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## DID COP26 LAPSE OR NOT LAPSE THE CORE OBJECTIVE OF THE UNFCCC UNDER THE PARIS AGREEMENT-CARBON MARKETS?

**ABSTRACT:** It is widely believed that there is academic literature addressing the United Nations Climate Summit, but there is no systematic review and analysis of research on COP26 and its objectives under the United Nations Framework Convention on Climate Change. This article describes a qualitative meta-synthesis of research on COP26 that examines the extent to which evidence exists for changes in reducing greenhouse gases as a core objective of the UNFCCC. A systematic analysis and synthesis of various studies have shown that Article 6.2 (not lapsed) has undergone a significant change in relation to the core objective of the UNFCCC under the market-based approach. Several studies have found that Article 6.4 (lapsed) has hardly changed under a market-based approach. The results for Article 6.8 under non-market-based approaches (lapsed) were similar, although COP26 did not have the opportunity to provide “Just Change Evidence”. The article concludes by identifying gaps in scientific research and suggesting additional scientific work to increase the availability of evidence for non-market approaches.

**Keywords:** climate change, COP26, carbon market, UNFCCC, negotiations

## 1. INTRODUCTION

In order to stabilise greenhouse gas concentrations based on the UNFCCC, the most consequential action on climate change was the ratification of the Kyoto Protocol, which became the cornerstone of the United Nations Climate Summit in December 1997.<sup>1</sup> This agreement contained the mandate for industrialised countries to reduce total emissions of carbon dioxide and other greenhouse gases by at least 5% below 1990 levels during the commitment period from 2008 to 2012.<sup>2</sup> When it became clear that the Kyoto Protocol would fail, UNFCCC members decided to create a new framework that would allow both industrialised and developing countries to take immediate action. The 2009 summit drew more than 100 heads of state and government from around the world to Copenhagen, but negotiators were unable to resolve their differences over the reduction of greenhouse gas emissions and the mechanisms that are the main objective of the UNFCCC. At COP16, the Cancun Agreements essentially formalised the basic elements of the Copenhagen Accord under the UNFCCC without achieving effective results for countries' greenhouse gas emissions.<sup>3</sup> During COP17, parties were unable to make progress on issues such as a global emissions reduction target by 2050 and a timeframe for a global emissions cap, and there was no real attempt to create a carbon market.<sup>4</sup>

Negotiators in Doha (COP18) At the conference, Canada had withdrawn from the pact, and Japan and Russia had declared that they would make no further commitments (the US was never a signatory).<sup>5</sup> At a meeting in Warsaw (COP19), the Parties agreed on the composition, modalities and procedures of the Technical Teams of Experts (TTEs) that will review developing countries' biannual reports under the International Consultations and Analyses (ICA) without taking real action on the carbon market to tackle greenhouse gas emissions.<sup>6</sup> The 20<sup>th</sup> Conference of the Parties (COP) and the

<sup>1</sup> See: e.g. B.G. Rabe, "Beyond Kyoto: Climate Change Policy in Multilevel Governance Systems," *Governance*, vol. 20, no. 3 (2007), pp. 423-444; Victor D.G., *The Collapse of the Kyoto Protocol and the Struggle to Slow Global Warming*, 1st edition, New Jersey 2001.

<sup>2</sup> P. Jackson, "From Stockholm to Kyoto: A Brief History of Climate Change," *United Nations*, 1 June 2007, at <https://www.un.org/en/chronicle/article/stockholm-kyoto-brief-history-climate-change>, 31 XII 2024.

<sup>3</sup> "Paris Climate Agreement Q&A," *Center for Climate and Energy Solutions*, February 2021, at <https://www.c2es.org/site/assets/uploads/2021/02/paris-climate-agreement-qa.pdf>, 31 XII 2024.

<sup>4</sup> "Outcomes of the U.N. Climate Change Conference in Durban, South Africa: Seventeenth Session of the Conference of the Parties to the United Nations Framework Convention on Climate Change (COP 17) and Seventh Session of the Meeting of the Parties to the Kyoto Protocol (CMP 7): November 28-December 11 2011," *The Center for Climate and Energy Solutions*, 2011, at <https://www.c2es.org/site/assets/uploads/2011/12/outcomes-of-the-u-n-climate-change-conference-in-durban.pdf>, 31 XII 2024.

<sup>5</sup> "UN Climate Talks: 1992-2023," *Council on Foreign Relations*, 2021, at <https://www.cfr.org/timeline/un-climate-talks>, 31 XII 2024.

<sup>6</sup> "Outcomes of the U.N. Climate Change Conference in Warsaw: Nineteenth Session of the Conference of the Parties to the United Nations Framework Convention on Climate Change (COP 19):

10<sup>th</sup> COP, which serves as the meeting of the Parties to the Kyoto Protocol, took place from 1 to 14 December in Lima, Peru.<sup>7</sup> The most promising aspect of the deal was that the parties agreed on a draft document that will serve as a starting point for further vigorous talks in the run-up to Paris (Jones, 2015). The Paris Agreement commits countries to nationally determined contributions and provides mechanisms to hold them accountable and increase their ambition in the coming years.<sup>8</sup> The Parties concluded negotiations on the Paris Agreement rulebook in December 2018 at COP24 in Katowice, Poland (the 24<sup>th</sup> Conference of the Parties to the UNFCCC). The governments agreed on most of the remaining parts of the rules. However, no consensus was reached on Article 6 of the agreement, which concerns the international carbon market that contributes to the greenhouse gas reduction mechanism.<sup>9</sup> After this brief explanation, the author argues that Article 6 is the most urgent issue for international climate negotiations as it concerns the core objective of the UNFCCC: the reduction of greenhouse gas emissions and compliance with the mechanisms. Thus, the most important question is: what was achieved or not achieved in Article 6 and its paragraphs during COP26 to achieve the core objective of the UNFCCC (i.e., greenhouse gases) – and why? The study by Kreibich and Hermwille<sup>10</sup> brings together the demand and supply sides of the voluntary carbon market by combining quantitative and qualitative methods without analysing in detail the mechanisms of Article 6 as the core of the negotiations and their levels. In another recent study, the authors argue that international debates on carbon markets are generally decentralised and do not focus on details such as Article 6 and its mechanisms.<sup>11</sup> The main objective of this study is, therefore, to analyse Article 6 and its sub-articles in the context of COP26.

Given the novelty of this study, two insights are developed here. At the same time, this article proposes a way to flesh out the mechanisms of Article 6 and to incorporate the market-based and non-market-based levels of mechanisms into COP26 and future debates, which differ from a climate policy analysis and negotiation approach. These levels of Article 6 can be used by negotiators and policymakers to analyse the present and the future. The rest of the article is organised as follows: Section 2 presents the methodology, Section 3 provides evidence based on negotiation information, Section 4

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November 11-22 2013,” *The Center for Climate and Energy Solutions*, 2013, at <https://www.c2es.org/site/assets/uploads/2013/11/outcomes-of-the-u-n-climate-change-conference-in-warsaw.pdf>, 31 XII 2024.

<sup>7</sup> “COP 20 Outcomes and Critiques,” *African Climate & Development Institute*, 23 December 2014, at <http://www.acdi.uct.ac.za/acdi/news/cop-20-outcomes-and-critiques>, 31 XII 2024.

<sup>8</sup> “Paris Climate Agreement Q&A”...

<sup>9</sup> “The Paris Agreement and Paris Rulebook,” *The London School of Economics and Political Science*, 2020, at <https://www.lse.ac.uk/granthaminstitute/events/landing-the-paris-climate-agreement-how-it-happened-why-it-matters-and-what-comes-next/>, 31 XII 2024.

<sup>10</sup> N. Kreibich, L. Hermwille, “Caught in Between: Credibility and Feasibility of the Voluntary Carbon Market Post-2020,” *Climate Policy*, vol. 21, no. 7 (2021), pp. 939-957.

<sup>11</sup> S. Evans, A.Z. Wu, “What Drives Cooperation in Carbon Markets? Lessons from Decision-Makers in the Australia-EU ETS Linking Negotiations,” *Climate Policy*, vol. 21, no. 8 (2021), pp. 1086-1098.

focuses on the analysis of COP26, Section 5 discusses the results, and, in Section 6, the author summarises the article.

