFCCC. A particularly illustrative example is the Brazilian approach to conditionality in the NDC. Rather than adopting the binary structure of separating unconditional from conditional targets, Brazil employs a scenario-based conditionality framework. The NDC explicitly states that "in a favorable international scenario of exponential growth in cooperation and technological diffusion, Brazil will be able to achieve the highest level of its climate ambitions", while "a scenario of fragmented international cooperation could limit Brazil's potential to contribute to the objectives of the UNFCCC and its Paris Agreement" (Brazil, 2024, p. 9). This framing links the achievements of Brazil's climate ambition directly to the delivery of international support, without formally labelling any target as conditional.

The NDC further reinforces this position by calling on the international community to "fully implement the provisions of the GST related to the means of implementation, including on financing, technology development and transfer and capacity building" (Brazil, 2024, p. 35). In this sense, conditionality is embedded in the architecture of the NDC itself, reflecting Brazil's position that enhanced ambition from developing countries depend on strengthened international cooperation and the effective delivery of support mechanisms under the principles of equity and common but differentiated responsibilities.

This approach, which integrates climate action within broader development objectives, is fully consistent with the traditional G-77 + China position, which emphasizes national circumstances and the principle of common but differentiated responsibilities. For Brazil, this implies preserving flexibility in the design and implementation of climate policies, while ensuring that decarbonisation efforts remain compatible with economic growth, social inclusion, and broader national development priorities.

In this sense, Brazil's NDC stands as a compelling example of how a major emerging economy navigates the balance between international climate governance and the imperative to advance domestic economic and social development. The country's approach illustrates how GST priorities can be substantively reflected, despite not extensively mentioned, through broader development strategies, sectoral policies, and national transition pathways shaped by domestic political, economic, and social circumstances.

EU Case Study

GST Reflection in the NDC

The EU NDC takes up the GST decision extensively. The EU NDC uses the ICTU template and contains a very short subsection (4c), in which it refers to its 2030, 2040 and 2050 climate targets (Danish Presidency of the Council of the European Union & European Commission, 2025). The EU also provides a more in-depth reference to the GST in another section (Section III of the NDC). Overall, the EU NDC refers to the majority of our analysed paragraphs explicitly (as shown in figure 7 below) and references specific policies and targets for renewables and efficiency (GST para 28a), cleaner fuels (28c), technologies such as CCS and hydrogen (GST para 28e), non-CO2 gases (para 28f),

transport (para 28g), deforestation (GST para 33). Paragraph 36 on circularity is referenced with an extensive list of legislative measures but no reference to measurable targets. Paragraph 35 (oceans) is not referenced specifically but the relevance of oceans is mentioned in a general statement.

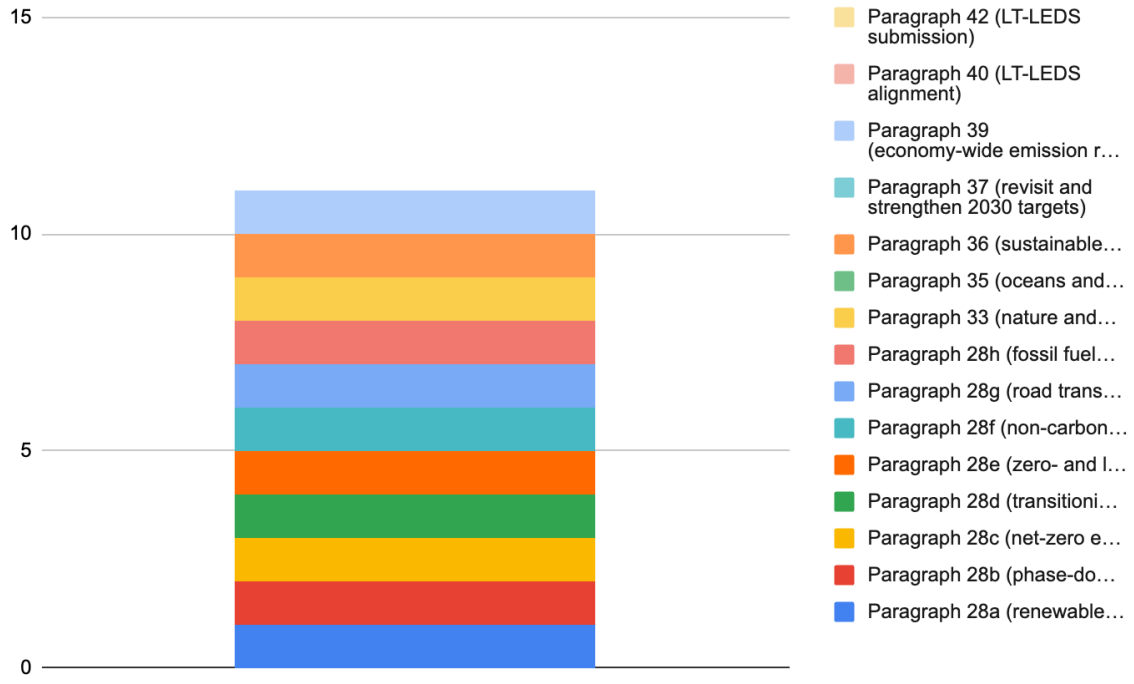


Figure 7. Explicit mentions of GST paragraphs in EU NDC (11 out of 15)

Paragraphs 28b on coal phase-down on 28d on fossil fuels are referenced with a general statement that "The EU and its Member States agreed that the energy sector should be predominantly free of fossil fuels well ahead of 2050 underlining the importance of aiming to achieve a fully or predominantly decarbonised global power system in the 2030s, leaving no room for new coal power." (Danish Presidency of the Council of the European Union & European Commission, 2025, p. 7). Elsewhere in the NDC, the REPowerEU Plan is referenced that was created to phase out the dependency on Russian fossil fuels. Para 28h on fossil subsidies is referenced with a list of relevant policies but no target.

Paragraphs 37 and 39 are not addressed. The EU NDC does not refer to a long-term low GHG emission development strategy in the context of the GST decision (para 40). The NDC, however, mentions that the EU LT-LEDS reflects the EU's climate neutrality objective. The NDC does not mention paragraph 42 explicitly and we could not find mentions of a revision of the LT-LEDS (para 42).

Comparison to the Previous NDC

The comparison with the previous NDC shows both continuities and expansions. One marked difference lies in the headline emission target. While the 2030 NDC had a specific target, the 2035 NDC has an emissions reductions range, which affords the EU greater flexibility in the emission reductions trajectory between 2030-2040. However, as outlined in the following, the EU did adopt a clear emission target for 2040 under the European Climate Change Law, which the 2035 NDC is derived from.

