

NDC: Analysis of the 2022 update submitted by the Government of Brazil

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Contents

| | |
|--------------------------------------------------------------------------|-----------|
| Summary | 2 |
| Recommendations | 2 |
| Context | 3 |
| The Brazilian contribution to the Paris Agreement: timeline | 5 |
| Analysis | 8 |
| Quantification | 8 |
| Alignment with Paris Agreement | 10 |
| Credibility: How Brazil can improve its NDC, absolutely and definitively | 10 |
| Ambition: It is in Brazil's interest to increase it. | 11 |
| Ambition: How to make a significant contribution by 2030? | 12 |
| Recommendations | 13 |
| Annex I: Comparison between NDC texts submitted | 15 |
| Annex II: Sources | 17 |

Summary

The 2022 update of Brazil's Nationally Determined Contribution (NDC) to the Paris Agreement:

- Does not increase the country's climate ambition
 - New emissions cap adopted for year 2030 actually **adds an entire “Colombia”** (in terms of its annual emissions) to Brazil's previously established threshold
 - New emissions cap adopted for year 2025 actually **adds an entire “Poland”** (in terms of its annual emissions) to Brazil's previously established threshold
- Backtracks from the binding targets submitted to the UNFCCC in 2016
 - Increases by 314 million tons of CO₂eq the level of emissions allowed in 2025 in relation to the target assumed in 2016
 - Increases by 81 million tons of CO₂eq the level of emissions allowed in 2030 in relation to the indicative target presented in 2016
- Does not incorporate binding commitments in relation to ending deforestation and reducing methane emissions by 30%, in 2030, as per announcements made at COP 26
- Does not contribute to achieving the greatest possible ambition in the short term, as requested in the Glasgow Climate Pact.

Recommendations

- The Government of Brazil must **absolutely and definitely update** its NDC with a due increase in climate ambition. The successive demonstrations of lower ambition directly affect the country's credibility.
- The solution involves adopting new targets that represent emission levels below 1.3 GtCO₂eq in 2025 and 1.2 GtCO₂eq in 2030, whatever the methodological decisions made by the Government of Brazil. Thereafter, successive updates shall provide for absolute reductions considering the new numbers.
- The solution also involves **enhancing 'how' the NDC targets are updated**: it is essential to carry out public consultations in all the next update rounds.
- In addition to course correction, the **implementation – or “delivery” – of emission reduction results** with a focus on 2025 must be a priority for this and the coming years.
- Additionally, the Government of Brazil must **internalize the commitments** already assumed internationally, such as the Declaration on Forests and the Global Methane Commitment, signed in Glasgow.

- Finally, the Government of Brazil must **align the NDC's short-term goals and national policies with the objective of climate neutrality by 2050.**

Context

Under the Paris Agreement, national governments agreed to keep average global warming well below 2°C and pursue efforts to limit it to 1.5°C by the end of the century. Collectively, the UNFCCC assesses progress towards these goals through synthesis reports and the Global Stocktake.

Individually, Parties contribute through Nationally Determined Contributions (NDCs) that can be revised at any time, provided that they “raise their level of ambition”¹. National governments are responsible for determining the form and content of their contributions, taking into consideration the principles of the Paris Agreement.

There is still a long way to go before the global economy aligns with a 1.5°C path. Current targets for 2030 (if fully implemented) put us on a 2.7°C global warming path. To reduce the gap between the global target and existing commitments, several voluntary sectoral commitments were announced at COP 26 (related to methane, deforestation and others). Projected global warming drops to around 2.4°C if these announcements are officially incorporated and implemented in practice².

Even so, the great gap in ambition between the promises of national governments and the scenarios of rising temperatures gives rise to concerns highlighted by several actors - from the UN Secretary General, Antonio Gutierrez, to young leaders around the world.

For these reasons, the Glasgow Climate Pact urged Parties to increase the ambition of their short-term targets ahead of COP27 scheduled to take place in Egypt in November 2022. Countries are also expected to incorporate the voluntary declarations made at COP 26 into their efforts to align with the long-term goal of the Paris Agreement.

The IPCC Working Groups I and II Reports published in August 2021 and in February 2022 emphasized that every fraction of a degree of warming matters and has direct and aggravating impacts on the climate. The report of Working Group III – to be published also in 2022 – will reinforce this sense of urgency.

There is no strict definition of how this increase in ambition should take place. In any case, Brazil is on the list of countries - along with Australia, Japan, Mexico and Indonesia - that are not yet in line with the short-term ambition called by the Glasgow Pact and Paris Agreement.

¹ Article 4.11 of the Paris Agreement.

² Carbon Brief, 2021.

