Submission from the Center for International Environmental Law (CIEL) in response to the invitation for submissions contained in document FCCC/PA/CMA/2022/L.14, para. 19 on activities involving removals and activities referred to in Chapter V of the rules, modalities and procedure of the mechanism established by Article 6, paragraph 4 of the Paris Agreement

Introduction

Since 1989, the Center for International Environmental Law (CIEL) has used the power of law to protect the environment, promote human rights, and ensure a just and sustainable society. Throughout its history, CIEL has engaged in the UNFCCC and the development of the international climate regime.

This submission responds to the call for submissions in paragraph 19 of document FCCC/PA/CMA/2022/L.14, Guidance on the mechanism established by Article 6, paragraph 4, of the Paris Agreement. It focuses primarily on activities involving removals; however, it also expands on some of the activities contained in Chapter V of the rules, modalities, and procedures.[1]

The Article 6.4 mechanism's Supervisory Body ("Supervisory Body") is tasked with developing recommendations (that it will then present to the Conference of the Parties serving as the meeting of the parties to the Paris Agreement (CMA)) to govern the Article 6.4 mechanism. The Supervisory Body began meeting in July 2022 and, among other topics, discussed its rules of procedures, methodologies (contained in Chapter V.B of the rules, modalities, and procedures), and activities involving removals. It then presented its first set of recommendations, those on activities involving removals, to the CMA during the Twenty-Seventh Conference of the Parties (COP27) in November 2022.

However, advancing recommendations on removals separate from, and in absence of, a complete governance framework for Article 6.4 is risky and wrongheaded.

It is essential that a full and robust governance package be developed concurrently, adopted as a complete framework, and put in place before any activities occur under the Article 6.4 mechanism. Taking a piecemeal approach likely will lead to confusion, increase the risk of negative environmental and social impacts, and increase the risk that rather than contribute to increased ambition, as is the stated intention of Article 6, the mechanism will detract from urgently needed emissions reductions. The CMA must use its critical oversight and guidance role to ensure that all necessary governance policies are in place including by mandating the Supervisory Body develop all the governance pieces as a package. Those governance pieces not only include

[1] Article 6.4 Rules, Modalities and Procedures, Decision 3/CMA.3 (2021).

robust rules to prevent Parties from pursuing or relying on activities under Article 6.4 that prolong emissions, but also the establishment of an independent grievance mechanism and developing other critical rules and recommendations to ensure that any Article 6.4 activities respect human rights including the rights of Indigenous Peoples. Critically, the Supervisory Body and the CMA must take the necessary time to carefully consider and agree on the requirements and processes necessary to operate the Article 6.4 mechanism right and not just 'get it done'. Anything less risks harming people and the environment and undermining the very integrity of the Paris Agreement itself.

The following sections address the inclusion of removals at all in the Article 6.4 mechanism, the risks of both land- and engineering-based removals, and comments on specific areas identified in the call for submissions on activities involving removals: monitoring, reporting, and avoidance of negative environmental and social risks. Lastly, this submission provides feedback on Chapter V of the rules, modalities and procedures on the need for protections to prevent social and environmental harm, ensure public participation and meaningful stakeholder consultation with Indigenous Peoples and local communities likely to be impacted by a proposed Article 6.4 activity, and the independent grievance mechanism.

Key Takeaways

- **Full governance package:** To minimize risks of harm to people and the environment, a full governance package must be in place prior to any activities occurring under Article 6.4.
- **Enhancing reductions to increase ambition:** If Article 6.4 is to increase, not undermine, ambition of climate action, it must focus on activities that rapidly reduce emissions from the production and use of fossil fuels and deforestation, as required to avoid and minimize overshoot of 1.5°C.
- **Market flaws:** Carbon markets and carbon offsets rearrange emissions rather than reducing them.
- **Risks of removals and false equivalence:** Carbon removal credits whether from land- or engineering-based removals are risky for the climate, communities, and the environment. Removals are not reductions, and relying on them delays immediate reduction of emissions while also threatening the environment and human rights, including Indigenous Peoples' rights, land rights, the rights to food, water, health, and culture, and the right to a healthy environment.
- **Risks of land-based removals:** Land-based carbon sequestration activities are limited by the amount of land available, cannot offset fossil fuel emissions, and have repeatedly failed to deliver promised climate impacts despite being relied on for carbon market credits or offsets.
- **Risks of engineered removals:** Engineered carbon dioxide removals, such as direct air capture (DAC), are speculative, unproven at scale, and pose significant risks to human rights and the environment.
- **Consistency with international law:** The UNFCCC, and bodies created under it, should not overstep decisions taken in other international fora, but rather should take note of those processes and refrain from sanctioning activities prohibited or regulated elsewhere (e.g. marine geoengineering, which is regulated by the London

Protocol to the London Convention).

- **Reporting and participation:** Robust rules are essential, including participatory monitoring and transparent reporting on, among other aspects, environmental and social impacts, stakeholder consultation, grievances received, additionality, and ongoing threats.
- **Human rights compliance and accountability:** Any activity credited under Article 6.4 must not harm the environment, must be compliant with human rights, and must be accountable for that compliance.

Climate Change is Causing Significant Harm and Urgent Emissions Reductions are Needed to Avoid Overshoot.

Climate change is already causing significant harm to people and the environment and every fraction of a degree of warming brings greater and greater risk to the rights of both present and future generations.[2] Global temperature rise has already led to irreversible impacts undermining humans' resilience and the ability to act[3] as well as more frequent and intense extreme weather impacts, such as wildfires, droughts, hurricanes, and monsoons, causing loss and damage around the world.[4] As evidenced by these events, together with sea level rise and the extinction of plants and animals, the world is facing not only a climate crisis but also a biodiversity crisis. Soon the IPCC will release its final report in the Sixth Assessment Report (AR6) cycle. The reports from AR6 Working Groups I, II, and III as well as the IPCC's Special Reports on 1.5 and land have collectively highlighted the devastating impacts of climate change, that the lack of action has resulted in temperatures continuing to rise and get ever closer to tipping points from which it will be impossible to come back, and highlighted what effective action can be, including that it should be people-centered.

We are in the critical decade for climate action as the science dictates that we must halve global emissions by 2030. "Limiting warming to 1.5°C is not safe, but it is safer than

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[2] *See, e.g., Five UN human rights treaty bodies issue a joint statement on human rights and climate change, Joint Statement on "Human Rights and Climate Change"* (Sept. 16, 2019), https://ohchr.org/EN/NewsEvents/Pages/DisplayNews.aspx?NewsID=24998&LangID=E#_edn5; The UN Special Rapporteur on Human Rights and the Environment (officially UN Special Rapporteur on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment) has emphasized the links between climate change and human rights, for example, noting the ". . . greater the increase in average temperature, the greater the effects on the right to life and health . . .". *Report of the Special Rapporteur on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment*, at paras. 23-39, 65, 68, U.N. Doc. A/ HRC/31/52 (Feb. 1, 2016).

