



# CARBON MECHANISMS RESEARCH

Policy Paper No. 01/2021

## Implementing Paris Cooperatively Market mechanisms in the latest NDC submissions

Victoria Brandemann, Nicolas Kreibich and Wolfgang Obergassel



# Disclaimer

The positions expressed in this paper are strictly those of the authors and represent neither the opinion of the Wuppertal Institute nor of the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety.

The Wuppertal Institute is carrying out the project “Market mechanisms coordination unit” on behalf of the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety.

## **Internet**

[www.carbon-mechanisms.de](http://www.carbon-mechanisms.de)

## **Contact**

Victoria Brandemann

Email: [Victoria.Brandemann@wupperinst.org](mailto:Victoria.Brandemann@wupperinst.org)

Wuppertal Institute for Climate, Environment and Energy GmbH

Döppersberg 19 • 42103 Wuppertal • Germany

[www.wupperinst.org](http://www.wupperinst.org)

This work is published under Creative Commons Attribution – NonCommercial – NoDerivatives 4.0 International license | <http://creativecommons.org/licenses/by-nc-nd/4.0/>

March 2021

Cover Photo: Jan 2013 Aerial Francois Site Photoshooting

by Masdar Official on Flickr (<https://flic.kr/p/eLgveQ>) /

CC BY-NC-SA 2.0 (<https://creativecommons.org/licenses/by-nc-sa/2.0/>)



# **Implementing Paris Cooperatively**

## Market mechanisms in the latest NDC submissions

Victoria Brandemann, Nicolas Kreibich and Wolfgang  
Obergassel

# Contents

- Summary ..... 1**
- 1 Introduction ..... 2**
- 2 Methodology..... 4**
- 3 Results ..... 5**
  - 3.1 State of play .....5
  - 3.2 Observed trends ..... 8
- 4 Conclusions ..... 11**
- References..... 12**



# Summary

In the framework of recent submissions of nationally-determined contributions (NDCs), international market mechanisms have garnered increasing consideration as a potent means to enable more ambitious targets for emission reductions. This paper analyses Parties' intentions regarding international cooperation under Article 6 of the Paris Agreement as stated in 51 of the recently submitted NDCs so far, and, secondly, compares them with previous submissions.

*Latest NDCs indicate interest of Parties to engage under Article 6 – but numbers of potential buyers still limited*

Although agreement on Article 6 is still pending in the negotiations, **41 of the 51 analysed NDCs state that Parties are open to using market mechanisms** in the future. The trend showing that most of these Parties want to sell mitigation outcomes, which was already observed in a previous paper (Oberghassel & Gornik, 2015), could be confirmed. Only very **few Parties (7) so far consider acquiring emission reductions**, which would result in an oversupply of mitigation outcomes on the market in the future. With regard to Article 6 pilots, the paper finds that the mere fact that a Party is involved in piloting activities does not necessarily mean that market mechanisms play a key role in its NDC implementation.

*Comparison with previous NDCs indicates increased openness towards markets*

Comparing the submissions of the new national climate contributions with the previous NDCs of the same Parties, a **slight increase of the willingness to use market mechanisms** can be observed. Less Parties (from previously 8 to now 4) exclude participation in market mechanisms and more Parties consider (from 13 to 17)

or intend (from 11 to 17) to use them. While one half (27) of the Parties did not change their initial position regarding market mechanisms, **nearly half (20) of the surveyed Parties expressed more interest** in market mechanisms than in their first NDCs. Only four negative changes could be observed.

*Lack of clarity regarding the functioning of Article 6 prevents Parties from taking clearer stance towards the role of markets in NDCs*

Due to several unresolved "crunch issues" in Article 6 negotiations, Parties cannot take a clear position towards market mechanisms and the potential these might bring as a tool for NDC attainment. Therefore, **the findings cannot indicate a strengthened role for international market mechanisms** in climate change mitigation. It remains to be seen how the picture will evolve when the remaining Parties to the Paris Agreement submit their next NDCs.

The paper analyses all updated NDCs submitted to UNFCCC as of February 28, 2021. The analysis will be updated as further updated NDCs become available over the course of 2021.

# 1 Introduction

Five years after the adoption of the Paris Agreement in 2015, Parties are required to submit new nationally determined contributions (NDCs) or update their existing ones. Parties with a timeframe up to 2025 in their initial NDCs were requested to submit a new NDC, whereas Parties with a timeframe up to 2030 simply had to update their NDCs according to Decision 1/CP.21, paras. 23–24 (UNFCCC, 2016).

A recent report by the UNFCCC Secretariat synthesises the information from the 48 new or updated NDCs that were submitted until the end of 2020. The report finds that many Parties have strengthened their mitigation commitments, indicating increased ambition to address climate change. However, full implementation of the targets communicated would lead to an emissions level that is only 0.3% lower for 2025 and about 2.8% lower for 2030 than the Parties' emission levels according to their previous NDCs. The estimated emission reductions therefore fall far short of what is required to limit global warming to 1.5 ° Celsius (UNFCCC (CMA), 2021). The report also finds that almost all Parties provided information on voluntary cooperation under Article 6 of the Paris Agreement and that the share of Parties planning to use market-based mechanisms has doubled since their previous NDCs (UNFCCC (CMA), 2021).

This paper analyses the 51 NDCs<sup>1</sup> submitted by Parties until February 28, 2021 (UNFCCC, 2021) and provides a more in-depth analysis of Parties' intention to use market mechanisms. Article 6 of the Paris Agreement establishes two

approaches for market-based cooperation in the context of NDC attainment: Parties may either directly engage in cooperative approaches and transfer internationally transferred mitigation outcomes (ITMOs) under Article 6.2, or they could make use of the new mechanism 'to contribute to the mitigation of greenhouse gas emissions and support sustainable development' established with Article 6.4 of the Agreement.

However, five years after the adoption of the Paris Agreement and despite numerous rounds of negotiations, Parties have not yet been able to agree on detailed provisions for these new types of market-based cooperation: In Katowice, the rules for Article 6 were the last chapter of the Paris Agreement that could not be finalized and the issue was again postponed in Madrid due to controversies on a number of issues (for details on the negotiations process see: Anju Sharma et al., 2020). With the postponement of the negotiations from 2020 to the end of 2021 due to the COVID-19 pandemic, agreement on Article 6 is still outstanding.