Like the new NDC, the previous NDC also did not address revisiting and strengthening the 2030 target (37), nor did it cover communicating and revising the LT-LEDS (42). Eight further topics appear in both documents (28a, 28c, 28d,

28e,28f, 28g, 39, and 40). Several topics appear in NDC 3.0 that were not mentioned in the previous NDC: coal (28b), fossil fuel subsidies (28h), nature and ecosystems (33), oceans and coastal ecosystems (35), and sustainable lifestyles (36). Our analysis of the previous NDC only shows measures and targets concerning renewable energy and energy efficiency (28a). The previous NDC refers to the same policy as the recent one: REPowerEU. In terms of measurable targets, the EU aims to increase "renewable energy in final energy consumption of at least 42.5% by 2030, with an additional 2.5% indicative top up that would allow to reach 45%" (Danish Presidency of the Council of the European Union & European Commission, 2025, p. 5).

Document review of NDC development processes

The European Climate Law (ECL) requires the Commission to propose an amendment to the ECL to set an EU-wide 2040 climate target within six months of the conclusion of the GST (Regulation (EU) 2021/1119 of the European Parliament and of the Council, 2021). However, due the 2024 election to the European Parliament (where climate was a contested issue) the Commission decided to not put forward a legislative amendment in Spring 2024. Instead, to fulfil its legal obligation nonetheless, the Commission published a Communication on the EU climate target for 2040 (European Commission, 2024b). The communication only refers to the procedural aspect of revising the ECL through an EU-wide 2040 GHG emissions reduction target within six months of the GST. The 2040 target communication was accompanied by a detailed impact assessment which considered in detail the economic, environmental and societal implications of different GHG emission reduction trajectories for the EU but only referenced the GST with regards to the consideration of outcomes or procedural aspects.[2]

Following the start of the 2nd von der Leyen Commission (2024-2029) the publication of a legislative proposal to amend the ECL was delayed multiple times. It was finally published in July 2025 (Proposal for a Regulation Amending Regulation (EU) 2021/1119 Establishing the Framework for Achieving Climate Neutrality (2025/0524 (COD)), 2025). The proposal makes general reference to the GST, highlighting that its outcomes have informed the proposal (p. 7) and stressing the need for urgent action (recital (1)), but does not refer to specific GST decisions.

In the subsequent intra- and then inter-institutional negotiations within and among the European Parliament and the Council of the EU, the GST was barely mentioned in formal documents. Within the Parliament's legislative process, the GST was mentioned only as a general reference and with regards to procedural aspects within the Rapporteur's initial report, barely going beyond the Commission proposal (European Parliament, 2025).
Within the Council the GST was not much mentioned within formal negotiation documents.

The Council negotiation process, both in the European Council and the Council of the EU, was, however, closely intertwined with the EU's NDC development process.

- On 18 September 2026, the Environment Council concluded that it needed more guidance from the European Council on the 2040 target negotiations. Nevertheless, the EU submitted a statement of intent to the UNFCCC outlining that it will submit its NDC before COP30 and highlighting an indicative target (Council of the EU, 2025). No reference to the GST was made in the document.
- On 23 October 2025, the European Council held its strategic debate on the 2040 target. The Council conclusions provided high level guidance on the 2040 target, but did not mention the GST (European Council, 2025).
- On 5 November 2025, the Environment Council agreed upon its General Approach to the ECL proposal, which makes general reference to the GST (in line with the original Commission proposal)(Proposal for Amending Regulation (EU) 2021/1119 Establishing the Framework for Achieving Climate Neutrality - General Approach, 2025). Based on these Council conclusions, the EU also agreed upon and submitted its 2035 NDC to the UNFCCC on November 5 (Danish Presidency of the Council of the European Union & European Commission, 2025).

[2] See https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52024SC0063

Subsequently, provisional agreement on the EU's 2040 target between the Parliament and Council was reached on 9 December 2025. The revised ECL was adopted in early 2026 and entered into force in April 2026.

The public consultations on the 2040 Climate Target (2023) (European Commission, 2023) and the ECL Amendment (2025) (European Commission, 2025e) can offer insights into the consideration of the GST by stakeholders. However, only in the 2023 consultation the GST was mentioned by two stakeholders (out of 579 submissions). Accordingly, it appears that the stakeholder contributions around the ECL and EU climate targets have focused mostly on domestic issues, with little if no explicit reference to the GST.

A similar picture emerges regarding news reporting where the debate on EU climate policy has focused mostly on domestic issues, with little reference or discussion of the GST and its outcomes (outside of reporting on international climate policy).[3]

In conclusion, during the NDC development process reference to the GST in official documents was constrained to general references to take into account its outcome and procedural aspects with regards to EU climate policy. The stakeholder and media debate on EU climate policy seems to have paid even less consideration to the GST outcomes.

GST reflection in domestic mitigation policies

Since the conclusion of the first GST in December 2023, the EU has launched several flagship climate policies that are of significance for implementing the objectives of the GST (see Table 4).

Table 4. Flagship domestic climate policy documents launched in the EU since the conclusion of the GST

Domestic Climate Policy	Date of launch
Revision of the European Climate Law (ECL)	Mar 11, 2026
Clean Industrial Deal (CID)	Feb 26, 2025
CID implementing legislation: IAA, CBAM revision, etc.	2025-2026
Affordable Energy Action Plan (European Commission, 2025b)	Feb 26, 2025
EU global climate and energy vision (European Commission, 2025d)	Oct 16, 2025

Out of these flagship climate policy initiatives only two explicitly mention the GST, namely the revision of the ECL and the EU global climate and energy vision (see above). The EU global climate and energy vision mentions that the EU will continue to work towards supporting the implementation of the GST outcomes through international and domestic climate policy. It makes specific reference to the specific GST decisions of "tripling of renewable deployments and doubling energy efficiency by 2030 [28a] as well as transitioning away from fossil fuels [28d]" (European Commission, 2025f, p. 13).

Reference to the GST was also made in several other EU policy documents such as Commission reports, but these do not constitute new policy action.[4] For example, a specific Commission Report outlines how key EU climate policies, including the ECL, the Effort Sharing Regulation and the EU Emissions Trading System, contribute to the GST outcomes (European Commission, 2024a). Similarly, the 2025 Climate Action Report reflects on the EU uptake of the

[3] Based on our observation. A brief keyword search on EU news reporting websites (Politico, EU Observer, Euractive) also yielded no tangible results.
[4] A brief search on EUR-Lex has indeed revealed that the GST was mentioned only in very few EU documents since 2024. Documents that mentioned included mainly reports and procedural documents.

GST outcomes at various fora including the G7, G20, OECD as well as other transnational initiatives like the Climate Club and the Clean Energy Ministerial. These engagements were on the themes of enhanced ambition for 1.5C, industrial decarbonisation, sustainable lifestyles, carbon pricing and market policies, etc (European Commission, 2025c).

In contrast, none of the other mentioned policy initiatives has made explicit references to the GST, albeit they all support the implementation of the GST objectives directly or indirectly.

- The **Clean Industrial Deal (CID)** supports a range of GST outcomes including decarbonization, roll-out of renewables, energy efficiency and the circular economy. The CID's main objective is to reconcile competitiveness and decarbonization in the EU and thereby foster economic growth in the EU (European Commission, 2025g).
- The **CID implementing legislation** (e.g. CBAM revision, IAA) similar support the GST outcomes by (potentially) strengthening domestic EU climate action.
- The **Affordable energy action plan 2025** emphasizes the need for energy autonomy of Europe, addressing energy poverty and making energy prices affordable for European citizens (European Commission, 2025a).