[3] IPCC, *Working Group II Contribution to the IPCC Sixth Assessment Report on Climate Change Impacts, Adaptation and Vulnerability* [AR6 WGII], Summary for Policymakers [SPM], para. B.1 (2022), https://www.ipcc.ch/report/ar6/wg2/.

[4] IPCC, AR6 WGII, Technical Summary [TS], at para. TS.B.2.

limiting warming to 2°C."[5] This requires urgent action to prevent emissions as much as possible by maximizing emissions *reductions* and curtailing the main drivers of climate change: the production and use of fossil fuels and deforestation.[6]

Exceeding 1.5°C of warming–even temporarily–will result in severe and irreversible impacts that will threaten human rights and limit our ability to act.[7] Failing to take ambitious emissions reduction action will result in overshooting not only 1.5°C of warming, but also 2°C, which will result in even more catastrophic impacts. "Risk of severe impacts increase[s] with every additional increment of global warming during overshoot."[8] And it is far from certain that we will even be able to come back from overshoot as the effect of carbon dioxide removal at scale is unknown and it is not equivalent to the climate effect of avoiding the same quantity of carbon dioxide emissions. As the IPCC laid out in its Special Report on 1.5°C, "[l]imits to our understanding of how the carbon cycle responds to net negative emissions increases the uncertainty about the effectiveness of CDR to decline temperatures after a peak" and that it is risky to rely on such technology rather than taken the necessary steps to reduce greenhouse gases in the near-term.[9]

Overshoot is not inevitable. Science indicates that it is still possible to keep warming to 1.5°C with limited or no overshoot,[10] through steep, immediate reductions in the production

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[5] UNFCCC, Structured expert dialogue on the second periodic review of the long-term global goal under the Convention (2020–2022) [UNFCCC, SED2], *Synthesis report by the co-facilitators of the structured expert dialogue*, U.N. Doc. FCCC/SB/2022/3, para. 28 (Sept. 20, 2022), https://unfccc.int/sites/default/files/resource/sb2022_03_adv.pdf.

[6] *See, e.g.*, IPCC, AR6 WGII, TS, at para. TS.E.4.5 ("Deep cuts in emissions will be necessary to minimise irreversible loss and damage (high confidence)"); IPCC, Working Group III Contribution to the IPCC Sixth Assessment Report on Mitigation of Climate Change [AR6 WGIII], Summary for Policymakers [SPM], para. C.3-C.4 (2022), https://www.ipcc.ch/report/ar6/wg3/ (para. C.3 stating "All global modelled pathways that limit warming to 1.5°C (>50%) with no or limited overshoot, and those that limit warming to 2°C (>67%), involve rapid and deep and in most cases immediate GHG reductions in all sectors." and para. C.4 stating "Reducing GHG emissions across the full energy sector requires major transitions, including a substantial reduction in overall fossil fuel use, the deployment of low-emission energy sources, switching to alternative energy carriers, and energy efficiency and conservation.").

[7] *See* IPCC, AR6 WGII, Summary for Policymakers [SPM], at paras. B.6, B.6.1.

[8] IPCC, AR6 WGII, SPM, at para. B.6.2.

[9] IPCC, *Global Warming of 1.5°C: An IPCC Special Report on the Impacts of Global Warming of 1.5°C Above Pre-Industrial Levels and Related Global Greenhouse Gas Emissions Pathways, in the Context of Strengthening the Global Response to the Threat of Climate Change, Sustainable Development, and Efforts to Eradicate Poverty*, Ch. 2, ES, at 34 B.5 (2018), https://www.ipcc.ch/sr15.

[10] CIEL & Heinrich Böll Stiftung, *IPCC Unsummarized: Unmasking Clear Warnings on Overshoot, Techno-fixes, and the Urgency of Climate Justice*, p. 9 (Apr. 21, 2022), https://www.ciel.org/wp-content/uploads/2022/04/IPCC-Unsummarized_Unmasking-Clear-Warnings-on-Overshoot-Techno-fixes-and-the-Urgency-of-Climate-Justice.pdf ("The Working Group III findings confirm that it is both technically and economically feasible to pursue rapid fossil fuel phaseout immediately, through scenarios that limit warming to 1.5°C, rather than overshoot it by gambling on the possibility of return. Included among the potential pathways forward for reducing emissions of the greenhouse gasses that cause global warming are measures that would reduce energy demand, replace fossil

and use of fossil fuels, rapid replacement of fossil fuels with renewables, and energy demand reduction.

In this context, focusing on potential "removals" is a dangerous distraction that risks easing the pressure for urgently needed action to curb emissions now. This is all the more true for engineering-based removals, which are illusory and unavailable in the near-term, if ever.[11] Moreover, the IPCC's Working Group I and II reports (as part of AR6) recognize that responses to climate change such as carbon dioxide removal (CDR) not only may fail to meet climate objectives, but also may pose significant risks and introduce unintended consequences for human and natural systems, exacerbating the impacts of warming and undermining the ability to adapt.[12] Relying on removals also stands in direct contradiction to States' legal obligations under international law. States' existing human rights obligations read in conjunction with international environmental agreements and principles, including the precautionary principle and duty not to cause transboundary harm, require them to pursue climate actions that present the greatest chance of preventing further foreseeable human rights violations caused by climate change and pose the least risk of harm to human rights.[13] These actions include available, proven measures like fossil fuel phaseout, switching to renewable energy, and reducing energy demand.

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fuels with renewables, and massively increase electrification. [See Box TS.5, TS-39-40; Ch. 1, 1-36 (describing the IMPs, including IMP-Ren, which involves heavy reliance on renewables, and IMP-LD, which emphasizes energy demand reductions).") [hereinafter CIEL & Heinrich Böll Stiftung, *IPCC Unsummarized*].

[11] *See generally* CIEL, *Fuel to the Fire. How Geoengineering Threatens to Entrench Fossil Fuels and Accelerate the Climate Crisis* (2019), https://www.ciel.org/reports/fuel-to-the-fire-how-geoengineering-threatens-to-entrench-fossil-fuels-and-accelerate-the-climate-crisis-feb-2019/.

[12] *See* CIEL & Heinrich Böll Stiftung, *Beyond the Limits: New IPCC Working Group II Report Highlights How Gambling on Overshoot is Pushing the Planet Past a Point of No Return*, pp. 1, 2, 6 (Feb. 28, 2022), https://www.ciel.org/wp-content/uploads/2022/02/CIEL_HBF_IPCC-WGII-Key-Messages-28Feb2022.pdf [hereinafter CIEL & HBF, *Beyond the Limits*]; IPCC, AR6 WGII, SPM, at paras. B.5.4, B.5.5.