## 2. METHODOLOGY

Methodology is crucial to any branch of science because unreliable methodology leads to unreliable results and consequently undermines the value of your analysis of the results.<sup>12</sup> In this article, the author attempts to assess the most important issue – the carbon market – in international climate negotiations from the perspective of the UN climate summit COP26. In terms of qualitative research approaches, the literature review method was considered by me as the author of the paper. Specifically, a systematic literature review of evidence is used. A systematic review can be explained as a research method and procedure for identifying and critically evaluating relevant research, as well as collecting and analysing information from scientific research.<sup>13</sup> In applying this method, special attention is paid to the technique of qualitative meta-synthesis (QMS) for analysis. Meta-synthesis is a qualitative tool used to analyse multiple qualitative studies identified through a systematic review. Following the systematic review, the author uses the technique of meta-synthesis to identify the results of a few different but related qualitative studies in the first step and the main themes in the literature in the second step.

The QMS approach can be applied to qualitative studies by a single author on a particular topic or to the qualitative findings of studies by different researchers in each field.<sup>14</sup> This study analyses the results of a published qualitative study conducted by several researchers on the carbon market as a binding element of the COP26 summit. As a first step, the researcher did not have access to scientific publications (e.g., journals or books) since this article was organised only a few months before COP26. To summarise the available data, the author examined qualitative studies on perceptions of COP26 using a keyword search. The main search terms were climate change, negotiations, carbon markets, COP26 and target. The keywords were used to find the desired articles in various databases, including Climate Home News, Carbon Brief, Carbon Market Watch, European Union and others. After creating the keywords, some well-known articles and quotes from these references were identified. Search terms that focused on the description, analysis, impacts and outcomes of the COP26 climate negotiations and the market approach were also used to find suitable articles. These identified references were further filtered using the terms “perceptions of climate negotiations”, “the main objective of climate change debates”, “qualitative studies”, “qualitative methodology”,

<sup>12</sup> “Research Guides: Organizing Your Social Sciences Research Paper,” *USC Libraries*, 2021, at <https://libguides.usc.edu/writingguide/methodology>, 31 XII 2024.

<sup>13</sup> H. Snyder, “Literature Review as a Research Methodology: An Overview and Guidelines,” *Journal of Business Research*, vol. 104 (2019), pp. 333-339.

<sup>14</sup> D. Murphy et al., “A Systematic Review and Meta-Synthesis of Qualitative Research into Mandatory Personal Psychotherapy during Training,” *Counselling and Psychotherapy Research*, vol. 18, no. 2 (2018), pp. 199-214.

“synthesis analysis” and “carbon market mechanisms”. Therefore, the data collection and exclusion criteria eliminated any quantitative or qualitative resources that did not have access to the full text, contained only an abstract and title in English and had no clear and related signals on Scopus or Web of Science in relation to the main topic of this article. The author will explain these criteria in more detail in the following sections, namely the analysis.

### 3. EVIDENCE (1): DO WE UNDERSTAND THE AIM AND WHAT WAS AND IS THE REAL AIM OF THE DEBATES ON CLIMATE CHANGE NEGOTIATIONS?

In this section, the author seeks to understand the main objective of the UNFCCC negotiations, specifically in the case of COP26, but not necessarily limited to this section, and to link to the Analysis, Results and Discussion sections. The author focuses on the arguments and debates before and after the Paris Agreement up to COP26 in order to understand the real objective of the discussions on climate change negotiations under the UNFCCC. The UNFCCC came into force in 1994, with its main objective being to stabilise greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system through negotiations. In December 1997, following two and a half years of intensive negotiations, the Conference of the Parties (Copenhagen) in Kyoto (Japan) adopted a significant extension to the Convention that establishes legally binding commitments to reduce emissions.<sup>15</sup> The Kyoto Protocol introduced three innovative mechanisms: the Clean Development Mechanism (CDM); Joint Implementation (JI); Emissions Trading, namely a global carbon market that enables countries to utilise cost-effective ways to reduce greenhouse gas emissions and support the objectives of the UNFCCC.<sup>16</sup> The Kyoto Protocol can, therefore, be seen as an important step towards a key negotiating objective that can stabilise greenhouse gas emissions and create an effective architecture for climate change.<sup>17</sup>

Nevertheless, the negotiations on the commitments of the Kyoto Protocol at COP15 in Copenhagen in 2009 failed to find an effective solution for the hottest target of the negotiations,<sup>18</sup> namely the reduction of greenhouse gases. However, attempts to develop a successor treaty to the Kyoto Protocol continued at subsequent COPs,

<sup>15</sup> “Uniting on Climate,” *United Nations Framework Convention on Climate Change*, 2007, at [https://unfccc.int/resource/docs/publications/unitingonclimate\\_eng.pdf](https://unfccc.int/resource/docs/publications/unitingonclimate_eng.pdf), 31 XII 2024.

<sup>16</sup> “Fact Sheet: The Need for Mitigation,” *United Nations Framework Convention on Climate Change*, November 2009, at [https://unfccc.int/files/press/backgrounders/application/pdf/press\\_factsh\\_mitigation.pdf](https://unfccc.int/files/press/backgrounders/application/pdf/press_factsh_mitigation.pdf), 31 XII 2024.

<sup>17</sup> S. Pouloupoulos, V. Inglezakis, *Environment and Development: Basic Principles, Human Activities, and Environmental Implications*, 1st edition, Amsterdam 2016.

<sup>18</sup> S.N. Seo, “Beyond the Paris Agreement: Climate Change Policy Negotiations and Future Directions,” *Regional Science Policy & Practice*, vol. 9, no. 2 (2017), pp. 121-141.

culminating in the Durban Platform for Enhanced Action (DPEA) in 2011 in Durban, South Africa.<sup>19</sup> The future of the Kyoto Protocol to reduce emissions was, therefore, uncertain. Although a second commitment period was negotiated and agreed in 2012 (the Doha Amendment), it did not enter into force, and the most recent instrument negotiated under the UNFCCC, the Paris Agreement (PA), emerged independently of the Kyoto Protocol to reconsider the core objective of the UNFCCC.<sup>20</sup> The Paris Agreement was signed in 2015 to think more and differently about the effects of climate change, such as greenhouse gas emissions. For example, this agreement includes measures to reduce greenhouse gas emissions from all parties and to respond to their impacts in the post-2020 period.<sup>21</sup> In order to achieve the main objective of the UNFCCC, the reduction of greenhouse gas emissions, the PA has taken Article 6 into account. Article 6 of the Paris Agreement aims to promote integrated, holistic and balanced approaches through its mechanisms, such as carbon markets, to support governments in voluntary international cooperation.<sup>22</sup> This cooperation under the Paris Agreement, therefore, helps Parties to pursue the UNFCCC's current and future goals to reduce greenhouse gas emissions by submitting their nationally determined contributions and achieving their heart's goal.<sup>23</sup>

Article 6 on concrete steps and projects to achieve the Paris Agreement was the main point of discussion and activity at COP22,<sup>24</sup> alongside the carbon market to reduce global greenhouse gas emissions.<sup>25</sup> Although there were many announcements by coalitions or groups of actors on the road to the negotiations, the number of commitments at COP22 was comparatively small, and little information was provided on progress in reducing GHG emissions compared to COP21 commitments and the UNFCCC's core objective.<sup>26</sup> COP23 on the UNFCCC headline target continued as countries

<sup>19</sup> See eg.: J. Aldy, R. Stavins, "Climate Negotiators Create an Opportunity for Scholars," *Science*, vol. 337, no. 6098 (2012), pp. 1043-1044; C. Streck et al., "The Durban Climate Conference between Success and Frustration," *Journal for European Environmental & Planning Law*, vol. 9, no. 2 (2012), pp. 201-221.

<sup>20</sup> D.A. DellaSala, M.I. Goldstein, *Encyclopedia of the Anthropocene*, 1st edition, Oxford 2018.

<sup>21</sup> L. Moosmann et al., *International Climate Negotiations: Issues at Stake in View of the COP25 UN Climate Change Conference in Madrid*, ENVI Committee, at [https://www.europarl.europa.eu/RegData/etudes/STUD/2019/642344/IPOL\\_STU\(2019\)642344\\_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/STUD/2019/642344/IPOL_STU(2019)642344_EN.pdf), 31 XII 2024.