At large it appears as if the GST is only mentioned in relevant policy documents as a reference but not really considered in domestically focused policies.

Why is the GST reflected the way it is in the EU?

Based on our document analysis and expert interviews, the relationship between the GST outcome and the new EU NDC reveals an interesting paradox: while the EU NDC is strongly aligned with the GST mitigation outcomes, the direct causal influence of the GST process on internal EU policy debates appears to have been limited. Rather than serving as an external mandate that prompted the EU to adapt its climate trajectory, the GST functioned as a tool for legitimization, statutory anchoring, and political leverage.

The high degree of thematic consistency between the GST outcome and the EU NDC stems primarily from an "inside-out" policy dynamic: The EU actively worked during the international negotiations from Glasgow to Dubai to anchor its existing priorities - namely renewable energy and energy efficiency goals - into the global GST decision. As a result, because the GST outcome strongly reflected EU preferences, the content of the EU NDC did not need to change significantly as a direct result of the Dubai outcome (Interview EU-1).

Another key reason the NDC did not feature heavily in domestic legislative debates is that the EU possesses its own internal transmission mechanism. The EU relies on the ECL rather than the NDC to act as the primary "conveyor belt" translating international climate commitments into binding domestic legislation. As noted above, the ECL requires an EU legislative proposal within six months of every GST outcome. This provides an indispensable starting point for post-GST policy proposals that might not have emerged without this trigger (Interview EU-1, EU-2). The new NDC was largely a technical byproduct of internal EU debates over the 2040 climate target, rather than an independently negotiated political document (Interview EU-2, EU-3). Furthermore, according to interviews, EU decision-makers and stakeholders relied far more heavily on EU-specific scientific benchmarks (such as advice from the European Scientific Advisory Board on Climate Change, or ESABCC) than on the GST outcome (Interview EU-1, EU-2). This matches the finding of the document analysis that the GST hardly featured in stakeholder submissions nor in media debates on the new EU climate target.

In addition, the EU's 2030 NDC and its climate policy acquis had just been significantly expanded and strengthened in the early 2020s under the Fit-for-55 and REPowerEU packages. Accordingly, relatively few EU policies have been proposed or adopted since 2024 that have climate action as their primary objective. In light of geoeconomic turbulence and political concerns about waning EU competitiveness, recent domestic policies such as the CID have

focused primarily on objectives such as strengthening EU competitiveness or lowering energy prices. As a result, they give less consideration to climate policy and hence also the GST.

However, while the GST did not prompt a re-writing of EU policy content, it was used strategically by climate architects within the European Commission. The Commission deployed the GST outcome as political leverage when formulating Commission proposals and reminding Member States of their international obligations. Frame-matching the new NDC to the GST decision also allowed the EU to signal to international partners that it remains a reliable actor that responds domestically to global governance signals (Interview EU-1). It has to be noted, though, that the EU did not respect the official deadline of February 2025 for the new NDCs. While most other countries also did not meet the deadline, this delay did weaken the signal the EU wanted to send.

The GST outcome also enabled some discussions on sectoral transformations. What was mostly used in EU discourse was part of the energy package on renewables and efficiency. For example, Commission president von der Leyen argued very strongly in favour of renewables with reference to the GST outcome (Interview EU-3). Civil society organisations demanded that the EU should develop a plan for phasing out fossil fuels with reference to the GST outcome (Interview EU-2). However, the GST outcome did not provide much direction on how to go forward on sectoral pathways; the EU NDC mainly lists what the EU has done on each GST topic so far, but it does not indicate next steps (Interview EU-3). In particular politically sensitive topics like phasing out fossil fuel subsidies saw little added momentum from the GST due to cost-of-living concerns, economic inflation, and energy security pressures following recent geopolitical crises (Interview EU-1). Furthermore, the more time passed from the GST, the less it was referenced. It wasn't really a topic for people outside the climate bubble (Interview EU-2).

Finally, for the EU, the GST Technical Dialogue did not have the intended effect of serving as a learning platform, as Brussels views itself as a climate first-mover with mature legislative frameworks to share rather than adopt (Interview EU-1).

In conclusion, the alignment between the new EU NDC and the GST outcome reflects a symbiotic legitimization process. The GST did not fundamentally alter EU climate ambition; rather, the EU shaped the GST outcome to mirror its existing trajectory. The European Commission then used the global decision as a political lever to uphold momentum at home and signal reliability abroad.

Looking forward, the EU climate policy acquis is expected to be revised in the coming years to reflect the recently adopted 2040 target – and it will be interesting to follow if and how the GST will be considered in these processes.

Nigeria Case Study

Nigerian NDC

Nigeria's NDC 3.0 uses the ICTU template and contains a subsection (4c) in which the country explains how the NDC is informed by the outcomes of the global stock take, stating that the NDC "aligns with the findings of the GST of 2023 and all retained measures and actions fall under the GST lines of action" (National Council on Climate Change, 2025, p. 41). Unlike Brazil and EU?, the GST is named throughout the document: in the President's Foreword (p. vii), the Director-General's Preface (p. viii), the Ambition section (p. 14), the Fairness statement (p. 20), and the ICTU planning section (pp. 40–41).

The single strongest piece of pick-up is structural. Nigeria switched its headline target from a business-as-usual (BAU) percentage reduction, used in NDC 1.0 and 2.0, to an economy-wide absolute emissions reduction, and the NDC states explicitly that this was done "notably transitioning from the BAU scenario to an economy-wide absolute emissions reduction" "as recommended by the GST" (National Council on Climate Change, 2025, p. 14). The new

target is a 29% reduction by 2030 and 32% by 2035 against a recalculated 2018 baseline of 573.5 Mt CO2e, on a net-zero-2060 pathway. This directly answers GST paragraphs 37 and 39.

The NDC refers to a large number of concrete measures with quantified targets, the great majority mapped to the GST lines of action in a dedicated table (Table 9, "Mapping of NDC 3.0 measures with the GST lines of action," p. 26). This table reproduces the paragraph-28 lines of action in the GST's own wording and assigns NDC measures to each. Explicit, quantified pick-up is found for: tripling renewables (28a) — 52% renewable share of generation capacity (10,400 MW hydro, 5,700 MW solar) by 2030; doubling energy efficiency (28a) — combined-cycle conversion, efficient lighting, EURO IV for 100% of vehicles by 2030; phasing down unabated coal (28b) — replacement of coal in manufacturing with 7 GW self-captive (50% renewable / 50% gas); zero- and low-carbon fuels (28c) — green/blue hydrogen and nuclear after 2035; accelerating zero- and low-emission technologies (28e) — low-GWP refrigerants and CCUS after 2035; methane from agriculture (28f) — ranching to 15% of cattle by 2035, manure-to-biogas, and Systems Rice Intensification on 40% of irrigated rice; methane from fossil-fuel operations — zero routine flaring by 2030 and a 60% cut in fugitive emissions by 2035; road-transport ZEVs (28g) — 30% of the vehicle fleet electric and 20% CNG by 2035; conserving nature (33) — a 60% cut in deforestation and 25 million trees planted annually; oceans and coastal ecosystems (35) — mangrove and coastal-wetland restoration; and circular economy (36) — climate-smart-agriculture circularity on 20% of cropland and 50% organic-waste recovery. The NDC also cites paragraph 37 of the GST explicitly by number, attributing the increase from 24 to 39 mitigation measures to alignment with the PA temperature goal "as per paragraph 37 of the GST" (National Council on Climate Change, 2025, p. 16).