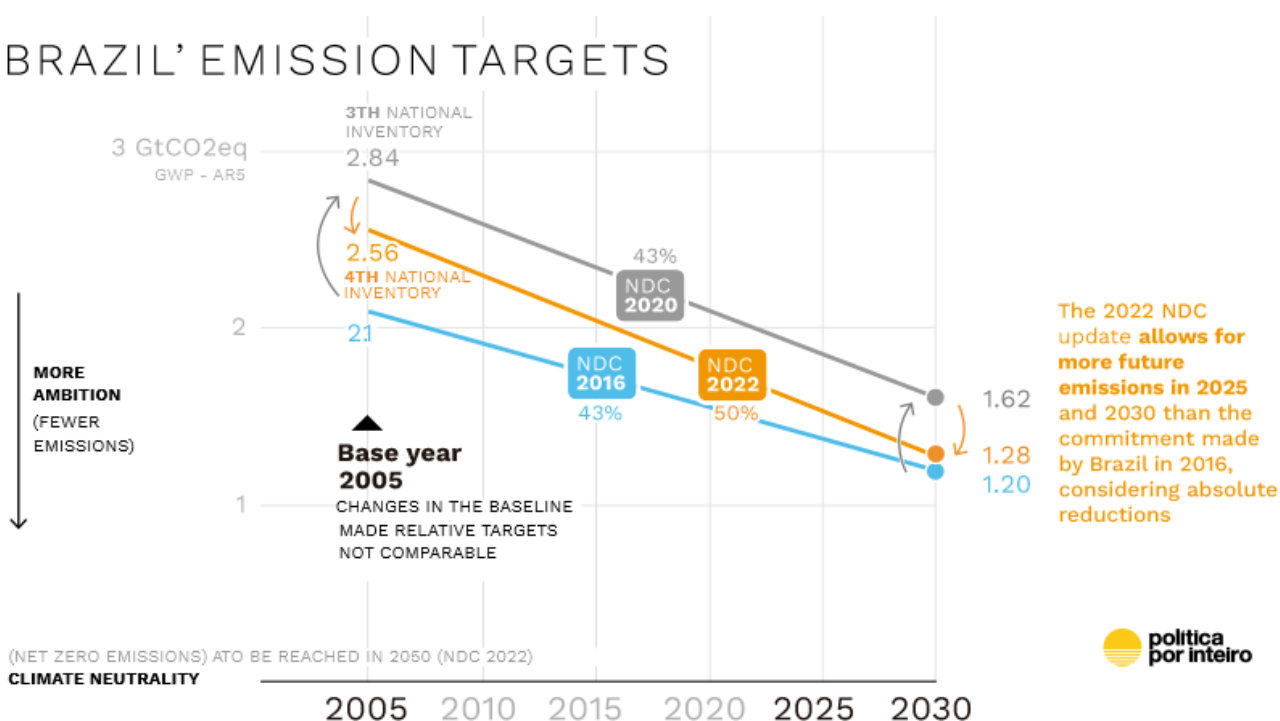
On February 23, 2022, the Interministerial Committee on Climate Change and Green Growth (CIMCV), a collegiate body of the federal government responsible for overseeing the implementation of Brazilian climate policy, met to revise the country's NDC.

On this occasion, an update of the NDC was determined, in relation to its technical parameters and emission reduction targets. No public consultation was carried out.

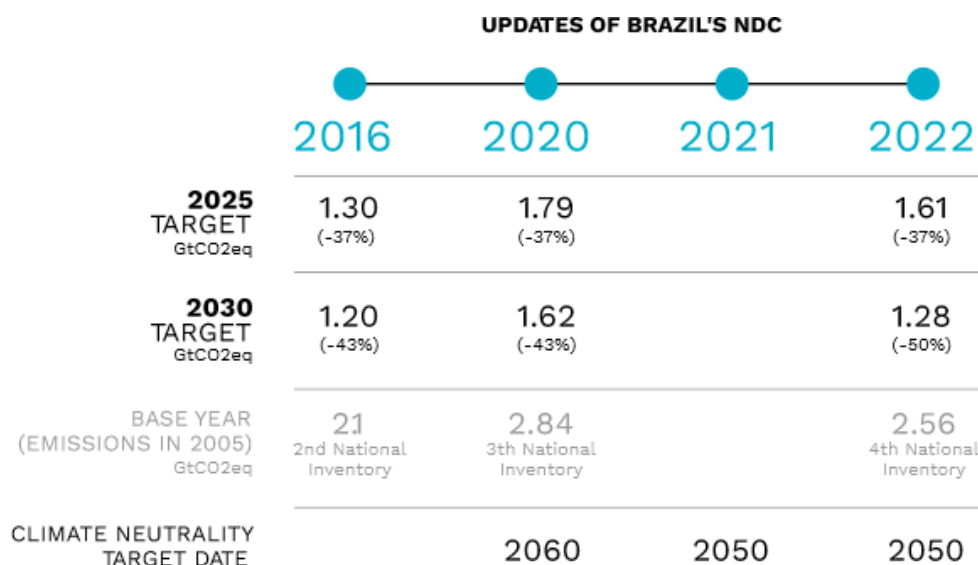
This update is the 3rd carried out by the government in relation to the first nationally determined contribution (iNDC) communicated by Brazil to the UNFCCC and in force since the Paris Agreement came into force in 2016.

Given that the NDC is an important instrument of foreign policy but also of national policy on climate change, we assess below its evolution, quantification and quality, based on Brazil's submission to the UNFCCC of 31/3/2022.

BRAZIL' EMISSION TARGETS



The Brazilian contribution to the Paris Agreement: timeline³



2015/2016: The [intended NDC \(iNDC\)](#) was presented on 27 September 2015 at UN Headquarters in New York (submitted to UNFCCC in 2016) and included the following commitments:

- 1.30 GtCO₂eq maximum reduction, at 2005 levels (37% reduction)
- 1.20 indicative maximum reduction GtCO₂eq in 2030, at 2005 levels (43% reduction)
- Implementation of the national adaptation plan
- Implementation of sectoral mitigation actions, such as zero illegal deforestation in 2030, recovery of 15 million hectares of degraded pastures and others

The absolute, economy-wide type of target was chosen after public consultations held prior to COP21. The base year emissions was fixed as 2.1 GtCO₂eq in the year 2005 (GWP-100, IPCC AR5).

³ Para acessar os documentos submetidos pelo governo brasileiro à UNFCCC, acesse este [link](#).

2020: The [first update](#) of the Brazilian target took place on December 9, 2020⁴, before the Ambition Summit convened by the United Kingdom and Italy, and contained the following commitments:

- 1.79 GtCO₂eq maximum reduction, at 2005 levels (37% reduction)
- 1.62 indicative maximum reduction GtCO₂eq in 2030, at 2005 levels (43% reduction)
- Climate neutrality (indicative) by 2060
- Conditional target: US\$ 10 billion/year support requested
- Exclusion of reference to national adaptation plan
- Exclusion of reference to the implementation of sectoral mitigation actions, such as zero illegal deforestation in 2030, recovery of 15 million hectares of degraded pastures and other.