<sup>22</sup> "Article 6: What is it and why is it Important?," *International Chamber of Commerce*, 18 July 2019, at <https://iccwbo.org/media-wall/news-speeches/article-6-important/>, 31 XII 2024.

<sup>23</sup> Operationalizing Article 6 of the Paris Agreement: European Bank for Reconstruction and Development (EBRD), United Kingdom 2017, at [https://www.iet.org/resources/International\\_WG/Article6/Portal/operationalising-article-6-of-the-paris-agreement.pdf](https://www.iet.org/resources/International_WG/Article6/Portal/operationalising-article-6-of-the-paris-agreement.pdf), 31 XII 2024.

<sup>24</sup> Stages of Climate Change Negotiations, 2021, at [https://www.europarl.europa.eu/infographic/climate-negotiations-timeline/index\\_en.html](https://www.europarl.europa.eu/infographic/climate-negotiations-timeline/index_en.html), 31 XII 2024.

<sup>25</sup> International Emissions Trading Association. 2016. COP 22 Summary Report. Marrakech. 20 November, at [https://www.iet.org/resources/UNFCCC/COP22/COP22WRAP\\_FINAL.pdf](https://www.iet.org/resources/UNFCCC/COP22/COP22WRAP_FINAL.pdf), 31 XII 2024.

<sup>26</sup> M. Deheza, et al., "COP22 in Marrakech: A Push for Accelerated Action by 2018," *Institute for Climate Economics Climate Brief*, no. 43 (2016), pp..



negotiated the finer details of the agreement to reduce emissions from 2020.<sup>27</sup> Discussions on Article 6 resulted in a mandate for the Chair to prepare informal documents for the Article 6 sections.<sup>28</sup> Parties were unable to reach a comprehensive agreement on three key informal notes on Article 6, namely Articles 6.2, 6.4 and 6.8.<sup>29</sup>

As global temperatures continued to rise, UN negotiations began in Katowice, Poland<sup>30</sup>. The COP in Katowice was important because some key elements, such as Article 6 of the PA and the carbon market to reduce global emissions, had to be ironed out by the Parties.<sup>31</sup> During COP24, the chapters of Article 6 and the market mechanisms were not fully clarified. This suggests that certain actors are reluctant to prioritise the use of Article 6-based markets to address GHG emissions, while others seem to view the use of markets as a dubious solution to the UNFCCC objective.<sup>32</sup> As greenhouse gas emissions continue to rise, governments gathered in Madrid for the UN Climate Change Conference COP25<sup>33</sup> to take the next decisive steps towards achieving the UNFCCC target for greenhouse gas emissions.<sup>34</sup> The aim of COP25 was to finalise the negotiations on the last outstanding issues of the “Katowice rulebook” for the implementation of the Paris Agreement, in particular the rules for the international carbon market (Article 6 and the carbon market). The carbon market mechanisms are important for how some countries want to achieve their targets and the main objective of the UNFCCC<sup>35</sup>. However, the COP25 negotiators disagreed on how to establish ru-

<sup>27</sup> J. Timperley, “COP23: Key Outcomes Agreed at the UN Climate Talks in Bonn,” *Carbon Brief*, 19 November 2017, at <https://www.carbonbrief.org/cop23-key-outcomes-agreed-un-climate-talks-bonn>, 31 XII 2024.

<sup>28</sup> “Report of the Subsidiary Body for Scientific and Technological Advice on its Forty-Fourth Session, Held in Bonn from 16 to 26 May 2016,” *United Nations Framework Convention on Climate Change*, 27 July 2016, at <https://unfccc.int/resource/docs/2016/sbsta/eng/02.pdf>, 31 XII 2024.

<sup>29</sup> C. Streck, M. von Unger, S. Greiner, “COP 25: Losing Sight of (Raising) Ambition,” *Journal for European Environmental & Planning Law*, vol. 17, no. 2 (2020), pp. 136-160.

<sup>30</sup> M. Asadnabizadeh, “Analysis of Internal Factors of the Swing States in the International Climate Change Negotiations: A Case study of Poland in COP24,” *American Journal of Climate Change*, vol. 8, no. 2 (2019), pp. 263-283.

<sup>31</sup> “COP24: UN Climate Change Conference, what’s at Stake and What You Need to Know?,” *United Nations News*, 29 November 2018, at <https://news.un.org/en/story/2018/11/1026851>, 31 XII 2024.

<sup>32</sup> See eg.: K. Shockley, “Sustainable Development Goals and Nationally Determined Contributions: The Poor Fit between Agent-Dependent and Agent-Independent Policy Instruments,” *Journal of Global Ethics*, vol. 14, no. 3 (2018), pp. 369-386; S. Dröge, V. Rattani, “After the Katowice Climate Summit: Building Blocks for the EU Climate Agenda,” *Deutsches Institut für Internationale Politik und Sicherheit*, no. 9 (2019), pp. 1-7.

<sup>33</sup> M. Asadnabizadeh, “Status of Impacts of Extreme Climate Events at the UN Climate Change Conference (COP25),” *International Journal of Climate Change: Impacts & Responses*, vol. 13, no. 1 (2020), pp. 1-11.

<sup>34</sup> “COP25 to be the Launchpad for Significantly more Climate Ambition,” *United Nations Climate Change*, 29 November 2019, at <https://unfccc.int/news/cop25-to-be-the-launchpad-for-significantly-more-climate-ambition-0>, 31 XII 2024.

<sup>35</sup> M. Asadnabizadeh, E. Moe, “A Review of Global Carbon Markets from Kyoto to Paris and beyond: The persistent failure of implementation,” *Frontiers in Environmental Science*, vol. 12 (2024), pp. 1-13.

les that would reduce overall carbon emissions. Thus, COP25 ended without an agreement on carbon markets and postponed this important decision to the next COP26 in Glasgow, even though the global community was facing a complete standstill due to COVID-19.<sup>36</sup>

### 3.1. Evidence (2): What was the main objective of the UNFCCC negotiations on the status of climate change after COP26?

The 26<sup>th</sup> Conference of the United Nations Framework Convention on Climate Change (UNFCCC) was held in the UK for the first time in 2021<sup>37</sup> and brought together around 200 UNFCCC leaders to reflect on the centrepiece of the UNFCCC target, greenhouse gases.<sup>38</sup> Although postponed due to COVID-19 restrictions on public meetings, COP26 is the most recent Conference of the Parties (COP), a coalition of states that forged the United Nations Framework Convention on Climate Change (UNFCCC) in 1992, in which they pledged to work together to keep greenhouse gas emissions at levels that prevent harmful anthropogenic interactions with the climate system and to act decisively rather than delay.<sup>39</sup> The continued delay of the global community in pursuing the main objective of the UNFCCC by industrialised countries, along with the postponement of agreements to COP26, has led countries to reflect on a robust decision on some important issues such as Article 6 and market mechanisms, which remain crucial to the debate.<sup>40</sup>

By hosting the conference, the UK government aimed to showcase the UK as a leader in global environmental policy and an advocate for reducing greenhouse gases through key Paris Agreement rules, such as the carbon market mechanism.<sup>41</sup> To ensure the main objective of the UNFCCC, the original COP26 website, run by the UK government, indicated that the primary goal of countries is to collectively reduce global greenhouse gas emissions by 2030 through the mechanisms of the Paris Agreement,

<sup>36</sup> H. Knaepen, "COP25: The Eternal Challenge of Competing Interests," *ecdpm*, 16 December 2019, at <https://ecdpm.org/talking-points/cop25-eternal-challenge-competing-interests/>, 31 XII 2024.

<sup>37</sup> "UN Climate Change Conference (COP26) at the SEC – Glasgow 2021," 2021, at <https://webarchive.nationalarchives.gov.uk/ukgwa/20230401054904/https://ukcop26.org/>, 31 XII 2024.

<sup>38</sup> "Learning for Sustainability: COP26," *Youth Link Scotland*, 2021, at <https://www.slideshare.net/slideshow/learning-forsustainabilitycop26overview-250374091/250374091>, 31 XII 2024.