One of the particularly contentious issues that needs to be resolved in order to agree on an Article 6 rulebook relates to the rules of how to account for ITMOs and emission reductions transferred under Article 6.2 and 6.4, respectively. While clearly not the only crunch issue to be resolved at COP26 in November 2021 in Glasgow, the rules of how to implement 'corresponding adjustments' in order to avoid double counting of mitigation outcomes are particularly relevant from the perspective of a country considering to export mitigation outcomes:

If robust accounting rules are agreed, exporting ITMOs could make it more difficult for the host country to achieve its own NDC, at least in the

---

<sup>1</sup> Counting the EU without UK as one Party. The UNFCCC synthesis report covers the 48 NDCs submitted before 31 December 2020.

short term. If, by contrast, less strict accounting approaches are adopted, host countries might be able to use (part of) the mitigation effect of ITMOs exported for attainment of their current or future NDCs.

The general negotiations dynamic point towards a robust accounting approach that effectively avoids double counting of mitigation outcomes (at least in the context of compliance markets). However, different perceptions of how Article 6 might assist or hinder host countries in achieving their NDC can be expected to have influenced the role Parties have ascribed to market-based mechanisms when developing or updating their NDCs. More generally, the uncertainty regarding the future functioning of Article 6 might have impacted Parties' intention to use market mechanisms.

This paper surveys text passages regarding international cooperation under Article 6 in the 51 recently submitted second or updated NDCs<sup>2</sup> and compares them with the earlier NDCs of the same Parties.

The first section, which builds on the approach of a previous study (Obergassel & Gornik, 2015), presents the state of play. The paper gives a detailed insight into the wording of the NDCs submitted and explores the question of whether Parties (still) consider market mechanisms as a means to achieve their Paris contributions. It also examines which approaches the Parties intend to use. Another aspect explored is whether Parties are intending to become sellers or buyers of mitigation outcomes. The analysis also briefly refers to major emitters in order to understand if they are considering acquiring carbon credits. Finally, the first part of the paper looks at Parties' piloting activities and address-

es the question how this engagement relates to Parties' position towards markets in their NDCs.

The second part of this paper focuses on the comparison with the first NDCs of the 51 Parties. It outlines whether Parties' interest in market mechanisms increased and how individual Party positions have changed.

---

<sup>2</sup> Few Parties such as Russia recently submitted their first NDC. These NDCs are also being analysed under the category "second/updated NDC", while their intended NDCs were considered as "first NDCs".

## 2 Methodology

The paper surveys all recently submitted second or updated nationally determined contributions (NDCs) on the question to what extent they envisage the use of market mechanisms.<sup>3</sup> It considers all NDCs submitted until February 28 2021. The analysis was carried out with the help of keyword search in order to find the relevant passages in the NDCs concerning international cooperative approaches.<sup>4</sup> The analysis is solely based on submitted NDC texts and does not take into account any other publicly available information such as national plans, legislation or other documents.

After having identified the relevant text passages, the following categories were used in order to describe the countries' willingness to use market mechanisms (from low to strong): "excluded", "not mentioned", "not excluded", "considered", and "intended". Table 1 below gives example sentences for each category. The main difference between "considered" and "intended" lies in stronger wording and more concrete actions in the latter case.

Category	Example NDC text passages
<b>"excluded"</b>	"Contribution from market mechanisms: None"
<b>"not excluded"</b>	"Chile does not rule out using international GHG emission transaction markets (...)" (Gobierno de Chile, 2015)
<b>"considered"</b>	"Singapore (...) will continue to study how it can leverage international cooperation under Article 6 of the Paris Agreement." (Singapore, 2020) "(...) the country will explore how it can use these mechanisms (...)"
<b>"intended"</b>	"Therefore, at the national level, in 2020 we will establish a public-private dialogue roundtable to define specific policy for the use of markets, (...)" (Gobierno de Chile, 2020) "Rwanda intends to meet its conditional contribution through the use of climate finance and international market mechanisms where appropriate (...)" (Republic of Rwanda, 2020)

Table 1: Sample sentences for the categories "excluded", "not excluded", "considered" and "intended".

<sup>3</sup> The analysis also includes the NDCs of Russia, Cambodia, Uruguay, Ecuador, South Sudan and Brunei although these Parties only submitted their "first NDC" instead of second or updated NDCs.

<sup>4</sup> As most NDCs are published in English, the following key words were used: "mechanism", "market/s", "crediting", "JCM", "CDM", "cooperative approach", "international", "Article 6" and "REDD", "ITMO". For submissions in French or Spanish relevant text passages could be found by translating these key words into the respective language.

# 3 Results

## 3.1 State of play

*Do Parties intend to use market mechanisms in their latest NDCs?*

Most of the surveyed Parties are open to participate in international cooperation under Article 6 of the Paris Agreement in the future. The analysis of the 51 NDCs that were submitted until 28 February 2021, however, shows that the degree of interest in using market mechanisms differs. While a very small number of Parties categorically exclude international cooperation under Article 6, others, quite the opposite, state different policy measures they are going to implement in order to prepare for the participation in market mechanisms.

Figure 1 illustrates the results of the analysis and shows that 41 of the 51 analysed NDCs

state openness to use market mechanisms in the future. They either “do not exclude” participation (7 Parties), “consider” (17 Parties) or “intend” (17 Parties) to participate in voluntary cooperation under Article 6. Only four Parties “exclude” international cooperation under Article 6 and six Parties do “not mention” market mechanisms in their NDCs. As one can see from the figure, most Parties to the Paris Agreement (112) did not submit their second or updated NDC yet.