This updated NDC would allow Brazil to emit considerably more greenhouse gases in 2025 and 2030 compared to the previous NDC, although it uses the same reduction percentage. This is due to the change in the base year emissions: they increased from 2.1 GtCO₂eq in 2005 to 2.8 GtCO₂eq (3rd National Communication in Brazil; GWP-100, IPCC AR5).

Using the "best available science" for decision making is a well-known principle in international climate negotiations and policy. The problem with Brazil's NDC Updated in 2020 was not the technical update *per se* but the fact that no corresponding adjustment of percentage was carried out in order to compensate for the new baseline.

The difference between the former and the updated NDC was of 480 million tons in 2030 - equal to eight years of emissions of the entire Brazilian power sector, or 3 times the mitigation achieved in the first 10 years of implementation of the Low Carbon Agriculture Plan (ABC Plan)⁵. For this reason, this 2020 Updated NDC prompted judicialization⁶.

2021: An "[Addendum](#)" was submitted by the Government of Brazil to the UNFCCC on October 31st, prior to COP26. It contains the following commitment:

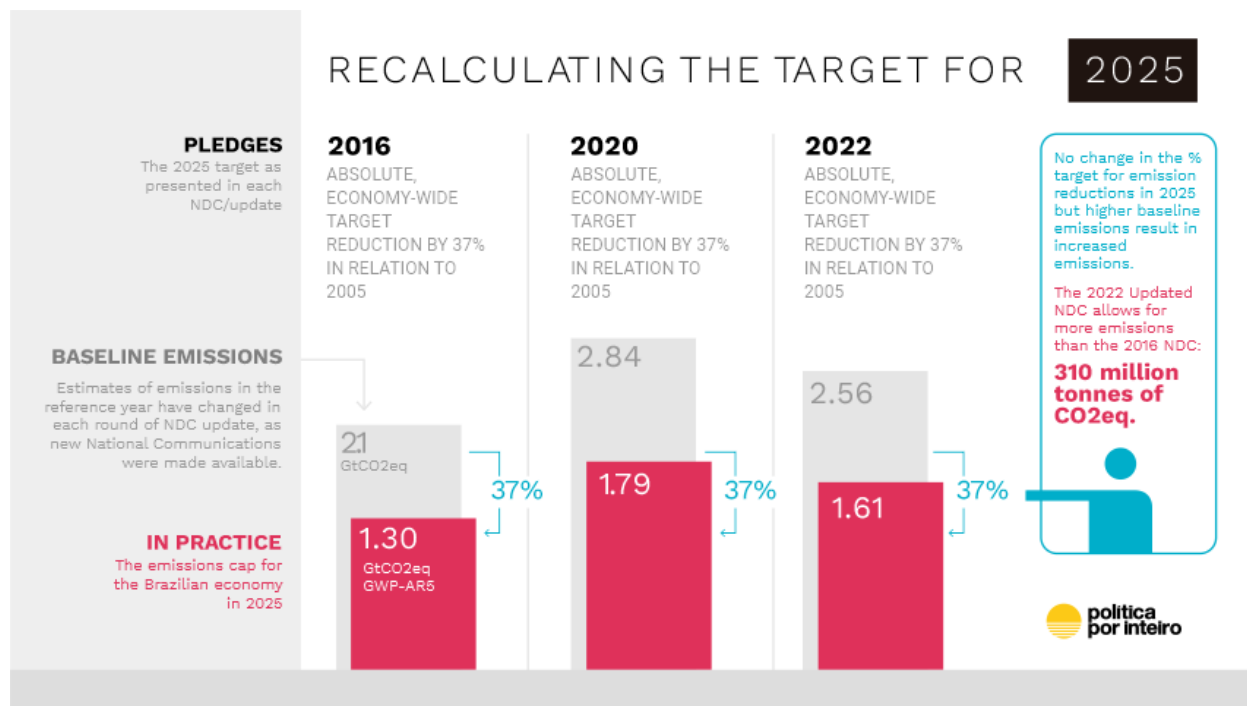
- Climate neutrality (Net Zero Emissions) by 2050

⁴ Decision 1/CP.21: "23 - Requests those Parties whose intended nationally determined contribution pursuant to decision 1/CP.20 contains a time frame up to 2025 to communicate by 2020 a new nationally determined contribution and to do so every five years thereafter pursuant to Article 4, paragraph 9, of the Agreement" and "24. Also requests those Parties whose intended nationally determined contribution pursuant to decision 1/CP.20 contains a time frame up to 2030 to communicate or update by 2020 these contributions and to do so every five years thereafter pursuant to Article 4, paragraph 9, of the Agreement".

⁵ Unterstell, 2020.

⁶ Observatório do Clima, 2021.