On transitioning away from fossil fuels (GST paragraph 28d), the pick-up is formally present but the weakest in substance. Table 9 fills the 28d line of action with two non-fossil-supply measures, "Reduce emissions in the Commercial, Institutional, and Residential categories" and "Modal shift for mass transit" (National Council on Climate Change, 2025, p. 26), rather than any measure addressing fossil-fuel production. The genuinely fossil-facing measures (flaring, fugitive methane) are filed under the separate methane line of action. Meanwhile the NDC reaffirms that "natural gas use will be boosted, serving as a key transition fuel in Nigeria's move towards increased adoption of renewable energy" (National Council on Climate Change, 2025, p. 5), counts 17,000 MW of gas inside the "renewable" generation build-out (Table 2, p. 16), and in the ICTU section states that Nigeria "currently relies on its natural gas resources as transitional fuel to shift from the fossil fuel-based economy" (National Council on Climate Change, 2025, p. 41). The transition-away signal is therefore acknowledged in form and redirected in substance toward a gas-bridge pathway. Across the whole NDC, the LULUCF sector, not energy, carries the abatement: 73.7% of the 2030 reduction and 68.1% of the 2035 reduction (National Council on Climate Change, 2025, p. 15).

Nigeria addresses the GST's call to strengthen 2030 targets and adopt economy-wide targets (paragraphs 37 and 39) directly and references its LT-LEDS (submitted 2024) throughout as the long-term strategy with which the NDC is "in full alignment" (National Council on Climate Change, 2025, p. 14), covering paragraphs 40 and 42. This is a clear contrast with Brazil, which does not strengthen its 2030 target and has not submitted an LT-LEDS.

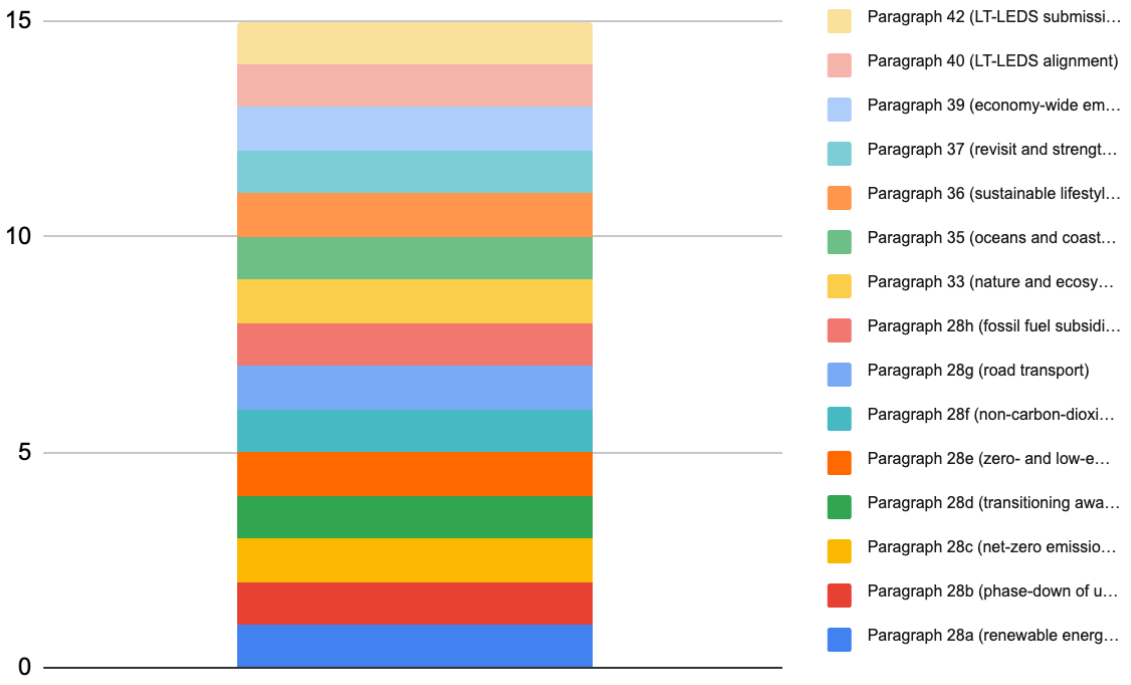


Figure 8. Explicit mentions of GST paragraphs in Nigerian NDC (15 out of 15)

Comparison to the Previous NDC

NDC 2.0 used a BAU-relative target (20% unconditional, 47% conditional against a 2030 projection) and covered 11 IPCC source categories with 24 measures (The Federal Government of Nigeria, 2021). NDC 3.0 moves to an absolute economy-wide target, expands to 19 source categories and 39 measures (p. 16), recalculates the 2018 baseline through the BTR1 (December 2024), and adds the GST lines-of-action mapping, the paragraph-37 citation, and the UAE Framework alignment. The gas-as-transition-fuel framing and the net-zero-2060 goal, however, carry over unchanged from NDC 2.0 and the pre-GST policy baseline (the National Climate Change Policy 2021–2030 and the Energy Transition Plan). The pick-up is thus concentrated in the accountability and target architecture; the underlying energy pathway is continuous with the previous NDC.

Document Analysis of the NDC Development Process

The NDC 3.0 was coordinated by the National Council on Climate Change (NCCC), the apex statutory body under the Climate Change Act 2021, which makes the President chair of the Council, with the Office of the Special Presidential Envoy on Climate Action as supervising interface (National Council on Climate Change, 2025, p. 11). Climagric Ltd was the lead consultancy firm (National Council on Climate Change, 2025, p. ix). Nigeria missed the UNFCCC's original 10 February 2025 submission deadline and was granted an extension; it submitted in September 2025, unveiling the NDC at the UN General Assembly. The development process is described as whole-of-government and whole-of-society, with some 1,500 stakeholder consultation meetings held between January and August 2025 across the geopolitical zones and roughly 50,000 participants (National Council on Climate Change, 2025, p. 24). Consultation workshops were run by geo-political zone (north first, then south), with a strong emphasis on data collation from states, reflecting weak subnational data systems.

The process was heavily facilitated by international actors. The acknowledgements credit UNDP (under "Climate Promise 2025," with the UN Secretary-General noted as having "mobilised the entire UN System"), the NDC Partnership, the UN Climate Change Regional Collaboration Centre for West and Central Africa, GIZ, FCDO, ILO, FAO,

UN-Women, GEF, the Netherlands Embassy and UNICEF (National Council on Climate Change, 2025, p. ix). The August 2025 validation workshop in Abuja included UNDP, AfDB, UNICEF, GIZ, UN-Women, ILO, FCDO and CSOs.