[13] *See* CIEL, ETC Group, Heinrich Böll Foundation & Third World Network, "Response to Questionnaire on the impact of new technologies for climate protection on the enjoyment of human rights", pp. 9-10 (2022), https://www.ohchr.org/sites/default/files/2022-06/Joint-submission-to-HRCAC-GeoengieeringHumanRights-CIEL-ETC-HBF-TWN.pdf; *see also* Philippe Sands & Kate Cook, *Joint Opinion*, secs. III, IV, V (Mar. 26, 2021), https://www.ohchr.org/sites/default/files/2022-06/Annex-SubmissionCIEL-ETC-HBF-TWN-Geoengineering-Opinion.pdf (provided as an Annex to Submission on the Response to the Questionnaire on the impact of new technologies for climate protection on the enjoyment of human rights); Margaretha Wewerinke-Singh et al, Submission by members of the network of academics for an International Non-Use Agreement on Solar Geoengineering, p. 6-7 (May 27, 2022), https://www.ohchr.org/sites/default/files/2022-05/20220527-wewerinke-singh-leiden-university-SolargeoNUA%20.pdf.

Carbon markets and carbon offsets rearrange emissions rather than reducing them.

Carbon markets have long been touted as a way to provide incentives and financing for emissions reductions activities. However, they have not lived up to these claims.[14] Theoretically, carbon markets work by issuing carbon credits for emissions reductions activities that are then bought by another entity that uses those reductions ("credits") to meet its emissions reduction targets. Primarily these credits are used not to promote mitigation action, but to offset the buyer's ongoing emissions elsewhere. This enables credit buyers to continue emitting activities while also claiming to have met their emission reduction obligations, asserting "net reductions," or claiming "carbon neutrality." Thus, rather than promoting overall emissions reductions and increased ambition, carbon markets have facilitated the trading of emissions around the world and outsourcing of climate actions, allowing States (largely developed States) and companies to continue business-as-usual activities while claiming that they are confronting the climate crisis through buying credits.[15]

Worse still, carbon markets actually can lead to increased global emissions by overestimating reductions or selling credits for non-permanent reductions that allow emissions elsewhere.[16] Recent studies analyzing millions of carbon credits, including ones verified by Verra, the leading standard setter for the voluntary carbon markets, found that only a small percentage of them resulted in actual emissions reductions.[17] Thus, if companies or States have relied on carbon credits to meet reduction targets, rather than undertaking the necessary steps to curb emission-generating conduct, such as by rapidly

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[14] *See, e.g.*, Source Material, *The Carbon Con* (Jan. 18, 2023), https://www.source-material.org/vercompanies-carbon-offsetting-claims-inflated-methodologies-flawed/; Von Tin Fischer & Hannah Knuth, "CO2 Certificates: Phantom Offsets and Carbon Deceit," *Die Ziet* (Jan.19, 2023), https://www.zeit.de/wirtschaft/2023-01/co2-certificates-fraud-emissions-trading-climate-protection-english; Bart Creeze & Ties Gijzel, "Showcase Project by the world's biggest carbon trader actually resulted in more carbon emissions," *Follow the Money* (Jan. 27, 2023), https://www.ftm.eu/articles/south-pole-kariba-carbon-emission.

[15] *See, e.g.*, Alex Lawson & Patrick Greenfield, "Shell to Spend $450m on carbon offsetting as fears grow that credits may be worthless," *The Guardian* (Jan. 19, 2023), https://www.theguardian.com/environment/2023/jan/19/shell-to-spend-450m-on-carbon-offsetting-fears-grow-credits-worthless-aoe.

[16] *See, e.g.*, Fischer & Knuth, *supra* (pointing out that "A marketplace where participants claim to want to save the climate – but in addition to failing to meet that goal are also likely making things worse. Because they may be damaging the climate even more."); Patrick Greenfield, "Revealed: more than 90% of rainforest carbon offsets by biggest certifier are worthless, analysis shows," *The Guardian* (Jan. 18, 2023), https://www.theguardian.com/environment/2023/jan/18/revealed-forest-carbon-offsets-biggest-provider-worthless-verra-aoe; Creeze & Gijzel, *supra*; Reuters, "Investor Group Bans Carbon Removal CO2 reduction plans" (Jan. 31, 2023), https://www.reuters.com/business/sustainable-business/investor-group-bans-carbon-removal-co2-reduction-plans-2023-01-31/.

[17] *See* Source Material, *The Carbon Con*, *supra*..

decarbonizing and ending deforestation, overall emissions may not have decreased but in fact gone up. We cannot offset our way to keeping global temperature rise below 1.5°C.

Removals are not reductions.

Carbon credits to date have primarily been based on emission ***reductions***. However, here the Supervisory Body is considering how to include ***removals*** in a global carbon market mechanism that would allow Parties to treat removals in one location as satisfying mitigation obligations in another. But removals are not reductions. Nor are their climate effects equivalent. Rather than reducing the emission of greenhouse gases, removals are activities that take or purport to take already emitted carbon dioxide from the atmosphere through either natural or engineered processes. The most recent IPCC working group reports from AR6 and its Special Report on 1.5°C explain that the effects of CO_2 removal at scale not only are unknown, but also that the climate effect of removing CO_2 is not equivalent to that of avoiding the emission of the CO_2 initially.[18] Removals relying on ecosystem restoration will take decades to realize and cannot compensate for delays in reducing fossil fuel emissions.[19] Further many proposed engineered removal activities, such as Direct Air Carbon Capture and Storage (DACCS) or Bioenergy with Carbon Capture and Storage (BECCS), which have featured prominently in the UNFCCC Secretariat's information notes presented to the Article 6.4 mechanism's Supervisory Body, are unproven at scale, face significant feasibility constraints, and pose considerable environmental and social risks.