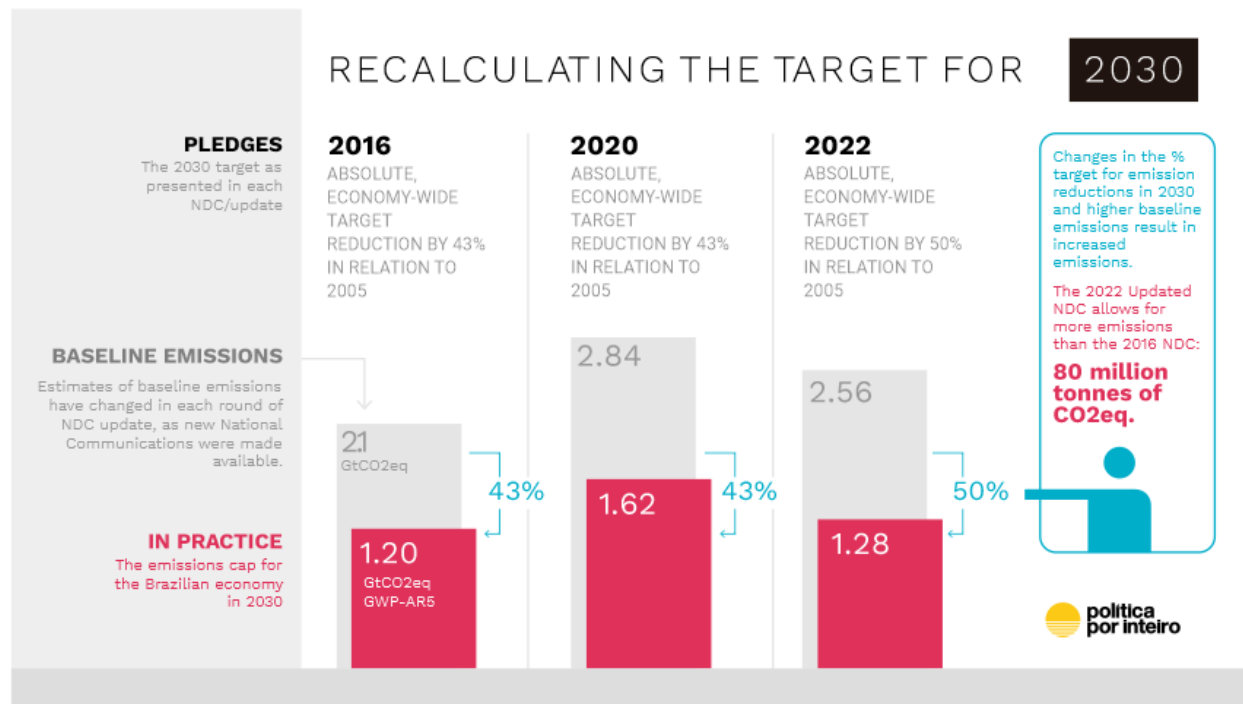
The reduction in ambition for short-term goals was maintained, as per the 2020 Updated NDC. The long-term goal has been anticipated.



2022: The latest update of the Brazilian target takes place in the context of Decisions [1/CP.26](#) and [1/CMA.3](#) of the 26th Conference of the Parties to the Framework Convention (COP26), which urges countries to revisit their short-term climate ambition, to consider new actions to reduce emissions by 2030, including methane, and to submit new or updated targets before COP27. It contains:

- 1.61 GtCO₂eq of maximum emissions in 2025, at 2005 levels (37% reduction)
- 1.28 GtCO₂eq of maximum indicative emissions in 2030, at 2005 levels (50% reduction)
- Maintains climate neutrality (net zero emissions) by 2050
- Unconditional: removes reference to financial support
- Reincludes adaptation efforts, placing the “second cycle” of the National Adaptation Plan and the MCTI AdaptaBrasil Program as references
- Maintains the exclusion of the reference to the implementation of sectoral mitigation actions, such as the end of illegal deforestation in 2030, recovery of 15 million hectares of degraded pastures and others.

The most recent Inventory submitted to the Framework Convention has been adopted as methodological reference, considering the GWP-100 metric, IPCC AR5. In this 2022 submission, the baseline emissions refer to 2,562 GtCO₂eq in 2005 (4th National Communication of Brazil to the UNFCCC).



Analysis

Quantification

The type of target adopted by Brazil is that of "absolute reduction for the entire economy", as described in all contributions already presented to the Paris Agreement, including in 2022.

For this reason, it is imperative to specify the absolute emissions levels in 2025 and 2030 to quantify, evaluate and compare NDC updates, seeking continuous progression from previous efforts.

| NDC | Inventário Nacional base | Baseline year/ emissions | Targets* | | Difference in relation to NDC, 2016 | | Difference in relation to 2020 Update | |
|----------------------|--------------------------|--------------------------|----------|------|-------------------------------------|------|---------------------------------------|------|
| | | 2005 | 2025 | 2030 | 2025 | 2030 | 2025 | 2030 |
| Original (NDC, 2016) | Close to the Second | 2.10 | 1.30 | 1.20 | | | | |

| | | | | | | | | |
|-----------------------------|--------|------|------|------|--------------------------------------------------------|--------------------------------------------------------|-------|-------|
| First Update (NDC, 2020) | Third | 2.84 | 1.79 | 1.62 | + 0.49 (increase the emissions, reduce ambition) | + 0.42 (increase the emissions, reduce ambition) | | |
| Third Update (NDC, 2022) | Fourth | 2.56 | 1.61 | 1.28 | + 0.31 (increase the emissions, reduce ambition) | + 0.08 (increase the emissions, reduce ambition) | -0.17 | -0.34 |

*values in Gt CO₂e (GWP-100, AR5)