The government framed the NDC explicitly as a GST response. At the National Stakeholders' NDC 3.0 Validation Workshop (Abuja, 27 August 2025), the Senior Special Assistant to the President on Climate Finance and Stakeholder Engagement, Ibrahim Abdullahi Shelleng, said the NDC "is designed to respond to the outcomes of the first Global Stocktake under the Paris Agreement," building on lessons learned and identifying where Nigeria needs to do more. NCCCS Director Halima Bawa-Bwari, at an earlier consultation workshop (Lagos, May 2025), framed the update as driven by changed scenarios and new policies since 2021, and noted that the 2023 fuel-subsidy removal was understood as "positively affecting climate action and greenhouse gas emission."

Unlike Brazil, where the Observatório do Clima produced an alternative NDC proposal that heavily referenced the GST and proposed fossil-fuel-phase-out pathways, the available documents show no comparable autonomous domestic civil-society proposal driving the GST pick-up in Nigeria. Subnational actors engaged substantively, but their interventions focused on access to finance and on ensuring that state-level input was actually reflected in the final document (Niger State Commissioner Yakubu Kolo, August 2025), rather than on the GST's substantive energy content. The impetus is top-down and internationally facilitated.

GST reflection in Nigerian mitigation policies

Following the conclusion of GST1, a number of domestic climate policy initiatives have been introduced in Nigeria. Table 5 shows the key policies adopted during this period that are relevant to the topics covered under GST1.

Table 5. Flagship domestic climate policy documents launched in Nigeria since the conclusion of the GST

Domestic Climate Policy	Date of launch
National Integrated Resource Plan (NIRP)	2024
Biennial Transparency Report 1 (BTR1)	December 2024
stream Petroleum Decarbonisation Template (UPDT, NUPRC)	2024–2025
Carbon Market Activation Policy (CMAP / NCMAP, draft)	2025
Third Sovereign Green Bond (₦50 billion)	16 June 2025

The domestic instruments advance measures that map onto GST lines of action even where they do not cite the GST. The NIRP (2024) is the electricity-sector planning document to 2045 and is named in the NDC as the source of the renewables-and-gas and nuclear pathway (Federal Ministry of Power, 2024, pp. 10, 16), embedding the gas-as-transition-fuel logic. It does not mention the GST and only three of the 15 analyzed topics are mentioned: renewable energy and energy efficiency (28a), zero- and low-emission technologies (28e), and road transport (28g). For the paragraph on revisiting and strengthening the 2030 targets (37), a contrary development can be seen when it is stated that "the 2030 target for the achievement of universal electrification and the phasing out of self-generation are widely considered not to be feasible“ and therefore the target year has been shifted to 2035, which is considered to be “very challenging“ to achieve (Federal Ministry of Power, 2024, p. 12)). Renewable energy policies and targets are mentioned in the context of their incorporation in the modelling.

Of all the Nigerian policy documents from Table 5, Nigeria’s BTR1 is the only one that mentions the GST. It covers all of the analyzed topics, except for the phase-down of coal power (28b), fossil fuel subsidies (28h), and revisiting and strengthening the 2030 targets (37). However, only the topic of transport (28g) refers to the GST: conducting surveys about vehicles is expected to provide quality information for the GST. Nigeria’s BTR1 includes a target and a measure

for renewable energy and energy efficiency (28a), road transport (28g), deforestation (33), and coastal ecosystems (35), while only a measure is included for for low-carbon technologies (28e), and only a target for non-CO2 emissions (28f). Neither a measure nor a target is included for zero- and low-carbon fuels (28c), fossil fuels (28d), circular economy (36), economy-wide emission reduction target (39), aligning with LT-LEDS (40), or communicating or revising them (42).

The UPDT operationalises the flaring and fugitive-methane line of action and underpins the NDC's zero-routine-flaring-by-2030 and 60%-fugitive-cut targets. The CMAP/NCMAP builds Article 6 / carbon-market infrastructure and is cited in the NDC as a funding vehicle projected to raise US$0.736–2.5 billion by 2030 (Federal Republic of Nigeria, 2025, pp. 21, 59). It does not mention the GST, but seven of the 15 analyzed topics. The mention of transitioning away from fossil fuels (28d) is not supported by any measures or policies. References to non-CO2 emissions (28f), road transport (28g), and deforestation (33) come with a target but no measures, while measures with no targets are mentioned in the context of low-carbon technology (28e), and coastal ecosystems (35). Concerning energy efficiency and renewable energy, national targets and projects from the voluntary carbon market are mentioned.

The Third Sovereign Green Bond (₦50 billion, about US$33 million, launched 16 June 2025) is a financing instrument supporting GST-aligned green projects rather than a mitigation policy (National Council on Climate Change, 2025, p. 22). However, the GST is not explicitly mentioned, nor are the topics of the analyzed paragraphs (Federal Government of Nigeria, 2025).

In summary, Nigeria's NDC 3.0 functions partially as a transmission belt between the GST and domestic policy. It restates and aggregates GST-aligned sectoral targets, the great majority of which originate in national policies, the NDC stating that "all measures and actions retained for inclusion in the NDC 3.0 originated from these policy documents" (National Council on Climate Change, 2025, p. 14), and it maps them explicitly to the GST lines of action. However, the post-GST flagship instruments (NIRP, UPDT, CMAP, the green bond) tend not to invoke the GST themselves, and no implementation plan or NDC Investment Plan was ready at submission; both were deferred to after national endorsement (National Council on Climate Change, 2025, p. 57). The 2023 removal of fuel subsidies, the strongest live policy lever, is presented in the NDC's just-transition framing and is mapped to the paragraph-28h subsidy-phase-out line of action, but the subsidy removal was a fiscal decision taken on its own logic and retrofitted to the GST narrative (National Council on Climate Change, 2025, pp. 49–50). Substantive alignment with GST priorities is therefore strong on accountability architecture, renewables and efficiency (28a), road transport (28g), and low-emission technologies (28e), but weak on the literal transition away from fossil fuels (28d) and its subsidies (28h), as well as the phase-down of coal (28b), which is softened by the continued expansion of oil and gas and the gas-bridge framing.

Why is the GST reflected the way it is in Nigeria?

Nigeria's NDC names the GST throughout, cites paragraph numbers, and includes a full lines-of-action mapping table. Yet as in Brazil and the EU, the substantive energy pathway is shaped decisively by domestic economic structure rather than by the GST. Understanding Nigeria's pattern requires separating the architecture it adopted from the transition it did not.

The clearest reason the transition-away signal (28d) is softened is fossil-rent dependence. The NDC states that oil and gas provide "two-thirds of government revenue and 90% of foreign exchange earnings," that the sector "is called upon to further grow," and that gas is "a key transition fuel" (National Council on Climate Change, 2025, p. 5). The Fairness section frames the country's position as a "dilemma" of balancing an economy that is "fossil fuel-based" with climate action and socio-economic development (National Council on Climate Change, 2025, p. 20). A literal 28d pathway is in direct tension with the fiscal base, so the NDC adopts the GST's accounting while preserving the gas bridge. This is the structural profile of a country locked into fossil-rent dependence, a position

broadly comparable to Brazil's framing of climate action as subordinate to development, though Nigeria's fossil exposure is more acute.