<sup>39</sup> D. Broom, "Climate Change: What is COP26 and why does it Matter?," *World Economic Forum* 10 May 2021, at <https://www.weforum.org/agenda/2021/03/cop26-un-climate-change-summit/>, 31 XII 2024.

<sup>40</sup> G. Nhamo, "UNFCCC Decision on Agriculture: Africa Must Continue Prioritising Adaptation in the Talanoa Dialogue and (I)NDC Processes," *South African Journal of International Affairs*, vol. 25, no. 3 (2018), pp. 281-299.

<sup>41</sup> A. Jennings, "The Movement to Replace Neoliberalism Has Lost a Battle, But We Can Still Win the War," *Global Policy*, 25 February 2020, at <https://www.globalpolicyjournal.com/blog/25/02/2020/movement-replace-neoliberalism-has-lost-battle-we-can-still-win-war>, 31 XII 2024.



specifically Article 6.<sup>42</sup> Echoing this UK government perspective, the sustainability viewpoint asserts that COP26 is grounded in multilateralism, as recognised by the past and current actions of nations regarding the rules of the Paris Agreement, including Article 6 and the carbon market, to reduce greenhouse gases. This indicates that the international community as a whole, along with the UNFCCC and COP26, has a crucial role in ensuring that governments seize the exceptional opportunity presented by COP26 to effectively advance the UNFCCC's emissions reduction target.<sup>43</sup>

Regardless of the findings on this topic and the UNFCCC emissions reduction target, the latest report by Working Group I of the Intergovernmental Panel on Climate Change (IPCC)<sup>44</sup> shows that global warming of 1.5°C is likely to be exceeded before 2040. Therefore, achieving the UNFCCC target and negotiations under the Paris Agreement to limit warming to 1.5°C is consistent with effective carbon market decision-making and policy, especially given a carbon budget of only 400-500 GtCO<sub>2</sub> from 2020, with annual emissions currently at around 40 GtCO<sub>2</sub>. The failure of the post-Paris Agreement discussions under the UNFCCC on Article 6 and the carbon market must be addressed at COP26 in the UK, not only because of the UNFCCC's primary goal of reducing greenhouse gas emissions, but also due to the first global stocktake (GST) by 2023 to assess and monitor the collective progress of countries in achieving the goals of the UNFCCC discussions and the Paris Agreement.<sup>45</sup> The author of this study argues that the 1992 United Nations Framework Convention on Climate Change and its follow-up conferences provide a near-universal architecture of international debate through which Parties work to reduce greenhouse gas emissions (the main objective of the UNFCCC) through mechanisms such as the carbon market before, during and after the Paris Agreement (i.e., Article 6). The primary objective of COP26 was, therefore, to accelerate progress towards achieving the objectives of Article 6 of the UNFCCC, irrespective of greenhouse gas emission reductions and the carbon market.

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<sup>42</sup> N.K. Arora, I. Mishra, "COP26: More Challenges than Achievements," *Environmental Sustainability*, vol. 4 (2021), pp. 585-588.

<sup>43</sup> W. Obergassel, L. Hermwille, S. Oberthür, "Harnessing International Climate Governance to Drive a Sustainable Recovery from the COVID-19 Pandemic," *Climate Policy*, vol. 21, no. 10 (2021), pp. 1298-1306.

<sup>44</sup> M. Asadnabizadeh, "Critical Findings of the Sixth Assessment Report (AR6) of Working Group I of the Intergovernmental Panel on Climate Change (IPCC) for Global Climate Change Policymaking a Summary for Policymakers (SPM) Analysis," *International Journal of Climate Change Strategies and Management*, vol. 15, no. 5 (2023), pp. 652-670.

<sup>45</sup> A. Mohan et al., "UNFCCC Must Confront the Political Economy of Net-Negative Emissions," *One Earth*, vol. 4, no. 10 (2021), pp. 1348-1351.

4. ANALYSING COP26: HOW TO CREATE AN EFFECTIVE AND UNDERSTANDABLE ANALYSIS

The author argues that the chosen methodology (i.e., Section 2) and the process of analysis in this section follows the Method of Procedure (MOP).<sup>46</sup> The author’s aim is to follow six steps to implement an effective QMS and analysis based on MOP (see Table 1).

Table 1. Screening MOP

MOP	Steps of the MOP	Section Implementing MOP
1	Extract available literature	(4.1)
2	Organise the literature	(4.1)
3	Review and analyse the relevant literature	(4.2)
4	Extract themes	(4.2)
5	Interpret arguments of themes	(4.2.1, 4.2.2, 4.2.3, 4.2.4)
6	Interpret evidence and discussion	(5)

Each of these steps enables the author to create greater transparency regarding the most important findings and final results.

4.1. Research Design: Selection of literature, themes, arguments and discussion

To frame the rest of the article, the author points out that for the selection of literature and the subsequent MOP process, qualitative studies from 2015 or literature focusing on one or all of the following terms and approaches were included: Climate Negotiations, Climate Target, UNFCCC Core Target and COP26 Ambition Target (i.e., MOP 1.2). On the other side of this MOP, the author considers what does not need to be included – studies focusing on meta-analyses or statistical approaches were excluded – to understand the main issues. Therefore, all quantitative studies (Scopus, Web of Science) that did not contain bold signals related to the main topic of this article were excluded by the author (i.e., MOP 3). The reason for this is to extract the topics within the literature levels (i.e., MOP 4). Then, the author endeavours to provide a clear interpretation of the arguments (i.e., MOP 5). Finally, the most important evidence in the literature and discussion is explained (i.e., MOP 6).

<sup>46</sup> E.g.: S. Harsh, D. Clarke, “Advancements in Research Synthesis Methods: From a Methodologically Inclusive Perspective,” *Review of Educational Research*, vol. 79, no. 1 (2009), pp. 395-430.

4.2. Results

*Thematic approach to the organisation of literature and in the light of COP26*

In the subsection preceding the analysis and presentation of the results in the following sections, the author attempts to review and summarise the available literature (30 different works by various researchers), grouped around the main theme of this article. It is worth noting that the data have been summarised in the form of themes from different studies, which are presented in Table 2.

In the analysis, the themes were summarised and further analysed to achieve the objectives of the study (i.e., to focus on studies that address the arguments, ideas, perceptions and strategies on greenhouse gases and the carbon market at COP26). Therefore, the themes of the studies focusing on these areas were transformed into categories 1, 2, 3, 4 representing the questions and issues. To be more specific, the results are presented in four summary sections: 1) PA commitments and strengthening ambition; 2) loss and damage finance; 3) Article 6 rules; 4) international carbon markets.

Table 2. A synthesis matrix table of included resources

Literature	Theme 1	Theme 2	Theme 3	Theme 4
	The Energy and Climate Intelligence Unit	Doug Bryden, John Buttanshaw, Sarah-Jane Denton, Sujina Khatun, Alexandra MacBean, Harrie Narain and Laura Smyth	Yamide Dagnet, Mima Holt, Nathan Cogswell, Lorena Gonzalez and Joe Thwaites	David Vetter
		LSE and Grantham Research Institute on climate change and environment	Kizzier et al.	Mark Lewis
				Christopher J. White, Francesco Sindico, Keith Bell
			Sabine Frank	Eleanor Green
				Chloé Farand
				Euan Strachan and Paul Greening
				Steinebach & Limberg
				Mountford et al.
				Masood & Tollefson
				Greiner, Hoch, Mbaye
				Diagne, Victoria & Singh
				November editorial: A bad deal or no deal at COP26?
				O'Neill
				Wang, Liu & Gu
				Annette

				Cadman & Sarker
				Depledge, Saldivia & Peñasco
				Behr, Bleuel, Müller & Nowak
				Obergassel et al.
				Hales & Mackey
				Obergassel
				Persico
				Hone

4.2.1. Theme 1: Review commitments and strengthening the ambition of the PA

The first sub-chapter is a review and analysis of the commitments of the Paris Agreement. This includes issues raised by COP26. The Energy and Climate Intelligence Unit study states that almost all countries have signed the Paris Agreement, the central aim of which is to achieve the UNFCCC’s main goal of limiting the global temperature increase this century to “well below 2°C above pre-industrial levels” and to pursue efforts to limit it to 1.5°C.<sup>47</sup> The Paris Agreement contained a clause “inviting” countries to submit improvements or extensions in the form of Nationally Determined Contributions (NDCs). A key expectation of an NDC is that governments accelerate their carbon reductions for the decade to 2030. Therefore, since the Paris Agreement, COP26 has been an opportunity for countries to come together to review their commitments and strengthen their ambition to reduce greenhouse gases through carbon markets.<sup>48</sup>