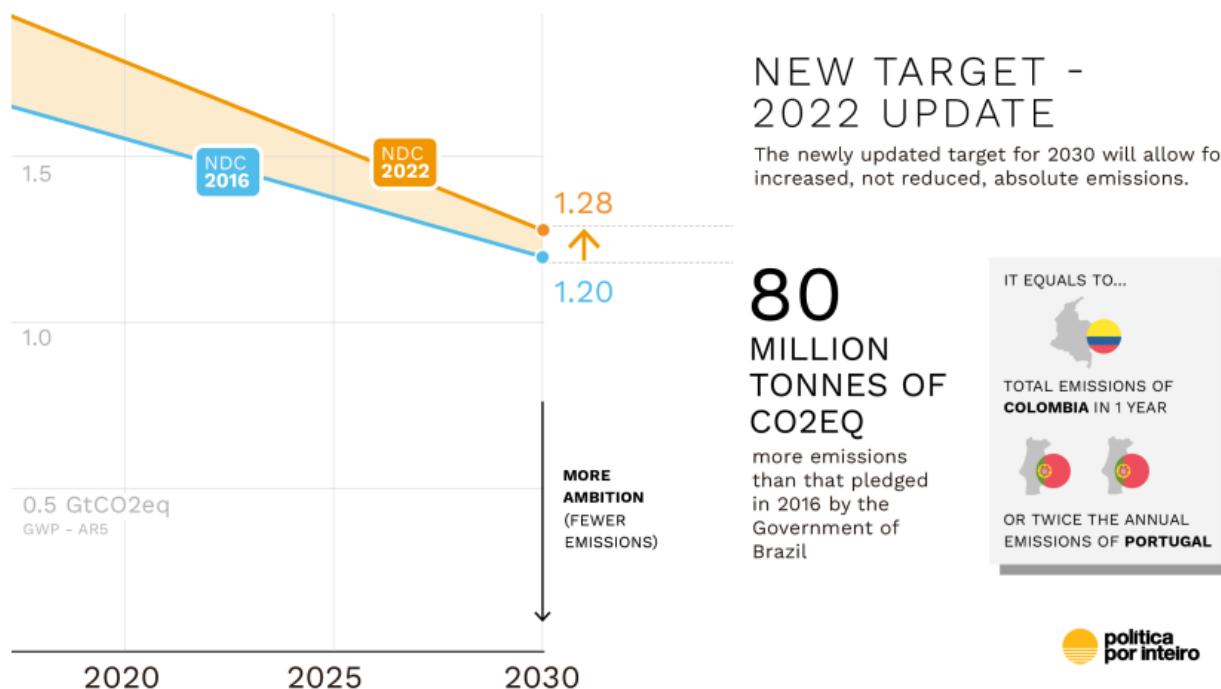
In 2022, the Government of Brazil submitted a new target that actually increases emissions when compared to the 2016 targets: an additional 314 million tons in 2025 and 81 million tons in 2030, specifically. That is, it commits to higher future emission levels than previously stipulated, rather than a drop in emissions.

This reduction in ambition may seem innocuous, but it has a relevant impact on the global effort to keep the temperature below 1.5oC. This increase, 80 million tCO₂e, is the equivalent of 1 year of emissions from our neighboring country, Colombia, which has almost 51 million inhabitants.

To match the ambition level of the NDC from 2016, it would be necessary to announce a commitment to reduce emissions by 49% for 2025 and 53% for 2030, relative to 2005, considering the 4th National Communication. Thus, the absolute values would reach the level of those announced before COP21.

To fully align with the Paris Agreement, Brazil should, in fact, increase its ambition. That is, to promise a higher goal than the one proposed 6 years ago. In that case, it would have to go beyond the aforementioned percentages.

It makes no sense to compare the targets proposed in 2022 with those of the 2020 update, precisely because the latter represented an even greater reduction in the country's short-term climate ambition, even giving rise to legal challenges. Although the 2022 targets reduce the so-called "climate pedaling" of 2020, it is a fact that they do not correct the original error (a setback in relation to the one proposed in 2016) and do not bring the country in line with the principles of the Paris Agreement (which requires objectively increasing climate ambition in this decade).



Alignment with Paris Agreement

The Paris Agreement calls for gradual, successive and ascending increases in ambition by Parties over time.

As mentioned in the section above, in practice, the Government of Brazil continues to propose a lower mitigation effort than the one communicated in 2016. Therefore, the emission limits announced in 2022 by the Government of Brazil are in conflict with:

- The progression provided for in Article 4.3 of the Agreement, which obliges the Parties to present successive NDCs that represent a higher ambition in relation to the current commitment;
- The "highest possible ambition" of the Party, taking into account its common but differentiated responsibilities, in light of different national circumstances, also set out in Article 4.3; and
- The Paris Agreement non-regression principle⁷.

In addition, the 2022 update does not include language on deforestation reduction, although Brazil has committed to zero deforestation by the end of this decade, through the signing of the Glasgow Declaration on Forests at COP 26.

⁷ According to Borges and Prolo, "Based on the Vienna Convention on the Law of Treaties, the best systematic interpretation of the Paris Agreement is that no Party is authorized by the Agreement to promote a regression in the NDC's ambition". (Translation by authors).

The 2022 update also does not include binding efforts to reduce methane emissions by 30%, although Brazil has committed to this through the Global Methane Pledge at COP26. Therefore, there was no internalization of sectoral commitments in this NDC.

The update does not include the international financial support requirement contained in the 2020 document. This was already the case with the submission made in 2016: unconditioned. Thus, this specific update points to the reestablishment of the 2016 NDC's unconditional target.

The 2022 update also maintained the “climate neutrality” target by 2050, promised in 2020.

The credibility of the announcements made at COP 26 and the long-term commitments remain in question as they are not backed by robust domestic measures - until March 2022, the Government of Brazil had not implemented national plans to control deforestation in biomes, nor resumed processes dialogue on low carbon trajectories and the Amazon Fund has been paralyzed since 2019.

Credibility: How can Brazil improve its NDC, definitively

In order to comply with the Paris Agreement's progression and non-regression principles, we must present updates on mitigation efforts at least within the initial threshold of absolute reduction from our first NDC submission to the Framework Convention in 2016.

In practice, this means that, at each review cycle related to contributions in this decade, Brazil will have to limit emissions up to 1.30 Gt in the year 2025 and up to 1.20 Gt in the year 2030. Any levels higher than these will violate the principles of the Paris Agreement and misalignment with the Glasgow Climate Pact.

So far, we are “anchored” in the iNDC or 2016 NDC, which is more ambitious than any proposals made by the Government of Brazil since then. From the 2020 NDC update to date, Brazil has successively failed to deliver short-term climate ambition increases. The methodological changes made had an impact on emission levels and there was no due adjustment of the total absolute reduction.