*Which market-based approaches are considered for use?*

In terms of what type of market-based approaches Parties are considering to use, the information included in the NDCs provides a somewhat blurred picture. Of the 41 Parties “intending”, “considering” or “not excluding” the

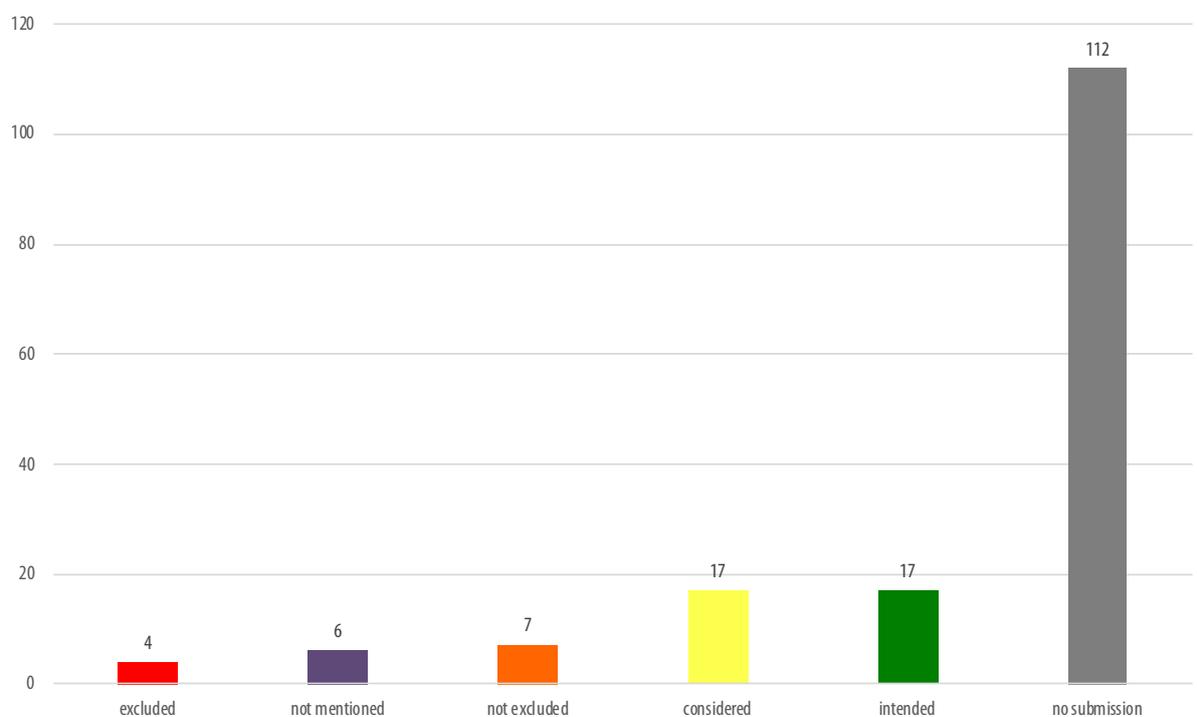


Figure 1: Market mechanisms in latest NDCs

use of markets, most (30) refer to Article 6, ‘voluntary cooperation’ or use other generic terms without providing further details. Some (5) make explicit reference to Article 6.2 of the Paris Agreement or use the term ‘cooperative approaches’. Only two Parties mention the Article 6.4 mechanism (Brazil and Senegal) with another two Parties making reference to the CDM. While Japan refers to its Joint Implementation Mechanism (JCM), Suriname expresses its interest in non-market approaches under Art. 6.8.

While these numbers provide an indication of Parties’ interest in using specific market-based approaches under Art. 6, they must be treated with some caution. First, even if a Party mentions a specific market-based approach in its NDC, this does not imply that it will refrain from (also) using other approaches. Second, there is still a lack of clarity with regards to terminology. The term ‘cooperative approaches’, for instance, is by some Parties also being used to refer to Article 6 in general and not only to cooperative approaches under Article 6.2.<sup>5</sup>

This lack of clarity provides for a large scope of interpretation, which might also explain why the recent NDC synthesis report prepared by the UNFCCC Secretariat provides a somewhat different picture in terms of the approaches considered for use: It finds a significantly larger share of Parties intending to use ‘cooperative approaches’ (see Figure 4 in: UNFCCC (CMA, 2021).

#### *Do Parties intend to transfer or acquire mitigation outcomes?*

Of the 51 analysed second or updated NDCs, 34 Parties either “consider” or “intend” to use market mechanisms. Although it is often not explicitly stated in the NDCs if the Parties are going to be buyer or seller, it could be concluded that of

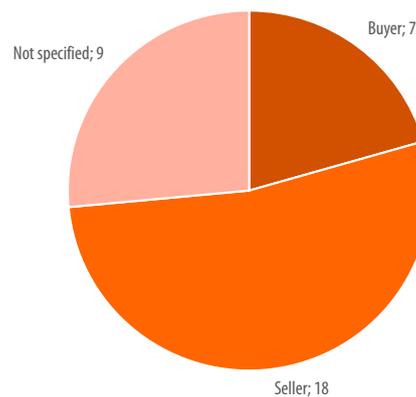


Figure 2: Buyer or seller of mitigation outcomes?

the 34 Parties, seven “consider” or “intend” to buy carbon credits (see Figure 2). 18 Parties “consider” or “intend” to sell emission reductions. Nine Parties did not clearly state if they “consider” or “intend” to become sellers or buyers.

Of the 51 NDCs analysed, most major emitters are “considering” or “intending” to use market mechanisms. Table 2 summarizes the major emitters’ positions with regard to market mechanisms. The EU, so far being the biggest emitter among the submitted updated/second NDCs, has excluded to buy carbon credits for NDC attainment. The use of market mechanisms in Australia remains unclear as Australia did not mention market mechanisms in its NDC. Among the 51 Parties analysed, only two major emitters could be clearly identified as buyers of mitigation outcomes: Japan and South Korea.

#### *Do Parties’ NDCs reflect piloting activities on the ground?*

Despite the Article 6 rulebook not yet being finalised, there has been a considerable proliferation of piloting activities across the globe, with most of them being in the preparatory phase (Greiner et al., 2020). The UNEP DTU Partnership (2020) database, which is updated regularly to reflect latest developments, lists a total number

<sup>5</sup> Suriname for instance states that “[it] will consider the use of the cooperative approaches available to it under Art. 6 of the Paris Agreement, especially those under Article 6.8.” (The Republic of Suriname 2020).

of 44 such piloting activities. This includes 7 activities that are global in scale or for which host Parties have not yet been selected.

Comparing the remaining 37 piloting activities with the list of Parties that have submitted an updated or new NDC reveals that 9 of the 51 Parties analysed in this paper are involved in piloting activities as host Parties. Some Parties are involved in more than one activity, bringing the total number of involvements up to 21.<sup>6</sup> With regard to Parties involved as buyers, only two Parties (Switzerland and Japan) have submitted an updated or new NDC.