To date, many technological or engineering-based removals have not been included in carbon markets.[20] However, some voluntary carbon markets have included credits generated from land-based removal activities such as reducing deforestation by protecting a forest. Far too often, these activities have been shown to be very risky for generating emissions credits because they overestimate the amount of carbon removed or sequestered, are for projects that are not new or additional, or their gains are reversed due to occurrences like wildfires.[21]

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[18] CIEL & HBF, *Beyond the Limits*, p. 6-7.
[19] Kate Dooley et al., *The Land Gap Report: 2022*, pgs. 15-16 (2022), https://www.landgap.org/.
[20] UNFCCC, Information Note: Removal activities under the Article 6.4 mechanism, version 1.0, para. 221 (Sept. 15, 2022) (document prepared for the second meeting of the Article 6.4 Supervisory Body, "This section provides information on removal activities that are based on engineering approaches and technologies. Since there is no experience with the implementation of these types of removal activities under existing market mechanisms …"), https://unfccc.int/sites/default/files/resource/a64-sb002-aa-a06.pdf; UNFCCC, Concept Note: Removal activities under the Article 6.4 Mechanism, Table 1 (July 8, 2022), https://unfccc.int/sites/default/files/resource/a64-sb001-aa-a05.pdf.
[21] *See, e.g.,* Source Material, *The Carbon Con*, *supra*; Dharna Noor, "Western Wildfires are Sending Carbon Offsets Up in Smoke," *Gizmodo* (July 27, 2021), https://gizmodo.com/western-wildfires-are-sending-carbon-offsets-up-in-smok-1847370861; Justine Calma, "If forests go up in smoke, so can

On top of these concerns, both land- and engineering-based $C0_2$ removal directly and indirectly threatens human rights. Removal activities can and do adversely impact the human rights of affected communities, for example those communities living in or dependent on the land or forests, in the areas where an activity is taking place. They also indirectly impact human rights by diverting resources from proven mitigation measures and/or delaying the necessary fossil fuel phaseout. These risks can also compound one another.[22]

Courts have recognized that carbon removal technologies are currently unreliable.[23] For example, in finding that the Netherlands was not taking sufficient action to reduce its greenhouse gas emissions, the Supreme Court of the Netherlands recognized that "at the moment there is no technology that allows [carbon removal] to take place on a sufficiently large scale," and that climate pathways relying on such technologies based on unproven assumptions about them "cannot be taken as a starting point for policy at this time without taking irresponsible risks by doing so. Taking such risks would run counter to the precautionary principle that must be observed when applying Articles 2 and 3 ECHR and Article 3(3) UNFCCC)."[24] Similarly, a German Court observed that the future deployment of such negative emission technologies is speculative.[25] These decisions underscore that in accordance with the precautionary principle and States' human rights obligations, States should favor available and existing mitigation measures instead of relying on dangerous unproven geoengineering technologies.[26]

Land- and Engineering-Based Removals Activities pose significant risk to people and the environment as well as the integrity of the Paris Agreement.

Beyond the risks posed by relying on removals instead of emissions reductions, the implementation of removal activities poses numerous human rights and environmental risks.

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carbon offsets," *The Verge* (Sept. 13, 2019), https://www.theverge.com/2019/9/13/20859156/forests-fires-carbon-offsets-amazon-california.

[22] IPCC, AR6, WGII, SPM at para.B.5.4.

[23] *See, e.g.*, Neubauer, et al. v. Germany, Federal Constitutional Court of Germany (29 April 2021), case no. BvR 2656/18/1, BvR 78/20/1, BvR 96/20/1, BvfR 288/20 (English translation), paras. 33, 226-27.

[24] *The State of the Netherlands v. Urgenda Foundation*, Supreme Court of the Netherlands (Dec. 20, 2019), case no. 19/00135 (English translation), para. 7.2.5.

[25] *Neubauer*, para. 227 (stating "However, to what extent negative emission technologies will be implemented on a large scale and not just in isolated applications is currently impossible to predict in view of ecological, technical, economic, political and social concerns- notwithstanding the constitutional law issues that could be raised.").

[26] *See* CIEL, ETC Group, Heinrich Böll Foundation & Third World Network, "Response to Questionnaire on the impact of new technologies for climate protection on the enjoyment of human rights," *supra*.

Risks of Land-based removals

The majority of activities involving removals included or considered in carbon markets to date are land-based removals including, for example, reforestation, tree-planting, wetland management and restoration, improved forest management, and rewilding. If done with respect for human rights including the rights of Indigenous Peoples, land-based removal activities can have positive benefits for the climate (both mitigation and adaptation and enhanced resilience) and biodiversity. There is no question that reduced deforestation and the restoration of degraded wetlands and forests can support and enhance the terrestrial carbon cycle and are critical to combating climate change. That does not mean that these activities should be the basis of carbon credits that can be used as offsets in a carbon market. Turning such land-based removals into credits that can be used in lieu of emissions reductions undermines their climate benefits. Not only is there not enough land,[27] but as recent studies have demonstrated carbon credits from land-based removals have a history of failing to actually achieve the promised climate impacts.[28]

Land is necessary to sustain human life and well-being, including access to food, shelter, and livelihood, and is critical for biodiversity and healthy ecosystems. However, it is increasingly under stress from climate change, which has exacerbated desertification and degradation, increased the presence of disease that kills trees, and led to more frequent and severe wildfires. Further, the amount of land that could be deployed for such activities is limited and States' current plans are unrealistic given the amount of available land.[29] Thus, using land for removal activities could also lead to conflicts over that land especially when it is necessary for food production.

One of the fundamental problems with relying on land-based removals is their impermanence, which is only exacerbated by the stress climate change puts on land. As has been seen, activities such as avoided deforestation, planting trees, or reforestation face serious risk of reversal especially due to wildfire[30] as well as changes in governmental policies that may result in renewed deforestation. Recent devastating wildfires across the EU, Australia, and the United States, among other places, drought in the United States and Africa, and floods in Pakistan illustrate the temporary nature of land-based removals and how quickly such "removals" can be reversed.

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[27] *See generally* Dooley et al., *Land Gap Report: 2022*.
[28] *See, e.g.*, Fischer & Knuth, *supra*; Patrick Greenfield, "Revealed: more than 90% of rainforest carbon offsets by biggest certifier are worthless, analysis shows," *supra*; Creeze & Gijzel, *supra*; Reuters, "Investor Group Bans Carbon Removal CO2 reduction plans" (Jan. 31, 2023), https://www.reuters.com/business/sustainable-business/investor-group-bans-carbon-removal-co2-reduction-plans-2023-01-31/; Source Material, *The Carbon Con*, *supra*.
[29] *See generally* Kate Dooley et al., *The Land Gap Report: 2022*.
[30] *See* Emily Pontecorvo & Shannon Osaka, "California is banking on forests to reduce emissions. What happens when they go up in smoke?," *Grist* (Oct. 27, 2021), https://grist.org/wildfires/california-forests-carbon-offsets-reduce-emissions/.

Additionally, the limited ecosystem capacity to capture carbon over the course of the century makes clear that removals from natural, land-based processes cannot substitute for steep emissions cuts. Recent estimates suggest that natural ecosystems have the capacity to remove less than 400 Gt CO2 from the atmosphere in total over the next 75 years -- a level that may not only be infeasible in practice, but also nowhere near enough to counteract global emissions.[31] Moreover, land-based removals cannot be used to compensate for fossil emissions or substitute for urgently needed emissions reductions.[32]

Land-based removal activities can negatively impact Indigenous Peoples and local communities who are living in or dependent on the land being used to generate credits. The majority of land targeted in plans for reforestation, restoration, or other removal activities is not unclaimed or unused, but instead is often the customary or traditional lands of Indigenous Peoples or local communities.[33] And land-based offset projects displace people or impact their ability to use the land and thus negatively impact their livelihoods.[34] However, many Indigenous Peoples and local communities do not have formal title to or recognized ownership of their lands.[35] Respecting land rights is critical for effective climate action as these communities have long been the stewards of the land. Further, setting aside land for removal activities can undermine food sovereignty as well as the rights to water and culture.