Given that the Government of Brazil describes in the text of the 2022 NDC update that “information on 2005 emissions and reference values may be updated and recalculated due to methodological improvements applicable to inventories”, it will be critical to compare any and all updates with the previous and original levels, and promote adjustments.

| Target year | Target emissions according to Brazil's iNDC | Future absolute targets | Future relative targets** |
|-------------|---------------------------------------------|----------------------------------------------------------|---------------------------|
| 2025 | 1.30 | < 1.30 or < absolute level of the most ambitious goal | > 49% |

| | | | |
|------|------|--------------------------------------------------------------|-------|
| 2030 | 1.20 | < 1.20 or < absolute level of the most ambitious goal | > 53% |
|------|------|--------------------------------------------------------------|-------|

*values in Gt CO₂e ** considering the 4th National Communication (GWP-100, AR5)

Ambition: it is in Brazil's interest to increase it.

It is in Brazil's interest to adopt more ambitious NDCs over time, for several reasons.

For example, to be able to participate in the mechanisms of Article 6 of the Paris Rulebook, for which only countries that have targets in line with Article 4.2 of the Agreement, i.e. successive and progressively ambitious, are eligible. Ambiguous or not ambitious targets can even raise complaints in the UNFCCC compliance mechanism.

An ambitious NDC would help the country in terms of high credibility. In turn, this could translate into high-valued emission reduction results (in Article 6.2) or carbon credits by private parties (in Article 6.4). It is certainly in Brazil's interest to sell any offsets or results at good prices and to negotiate with eventual purchasers in good terms. A weak NDC does not position Brazil well in this market, nor does it place it in a strategic position in the low-carbon technological and commercial competition. The higher our credibility, the more value our mitigation results will have.

Given this, it is necessary to be clear that it makes no sense to lower the bar on climate ambition. The opposite is true: a robust and well-implemented NDC will allow us to enjoy the benefits of decarbonisation, trade results on emissions and carbon credits with other countries, and international trade and investment partnerships for the low carbon transition.

Ambition: How to make a significant contribution by 2030?

The government opened a public consultation during COP 26 to find out what society thinks about updating the law on the national policy on climate change — but it did not repeat the same procedure in relation to the NDC.

Given that the NDC applies to the entire economy, covers the entire national territory and requires efforts from the whole of society, it is reasonable to understand it as an instrument that is not "of governments", but "of Brazilian society". Therefore, it is essential that the current and future governments open public consultations and engage society in the planning of a good NDC.

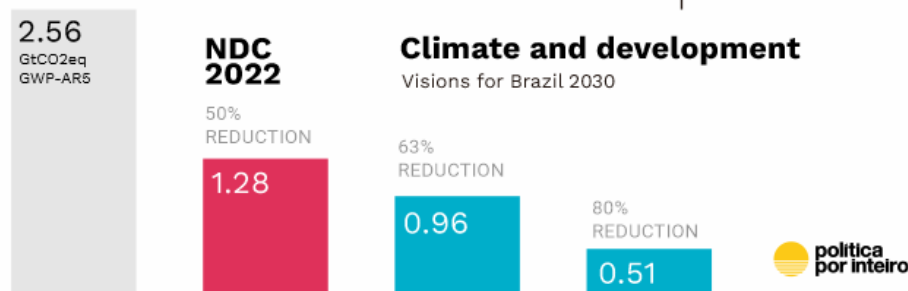
There are a myriad of net zero and short-term emissions targets already, from companies, state governments and municipal governments in Brazil. But they have not yet been reflected in ambition for the entire country. Although an international instrument, the NDC could become that instrument of coordination and cohesion between levels of government and sectors.

In 2021, the [Climate and Development Initiative](#) brought together more than 300 experts and leaders in high-level consultations around what the country's climate ambition should be for this decade. This initiative demonstrated that Brazil's capable of achieving a 63% to 80% reduction in emissions by 2030 (4CN, GWP-100, AR5), which would mean capping emissions by 0.96 to 0.51 GtCO₂e by 2030, compared to 2005. The solutions are known and accessible: the radical reduction of deforestation, the bet on the economy of forest restoration and carbon pricing, through a regulated trading system. In addition to the benefits involved in decarbonization, this strategy has the potential to leverage investments, generate jobs and income, and fight inequalities.

MORE AMBITION FOR 2030

The resulting models of the Climate and Development Initiative (www.clima2030.com.br) shows that it is possible to have greater short term emission by focusing on radically **reducing deforestation, promoting forest restoration** and by introducing **carbon pricing** into the economy.

2005 EMISSIONS
(4th INVENTORY)



Comparing the Climate and Development initiative targets for the year 2030 with the NDC update from 2022, there is a gap of hundreds of millions of tons.

| Source | Emissions threshold* - 2030 | Absolute reduction compared to 2005 (4CN) | Gap* in relation to the most ambitious NDC to date |
|------------------------------------------------------------------------|-----------------------------|-------------------------------------------|---------------------------------------------------------------------|
| NDC 2022 | 1.28 | 50% | + 0.08 GtCO ₂ e (reduction of ambition, +6,7% emissions) |
| Climate & Development: Recovery & Just Transition scenario | 0.96 | 63% | - 0,24 GtCO ₂ e (increase of ambition, -20% emissions) |
| Climate & Development: Recovery & Just Transition & Zero Deforestation | 0.51 | 80% | - 0.69 GtCO ₂ e (increase of ambition, -58% emissions) |

| | | | |
|----------|--|--|--|
| scenario | | | |
|----------|--|--|--|

*values in Gt CO₂e (GWP-100, AR5)

Recommendations

- The Government of Brazil must absolutely and definitively resolve the problem of updating its NDC without the due increase in climate ambition. The successive demonstrations of regression in relation to what was proposed in 2015 with the Paris Agreement directly affect the country's credibility in the international diplomatic and financial sphere.
- As we point out in this analysis, the solution involves adopting new targets that represent emission levels below 1.3 GtCO₂eq in 2025 and 1.2 GtCO₂eq in 2030, in the next cycle, whatever the methodological decisions taken by the Government of Brazil. Thereafter, successive updates shall provide for absolute reductions from the new numbers, as appropriate.
- The solution must also include the institution of public consultation in all the next rounds of updating the NDC, since this is an act of the State, affecting the whole of society, and not of a government.
- In addition to correcting the NDC, the implementation – or “delivery” – of emission reduction results with a focus on 2025 must be a priority for this and future years, at the risk of governments being held responsible for inaction or insufficient action taken.
- Additionally, the Government of Brazil must internalize the commitments already assumed internationally, such as the Declaration on Forests and the Global Methane Commitment, signed in Glasgow.
- Finally, the Government of Brazil must align the NDC's short-term targets and national policies with the objective of climate neutrality by 2050: at least 66% of emissions below 2005 levels by 2030, considering just transition and economic recovery measures green.