Party	Share of Global GHG Emissions <sup>7</sup>	Future Use of Market Mechanisms	Seller or Buyer
<b>EU 27</b>	<b>6.41%</b>	<b>excluded</b>	<b>n.a.</b>
<b>Russia</b>	<b>4.84%</b>	<b>considered</b>	<b>Not specified</b>
<b>Brazil</b>	<b>2.79%</b>	<b>considered</b>	<b>Seller</b>
<b>Japan</b>	<b>2.56%</b>	<b>intended</b>	<b>Buyer</b>
<b>Mexico</b>	<b>1.39%</b>	<b>considered</b>	<b>Seller</b>
<b>Republic of Korea</b>	<b>1.33%</b>	<b>intended</b>	<b>Buyer</b>
<b>Australia</b>	<b>1.05%</b>	<b>not mentioned</b>	<b>n.a.</b>

Table 2: Major emitters position on market mechanisms and their intention to buy or sell mitigation outcomes

There are, however, also EU countries engaged in piloting activities, namely Sweden and Germany. While Sweden is also listed as a buyer of numerous piloting activities, Germany is in-

involved by providing financial support. EU and (non-EU) Parties might further be involved in piloting through international activities, including World Bank programmes such as the Carbon Initiative for Development (Ci-Dev) or the Transformative Carbon Asset Facility (TCAF).

By looking at the NDCs of those Parties directly involved in piloting activities, we explored the relationship between their piloting engagement and their position towards market mechanisms in their NDCs: while both Parties involved as a buyer (Japan and Switzerland) state in their NDCs their intention to use market mechanisms, the picture is less clear among those involved as host Parties: While none of the Parties hosting Article 6 piloting activities does explicitly exclude market mechanisms, there is also one Party that does “not mention” (Mongolia) and one Party that does “not exclude” (Kenya) the use of market mechanisms in their NDCs. While two Parties “consider” market mechanisms (Chile and Mexico) a majority of five Parties involved in piloting express their intention to use market mechanisms (Rwanda, Peru, Senegal, Colombia, Ethiopia). This might indicate that the mere fact that a Party is involved in piloting activities does not automatically mean that market mechanisms play a role in NDC implementation.

<sup>6</sup> The following Parties are or will be hosting Article 6 piloting activities (number of involvements in brackets): Chile (2), Colombia (4), Ethiopia (2), Kenya (4), Mexico (1), Mongolia (2), Peru (2), Rwanda (1), Senegal (3). Two Parties are involved as buyers: Japan (1) and Switzerland (8).

<sup>7</sup> The data on the share of global GHG emissions was retrieved from Climate Watch’s 2020 NDC Tracker (World Resources Institute, 2021).

### 3.2 Observed trends

#### *Has the interest in market mechanisms increased?*

The analysis of the 51 new or updated NDCs shows that market mechanisms find stronger resonance in the recent submissions compared to the first NDCs of the same 51 Parties<sup>8</sup>. Figure 3 shows that a positive trend can be observed in four of the five categories<sup>9</sup>: Less countries “exclude” or “do not mention” market mechanisms and more countries “consider” or “intend” to use market mechanisms in the future. Our data in Figure 3 shows that 41 Parties now “intend”, “consider” and “do not exclude” voluntary cooperation as compared to 35 Parties in previous NDC submissions. Notwithstanding

this positive development, the analysis does not reach the same conclusion as the report of the UNFCCC Secretariat (UNFCCC (CMA), 2021), which states that the share of Parties communicating that they plan to or will possibly use voluntary cooperation has more than doubled in comparison with their previous NDC.<sup>10</sup>

To be precise, in the first NDCs of the 51 Parties, eight Parties “excluded” participation in market mechanisms and eight Parties “did not mention” market mechanisms. In the updated or second NDCs the numbers went down to four (“excluded”) and six (“not mentioned”). The biggest change can be observed in the “not excluded” category. Of the 51 Parties, 11 did “not exclude” the use of market mechanisms in their first NDCs as compared to seven in the sec-

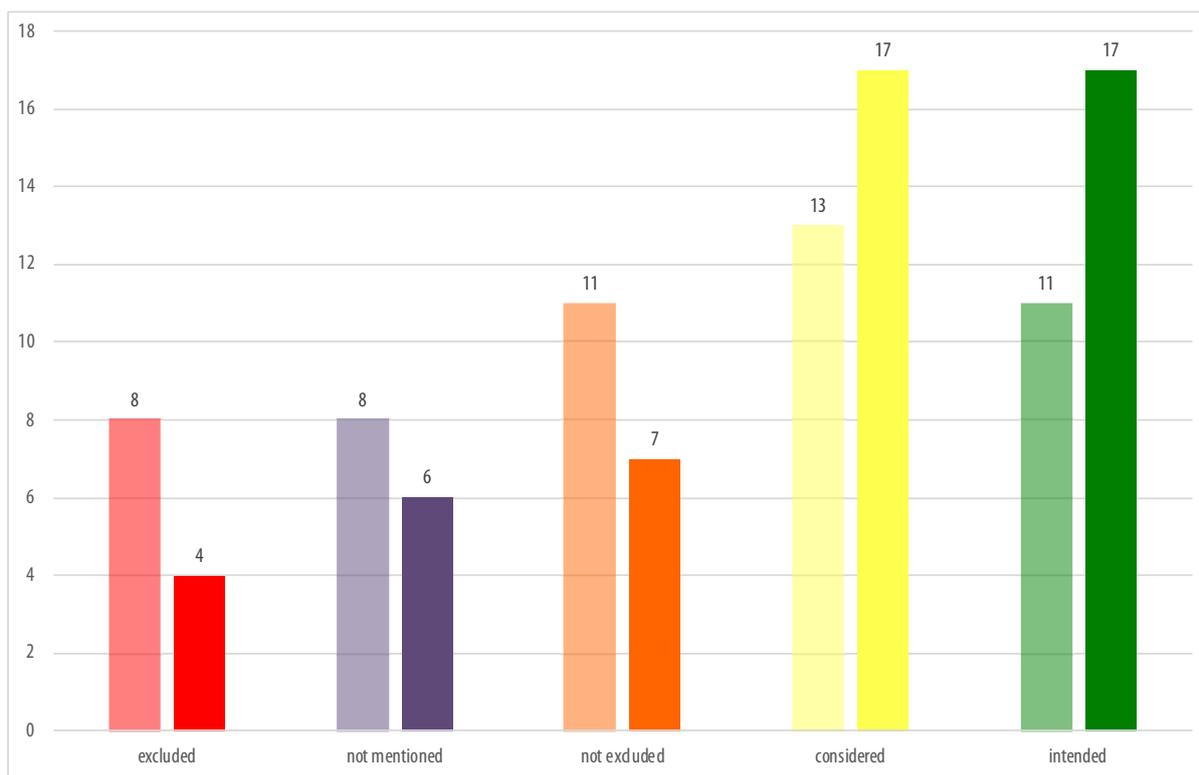


Figure 3: Comparison of market mechanisms in first (left) and latest NDCs (right)

<sup>8</sup> The EU (without UK) is counted as one Party.