4.2.2. Theme 2: Funding for loss and damage (L&D)

The second theme that emerges from the selected literature is the financing of loss and damage during COP26. In “COP26: What is it and why is it important?”, the authors report that COP26 provides an important opportunity to reflect on what has been achieved and what remains to be achieved in terms of loss and damage five years after the signing of the Paris Agreement. Due to the global economic and social devastation caused by the COVID-19 pandemic, policymakers around the world are focusing

<sup>47</sup> See: J. Rogelj et al., “Emission Pathways Consistent with a 2°C Global Temperature Limit,” *Nature Climate Change*, vol. 1, no. 8 (2011), pp. 413-418; J. Rogelj et al., 2016. “Paris Agreement Climate Proposals Need a Boost to Keep Warming Well Below 2°C,” *Nature*, vol. 534 (2016), pp. 631-639; Y. Gao, X. Gao, X. Zhang, “The 2 °C Global Temperature Target and the Evolution of the Long-Term Goal of Addressing Climate Change – from the United Nations Framework Convention on Climate Change to the Paris Agreement,” *Engineering*, vol. 3, no. 2 (2017), pp. 272-278.

<sup>48</sup> “UK to Host 2021 UN Climate Summit, COP26,” *Energy & Climate Intelligence Unit*, 2021, at <https://eciu.net/analysis/briefings/international-perspectives/cop-26>, 31 XII 2024.

during COP26 on how to rebuild their economies based on loss and damage financing, and this topic is crucial.<sup>49</sup>

Some experts estimate that climate damage will cost the global economy more than GBP £480 trillion by the end of the century. However, COP26 is crucial for bringing together the different viewpoints on loss and damage, addressing the impacts of climate change, especially in developing countries, and reducing the economic costs (e.g., from floods or forest fires).<sup>50</sup> According to the LSE study (2020-21), Parties were keen to submit updated “Nationally Determined Contributions (NDCs)” to the UNFCCC before COP26. Countries were clear that the NDCs to be submitted by 2021 could include targets for loss and damage as well as for major reductions.<sup>51</sup> Other authors argue that loss and damage was a major issue in the negotiations during COP26, with the G77 and China proposing the establishment of a “Glasgow Loss and Damage Facility” through which industrialised countries would provide funding for loss and damage. Five philanthropies offered to provide seed funding for the facility (USD 3 million), while the Wallonia region pledged EUR 1 million.<sup>52</sup>

#### 4.2.3. Theme 3: Article 6 rules

Four of the 28 selected studies focused specifically on Article 6 of the Paris Agreement and its challenges for COP26.<sup>53</sup> Yamide Dagnet et al.<sup>54</sup> noted that the outstanding negotiations related to Article 6 remain an important issue.<sup>55</sup> Given the lack of agreement on decisions at COP25, the following key questions from 2019 remain unresolved:

<sup>49</sup> E.g. R. Barouki et al., “Addendum to: «The COVID-19 Pandemic and Global Environmental Change: Emerging Research Needs», Environ. Int. 146 (2021) 106272,” *Environment International*, vol. 152 (2021), pp. 106-491; M. Aktar, M. Alam, A. Al-Amin, “Global Economic Crisis, Energy Use, CO<sub>2</sub> Emissions, and Policy Roadmap Amid COVID-19,” *Sustainable Production and Consumption*, vol. 26 (2021), pp. 770-781.

<sup>50</sup> D. Bryden et al., “COP26: What is it and why is it Important?,” *Travers Smith*, 1 April 2021, <https://www.traverssmith.com/knowledge/knowledge-container/cop26-what-is-it-and-why-is-it-important/>, 31 XII 2024.

<sup>51</sup> “What is COP26?,” *The London School of Economics and Political Science*, 2020, at <https://www.lse.ac.uk/international-development/events/Cutting-Edge-Series-202122/Outcomes-of-COP26-and-where-next-on-Climate>, 31 XII 2024.

<sup>52</sup> D. Puig, E. Roberts, *Loss and Damage at COP26*, DTU Library 2021, at <https://orbit.dtu.dk/en/publications/loss-and-damage-at-cop26/fingerprints/>, 31 XII 2024.

<sup>53</sup> Y. Dagnet et al., “INSIDER: 4 Key Topics Climate Negotiators Must Resolve by COP26,” *World Resources Institute*, 11 December 2020, at <https://www.wri.org/insights/insider-4-key-topics-climate-negotiators-must-resolve-cop26>, 31 XII 2024; J. Timperley, “COP23: Key Outcomes...”; S. Frank, “The Lengthened and Stony Road to Glasgow,” *Carbon Market Watch*, 28 January 2021, at <https://carbonmarketwatch.org/2021/01/28/the-lengthened-and-stony-road-to-glasgow/>, 31 XII 2024.

<sup>54</sup> Y. Dagnet et al., “INSIDER...”

<sup>55</sup> See: F. Yamin, *Climate Change and Carbon Markets*, 1st edition, London 2012; M. Blum, “The Legitimation of Contested Carbon Markets after Paris – Empirical Insights from Market Stakeholders,” *Journal of Environmental Policy & Planning*, vol. 22, no. 2 (2020), pp. 226-238; C. Streck, M. von Unger, S. Greiner, “Cop 25...”

How can Article 6.2 be resolved to secure the UNFCCC target and GHG reductions? Another study, based on the International Civil Aviation Organisation (ICAO) and the International Maritime Organisation (IMO), claims that COP25 failed to reach a consensus on Article 6 on greenhouse gas reduction, which is a sign of insufficient action. The authors, therefore, believe that it is important for states to reach a solid agreement on Article 6 and its paragraphs at COP26 and to pursue the main objective of the UNFCCC.<sup>56</sup> Kizzier and colleagues note that institutional pressure for further negotiations on Article 6 is increasing. The World Resources Institute study points out that Article 6 is one of the most complex concepts of the global climate Agreement. This complexity was one of the main reasons why Article 6 was not agreed upon in previous climate negotiations and why the UNFCCC target was not met. Article 6 should be supported at COP26 and should not negate the ambition and environmental integrity of the Paris Agreement and countries' commitments under it.<sup>57</sup> The United Nations Framework Convention on Climate Change (UNFCCC) reports that countries are attempting to make progress in revising their national climate action plans, which is required under Article 6 of the Paris Agreement in order to pursue the goals of the UNFCCC.<sup>58</sup> The need for progress encourages countries<sup>59</sup> to work more collaboratively on Article 6 at COP26. The Carbon Watch study argues that the 197 Parties to the UN climate body, UNFCCC, have committed to more ambitious short-term targets, using Article 6 of the Paris Agreement to strengthen both the Nationally Determined Contributions (NDCs) and the UNFCCC's headline target to reduce greenhouse gas emissions.<sup>60</sup> Therefore, countries need to increase their ambition by focusing on Article 6 at COP26.<sup>61</sup>

<sup>56</sup> Y. Dagnet et al., "INSIDER..."

<sup>57</sup> K. Kelley, K. Levin, M. Rambharos, "What You Need to Know about Article 6 of the Paris Agreement," *World Resources Institute*, 2 December 2019, at <https://www.wri.org/insights/what-you-need-know-about-article-6-paris-agreement>, 31 XII 2024.

<sup>58</sup> E.g. M.C. Grimston et al., "The European and Global Potential of Carbon Dioxide Sequestration in Tackling Climate Change," *Climate Policy*, vol. 1, no. 2 (2001), pp. 155-171; H.A. Daggash, N.M. Dowell, "Higher Carbon Prices on Emissions Alone will not Deliver the Paris Agreement," *Joule*, vol. 3, no. 9 (2019), pp. 2120-2133.

<sup>59</sup> E.g.: K. Capoor, P. Ambrosi, *State and Trends of the Carbon Market 2008*, Washington 2008, at <https://openknowledge.worldbank.org/bitstream/handle/10986/13405/44607.pdf?sequence=1&isAllowed=y>, 31 XII 2024; J.F. Green, "Don't Link Carbon Markets," *Nature*, vol. 543 (2017), pp. 484-486.