Annex I: Comparison between NDC texts submitted

The comparison below focuses on the short term ambition targets, in line with the requests made in the Glasgow Climate Package. Main changes are commented below, by comparing official texts from the different updates, focusing on areas where there is relevant impact.

| | 2016 NDC | 2020 Update | 2022 Update | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| Target type: there is consistency regarding the use of absolute, economy-wide targets. | <i>Type:</i> absolute target in relation to a base year. | <p>3. Scope and coverage:</p> <p>(a) General description of the target:</p> <p>Economy-wide absolute targets, consistent with the sectors present in the National Inventory of Greenhouse Gas Emissions for 2025 and 2030, always compared with 2005. The targets will be translated into policies and measures to be detailed and implemented by the Brazilian Federal Government.</p> | <p>3. Scope and coverage:</p> <p>(a) General description of the target:</p> <p>Economy-wide absolute targets, consistent with the sectors present in the National Inventory of Greenhouse Gas Emissions for 2025 and 2030, always compared with</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Base year: there was a methodological change; from an absolute number fixed for 2005, it moved to the 3rd and now the 4th emissions inventory. As a result, the percentage targets have become incomparable, and it is necessary to translate them into absolute reductions. | based on estimated emission levels of 2.1 GtCO _{2e} | <p>3rd National Communications</p> <table border="1" data-bbox="1039 820 1465 852"> <thead> <tr> <th>Ano</th> <th>Uso de Solenoides e de Outros Produtos</th> <th>Energia</th> <th>Processos Industriais</th> <th>Agronegócio</th> <th>Uso de Terra, Mudança do Uso de Terra e Florestas</th> <th>Resíduos</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>2005</td> <td>0</td> <td>312,739</td> <td>85,318</td> <td>102,492</td> <td>1,904,655</td> <td>41,470</td> <td>2,756,674</td> </tr> </tbody> </table> <p>(Source: Sirene, MCTI)</p> <p>(b) Quantifiable information on the reference indicators, their values in the reference year(s), base year(s), reference period(s) or other starting point(s), and, as applicable, in the target year:</p> <p>The reference indicator will be quantified on the basis of the total net emissions of greenhouse gases (GHG) in the reference year of 2005 reported in the "National Inventory of Anthropogenic Emissions by Sources and Removals by Sinks of Greenhouse Gases not controlled by the Montreal Protocol". For reference purposes, the level of emissions of greenhouse gases for the base year is registered in the current inventory as per the "Third National Communication from Brazil to the United Nations Framework Convention on Climate Change", submitted on 20 April 2016.</p> | Ano | Uso de Solenoides e de Outros Produtos | Energia | Processos Industriais | Agronegócio | Uso de Terra, Mudança do Uso de Terra e Florestas | Resíduos | Total | 2005 | 0 | 312,739 | 85,318 | 102,492 | 1,904,655 | 41,470 | 2,756,674 | <p>4th National Communications</p> <table border="1" data-bbox="1522 792 1969 820"> <thead> <tr> <th>Ano</th> <th>1. Energia</th> <th>2. Processos industriais e uso de produtos (IPPU)</th> <th>3. Agronegócio</th> <th>4. Uso de Terra, Mudança do Uso de Terra e Florestas (LULUCF)</th> <th>5. Resíduos</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>2005</td> <td>313,396</td> <td></td> <td>78,883</td> <td>47,739</td> <td>1,564,054</td> <td>51,618</td> <td>2,445,989</td> </tr> </tbody> </table> <p>(Source: Sirene, MCTI)</p> <p>(b) Quantifiable information on the reference indicators, their values in the reference year(s), base year(s), reference period(s) or other starting point(s), and, as applicable, in the target year:</p> <p>The reference indicator will be quantified on the basis of the total net emissions of greenhouse gases (GHG) in the reference year of 2005 considering always the latest updated version of the current reported in the "National Inventory of Anthropogenic Emissions by Sources and Removals by Sinks of Greenhouse Gases not controlled by the Montreal Protocol". For reference purposes only, the level of emissions of greenhouse gases for the base year is registered in the current inventory as per the "Fourth National Communication from Brazil to the United Nations Framework Convention on Climate Change", submitted on 31 December 2020. Every time a new inventory update is released, the 2005 baseline data presented in it will be considered for this purpose, based on the principle of "best available science".</p> | Ano | 1. Energia | 2. Processos industriais e uso de produtos (IPPU) | 3. Agronegócio | 4. Uso de Terra, Mudança do Uso de Terra e Florestas (LULUCF) | 5. Resíduos | Total | 2005 | 313,396 | | 78,883 | 47,739 | 1,564,054 | 51,618 | 2,445,989 |
| Ano | Uso de Solenoides e de Outros Produtos | Energia | Processos Industriais | Agronegócio | Uso de Terra, Mudança do Uso de Terra e Florestas | Resíduos | Total | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2005 | 0 | 312,739 | 85,318 | 102,492 | 1,904,655 | 41,470 | 2,756,674 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ano | 1. Energia | 2. Processos industriais e uso de produtos (IPPU) | 3. Agronegócio | 4. Uso de Terra, Mudança do Uso de Terra e Florestas (LULUCF) | 5. Resíduos | Total | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2005 | 313,396 | | 78,883 | 47,739 | 1,564,054 | 51,618 | 2,445,989 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Justification for transforming an NDC with a fixed baseline to an inventory-based reference: inconsistencies detected. | | | Contains two errors. The absolute variation of baseline emissions between inventories is justified by the "NDC being established on a percentage basis". However, if there is variation between inventories and the NDC is established on a percentage basis, there may be (and has been) a reduction in absolute emissions | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| | 2016 NDC | 2020 Update | 2022 Update |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | | | <p>It is important to state that the Brazilian NDC has its baseline for emissions anchored to its National Communications, which follows the IPCC methodologies for greenhouse gases inventories upon national level. Therefore, some variations regarding absolute numbers may be observed among inventories due to methodological improvements applicable. Any methodological variation will not affect the Brazilian ambition, since the NDC is established in percentual basis.</p> <p>The excerpt below informs that the goal consists of "absolute goals for the whole economy", contrary to the previous excerpt.</p> <p><small>3. Scope and coverage: (a) General description of the target: Emissions refer to absolute targets, consistent with the sectors present in the National Inventory of Greenhouse Gas Emissions for 2025 and 2030, always compared with</small></p> |
| Percentage change: from 43% to 50%; does not result in greater absolute reductions. | | Through this communication, Brazil confirms the commitment originally presented in its intended Nationally Determined Contribution (INDC), to reduce its greenhouse gas emissions in 2025 by 37%, compared with 2005. Additionally, Brazil commits to reduce its emissions in 2030 by 43%, compared with 2005. | Through this communication, Brazil confirms in its Nationally Determined Contribution (NDC), to reduce its greenhouse gas emissions in 2025 by 37%, compared with 2005. Additionally, Brazil commits to reducing its emissions in 2030 by 50%, compared with 2005. |
| <p>Progression: the government does not include the 2025 target in the field text that refers to compliance with Article 4.3 of the Paris Agreement.</p> <p>Regarding the consistency of the short-term and long-term goals, the Government of Brazil did not provide technical reasoning.</p> | Indicates absolute emission levels of 1.3 GtCO ₂ eq in 2025 and 1.2 GtCO ₂ eq in 2030. | <p>(c) How the Party has addressed Article 4, paragraph 3, of the Paris Agreement: The target of reducing emissions by 43% between 2005 and 2030 represents an increase of 6% compared to the previous target of reducing emissions by 37% between 2005 and 2025. The current target is also consistent with an indicative long-term objective of reaching climate neutrality by 2060.</p> <p>Reinforces language on "absolute emissions target" however does not specify any numbers.</p> <p>% targets adopted refer to emission levels above than those established in the 2016 NDC submission.</p> | <p>(c) How the Party has addressed Article 4, paragraph 3, of the Paris Agreement: The target of reducing emissions by 50% between 2005 and 2030 represents an increase of 16.27% compared to the previous target of reducing emissions by 43% between 2005 and 2030. The current target is also consistent with a long-term objective of reaching climate neutrality by 2050.</p> <p>Reinforces language on "absolute emissions target" however does not specify any numbers.</p> |
| Conditionality of targets on external support: Removed in the 2022 update. This means that the conditions of the 2016 NDC (without conditionalities) have been reinstated. | Goals not conditional on external support. | Conditionality: US\$ 10 billions/year from 2021. <small>As of 2021, Brazil will require at least US\$ 10 billion per year to address the numerous challenges it faces, including the conservation of native vegetation in its various biomes. Further decisions regarding Brazil's indicative long-term strategy, especially the definition of the final date to be considered to this end, will take into account financial transfers to be received by the country. Although the Federal Government currently considers achieving carbon neutrality in 2060, the proper functioning of the market mechanisms under the Paris Agreement might justify considering a more ambitious long-term objective in the future, having as a time horizon, for instance, the year 2050.</small> | Goals are not conditional on external support. (The section on conditionality in the 2020 text has been removed.) |