<sup>9</sup> “excluded”, “not mentioned”, “not excluded” “considered” and “intended use of market mechanisms”.

<sup>10</sup> As the UNFCCC report does not provide further details on the methodology applied, the underlying reasons for the diverging findings could not be explored any further due to time constraints.

ond/updated NDCs. In the first NDC submissions, 13 Parties “considered” market mechanisms (as compared to 17 in the second / updated NDCs) and 11 “intended” to use market mechanisms (17 in the second/updated NDCs).

*(How) have Party positions changed?*

Compared to the interest in market mechanisms in the first NDCs, the analysis shows a slight positive trend, although this trend could be reverted when the remaining 112 updated or second NDCs will be submitted. Figure 4 shows that of the 51 Parties analysed, 20<sup>11</sup> express more interest in market mechanisms than in their first NDCs. About half of the countries (27<sup>12</sup> of 51), however, didn’t change their position on the use of market mechanisms. By comparing the NDCs, only four<sup>13</sup> negative changes could be observed. As an example, Nepal stated in its first NDC that it “aims to put in place forest carbon trade and payment mechanism” (Government of Nepal, 2016), but in the second NDC the wording on market mechanism is weaker: “Nepal may explore potential markets that allow higher mitigation ambition while promoting sustainable development and environmental integrity” (Government of Nepal, 2020). New Zealand, Mongolia and Nicaragua simply do not mention market mechanisms anymore in their updated NDCs, although they “intended” or “considered”

the use of market mechanisms in their first NDCs.

The world maps on the following page juxtapose the position of the Parties concerning market mechanisms as stated in the first NDCs and the second or updated NDCs (see Figure 5 on the following page).

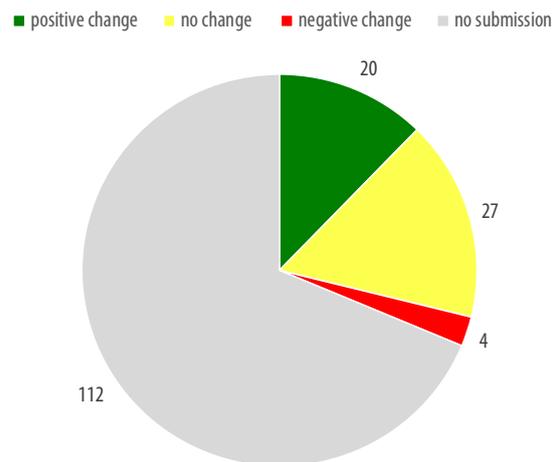


Figure 4: Change in Party positions regarding market mechanisms compared to their first NDCs

<sup>11</sup> Jamaica, Chile, Andorra, Suriname, Cuba, Russia, Brazil, Costa Rica, UK, Papua New Guinea, Peru, Monaco, Panama, Maledives, UAE, Dominican Republic, Colombia, Zambia, Brunei and Uruguay.

<sup>12</sup> Rwanda, Japan, Singapore, Norway, Marshall Islands, Moldova, Viet Nam, Thailand, Grenada, Switzerland, Tonga, EU27, Kenya, Senegal, Republic of Korea, Mexico, Argentina, Fiji, Ethiopia, Cambodia, Bangladesh, Australia, Ecuador, Democratic People’s Republic of Korea, South Sudan, Iceland and Saint Lucia