<sup>60</sup> See e.g.: R. Weikmans, H. van Asselt, J.T. Roberts, "Transparency Requirements under the Paris Agreement and Their (Un)Likely Impact on Strengthening the Ambition of Nationally Determined Contributions (NDCs)," *Climate Policy*, vol. 20, no. 4 (2019), pp. 511-526; S. Greiner et al., *Moving Towards Next Generation Carbon Markets: Observations from Article 6 Pilots*, Freiburg 2019, at <https://www.zora.uzh.ch/id/eprint/175360/1/ZORA17360.pdf>, 31 XII 2024.

<sup>61</sup> S. Frank, "The Lengthened..."



#### 4.2.4. Theme 4: International Carbon Markets

In this part of the article, the author will take a closer look at Article 6 in terms of its mechanisms, namely the market-based and non-market-based approaches related to the international carbon market. Article 6 creates and maintains carbon markets. International carbon markets have evolved significantly from the flexible mechanisms of the Kyoto Protocol (e.g., the Clean Development Mechanism) to the co-operative mechanisms and approaches of the Paris Agreement. All countries covered by this Article and its paragraphs (i.e., Article 6.2: Market-based Mechanism, Article 6.4: Market-based Mechanism and Article 6.8: Non-market-based Mechanisms) are required to reduce their emissions and pursue the objectives of the UNFCCC. There have also been more attempts (23 out of 30 pieces of literature) to look at COP26 specifically for international carbon markets.<sup>62</sup>

- <sup>62</sup> D. Vetter, "Climate Change Experts: Here's why a Virtual COP26 won't Work," *Forbes*, 8 April 2020, at <https://www.forbes.com/sites/davidrvetter/2020/04/08/climate-change-experts-heres-why-a-virtual-cop26-wont-work/?sh=4a6811074ec5>, 31 XII 2024; M. Lewis, "The COP that was not – Will Postponing COP26 Affect Global Climate Action?," *Investors' Corner*, at <https://hub.ipe.com/asset-manager/bnp-paribas-asset-management/the-cop-that-was-not-will-postponing-cop26-affect-global-climate-action/10049851.supplierarticle>
- 31 XII 2024; C.J. White, F. Sindico, K. Bell, "Climate Change: COP26 Glasgow will Provide World Stage for Scotland's Green Innovation," *The Conversation*, 8 January 2020, at <https://theconversation.com/climate-change-cop26-glasgow-will-provide-world-stage-for-scotlands-green-innovation-129158>, 31 XII 2024; C. Farand, "UK Negotiator: Countries must Resolve Carbon Market Dispute to Step up Ambition," *Climate Home News*, 29 October 2020, at <https://www.climatechangenews.com/2020/10/29/uk-negotiator-countries-must-resolve-carbon-market-dispute-step-ambition/>, 31 XII 2024; E. Green, "Voluntary Carbon Offsets 'Need New Oversight Body,'" *Argus*, 27 January 2021, at <https://www.argusmedia.com/en/news/2181175-voluntary-carbon-offsets-need-new-oversight-body>, 31 XII 2024; Y. Steinebach, J. Limberg, "Implementing Market Mechanisms in the Paris Era: The Importance of Bureaucratic Capacity Building for International Climate Policy," *Journal of European Public Policy*, vol. 29, no. 7 (2021), pp. 1153-1168; P. Greening, E. Strachan, "COP26 and Creating a Center for Carbon Trading," *mondaq*, 15 November 2021, at <https://www.mondaq.com/climate-change/1131200/>, 31 XII 2024; H. Mountford et al., "COP26: Key Outcomes from the UN Climate Talks in Glasgow," *World Resources Institute*, 17 November 2021, at [https://www.wri.org/insights/cop26-key-outcomes-un-climate-talks-glasgow?utm\\_medium=social&utm\\_source=twitter&utm\\_campaign=socialmedia](https://www.wri.org/insights/cop26-key-outcomes-un-climate-talks-glasgow?utm_medium=social&utm_source=twitter&utm_campaign=socialmedia), 31 XII 2024; E. Masood, J. Tollefson, "«COP26 hasn't Solved the Problem»: Scientists React to UN Climate Deal," *Nature*, vol. 599 (2021), pp. 355-356; "November Editorial: A Bad Deal or no Deal at COP26?," *Global S&T Development Trend Analysis Platform of Resources and Environment*, 26 November 2021, at <http://resp.llas.ac.cn/C666/handle/2XK7JSWQ/342298>, 31 XII 2024; W. Obergassel et al., "Turning Point Glasgow? An Assessment of the Climate Conference COP26," *Carbon & Climate Law Review*, vol. 15, no. 4 (2021), pp. 271-281; W. Obergassel et al., "Climate Diplomacy on Hold, But not Climate Change: An Analysis of International Climate Policy in the Year of the Pandemic," *Carbon & Climate Law Review*, vol. 15, no. 3 (2021), pp. 211-220; D. Hone, "Article 6 at COP26," *Shell Climate Change*, 11 October 2021, at <https://blogs.shell.com/2021/10/11/article-6-at-cop26/>, 31 XII 2024; R. Hales, B. Mackey, "The Ultimate Guide to why the COP26 Summit Ended in Failure and Disappointment (Despite a Few Bright Spots)," *The Conversation*, 14 November 2021, at <https://theconversation.com/the-ultimate-guide-to-why-the-cop26-summit-ended-in-failure-and-disappointment-despite-a-few-bright-spots-171723>, 31 XII 2024; S. Greiner et al., "COP26 Digest: The Significance of Article 6 and CDM Transition Outcomes for Africa," *Climate Focus*, May 2022, at <https://climatefocus.com/>

David Vetter explained that among the issues that need to be addressed is the resolution of Article 6, specifically Article 6.2 (double counting) of the Paris Agreement, which sets out how nations can pursue UNFCCC targets and reduce emissions through international carbon markets.<sup>63</sup> Global Climate Action (2020) argues that COP26 should rather have been used to resolve the outstanding issues from COP25,<sup>64</sup> the issue of Article 6.2, 6.4 and 6.8, which sets out the rules for international carbon markets and carbon credits.<sup>65</sup> Christopher and his colleagues stated that COP25 did not perform well on Articles 6.2, 6.4 and 6.8 in support of UNFCCC emission reduction targets. These issues, particularly Article 6.2 on double counting, need to be finalised at COP26 to create an international carbon market between countries.<sup>66</sup> The study by Green<sup>67</sup> notes that COP26 was a key negotiating point for international carbon markets. There was little clarity on Rule 6.4 regarding appropriate adjustments, while countries collectively responded better to Article 6.2. This could lead to double counting, where the country that generates the offsets through an offset project counts them, but also the country that purchases the offsets.<sup>68</sup> Chloé pointed out that under the Paris Agreement, countries agreed to create a new carbon trading system based on Articles 6.2, 6.4 and 6.8 to reduce emissions at a lower cost and in line with the main objective of the UNFCCC. However, during the climate negotiations at COP26, countries only jointly agreed to make progress on Article 6.2 (double counting). There has been little success on Article 6.4 and no significant progress or change towards the UNFCCC

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publications/cop26-digest-significance-article-6-and-cdm-transition-outcomes-africa/, 31 XII 2024; S. O'Neill, "COP26: Some Progress, But Nations Still Fiddling while World Warms," *Engineering*, vol. 11 (2022), pp. 6-8; Y. Wang, Y. Liu, B. Gu, "COP26: Progress, Challenges, and Outlook," *Advances in Atmospheric Sciences*, vol. 39, no. 8 (2022), pp. 1209-1216; L. Annette, "COP26: Reflections on the Power of Science as a Force Against Climate Change," *Impact*, no. 1 (2022), pp. 4-5; T. Cadman, T. Sarker, *De Gruyter Handbook of Sustainable Development and Finance*, Berlin 2022; J. Depledge, M. Saldivia, C. Peñasco, "Glass Half Full or Glass Half Empty? The 2021 Glasgow Climate Conference," *Climate Policy*, vol. 22, no. 2 (2022), pp. 147-157; P. Behr et al., "Rethinking Voluntary Carbon Credit Markets and the EU ETS: A Critical Review," *Discussion Papers In Business And Economics*, 2022, at <https://fuldok.hs-fulda.de/opus4/frontdoor/deliver/index/docId/960/file/Discussion+Paper+No+22+V>, 31 XII 2024; G. Persico, "Non-Market Approaches Under Article 6 PA: Yet to be Defined," *Italian Climate Network*, 4 November 2022, at <https://www.italiaclima.org/en/cop26-non-market-approaches/>, 31 XII 2024.