Annex II: Sources

- UNFCCC decisions <https://unfccc.int/decisions>
- NDC Synthesis Report
<https://unfccc.int/process-and-meetings/the-paris-agreement/nationally-determined-contributions-ndcs/nationally-determined-contributions-ndcs/ndc-synthesis-report>
- Brazil's NDC submissions and updates to the UNFCCC
<https://www4.unfccc.int/sites/NDCStaging/pages/Party.aspx?party=BRA>
- Fundamentals for the elaboration of Brazil's Nationally Determined Contribution (NDC) in the context of the Paris Agreement under the UNFCCC (in Portuguese):
<http://educaclima.mma.gov.br/wp-content/uploads/2019/12/Fundamentos-elabora%C3%A7%C3%A3o-NDC-brasileira.pdf>
- National Inventories and Communications from Brazil to the UNFCCC (MCTI):
<https://www.gov.br/mcti/pt-br/acompanhe-o-mcti/sirene/emissoes/emissoes-de-gee-por-setor-1>
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- Annual Country Emissions (Our World in Data): <https://ourworldindata.org/co2-emissions>
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<https://www.capitalreset.com/brasil-precisa-passar-barra-climatica-para-entrar-nos-mercados-de-carbono-de-paris/>
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https://www.climaesociedade.org/files/uqgd/d19c5c_9bc29d5e06a14fd0af3d38c042ac0cb7.pdf
- Observatório do Clima (2020): "NDC e a pedalada climática" (In Portuguese)
<https://www.oc.eco.br/wp-content/uploads/2020/12/ANA%CC%81LISE-NDC-1012FINAL.pdf>
- Carbon Brief (2021). "Analysis: Do COP26 promises keep global warming below 2 degrees Celsius?". Acessado em 23/02/2022.
<https://www.carbonbrief.org/analysis-do-cop26-promises-keep-global-warming-below-2c>