<sup>13</sup> New Zealand, Mongolia, Nepal and Nicaragua

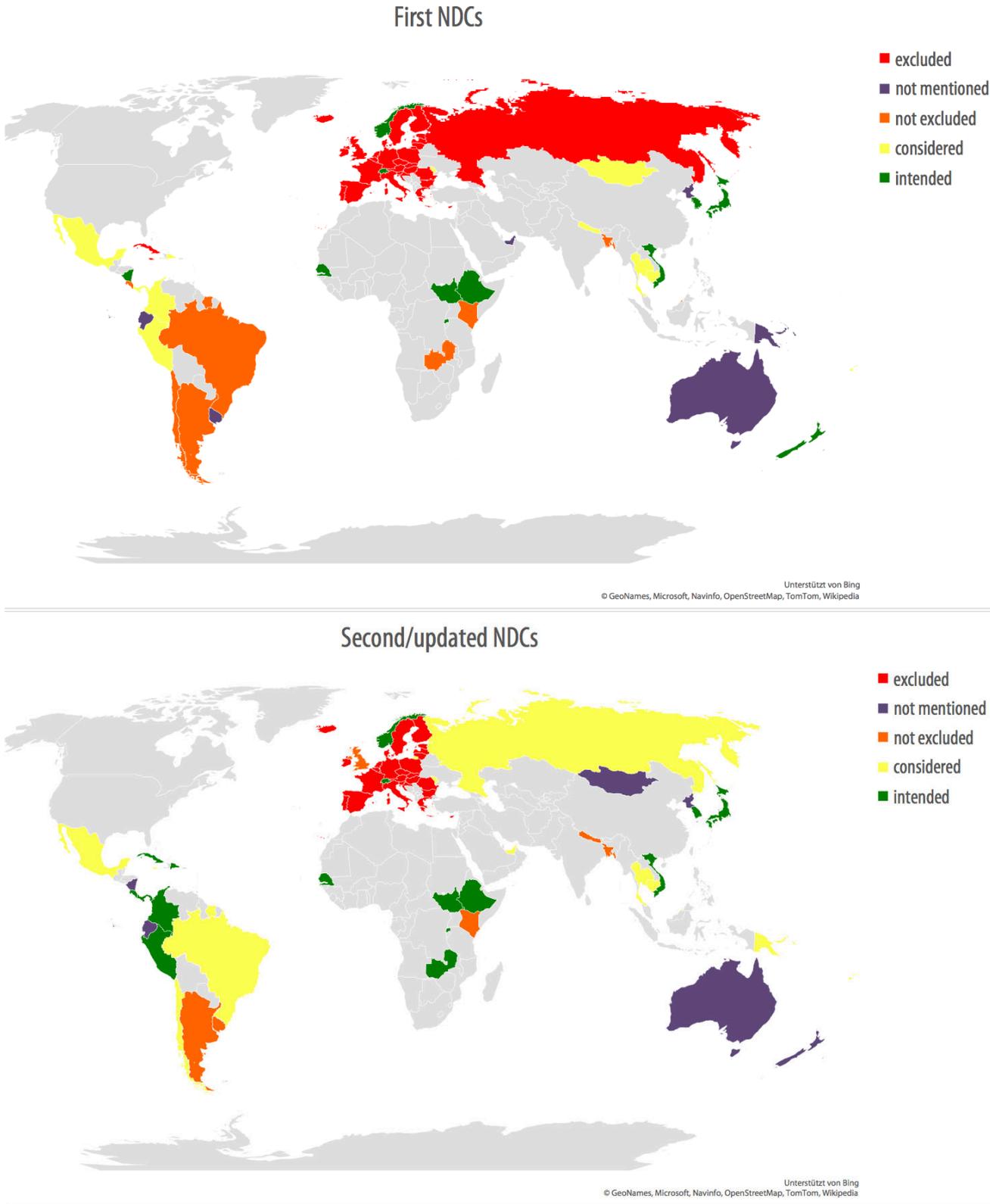


Figure 5: Party positions on market mechanisms in first and latest NDCs

## 4 Conclusions

Slightly more positive but still very vague - the 51 submitted updated or second NDCs analysed in this paper show that most Parties want to keep all options open without giving details on how exactly market mechanisms are going to be used. Most Parties (41 of 51) are open to use market mechanisms in the future, and although agreement on Article 6 is still pending in the negotiations nearly half (20<sup>14</sup>) of the surveyed Parties express more interest in market mechanisms than in their first NDCs. As most Parties of the Paris Agreement (112) did not submit their second or updated NDC yet, any perceived tendencies should, however, be regarded with caution.

The trend observed in a previous paper (Obergassel & Gornik, 2015) that most Parties want to sell mitigation outcomes, could be confirmed. Of the 34 countries that “consider” or “intend” to use market mechanisms, only Switzerland, Singapore, Monaco, UAE, South Korea, Norway and Japan mention interest in acquiring emission reductions. Therefore, a better balance of demand and supply than in the previous analysis could not be found.

With “corresponding adjustments” and other unresolved crunch issues being the elephant in the room, much progress in the NDCs on market mechanisms could not be expected. In contrast with the architecture of the Kyoto Protocol, all Parties to the Paris Agreement must now develop and communicate national mitigation targets. This puts Parties that did not have mitigation targets before in a new situation, having to consider the impact sold mitigation out-

comes might have on the attainment of their own mitigation targets. Some observers expected that these changed circumstances are likely to result in reduced potential ITMO supply compared with the first round of NDCs (e.g. Kachi et al., 2020). Since most second and updated NDCs contain very vague wording on market mechanisms, it is not clear if these new circumstances and their implications have already been fully understood and integrated into the positions of the 51 analysed Parties.

To obtain a more solid understanding of Parties’ positions regarding market mechanisms, further analysis is required that takes into account other country-specific documents. More in-depth consideration of national circumstances could provide relevant insights regarding the actual potential Parties see in the market mechanisms. Progress on the ground could also be an important driver of Party positions. While current NDCs do not seem to reflect piloting activities on the ground, this could change in the future with there being more clarity about the potential Article 6 might hold, in particular for host Parties. It will be interesting to observe this development further.

In summary, the findings of the analysis of the first set of second and updated NDCs do not indicate that there is a strengthened role for international market mechanisms in climate change mitigation. There is an urgent need for the Article 6 negotiations to provide more clarity regarding the functioning of market-based mechanisms. Without such clarity, Parties cannot take a clear stance towards market mechanisms and the potential these might bring as a tool for NDC attainment.

---

14 Jamaica, Chile, Andorra, Suriname, Cuba, Russia, Brazil, Costa Rica, UK, Papua New Guinea, Peru, Monaco, Panama, Maldives, UAE, Dominican Republic, Colombia, Zambia, Brunei.

# References

- Anju Sharma, Axel Michaelowa, Aglaja Espelage, Jennifer Allan, & Benito Müller. (2020). *COP25 Key Outcomes*. European Capacity Building Initiative.  
[https://ecbi.org/sites/default/files/COP25%20Key%20Outcomes\\_0.pdf](https://ecbi.org/sites/default/files/COP25%20Key%20Outcomes_0.pdf)
- Gobierno de Chile. (2015, September). *INTENDED NATIONALLY DETERMINED CONTRIBUTION OF CHILE TOWARDS THE CLIMATE AGREEMENT OF PARIS 2015*.  
<https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Chile%20First/INDC%20Chile%20english%20version.pdf>
- Gobierno de Chile. (2020). *Chile's Nationally Determined Contribution (NDC)—Update 2020*.  
[https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Chile%20First/Chile's\\_NDC\\_2020\\_english.pdf](https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Chile%20First/Chile's_NDC_2020_english.pdf)
- Government of Nepal. (2016). *FIRST NATIONALLY DETERMINED CONTRIBUTION*.  
<https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Nepal%20First/Nepal%20First%20NDC.pdf>
- Government of Nepal. (2020, December). *Second Nationally Determined Contribution (NDC)*.  
[https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Nepal%20Second/Second%20Nationally%20Determined%20Contribution%20\(NDC\)%20-%202020.pdf](https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Nepal%20Second/Second%20Nationally%20Determined%20Contribution%20(NDC)%20-%202020.pdf)
- Greiner, S., Krämer, N., de Lorenzo, F., Michaelowa, A., Hoch, S., & Kessler, J. (2020). *Article 6 piloting: State of play and stakeholder experiences*.  
<https://www.climatefinanceinnovators.com/publication/article-6-piloting-state-of-play-and-stakeholder-experiences/>
- Kachi, A., Warnecke, C., Tewari, R., Mooldijk, S., & Graichen, J. (2020). *Considerations for Article 6 engagement: The host country perspective*. 41.
- Obergassel, W., & Gornik, M. (2015). *Update on the Role of Market Mechanisms in Intended Nationally Determined Contributions*. 04, 21.
- Republic of Rwanda. (2020, May). *Updated Nationally Determined Contribution*.  
[https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Rwanda%20First/Rwanda\\_Updated\\_NDC\\_May\\_2020.pdf](https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Rwanda%20First/Rwanda_Updated_NDC_May_2020.pdf)
- Singapore. (2020). *SINGAPORE'S UPDATE OF ITS FIRST NATIONALLY DETERMINED CONTRIBUTION (NDC) AND ACCOMPANYING INFORMATION*.  
<https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Singapore%20First/Singapore's%20Update%20of%201st%20NDC.pdf>
- The Republic of Suriname. (2020). *Nationally Determined Contribution 2020*.  
<https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Suriname%20Second/Suriname%20Second%20NDC.pdf>
- UNEP DTU Partnership. (2020). *Article 6 Pipeline overview (December 2020)*.  
<https://www.cdmpipeline.org/>
- UNFCCC. (2016). *Report of the Conference of the Parties on its twenty-first session, held in Paris from 30 November to 11 December 2015. Addendum. Part two: Action taken by the Conference of the Parties at its twenty-first session*. 36.
- UNFCCC. (2021). *NDC Registry—Latest Submissions*. The Latest Submissions.  
<https://www4.unfccc.int/sites/ndcstaging/Pages/LatestSubmissions.aspx>
- UNFCCC (CMA). (2021). *Nationally determined contributions under the Paris Agreement. Synthesis report by the secretariat*. <https://unfccc.int/documents/268571>