Ambition is also heavily conditional on external finance. Nigeria maintains a 20% unconditional / 80% conditional split, against an estimated total need of US$337 billion (2026–2035), of which US$270 billion is expected from international sources (National Council on Climate Change, 2025, p. 21). The GST's finance signals, together with the Climate Promise and NDC Partnership machinery, gave Nigeria both a reason and a template to frame ambition in GST terms in order to mobilise that finance. This parallels Brazil's scenario-based conditionality and its call for full implementation of the GST's means-of-implementation provisions: in both cases, GST pick-up partly reflects finance-seeking framing.

The pick-up was driven more visibly by international actors than by a domestic pro-climate coalition. UNDP, the NDC Partnership, the EU, GIZ and FCDO shaped the process and the GST framing, and government statements at the August 2025 validation workshop framed the NDC as a direct GST response. Climate policy is led principally by federal political elites, with the NCCC itself described in the NDC as "not fully operational" (National Council on Climate Change, 2025, p. 11). There is no documented equivalent of Brazil's civil-society NDC proposal forcing the pick-up from below. Nigeria does not have a strong green party or groups. While there has been advocacy from academia and renewable energy companies, their emphasis has been on higher ambition, promoting to access climate finance and development benefits (Interview N-1). Overall, the Global Stocktake has not featured prominently in domestic discussions (Interview N-2).

Finally, Nigeria absorbed the GST process, not only the decision, but selectively. The move to absolute targets, the BTR1-based recalculated inventory, the Enhanced Transparency Framework alignment, the NDC Synthesis Report recommendations, and the lines-of-action framing all reflect the technical dialogue rather than the headline decision alone. The ICTU section confirms the NDC "is informed by both the outcomes of the first GST, the UAE Framework and the country's long-term plans" (National Council on Climate Change, 2025, p. 41).

What is harder to evidence from the documents is whether good-practice examples shared during the technical dialogue changed specific domestic choices, as opposed to Nigeria mapping pre-existing measures onto a GST template after the fact. According to interview partners, the GST technical dialogue has driven discussions among development agencies and national climate experts, but has not been an issue in broader domestic discussions (Interview N-1, N-2)).

In summary, the overall pattern is genuine, costly adoption of the GST's measurement and accountability logic combined with continuity on the underlying energy pathway, where the gas-as-transition-fuel framing predates the GST and carries through unchanged.

Conclusions and Recommendations for the Second Global Stocktake

Key Findings

This analysis examined how the mitigation outcomes of Decision 1/CMA.5 have been reflected in the third generation of NDCs. By analysing 113 NDCs submitted by 31 May 2026, our analysis provides one of the first systematic assessments of how Parties have incorporated the outcomes of the first GST into their updated climate pledges.

The findings demonstrate that the GST1 has become a widely recognised metric in the current round of NDCs. The term "Global Stocktake" is explicitly mentioned in almost all analysed NDCs, suggesting that Parties generally

acknowledge the GST as an important element of the Paris Agreement's ambition cycle. At the same time, this general recognition is only partially reflected in explicit references to the GST mitigation outcomes. The extent to which individual GST paragraphs are referred to varies considerably across the analysed NDCs.

The analysis further shows that the ICTU template has been widely adopted by Parties, although some exceptions remain. While subsection 4(c) of the ICTU guidance is specifically intended to explain how the outcomes of the GST1 informed the preparation of the NDC, references to the GST1 were frequently found in other sections of the documents as well. This suggests that Parties do not necessarily limit their discussion of the GST1 to the reporting format provided by the ICTU guidance.

The three most frequently addressed paragraphs are 28a (tripling renewable energy and doubling energy efficiency), 39 (economy-wide target aligned with 1.5°C) and 28d (transition away from fossil fuels). At the other end of the spectrum, the least frequently explicitly mentioned paragraphs are 42 (revise LT-LED), 37 (strengthen 2030 target), 35 (oceans and coastal ecosystems), 36 (circular economy) and 40 (NDC aligned with LT-LED).

The limited engagement with paragraph 37 on strengthening 2030 targets is particularly noteworthy. There is unanimous consensus that Parties are collectively not on track towards achieving the mitigation objectives of the Paris Agreement, as acknowledged already in the COP decision adopting the Paris Agreement (UNFCCC, 2015) and in subsequent COP and CMA decisions, including the GST decision. Still, the vast majority of Parties is apparently not willing or not able to address this shortfall.

It should be noted that, due to time constraints in the coding process, the relevance of each paragraph's topic to the individual Party was not captured. Therefore the absence of a reference to a given paragraph does not necessarily indicate a lack of engagement, as some topics are simply not relevant to certain Parties. For example paragraph 35 (oceans and coastal ecosystems) is not applicable to landlocked Parties and 28b (phase-down of coal) is not applicable to coal-independent Parties. However, some unaddressed topics may be highly relevant to a given Party. This dimension could not be systematically assessed within the scope of this analysis.

A noteworthy finding is that the substantive topics addressed in the selected GST paragraphs are reflected in a considerably higher number of NDCs than explicit references to the GST itself. In many cases, Parties address mitigation priorities that are consistent with the GST outcomes, but do not explicitly link these to the GST.

The analysis also reveals differences in the extent to which GST-related commitments are accompanied by concrete policies, measures, or measurable targets. Some mitigation outcomes are translated into specific implementation measures more frequently than others, indicating varying levels of operationalisation across the different GST outcomes. Interestingly, no clear relationship was found between the political strength of the operative language used in Decision 1/CMA.5 and the extent to which the respective outcomes were reflected in NDCs. It is interesting to observe that paragraph 33 (nature and ecosystems) which does not even directly address the Parties has nonetheless been taken up substantively in many NDCs. It would be valuable to investigate the reasons why this topic has attracted so much attention in the NDCs. Overall, the missing correlation between the language of the GST paragraphs and NDC uptake suggests that factors other than the wording of the GST decision influence whether and how Parties integrate specific outcomes into their national climate plans.

Taken together, the findings indicate that, for many Parties, the first GST1 has primarily served as a general frame of reference rather than as a detailed blueprint for updating NDCs. Explicit integration of its individual mitigation outcomes remains uneven, and references are often not accompanied by concrete implementation measures or measurable targets. This suggests a gap between acknowledging the outcomes of the GST1 and operationalising them within national climate commitments.

This finding of the large-n analysis is confirmed by the in-depth country studies of why the GST is reflected the way it is in the NDCs of Brazil, the EU, and Nigeria. While all three jurisdictions demonstrate strong alignment with the GST1 on paper, the underlying drivers determining how and why the GST1 is reflected differ dramatically. Rather than functioning as a direct driver that prompts rewriting of national plans, the GST1 outcome is filtered through domestic economic structures, legal frameworks, international financial ambitions, and sovereign priorities.