<sup>63</sup> D. Vetter, "Climate Change Experts..."

<sup>64</sup> See e.g.: M. Asadnabizadeh, "Development of UN Framework Convention on Climate Change Negotiations under COP25: Article 6 of the Paris Agreement Perspective," *Open Political Science*, vol. 2, no. 1 (2019), pp. 113-119; P. Newell, O. Taylor, "Fiddling while the Planet Burns? COP25 in Perspective," *Globalizations*, vol. 17, no. 4 (2020), pp. 580-592; W. Obergassel et al., "COP25 in Search of Lost Time for Action: An Assessment of the Madrid Climate Conference," *Carbon & Climate Law Review*, vol. 14, no. 1 (2020), pp. 3-17.

<sup>65</sup> M. Lewis, "The COP that was not..."

<sup>66</sup> C.J. White, F. Sindico, K. Bell, "Climate Change: COP26 Glasgow..."

<sup>67</sup> E. Green, "Voluntary Carbon Offsets..."

<sup>68</sup> Ibid.

target on Article 6.8 of the Paris Agreement.<sup>69</sup> Another study points out that during COP26, states only had the collective responsibility to agree on Article 6.2 and the rules for double counting for an international carbon market and market-based approaches and to develop more ambition for climate action beyond 2021, according to the UK climate negotiator. On Article 6.4 and even 6.8, countries did not achieve much success.<sup>70</sup> Euan Strachan and Paul Greening<sup>71</sup> note that COP26 was the last chance for countries and their cooperation to reflect on the main objective of the UNFCCC through Article 6 and international carbon market mechanisms. They believe that Articles 6.2 and 6.4 were not fully successful in developing an international carbon market during the negotiations due to the lack of firm commitments between countries and the private sector. There has been little real progress on Article 6.2 for internationally purchased carbon credits. The country of origin and the purchasing country cannot both claim these credits in their NDCs.<sup>72</sup> In one of the recent studies in the *Climate Policy Journal*, the authors argue that Article 6 is the central issue for COP26 in relation to the UNFCCC emissions reduction target. Key technical considerations raised in relation to Article 6 include ensuring that emissions trading delivers real carbon savings and avoids “double counting” of traded emission reduction units.<sup>73</sup> To support the latter evidence and arguments, another study, DCarbonX Decentralised Application: Carbon Market Case Study, concludes that one of the key discussion points at COP26 in pursuit of the UNFCCC target was related to Article 6, which establishes a framework for the creation of a voluntary international market for carbon credit trading. Article 6.2 resolved the issue of state participation and provides for countries to voluntarily participate in “cooperative approaches” that would create internationally transferable mitigation outcomes (ITMOs) for their NDCs. Furthermore, a study in the *Climate Policy Journal* states that at COP26 in Glasgow in November 2021, countries jointly adopted international guidelines for the accounting of ITMOs under Article 6.2 of the Paris Agreement. These guidelines allow countries to choose between two options for the accounting of one-year targets.<sup>74</sup>

This means that countries have collectively agreed that ITMOs will not be counted twice internationally (Article 6.2), which means that more than one country can count the same emission reductions towards their own climate commitments. This is crucial for making real progress in reducing emissions and achieving the UNFCCC’s main objective. For adaptation to take place, countries have also jointly agreed that 5%

<sup>69</sup> See e.g.: R. Weikmans, H. van Asselt, J.T. Roberts, “Transparency Requirements...”; L. Rajamani, D. Bodansky, “The Paris Rulebook: Balancing International Prescriptiveness with National Discretion,” *International and Comparative Law Quarterly*, vol. 68, no. 4 (2019), pp. 1023-1040; S. Andresen, “The Paris Agreement and Its Rulebook in a Problem-Solving Perspective,” *Climate Law*, vol. 9, no. 1-2 (2019), pp. 122-136.

<sup>70</sup> C. Farand, “UK Negotiator...”

<sup>71</sup> P. Greening, E. Strachan, “COP26 and Creating a Center...”

<sup>72</sup> Ibid.

<sup>73</sup> Y. Steinebach, J. Limberg, “Implementing Market Mechanisms...”

<sup>74</sup> L. Moosmann et al., *International Climate Negotiations...*

of revenues must be channelled into financing adaptation through traditional market mechanisms (Article 6.4).<sup>75</sup> Stavins, an economist at Harvard University in Cambridge, Massachusetts, points out that COP26 was only successful because of Article 6.2 and the market-based approach. A common accounting framework will make it possible to link separate trading systems, such as those that currently exist in Europe, China and parts of the United States<sup>76</sup>, and create an intergovernmental atmosphere that will allow an international market to emerge.<sup>77</sup> Another study points out that there was real progress on Article 6.2 during COP26, as states discussed the need to build capacity to create such a framework that would allow ITMOs without undermining the country's NDC targets and without the risk of oversupply.<sup>78</sup> One report argues that COP26 mainly discussed Articles 6.2 and 6.4, largely excluding the possibility of double counting of emission reductions. For this article, the idea of unadjusted carbon credits outside the UN system was discussed and considered.<sup>79</sup> According to O'Neill,<sup>80</sup> at COP26, states discussed joint emissions reporting, the so-called "enhanced transparency framework", the alignment of national emission reduction timetables and mechanisms and standards for international carbon markets related to Article 6.2. States began to reflect on how these issues should be addressed. They argued that the framework for linking national carbon markets under Article 6.2 was created to prevent double counting of emission savings. In other words, for internationally purchased carbon credits, the source country and the buyer country cannot both claim these credits in their NDCs.

A study by Advances in Atmospheric Sciences points out that COP26 brings a real change to Article 6.2 by avoiding double counting. Another point is that during this meeting, states jointly launched a decade of action to strengthen climate ambition.<sup>81</sup> In a study titled "COP26: Reflections on the Power of Science as a Force Against Climate Change", the authors believe that some parts of Article 6 have been resolved. For example, Article 6.2 addresses the question of how to deal with carbon trading. The states have taken a positive step on this issue because it is part of decarbonisation or, rather, it is linked to industrial decarbonisation<sup>82</sup>. To follow this framework, the United Kingdom, India, Germany, Canada and the United Arab Emirates have agreed to disclose

<sup>75</sup> H. Mountford et al., "COP26: Key Outcomes..."

<sup>76</sup> M. Asadnabizadeh, "Climate Change in the Foreign Policy of the Trump Administration," *Environmental Policy and Law*, vol. 49, no. 2-3 (2019), pp. 195-202; M. Asadnabizadeh, "US President Joe Biden's Administration: A New U.S. Climate Change Agenda (U.S. CCA)," *Journal of Politics and Law*, vol. 14, no. 3 (2021), pp. 124-137.

<sup>77</sup> E. Masood, J. Tollefson, "«COP26 hasn't Solved the Problem»..."

<sup>78</sup> S. Greiner et al., "COP26 Digest: The Significance of Article 6..."

<sup>79</sup> "November Editorial..."

<sup>80</sup> S. O'Neill, "COP26: Some Progress..."

<sup>81</sup> Y. Wang, Y. Liu, B. Gu, "COP26: Progress..."