Lastly, land-based removals are often not additional.[36] To be additional, an activity needs to be one that would not have occurred but for the money from the carbon market, i.e. that a forest would not be conserved unless it was generating a carbon credit under a carbon market.[37] However, carbon credits have been generated from land that was never going to be deforested or changed, and therefore are not additional.

Risks of Engineering-based Removal Technologies

As noted, prioritizing removals not only can delay necessary rapid decarbonization, but also present independent risks to human rights and the environment. This is especially true of

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[31] *See* Dooley et al., *The Land Gap Report: 2022*, at pg. 15; Kate Dooley et al., Carbon removals from nature restoration are no substitute for steep emission reductions. *One Earth* 5, pp. 812-24 (2022).
[32] Dooley et al., *The Land Gap Report: 2022*, at pgs. 15-16; *see also* Lawson & Greenfield, "Shell to Spend $450m on carbon offsetting as fears grow that credits may be worthless," *supra*.
[33] *See* Dooley, et al., *The Land Gap Report: 2022*, at pg. 53.
[34] *See* Source Material, "Total's Congo offsetting project 'snatched our land'" (Dec. 12, 2022), https://www.source-material.org/total-oil-congo-carbon-offsetting-project-indigenous-land-forest/.
[35] Dooley, et al., *The Land Gap Report: 2022*, at pgs. 53-59.
[36] *See* Julia Reichelstein, "Trying to be (actually) carbon neutral: Three Lessons," *GreenBiz* (Jan. 3, 2022), https://www.greenbiz.com/article/trying-be-actually-carbon-neutral-three-lessons.
[37] *See* Carbon Offset Guide, How Carbon Offset Programs Address Additionality, https://www.offsetguide.org/high-quality-offsets/additionality/high-quality-offsets-additionality-how-carbon-offset-programs-address-additionality/; Dee Lawrence, "The Concept of Additionality in the Voluntary Carbon Market, Explained, *Forbes* (Oct. 1, 2021), https://www.forbes.com/sites/forbesnonprofitcouncil/2021/10/01/the-concept-of-additionality-in-the-voluntary-carbon-market-explained/?sh=634bcd6078ec.

speculative technologies meant to generate engineered removals of carbon dioxide. These "geoengineering" technologies largely do not exist and, to the extent that they do, they cannot be deployed at scale and bring numerous ecological and social risks. As the UNFCCC's Structured Expert Dialogue on the Long-Term Goal noted, "[t]he feasibility of most CO2 removal technology is highly uncertain. Options vary in terms of cost, potential and side effects."[38]

Additionally, many removal technologies, including two of the ones discussed most in the Information Notes prepared for the Supervisory Body to consider, rely on carbon capture and storage (CCS), which faces significant feasibility constraints and uncertainties, high costs and substantial energy, chemical and water input requirements, and environmental, health and safety risks. Point-source CCS is a purported emissions reduction (not removal) technology that has existed for decades, primarily been used to supply CO2 for enhanced oil recovery (to produce more fossil fuels), and to extend the operation of polluting facilities,such as coal-fired power plants, that were supposed to shut-down).[39] CCS consistently has overpromised and under-delivered on emissions reductions. Carbon capture projects face significant feasibility problems due to their substantial costs,[40] the land use footprint of CCS infrastructure, and its serious environmental, health, and safety risks.[41] In its working group III report as part of AR6, the IPCC refers to CCS as among the highest-cost mitigation measures with the least potential to reduce emissions in the near-term (by 2030).[42] Engineered removals that rely on CCS to capture CO_2 collected from the ambient air (such as DACCS) or released when biofuel is combusted (BECCS), transport and inject it underground, are thus susceptible to those cost and feasibility constraints, technical uncertainties, and safety risks.

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[38] UNFCCC SED2, para. 30.

[39] *See, e.g.,* Nicholas Kusnetz, In a Bid to Save Its Coal Industry, Wyoming Has Become a Test Case for Carbon Capture, but Utilities are Balking at the Pricetag, *Inside Climate News* (May 29, 2020), https://insideclimatenews.org/news/29052022/coal-carbon-capture-wyoming/; Karin Rives, Only still-operating carbon capture project battled technical issues in 2021, *S&P Global* (Jan. 6, 2022), https://www.spglobal.com/marketintelligence/en/news-insights/latest-news-headlines/only-still-operating-carbon-capture-project-battled-technical-issues-in-2021-68302671.

[40] *See* Hélène Pilorgé et al., Cost Analysis of Carbon Capture and Sequestration of Process Emissions from the U.S. Industrial Sector, 54(12) Envtl. Sci. & Tech. 7524-7532 (2020), https://pubs.acs.org/doi/abs/10.1021/acs.est.9b07930.

[41] CIEL, *Confronting the Myth of Carbon-Free Fossil Fuels: Why Carbon-Capture is Not a Climate Solution* (July 2021), https://www.ciel.org/reports/carbon-capture-is-not-a-climate-solution/; Sandra Steingraber, Carbon capture and storage fails to mitigate the dangers of fracking, *in Concerned Health Professionals of New York and Physicians for Social Responsibility, Compendium of Scientific, Medical, and Media Findings Demonstrating Risks and Harms of Fracking and Associated Gas and Oil Infrastructure* (Eighth Ed., 2022), https://www.psr.org/wp-content/uploads/2022/04/compendium-8.pdf*; see also* Beth Warden, Government report on CO2 pipeline leak in Mississippi could affect South Dakota Pipelines, *Dakota News Now* (June 11, 2022), https://www.dakotanewsnow.com/2022/06/12/government-report-co2-pipeline-leak-mississippi-could-affect-south-dakota-pipelines/.

[42] *See generally* CIEL & HBF, *IPCC Unsummarized*; *see also* IPCC, AR6 WGIII, SPM, at Fig. SPM.7 at SPM-50.

Engineering-based Removal Technologies: BECCS and DACCS
In the Article 6.4 mechanism's Supervisory Body's discussions of removals, the primary engineering-based technologies referenced are BECCS, which is a hybrid between a land- and engineering-based removal, and DACCS. BECCS and DACCS (or direct air capture (DAC)) remain primarily speculative, with high financial cost, energy intensity, land use, and other input requirements sharply constraining their ability to meaningfully and/or permanently "remove" atmospheric CO_2.