In terms of economic structures, Nigeria relies on oil and gas for two-thirds of government revenue and 90% of foreign exchange earnings. Consequently, while its NDC explicitly maps to GST1 lines of action, it softens the transition away from fossil fuels (GST paragraph 28d) by framing natural gas as an indispensable "transition fuel" and planning for sector expansion. In Brazil, priorities like poverty reduction, industrial modernization, and energy security similarly shape its climate response. Brazil avoids explicit commitments to transitioning away from fossil fuels that could constrain its development trajectory. In the EU, post-GST domestic policies increasingly prioritize industrial competitiveness, energy security, and cost-of-living concerns (e.g., Clean Industrial Deal, Affordable Energy Action Plan).

Furthermore, the three Parties strategically deploy GST1 language to achieve distinct international and diplomatic objectives. The EU executed an "inside-out" strategy by actively embedding its existing domestic goals (renewables and energy efficiency) into the Dubai GST1 decision. Post-Dubai, the European Commission used the GST1 as internal political leverage in negotiations with Member States and as a signal to international partners that the EU remains a reliable global actor. Nigeria, facing a $337 billion climate implementation bill (with $270 billion expected from international sources), structured its NDC around explicit GST paragraphs to attract external funding. This framing was heavily driven and facilitated by international partners like the UNDP Climate Promise, the NDC Partnership, GIZ, and FCDO. Brazil employs a scenario-based conditionality framework, explicitly linking higher ambition to international cooperation and the delivery of means of implementation (finance and technology transfer) under CBDR principles. This allows Brazil to signal global commitment while preserving sovereign flexibility and avoiding binary conditional/unconditional labels.

In terms of domestic stakeholder and civil society dynamics, the presence—or absence—of strong domestic coalitions influences whether the GST is used as a tool for public accountability. Brazilian civil society played an active role, with organizations like *Observatório do Clima* publishing an independent shadow NDC proposing explicit GST-aligned pathways for fossil fuel phase-outs and renewable expansion. However, experts point out that while the government conducted public consultations on the Climate Plan, the NDC process lacked deep political dialogue and negotiation with productive sectors (industry, agriculture, finance), resulting in weak private sector ownership beyond government circles. In the EU, civil society organisations demanded the development of a fossil-fuel phase-out plan and also used the GST outcome as leverage to demand an ambitious headline emission target in line with achieving the 1.5°C limit. In Nigeria, by contrast, GST adoption was driven top-down by federal political elites and international partners, without a strong domestic civil society coalition pushing for fossil fuel phase-out pathways.

Recommendations for the Second Global Stocktake

Based on the large-n analysis of NDCs and the small-n in-depth case studies, in particular on the basis of the expert interviews conducted in this context, it seems recommendable that the second Global Stocktake (GST2) should pivot from a broad, top-down diagnostic exercise to a streamlined, country-facing driver of implementation. To achieve greater impact, GST2 could adapt its design and implementation across five key strategic areas.

1. Streamlining Process, Bridging the Technical-Political Divide and Integrating the COP Action Agenda

Interview respondents unanimously noted that the detailed sharing of best practice and lessons learned in the GST1 technical dialogue had hardly trickled down to the national level. In addition, the heavy, workshop-dense technical phase felt disconnected from the final political outcome. Subsequent GSTs might thus be adapted as follows:

- "Less is More" on Information Gathering: As, according to interview respondents, foundational scientific insights are already well-established, GST2 should rely less on exhaustive written submissions and long workshops. Instead, events and calls for submissions from Parties and non-Party stakeholders should be designed to focus on identifying concrete barriers and actionable solutions at national and global levels.
- Start Political Coordination Early to Bridge Technical Assessment and Consideration of Outputs: GST2 needs to work more strongly to prevent the political outcome from ignoring technical findings. Rather than rushing political considerations into a few months at the end, Parties should start coordinating on potential political landing zones from day one. While there is no surefire way of doing this, if coordination on the political outcome started on day one, this would automatically feed into how the technical element is conducted. The process could also consider integrating implementing actors early and using bridging documents to ensure technical findings directly inform political outcomes.
- Define Key Messages**:** GST2 should identify a limited number of strategic messages that remain at the centre of international discussions and implementation efforts throughout the cycle. The GST1 call to *transitioning away from fossil fuels* illustrates how a single message can shape subsequent COP negotiations and initiatives such as the Santa Marta Dialogue.
- Key Presidency Role: The subsequent COP Presidencies will need to play a key role to actively steer political attention and coordinate Parties to ensure the process remains politically salient, rather than a purely technical exercise.

2. Moving from Global Directions to Usable, Country-Facing Guidance

While GST1 provided broad global direction (e.g., transitioning away from fossil fuels), GST2 should deliver more granular, domesticable guidance tailored to real-world national contexts.

- Replace Generic Calls with Concrete Milestones: Every paragraph in the Dubai decision (GST1) should have a follow-up with greater urgency and specificity, including implementation timelines and sectoral pathways (e.g., referencing the two "roadmaps" being developed by the Brazilian COP30 Presidency).
- Acknowledge Diverse National Starting Points: Output guidance should differentiate between various economy types - such as fossil fuel exporters, energy-poor nations, gas-transition economies, and industrializing nations - and reflect distinct implementation challenges.
- Develop Actionable Domestic Indicators: GST2 should offer specific indicators countries can adopt directly, such as sectoral fossil fuel demand, production targets, methane/flaring intensity, subsidy reform impacts, clean cooking access, and public transport access.
- Focus on concrete barriers and actions: Instead of replicating existing information (e.g., IPCC reports), the GST should identify concrete barriers to implementation and propose actionable solutions.

3. Embed Climate Action in Development Priorities

The in-depth country studies re-affirm the finding of Pérez Català et al. (2026) on the primacy of national socio-economic framework conditions in the interpretation and implementation of the GST outcomes. Subsequent GTSs should therefore

- Prioritise Consideration of Sustainable Development Impacts: Technical and political discussions should put a strong focus on the broader sustainable development impacts of climate actions to enhance understanding of potential multiple benefits and how to minimise adverse impacts.
- Reduce "Climate-Centric" Isolation by Embedding GST signals within Broader Development Narratives: GST 2 should reframe climate ambition into the strategic language of key economic decision-makers, connecting GST goals to industrial competitiveness, energy and mineral security, infrastructure, technology, and commodity value chains. Future calls for action should clearly lay out how the desired actions such as transitioning away from fossil fuels connect to these broader economic and development imperatives.

4. Confronting Hard Political Realities: Overshoot, Equity, & Loss/Damage

GST1 was heavily weighted toward mitigation. GST2 must rebalance the climate agenda and confront issues that were previously glossed over.

- Addressing 1.5°C Overshoot: As science acknowledges a temporary overshoot of the 1.5°C limit, GST2 must explicitly frame how the international community plans to return to 1.5°C.
- Reopening Equity & Atmospheric Space: Developing nations will place greater emphasis on historical responsibility, remaining atmospheric space, and equitable transitions.
- Elevating Adaptation, Resilience and Loss & Damage: With worsening climate impacts already baked in, equity, adaptation, and Loss and Damage must be raised to equal standing with mitigation in the political outcome..
- **Reflect Geopolitical Realities:** GST2 should better acknowledge how geopolitical shifts, technological competition and changing international alliances influence countries' climate strategies.