<sup>82</sup> M. Asadnabizadeh, "The Failure of Deep Decarbonising of Europe (DDE) by 2050 in Line with the Paris Agreement: a Losing Player Analysis," *International Journal of Global Energy Issues*, vol. 43, no. 5/6 (2021), pp. 522-533.

the carbon footprint of major public construction projects by 2025.<sup>83</sup> Cadman & Sarker<sup>84</sup> argue that Article 6 and, in particular, 6.2 was important during COP26 because the issue was that fossil fuel pollution cannot be reduced due to the absence of limits on trading emissions from burning fossil fuels<sup>85</sup>. In the COP26 agreement, countries contended that fossil fuel pollution can be traded without reducing overall fossil fuel emissions in the country of origin. Depledge argues in a research article that Article 6.2 was a key issue that dominated the debates at COP26, as it addressed how to ensure the integrity of the environment and achieve an overall reduction in global greenhouse gas emissions. Parties generally agreed on the use of “appropriate adjustments” between NDCs to make new amendments for this article and avoid double counting.<sup>86</sup> Hales & Mackey<sup>87</sup> argue that Article 6.2 of the Paris Agreement was very important for the discussions between states at COP26 because emissions from the fossil fuel industry need to be altered, namely by offsetting their emissions.<sup>88</sup> A discussion paper from the business community argues that Article 6.4 was not substantially changed during COP26 because the Subsidiary Body for Scientific and Technological Advice, the newly established Oversight Body and the introduction of a grievance mechanism need to work more on this issue to further improve and ensure the robustness of the mechanism for the main objective of the UNFCCC.<sup>89</sup> Hone<sup>90</sup> argues that Article 6.4 (market-based approaches) underwent a flawed amendment during the COP26 negotiations. The author points out that the reason for this is the lack of cooperation agreements between national governments to establish links between trading schemes and the private sector to develop emission reduction projects by 2030. Another reason is the competition between Australia and the EU in developing emission reduction protocols at a time when efforts to reduce emissions are increasing.

Obergassel et al. (2021b) argue that there was no real progress by states on Article 6.8 during the COP26 discussions, as negotiators had just started to consider the establishment of a Glasgow Committee on Non-market Approaches to implement the work programme on Article 6.8 by 2027.<sup>91</sup> Another reason is that the states have not fully agreed on the activities of the work programme under 6.8, which include “adaptation, resilience and sustainability”, “climate change mitigation and sustainable

<sup>83</sup> L. Annette, “COP26: Reflections...”.

<sup>84</sup> T. Cadman, T. Sarker, *De Gruyter Handbook...*

<sup>85</sup> On fossil fuels, see also: M. Asadnabizadeh, “Bump in the Road to Global Energy Transition: The Bottlenecks of the Carbon Markets,” *Athenaeum. Polskie Studia Politologiczne*, vol. 79 (2023), pp. 90-113.

<sup>86</sup> J. Depledge, M. Saldivia, C. Peñasco, “Glass Half Full...”.

<sup>87</sup> R. Hales, B. Mackey, “The Ultimate Guide...”.

<sup>88</sup> Ibid.

<sup>89</sup> P. Behr et al., “Rethinking voluntary...”.

<sup>90</sup> D. Hone, “Article 6...”.

<sup>91</sup> M. Asadnabizadeh, “Did the Glasgow COP26 Negotiations Meet or Miss Article 6 (Carbon Markets) of the Paris Agreement? A Systematic Review of the Literature,” *Politics & Policy*, vol. 52, no. 4 (2024), pp. 757-777.



development measures” and “clean energy development”. Another study by Obergassel et al. (2021a) argues that COP26 failed to take a bold step in favour of Article 6.8. COP26 Parties submitted draft texts for this voluntary cooperation approach to non-market approaches, which were revised during the negotiations to reflect the views of the Parties. However, discussions on this part of Article 6 remained at an abstract level, presumably because there was no pressure to reach a result without a COP. As the Parties were unable to produce a new version of the text that all Parties could agree to, Article 6.8 of the negotiating texts was referred to the next session for further consideration. Persico<sup>92</sup> notes that at COP26 in Glasgow, Article 6.8 (non-market approaches) was not successful for two reasons. Several countries, such as Bolivia, India, Brazil, Ecuador and Uganda, have called for equal treatment of NMAs with market mechanisms. The second reason is that the European Union and the USA have pointed out the lack of clarity in Article 6.8. The problem is that these countries do not fully agree with this part of Article 6 of the Paris Agreement and, therefore, cannot make progress.

## 5. INTERPRETATION OF THE EVIDENCE AND DISCUSSION: DID COP26 LAPSE OR NOT LAPSE TO ACHIEVE THE MAIN OBJECTIVE OF THE UNFCCC THROUGH THE CARBON MARKET?

This section describes the discussion of the evidence in the literature. Much of the work on meta-synthesising the literature comes from the international carbon market (Theme 4) with the aim of producing a qualitative synthesis of the evidence.<sup>93</sup> In reviewing and assessing the literature, the author realised that to answer the main research question – what has and has not been achieved in Article 6 and its paragraphs during the recent global climate negotiations at COP26 to achieve the main objective of the UNFCCC (i.e., greenhouse gases) – it is better to focus on the concrete evidence. The evidence synthesis in this study has filled a gap in existing studies by describing the evidence of COP26 for the main objective of the UNFCCC through international carbon market mechanisms. That is, the synthesis of the literature has shown that the main objective of the international climate negotiations under the UNFCCC was and is to pursue the issue of greenhouse gases, which is actively linked to the international carbon market mechanisms under Article 6 of the Paris Agreement. Therefore, the author has focused on understanding and describing the extent to which the studies support the synthesis presented.

The synthesis presented here is based on the following question: to what extent and at what level is there evidence to support the widespread question about the function of carbon market mechanisms in achieving the objectives of the UNFCCC negotiations? The evidence is ranked from “real change” to “no change”. The studies that the author

<sup>92</sup> G. Persico, “Non-Market Approaches...”

<sup>93</sup> E.g. K. Flemming, J. Noyes, “Qualitative Evidence Synthesis: Where are We at?,” *International Journal of Qualitative Methods*, vol. 20 (2021), pp. 1-13.



has reviewed and assessed in the Theme 4 section of this paper provide specific types of evidence for specific types of change and for specific Article 6 mechanisms. This approach is consistent with some studies – Mechanisms and the Evidence Hierarchy – on how evidence is evaluated and at what level.<sup>94</sup> Thus, the results show the amount and type of evidence that supports the aim of this article. The results are summarised in Table 3 for discussion purposes. The table indicates how many articles provided evidence for the several types of Article 6 mechanisms. Table 3 also contains further information on qualitative descriptive evidence, pure change evidence and qualitative descriptive change evidence.

Table 3. Summary of results

Mechanisms	N	QDE	JCE	QDCE	Status in COP26
Market-based approach	23	19	17	12	RC
Market-based approach	23	8	3	5	FC
Non-market approaches	23	7	0	5	NC

Legend for table

Article 6.2

Article 6.4

Article 6.8

N: Total Number of Studies With Descriptive and Change Evidence

QDE: Qualitative Descriptive Evidence

JCE: Just Change Evidence

QDCE: Qualitative Descriptive Change Evidence

RC: Real Change

FC: Flawed Change

NC: No Change

As can be seen from the table above, the author has considered 23 out of 30 studies to understand the role of Article 6 mechanisms in the UNFCCC negotiations (COP26). In reviewing and assessing the 23 studies, the author differentiated between descriptive evidence, pure change evidence and qualitative descriptive change evidence. The analysis of the studies suggests that there is strong evidence that the market-based approach (Article 6.2) was considered and supported by COP26 to enhance the main objective of the UNFCCC. The studies suggest that the arguments in favour of changing Article 6.4 towards the UNFCCC objective are weak (i.e., market-based approach). A similar amount of qualitative, descriptive change evidence (5) focused on non-market-based approaches (Article 6.8), but the pure change evidence was 0.

<sup>94</sup> B. Clarke et al., “Mechanisms and the Evidence Hierarchy,” *Topoi*, vol. 33, no. 2 (2013), pp. 339-360.

## 6. CONCLUSION

At a time when climate change, its impacts, science, negotiations and challenges are gaining prominence, researchers, scientists, practitioners, businesses and policymakers need more concrete evidence and research to guide climate change negotiations under the UNFCCC and achieve the main goal of reducing greenhouse gases. The results suggest that Article 6.2 of the market-based approach has been incorporated more into the COP26 programme and that countries have strengthened their actions in this area. The results also indicate that Article 6.4 could lead to fewer changes by COP26. In addition, Article 6.8 will not undergo any real or erroneous changes during the UNFCCC negotiations until 2021. To summarise, the findings highlight the research gaps that need to be addressed to inform the next round of UNFCCC debates and research on non-market-based approaches.

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