BECCS and DACCS, as well as other geoengineering technologies that may be considered as credit-generating activities, pose significant risks to human rights and the environment.[43] Scientists and human rights experts have warned that relying on CO2 removal technologies like BECCS and DACCS could impact food sovereignty, biodiversity, and land rights, among others, and could overburden future generations.[44] Several of these risks are tied to the drivers of climate change (e.g., fossil fuels), which as noted above undermine human rights, but others relate to the significant inputs required for the technologies themselves.

For example, in the case of BECCS, the amounts of land required to implement BECCS on a climate-relevant scale are unavailable without dramatically infringing on human rights, including the right of Indigenous Peoples to free, prior and informed consent (FPIC), and threatening food sovereignty and ecosystem integrity.[45] It is estimated that BECCS will require land 2 to 4 times larger than the amount of land area designated as marginal or abandoned and therefore potentially available for such activities.[46] Moreover, as noted above, land so designated may, in fact, be serving other functions such as subsistence or

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[43] *See* CIEL, Earthrights International, Fian International, Heinrich Böll Stiftung, IBON International, Indigenous Environment Network & IWGIA, *Submission to the First Global Stocktake: Human Rights-Based Climate Action*, pp. 16-17 (Aug. 2022), https://climaterights.org/wp-content/uploads/2022/08/19-August-2022_Joint-Submission-to-the-First-Global-Stocktake-Human-Rights-Based-Climate-Action.pdf.
[44] CIEL & HBF, *IPCC Unsummarized*, at pp. 24-32; Report of the Special Rapporteur on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment, Report to the UN General Assembly on a safe climate, UN Doc. A/74/161 Annex, para. 21 (July 2019), http://srenvironment.org/sites/default/files/Reports/2019/CC%20Good%20Practices%20Annex.pdf.
[45] *See, e.g.*, Corporate Europe Observatory, *The Deadly Climate Gamble: Dirty Energy Bets on Unproven 'Carbon Removals' to Keep Fossil Fuels Flowing* (Oct. 2022), https://www.corporateeurope.org/en/DeadlyClimateGamble; Dooley et al, *The Land Gap Report: 2022*, pgs. 22-23.
[46] William C.G. Burns, Human Rights Dimensions of Bioenergy With Carbon Capture and Storage: A Framework for Climate Justice in the Realm of Climate Geoengineering, *in* Randall Abate, *Climate Justice: Case Studies in Global and Regional Governance Challenges*, pp. 158-59 (Environmental Law Institute, 2016), *available at* https://www.ohchr.org/sites/default/files/2022-04/WIL-BURNS-BECCS-HR-Abate-Book-Chapter.pdf.

biodiversity protection.[47] Producing bioenergy also requires significant amounts of water.[48] Working Group II of the IPCC noted that "Deployment of afforestation of naturally unforested land, or poorly implemented bioenergy, with or without carbon capture and storage, can compound climate-related risks to biodiversity, water and food security, and livelihoods, especially if implemented at large scales, especially in regions with insecure land tenure (high confidence)."[49] Thus, BECCS could lead to land grabbing, deforestation, and violations of land rights and human rights including to water and food.

Similarly, DAC requires enormous amounts of land and water as well as energy and chemicals.[50] The IPCC notes that powering DAC at a scale capable of removing 10 gigatonnes of CO_2 per year, which is approximately a quarter of current annual global CO_2 emissions, would require an amount of energy equivalent to current total global electricity production and one-sixth of total energy supply.[51] DAC's high land and water requirements could also significantly impact food prices and consequently food sovereignty.[52] Additionally, deploying DAC at such a large (gigatonne) scale would require enormous amounts of chemicals such as sodium hydroxide, ammonia, or ethylene oxide, at volumes many times greater than their current production levels.[53] This chemical production and use, as well as the energy required to both produce them and power DAC would involve its own pollution impacts and health and environment risks.

Moreover, neither BECCS nor DAC could begin removing atmospheric CO_2 at any significant scale until 2050 or beyond, which is well after the years during which emissions need to be effectively eliminated to keep global temperature rise below 1.5°C.[54]

Engineering-based Removal Technologies: Other Techniques

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[47] CIEL & HBF, *IPCC Unsummarized*, at p. 31.
[48] FERN, Six Problems with BECCS (2022), https://www.fern.org/fileadmin/uploads/fern/Documents/2022/Six_problems_with_BECCS_-_2022.pdf
[49] IPCC, AR6 WGII, SPM, at para. B.5.4.
[50] CIEL, ETC group, Heinrich Böll Foundation & Third World Network, at p. 9; *see also* CIEL & HBF, *IPCC Unsummarized*, at pgs. 29-30 & the sources cited therein.
[51] AR6, WGIII, Ch. 12, para. 12.3.1.1, 12-44.
[52] AR6, WGII, Ch. 4, para. 4.7.6.
[53] Sudipta Chatterjee & Kuo-Wei Huang, Unrealistic energy and materials requirement for direct air capture in deep mitigation pathways, Nat Commun 11, 3287 (2020).
[54] *See* CIEL & Heinrich Böll Stiftung, *Lost in Translation: Lessons from the IPCC's Sixth Assessment on the UrgentTransition from Fossil Fuels and the Risks of Misplaced Reliance on False Solutions* (March 2023), https://www.ciel.org/wp-content/uploads/2023/03/Lost-in-Translation-Lessons-from-the-IPCCs-Sixth-Assessment.pdf (citing to IPCC WGIII, Chapter 12 "Even in optimistic scenarios, where the "volumes of future global CDR deployment assumed…are large compared to current volumes of deployment," carbon removal technologies like BECCS and DACCS would not begin removing carbon dioxide from the atmosphere at any meaningful scale until 2050 or later,with DACCS annual CO2 removal amounting to "0 [0–0.02] GtCO2 yr–1 by 2030" and barely reaching "0.02 [0–1.74] GtCO2 yr–1 by 2050." [WGIII Ch. 12, 12.3 at pp. 1264–1265; see also WGIII Ch. 12, Figure 12.3 at p. 1264]"); CIEL & HBF, *IPCC Unsummarized*, at p. 26 & n. 35.

Ocean fertilization and ocean alkalinization are other, proposed engineering-based removal activities that have been included in the Information Notes considered by the Supervisory Body. The definition proposed in the Supervisory Body's draft recommendations on activities involving removals presented at the 27th Conference of the Parties (COP) included CO_2 stored in ocean reservoirs. Like other speculative removal technologies, these activities present significant risks. Parties to the London Protocol to the London Convention have recognized these risks in their discussions and have already regulated marine geoengineering and currently are considering additional regulations.[55] The Parties to the London Protocol to the London Convention adopted a resolution stating that, unless they are for legitimate scientific research, ocean fertilization activities should not be allowed. The recent Report of the Working Group on Marine Geoengineering under the Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection (GESAMP) acknowledged that marine geoengineering not only should not be used in place of reducing emissions, but also may have adverse environmental effects and should be further evaluated in order to devise proper regulations under the London Convention and London Protocol.[56] Based on this report the Parties to the London Convention and London Protocol have chosen to prioritize evaluating enhancing ocean alkalinity and macroalgae cultivation and other biomass for sequestration including artificial upwelling (both CO2 removal techniques) as well as marine cloud brightening and microbubbles/reflective particles/materials (two solar radiation management techniques). Given the potential for these techniques to have detrimental effects that may be widespread, long-lasting or severe, Parties have been urged to act with extreme caution and to follow the precautionary approach.[57] The UNFCCC and the bodies created under it should be aware of these ongoing processes and take heed to not act too fast or in a way that may sanction activities precluded or subject to regulation in other international fora.