# ANNEX

Party	NDC category	Seller or buyer	Intention to use Market Mechanisms	Which Mechanisms to be used?	Date of submission	Change
<b>Andorra</b>	<a href="#">First NDC</a>		excluded		24.03.17	
<b>Andorra</b>	<a href="#">Update of first NDC</a>	seller	considered	not specified	20.05.20	Positive change
<b>Argentina</b>	<a href="#">First NDC</a>		not excluded		17.11.16	
<b>Argentina</b>	<a href="#">Second NDC</a>		not excluded	not specified	30.12.20	No change
<b>Australia</b>	<a href="#">First NDC</a>		not mentioned		09.11.16	
<b>Australia</b>	<a href="#">Update of first NDC</a>		not mentioned	n.a.	31.12.20	No change
<b>Bangladesh</b>	<a href="#">First NDC</a>		not excluded		21.09.16	
<b>Bangladesh</b>	<a href="#">Update of first NDC</a>		not excluded	CDM	31.12.20	No change
<b>Brazil</b>	<a href="#">First NDC</a>		not excluded		21.09.16	
<b>Brazil</b>	<a href="#">Update of first NDC</a>	seller	considered	Art. 6.4/SDM	09.12.20	Positive change
<b>Brunei</b>	<a href="#">INDC</a>		not excluded		01.11.15	
<b>Brunei</b>	<a href="#">First NDC</a>	not specified	considered	not specified	31.12.20	Positive change
<b>Cambodia</b>	<a href="#">INDC</a>		considered		06.02.17	
<b>Cambodia</b>	<a href="#">First NDC</a>	seller	considered	not specified	31.12.20	No change
<b>Chile</b>	<a href="#">First NDC</a>		not excluded		10.02.17	
<b>Chile</b>	<a href="#">Update of first NDC</a>	not specified	considered	not specified	09.04.20	Positive change
<b>Colombia</b>	<a href="#">First NDC</a>		considered		12.07.18	
<b>Colombia</b>	<a href="#">Update of first NDC</a>	seller	intended	Article 6.2/ co-operative approaches	30.12.20	Positive change
<b>Costa Rica</b>	<a href="#">First NDC</a>		not excluded		13.10.16	
<b>Costa Rica</b>	<a href="#">Update of first NDC</a>	not specified	intended	not specified	29.12.20	Positive change
<b>Cuba</b>	<a href="#">First NDC</a>		excluded		30.12.16	
<b>Cuba</b>	<a href="#">Update of first NDC</a>	not specified	intended	Article 6.2/ co-operative approaches	10.12.20	Positive change
<b>Democratic People's Republic of Korea</b>	<a href="#">First NDC</a>		not mentioned	n.a	03.10.16	
<b>Democratic People's Republic of Korea</b>	<a href="#">Update of first NDC</a>		not mentioned	n.a.	19.09.19	No Change

Party	NDC category	Seller or buyer	Intention to use Market Mechanisms	Which Mechanisms to be used?	Date of submission	Change
<b>Dominican Republic</b>	<a href="#">First NDC</a>		considered		21.09.17	
<b>Dominican Republic</b>	<a href="#">Update of first NDC</a>	seller	intended	Article 6.2/ co-operative approaches	29.12.20	Positive change
<b>Ecuador</b>	<a href="#">INDC</a>		not mentioned		13.10.15	
<b>Ecuador</b>	<a href="#">First NDC</a>		not mentioned	n.a.	29.03.19	No change
<b>Ethiopia</b>	<a href="#">First NDC</a>		intended		09.03.17	
<b>Ethiopia</b>	<a href="#">Update of first NDC</a>	seller	intended	not specified	31.12.20	No change
<b>EU28</b>	<a href="#">First NDC</a>		excluded		05.10.16	
<b>EU 27</b>	<a href="#">Update of first NDC</a>		excluded	n.a.	18.12.20	No change
<b>Fiji</b>	<a href="#">First NDC</a>		considered		22.04.16	
<b>Fiji</b>	<a href="#">Update of first NDC</a>	seller	considered	not specified	31.12.20	No change
<b>Grenada</b>	<a href="#">First NDC</a>		considered		22.04.16	
<b>Grenada</b>	<a href="#">Second NDC</a>	not specified	considered	not specified	01.12.20	No change
<b>Iceland</b>	<a href="#">First NDC</a>		excluded		21.09.16	
<b>Iceland</b>	<a href="#">Update of first NDC</a>		excluded	n.a.	18.02.21	No change
<b>Jamaica</b>	<a href="#">First NDC</a>		excluded		10.04.17	
<b>Jamaica</b>	<a href="#">Update of first NDC</a>	not specified	considered	not specified	01.07.20	Positive change
<b>Japan</b>	<a href="#">First NDC</a>		intended		08.11.16	
<b>Japan</b>	<a href="#">Update of first NDC</a>	buyer	intended	JCM	31.03.20	No change
<b>Kenya</b>	<a href="#">First NDC</a>		not excluded		28.12.16	
<b>Kenya</b>	<a href="#">Update of first NDC</a>		not excluded	not specified	28.12.20	No change
<b>Maldives</b>	<a href="#">First NDC</a>		not mentioned		22.04.16	
<b>Maldives</b>	<a href="#">Update of first NDC</a>	not specified	intended	not specified	28.12.20	Positive change
<b>Marshall Islands</b>	<a href="#">First NDC</a>		excluded		22.04.16	
<b>Marshall Islands</b>	<a href="#">Second NDC</a>		excluded	n.a.	22.11.18	No change
<b>Mexico</b>	<a href="#">First NDC</a>		considered		21.09.16	
<b>Mexico</b>	<a href="#">Update of first NDC</a>	seller	considered	not specified	30.12.20	No change
<b>Monaco</b>	<a href="#">First NDC</a>		not excluded		26.10.16	
<b>Monaco</b>	<a href="#">Update of first NDC</a>	buyer	considered	not specified	28.12.20	Positive change
<b>Mongolia</b>	<a href="#">First NDC</a>		considered		21.09.16	
<b>Mongolia</b>	<a href="#">Update of first NDC</a>		not mentioned	n.a.	13.10.20	Negative Change