5. Elevating Climate Finance

Implementation guidance is ineffective if detached from financial resources. GST2 should directly link targets to support mechanisms.

- Direct Links to Means of Implementation: Implementation guidance must explicitly connect to finance, technology transfer, and capacity-building—otherwise, nations will dismiss the GST as mere "reporting language".
- Guiding Global Capital Flows: GST2 outputs should be designed to guide international development banks, private investors, and concessional finance mechanisms toward developing country transition priorities.

6. Strengthen Participation and Ownership

To ensure GST2 resonates beyond political elites and technical bodies, it must cultivate deep domestic anchorage. A particular challenge is that the original Paris Agreement negotiators increasingly retire. The question is therefore how to maintain a sense of ownership within countries, how to create a situation where the relevant national actors accept the GST as their process. The process should in particular actively involve actors who are responsible for implementation.

- Engage Real-Economy Actors: Expand participation beyond capital elites and climate ministries to include the private sector, industrial leaders, and financial institutions.
- Deepen Bottom-Up Anchorage: Cultivate domestic ownership by involving subnational governments, encouraging civil society shadow NDCs, and creating tailored peer-learning platforms (e.g., for methane MRV or gas-transition planning).

7. Leverage the Action Agenda for GST2 and Its Follow-Up

At COP30, the Action Agenda was re-organised along the lines of the GST1 outcome. This strengthened the role of GST1 and demonstrated that its implementation depends not only on national governments but also on the private and financial sectors, as well as subnational governments. GST2 could leverage the Action Agenda as follows:

- Use the Action Agenda as Monitoring Mechanism: As part of taking stock of collective progress, GST2 could use the Action Agenda work plan as a mechanism for monitoring the implementation of ongoing initiatives.
- Use the Action Agenda to Stimulate Engagement: Linking the COP Action Agenda and climate coalitions to the GST has already stimulated increased engagement with the GST1 outcomes. The GST2 follow-up should therefore similarly use the Action Agenda to drive further uptake of its outcomes and track progress.

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Annex: Coding keyword list

The coding keyword list helped to identify relevant text passages. The presence of one of the keywords did not automatically lead to positive coding. Relevant passages were assessed individually by the researchers. Furthermore, it should be noted that the researchers did not search for all the keywords every time. In most cases, the relevant text passages were found after 1–3 keyword searches.

GST paragraph	Keywords
28a	28a; renewable; energy efficiency; tripling; doubling; wind; solar; tripling renewable; tripling renewables; doubling energy efficiency; energy efficiency improvement; by 2030; renewable energy capacity; share of renewables; renewable share; energy savings; final energy consumption; RES; renewable energy directive; energy efficiency directive
28b	28b; phase-down; phase-out; coal power; abated; unabated; phase-down of unabated coal; unabated coal; unabated coal power; coal; lignite; coal-fired; no new coal; decarbonised power system; coal phase-out; energy matrix
28c	28c; biofuel; hydrogen; bioethanol; green hydrogen; net zero emission energy systems; zero- and low-carbon fuels; zero-carbon; low-carbon fuel; by around mid-century; mid-century; renewable hydrogen; RFNBO; sustainable aviation fuel; SAF; synthetic fuel; e-fuel; ammonia
28d	28d; transitioning away from fossil fuels; transition away from fossil fuels; just, orderly and equitable; in this critical decade; net zero by 2050; fossil fuel phase-out; phase out fossil; peak in consumption; gas demand; oil demand; decarbonisation pathway;
28c	28c; biofuel; hydrogen; bioethanol; green hydrogen; net zero emission energy systems; zero- and low-carbon fuels; zero-carbon; low-carbon fuel; by around mid-century; mid-century; renewable hydrogen; RFNBO; sustainable aviation fuel; SAF; synthetic fuel; e-fuel; ammonia
28d	28d; transitioning away from fossil fuels; transition away from fossil fuels; just, orderly and equitable; in this critical decade; net zero by 2050; fossil fuel phase-out; phase out fossil; peak in consumption; gas demand; oil demand; decarbonisation pathway; fit for 55
28e	28e; hydrogen-based steelmaking; electric boilers; and CCS; Solar photovoltaic (PV) panels; wind turbines; and nuclear energy; Hybrid electric vehicles (HEVs); biomass boilers; and combined heat and power (CHP)

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	systems; zero- and low-emission technologies; carbon capture and utilization and storage; hard-to-abate sectors; low-carbon hydrogen production; CCS; CCUS; carbon capture; abatement technology; removal technology; negative emissions; industrial decarbonisation; clean tech; solar photovoltaic; PV panels; nuclear energy; hybrid electric vehicle; HEV; biomass boiler; combined heat and power; CHP
28f	28f; non-carbon-dioxide emissions; non-CO2; methane emissions by 2030; methane; CH4; HFC; F-gases; fluorinated gases; nitrous oxide; N2O; Global Methane Pledge; fugitive emissions
28g	28g; emissions from road transport; road transport; zero and low emission vehicles; infrastructure; electric vehicle; EV; BEV; ZEV; charging infrastructure; alternative fuels infrastructure; CO2 standards; heavy-duty vehicle; HDV; modal shift; public transport; battery electric vehicle
28h	28h; phasing out inefficient fossil fuel subsidies; energy poverty; just transitions; fossil fuel subsidies; energy subsidies; tax expenditure on fossil; subsidy reform; green finance, carbon pricing, fiscal reform
33	33; conserving; reforestation; protecting and restoring nature and ecosystems; halting and reversing deforestation; forest degradation by 2030; sinks and reservoirs of GHG; terrestrial and marine ecosystems; deforestation; forest; LULUCF; biodiversity; carbon sinks; carbon removals; carbon farming; peatlands; wetlands; Kunming-Montreal; NBSAP; nature restoration; conservation; mangroves
35	35; oceans and coastal ecosystems; marine ecosystems; ocean; marine; coastal; sea areas; blue carbon; mangrove; coral reef; fisheries
36	36; transition to sustainable lifestyles; sustainable patterns of consumption and production; circular economy approaches; circular economy; ecodesign; waste; recycling; product policy; sufficiency; demand-side; sustainable consumption, sustainable production, resource efficiency
37	37; revisit; strengthen 2030; strengthen the 2030 target; enhance 2030 target; update NDC for 2030; strengthening pre-2030 ambition; raising 2030 ambition; revised 2030 target
39	39; economy-wide; covering all greenhouse gases; all sectors and categories; absolute reduction targets; aligned with limiting global warming to 1.5°C; highest possible ambition; all gases; Kyoto basket; IPCC pathway; deep, rapid and sustained reductions; fair

	contribution
40	40; aligned with long-term; consistent with long-term low GHG emission development strategy; linear trajectory; climate neutrality; net zero by 2050; mid-century strategy; long-term pathway
42	42; communicate or revise long-term low-emission development strategies; submit long-term strategy; updated LT-LEDS; LTS; LT-LEDS; long-term strategy submission; long-term low-emission development strategy; Article 4, paragraph 19