The UNFCCC's sister convention, the Convention on Biological Diversity (CBD), has also taken a precautionary approach to prevent potential harm and acted to regulate or prevent engineered removals due to the risks they pose. The CBD has been a leader among multilateral environmental agreements in grappling with geoengineering having first done so in 2007. Since first doing so at its Ninth COP, the States Parties to the CBD have adopted decisions on geoengineering at five consecutive COPs. Perhaps most significantly, at COP10, they took Decision X/33, which established a de-facto moratorium on all

[55] Marine geoengineering techniques identified for further evaluation (Oct. 10, 2022), https://www.imo.org/en/MediaCentre/PressBriefings/pages/Marine-geoengineering.aspx (explaining in the "Background Information" that the LP and LC first regulated ocean fertilization in 2008 and adopted further regulations in 2010 and 2013 to regulate and control marine geoengineering) .
[56] *Id.*
[57] *Id.*

geoengineering activities.[58] This followed on a previously adopted moratorium on ocean fertilization.[59]

Given the significant risks, if removals are not excluded from carbon markets altogether, robust rules are all the more essential.

Carbon markets and offsets' significant problems render their role in delivering effective and rights-based climate action suspect at best. These risks make it imperative that any carbon market established under the Paris Agreement has in place robust rules to limit or minimize its adverse impacts. This is especially true if it intends to include activities involving removals. Given that removals are not reductions nor equivalent to them, removals should not be the basis of emissions reduction credits in any market mechanism. At minimum, activities involving removals should be severely restricted and any engineered "removals" that are unproven and/or prolong the use of fossil fuels should be ruled out so as to not risk undermining the Paris Agreement or delaying the drastic emissions reductions needed to avoid and minimize overshoot of 1.5°C to the greatest extent possible.

Definition

One of the significant problems of the draft recommendations on activities involving removals presented at COP27 was in the inclusion of an overbroad definition of removals that threw open the door to all manner of natural processes and engineered activities, - ranging from reforestation to ocean fertilization and other types of marine geoengineering to turning wood harvested from monocropped tree plantations into wood products, as acceptable Article 6.4 activities. As detailed above, many of the activities encompassed in such a sweeping definition are speculative, unproven, or infeasible at scale; foreseeably risky to human rights and the environment; not additional or counterproductive from a climate perspective; incapable of storing CO2 on a climate-relevant timescale; and/or contrary to international or domestic law. While it is imperative that rights-respecting measures be undertaken to safeguard and restore natural forests, wetlands, and other ecosystems, thereby enhancing their contributions to the carbon cycle, as well as biodiversity and human welfare, such efforts must be complementary to, not a substitute for or traded off against, emissions reductions.

[58] Convention on Biological Diversity, Decision X/33, para. 8(w) (2010) ("no climate-related geo-engineering activities** that may affect biodiversity take place, until there is an adequate scientific basis on which to justify such activities and appropriate consideration of the associated risks for the environment and biodiversity and associated social, economic and cultural impacts,"); *see* (Convention on Biological Diversity, Climate-related Geoengineering and Biodiversity, https://www.cbd.int/climate/geoengineering/; Sands & Cook, at para. 18.
[59] Convention on Biological Diversity, Decision IX/16 (2008).

The following sections provide comments on specific areas included in the call for submissions. These comments regarding critical features of the Article 6.4 governance framework apply with equal force to any activities that may come under Article 6.4. Robust monitoring, comprehensive and transparent reporting, and the avoidance of negative environmental and social risks should be applied to all potential carbon market activities. This is one of the reasons why it is critical for the Supervisory Body and CMA to take a more comprehensive approach and ensure that all parts of the governance structure are in place before any activities are approved for generating credits.

Monitoring

Monitoring is essential to ensuring that any Article 6.4 activity is actually doing what is claimed and is in compliance with all applicable rules and regulations. This monitoring must also be transparent and take place at regular intervals to ensure ongoing compliance.

The length of time that an activity should be monitored cannot be underestimated– particularly when the desired impacts are intended to be felt on a climate-relevant scale. The requirement to monitor should not be limited to the amount of time it takes to "finish" an activity or a crediting period, but should extend beyond. This is especially true with respect to removals, given the high risk of reversals. As highlighted above, land-based removals run a particularly high risk of reversal whether from a wildfire or other natural disaster or a change in priorities of a country. Thus, a monitoring period for a forest restoration project, for example, cannot be limited to a crediting period.

Further, the monitoring should not just be done by the entity that proposed or implemented the removal activity or even the buyer of the credits, though both should have a role; participatory monitoring and/or third-party monitoring is essential.[60] Participatory monitoring involves engaging with local communities, Indigenous Peoples, and those in the area where the project is taking place (i.e. near the forest being conserved or reforested). Similarly, third-party monitoring involves having independent people, some of whom may be in the communities, but also experts who can review the activity and verify the claims being made. Both are vital as it avoids relying solely on self-reporting or monitoring only by those who stand to benefit from the activity taking place. This is all the more critical in the face of recent studies that have shown that offset credits are not always what they seem and have not actually done what was claimed.

Reporting

Transparent and comprehensive reporting on activities resulting in emissions reductions credits is critical. Not only is such reporting a key enabler for monitoring, but it is also

[60] CIEL, *Funding Our Future: Five Pillars for Rights-Based Climate Finance*, p. 22 (March 2021), https://www.ciel.org/wp-content/uploads/2021/03/FundingOurFuture_5PillarsForRightsBasedClimateFinance_CIEL_mar2021.pdf.

essential to prevent greenwashing and fraud. Further, reporting can also help enable local communities and Indigenous Peoples to participate in the development and implementation of an activity.

Reporting must be transparent. All reports should be publicly available, at a minimum they should be on the Article 6.4 mechanism's website. Additionally, they should be easily accessible, including, for example, that they should be readable on mobile devices as well as computers, in multiple languages including in the languages of the area in which the activity is taking place, and easy to find. Reports also should be made available in the local area directly.