Party	NDC category	Seller or buyer	Intention to use Market Mechanisms	Which Mechanisms to be used?	Date of submission	Change
<b>Nepal</b>	<a href="#">First NDC</a>		considered		05.10.16	
<b>Nepal</b>	<a href="#">Second NDC</a>		not excluded	not specified	08.12.20	Negative Change
<b>New Zealand</b>	<a href="#">First NDC</a>		intended		05.10.16	
<b>New Zealand</b>	<a href="#">Update of first NDC</a>		not mentioned	n.a.	22.04.20	Negative Change
<b>Nicaragua</b>	<a href="#">First NDC</a>		intended		03.09.18	
<b>Nicaragua</b>	<a href="#">Update of first NDC</a>		not mentioned	n.a.	n.a.	Negative Change
<b>Norway</b>	<a href="#">First NDC</a>		intended		20.06.16	
<b>Norway</b>	<a href="#">Update of first NDC</a>	buyer	intended	not specified	07.02.20	No change
<b>Panama</b>	<a href="#">First NDC</a>		considered		18.04.16	
<b>Panama</b>	<a href="#">Update of first NDC</a>	not specified	intended	not specified	28.12.20	Positive Change
<b>Papua New Guinea</b>	<a href="#">First NDC</a>		not mentioned		24.03.16	
<b>Papua New Guinea</b>	<a href="#">Second NDC</a>	seller	considered	not specified	16.12.20	Positive Change
<b>Peru</b>	<a href="#">First NDC</a>		considered		25.07.16	
<b>Peru</b>	<a href="#">Update of first NDC</a>	seller	intended	Art. 6.2/ cooperative approaches	18.12.20	Positive Change
<b>Republic of Korea</b>	<a href="#">First NDC</a>		intended		03.11.16	
<b>Republic of Korea</b>	<a href="#">Update of first NDC</a>	buyer	intended	not specified	30.12.20	No change
<b>Republic of Moldova</b>	<a href="#">First NDC</a>		considered		20.06.17	
<b>Republic of Moldova</b>	<a href="#">Update of first NDC</a>	seller	considered	not specified	04.03.20	No change
<b>Russia</b>	<a href="#">INDC</a>		excluded		31.03.15	
<b>Russia</b>	<a href="#">First NDC</a>	not specified	considered	not specified	25.11.20	Positive Change
<b>Rwanda</b>	<a href="#">First NDC</a>		intended		06.10.16	
<b>Rwanda</b>	<a href="#">Update of first NDC</a>	seller	intended	not specified	20.05.20	No change
<b>Saint Lucia</b>	<a href="#">First NDC</a>		not excluded		22.04.16	
<b>Saint Lucia</b>	<a href="#">Update of first NDC</a>		not excluded	not specified	27.01.21	No change
<b>Senegal</b>	<a href="#">INDC</a>		intended		26.09.15	
<b>Senegal</b>	<a href="#">Update of first NDC</a>	seller	intended	Art. 6.4/SDM	29.12.20	No change
<b>Singapore</b>	<a href="#">First NDC</a>		considered		21.09.16	
<b>Singapore</b>	<a href="#">Update of first NDC</a>	buyer	considered	not specified	31.03.20	No change
<b>South Sudan</b>	<a href="#">INDC</a>		intended		23.11.15	

Party	NDC category	Seller or buyer	Intention to use Market Mechanisms	Which Mechanisms to be used?	Date of submission	Change
<b>South Sudan</b>	<a href="#">First NDC</a>	seller	intended	CDM	23.02.21	No change
<b>Switzerland</b>	<a href="#">First NDC</a>		intended		06.10.17	
<b>Switzerland</b>	<a href="#">Update of first NDC</a>	buyer	intended	Art. 6.2/ cooperative approaches	09.12.20	No change
<b>Thailand</b>	<a href="#">First NDC</a>		considered		21.09.16	
<b>Thailand</b>	<a href="#">Update of first NDC</a>	seller	considered	not specified	26.10.20	No change
<b>The Republic of Suriname</b>	<a href="#">First NDC</a>		not excluded		13.02.19	
<b>The Republic of Suriname</b>	<a href="#">Second NDC</a>	seller	considered	Article 6.8	09.12.19	Positive change
<b>Tonga</b>	<a href="#">First NDC</a>		not mentioned		21.09.16	
<b>Tonga</b>	<a href="#">Second NDC</a>		excluded	n.a.	09.12.20	No change
<b>UAE</b>	<a href="#">First NDC</a>		not mentioned		21.09.16	
<b>UAE</b>	<a href="#">Second NDC</a>	buyer	considered	not specified	29.12.20	Positive change
<b>United Kingdom (as part of EU)</b>	<a href="#">EU first NDC</a>		excluded		n.a.	
<b>United Kingdom</b>	<a href="#">First NDC</a>		not excluded	not specified	12.12.20	Positive change
<b>Uruguay</b>	<a href="#">INDC</a>		not mentioned		29.09.15	
<b>Uruguay</b>	<a href="#">First NDC</a>	seller	not excluded	not specified	14.11.17	Positive change
<b>Viet Nam</b>	<a href="#">First NDC</a>		intended		03.11.16	
<b>Viet Nam</b>	<a href="#">Update of first NDC</a>	seller	intended	not specified	11.09.20	No change
<b>Zambia</b>	<a href="#">First NDC</a>		not excluded		09.12.16	
<b>Zambia</b>	<a href="#">Update of first NDC</a>	seller	intended	not specified	30.12.20	Positive change