Reporting should be comprehensive. The default should be to be over-inclusive about the type of information included in reports. Though this is a non-comprehensive list, reports should include:

- Information on environmental and social impacts, including how any adverse impacts are being prevented or mitigated;
- Information on how rights-holders were consulted initially and how they are being consulted and/or included in the activity in an ongoing way;
- Information on any grievances that have been filed;
- Information about ongoing threats that may affect the duration or reliability of the activity's climate impact;
- Information about the actual impact on CO_2; and,
- Information on additionality, meaning whether the activity would have happened in the absence of it receiving support through the carbon market (for example, if the forest would not have been conserved or not reforested).

This information is critical to assessing the legitimacy of any market activity.

Avoidance of Negative Environmental and Social Risks

Land- and engineering-based removal activities (as well as many other carbon market projects) can and do have negative impacts on people and the environment including among others risks to biodiversity, ecosystem integrity, food sovereignty, water security, and livelihoods. Article 6.4 establishes a mechanism intended to both contribute to greenhouse gas mitigation and "support sustainable development." Activities that violate human rights including the rights of Indigenous Peoples and negatively impact the environment and ecosystem integrity do not contribute to sustainable development and should not be sanctioned by a carbon market mechanism under the Paris Agreement. Thus it is imperative that there are robust rules to ensure that carbon market activities avoid negative environmental and social risks, including among others risks to biodiversity, ecosystem integrity, food sovereignty, water security, and livelihoods. Effective climate action is not action that harms people or the environment.

The draft recommendations on removals presented by the Supervisory Body to the CMA at COP27 included worrying language related to the avoidance of negative environmental and social risks. Paragraph 21 stated "Activity participants shall *minimize and, where possible, avoid*, negative environmental and social impacts of an activity involving removals including impacts on biodiversity, land and soils, ecosystem health, human health, food security, local livelihoods, and the rights of the indigenous peoples, by following requirements to be developed by the Supervisory Body *while acknowledging that the enforcement of environmental and social protection laws is a national prerogative of the host Party" (emphasis added).*

First, activity participants should seek to avoid any negative environmental and social impacts of an activity involving removals. Second, the list of potential impacts should also include "human rights," should refer to "food sovereignty" instead of food security, and should indicate that this is a non-exhaustive list as there are other potential impacts such as impacts on water security. Lastly, and critically, this paragraph introduced a caveat on national prerogatives that could undermine both the Supervisory Body's ability to set rules and also the integrity of the Paris Agreement by allowing activities that harm the environment or people from being approved if a country says that it does not enforce a specific environmental or social protection. Given the foreseeable harms of certain proposed credit-generating activities and the history of market activities undermining human rights including the rights of Indigenous Peoples, this could prove devastating for many communities around the world. Additionally, it is a step back from the commitment Parties made at COP26 when they approved the Article 6.4 rules, modalities and procedures and included that the Supervisory Body would need to take steps to establish the necessary rules and processes to ensure respect for human rights including the rights of Indigenous Peoples, local communities, migrants, children, persons with disabilities and people in vulnerable situations as well as the right to health, right to development, gender equality, empowerment of women, and intergenerational equity, and "the application of robust, social and environmental safeguards."[61]

In developing its recommendations for how to avoid negative social and environmental risks, the Supervisory Body and CMA must include respect for human rights and protection of the environment and ecosystems and should be looking for ways to enhance human rights and ecosystem integrity, not ways to undermine them from the beginning.

Having in place robust, rights-based social and environmental safeguards and rules for ensuring public participation and meaningful consultation, including Indigenous Peoples' right to free, prior and informed consent as well as an independent grievance mechanism to provide remedy if harms occur are also essential to avoiding and minimizing environmental and social risks.

[61] Article 6.4 rules, modalities and procedures, para. 24(a)(ix)-(x).

Other Issues Related to Chapter V of the rules, modalities and procedures
Though the call for submissions focuses on activities involving removals, it also invites comments on other issues related to Chapter V of the rules, modalities and procedures for Article 6.4, which were adopted at COP26. As Chapter V focuses on the Article 6.4 activity cycle, it is a critical component of the governance of the mechanism. These components must all be developed and put in place before any mechanism activity takes place.

This submission does not comment on all aspects of Chapter V, but instead concentrates on the paragraphs 31(d), 31(e), and 62 of the rules, modalities and procedures for Article 6.4.

Environmental and Social Safeguards and Meaningful Consultation
First and foremost, to ensure that activities comply with the requirements of paragraph 31(d)-(e) to avoid negative environmental and social impacts and to undergo meaningful stakeholder consultation, there should be comprehensive safeguards in place.[62] These safeguards should be rooted in and compliant with human rights including the rights of Indigenous Peoples and should be developed in a participatory manner. They should also include an exclusion list and unacceptable impacts (for example, involuntary resettlement, infringing on critical habitat, among others). Additionally, to ensure the right to participation[63] there should be robust rules, compliant with human rights including the rights of Indigenous Peoples, to enable meaningful stakeholder consultation. These rules should specify that meaningful consultation is "timely, effective, inclusive and held free of coercion and in an appropriate way for communities that are directly affected by the proposed [activity]."[64] Further, any Article 6.4 activity must comply with and respect the

[62] *See e.g.,*CIEL, *Rights, Carbon, Caution: Upholding Human Rights under Article 6 of the Paris Agreement* (Feb. 2021), https://www.ciel.org/reports/rights-carbon-caution/*;* CIEL, *Funding Our Future*, pgs. 13-19.
[63] *See, e.g.*, U.N. Conference on Environment and Development, Rio Declaration on Environment and Development, U.N. Doc. A/Conf.151/26/Rev.1 (Vol. 1), principle 10 (Aug. 12, 1992) ("Environmental issues are best handled with the participation of all concerned citizens, at the relevant level. At the national level, each individual shall have appropriate access to information concerning the environment that is held by public authorities, including information on hazardous materials and activities in their communities, and the opportunity to participate in decision-making processes. States shall facilitate and encourage public awareness and participation by making information widely available."); Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters, June 25, 1998, 2161 U.N.T.S. 447; Regional Agreement on Access to Information, Public Participation and Justice in Environmental Matters in Latin America and the Caribbean, opened for signature Sept. 27, 2018, C.N.195.2018, http://repositorio.cepal.org/bitstream/handle/11362/43583/1/S1800428_en.pdf; UNFCCC, art. 6; Paris Agreement, art. 12.
[64] Adaptation Fund, Environmental and Social Policy, para. 33 (Mar. 2016), https://www. adaptation-fund.org/wp-content/uploads/2013/11/AmendedMarch-2016_-OPG-ANNEX-3-Environmental-social-policyMarch-2016.pdf; *see also* Green Climate Fund (GCF), Environmental and Social Policy, para. 69 (2018), https://www.greenclimate.fund/document/environmentaland-social-policy.

Indigenous Peoples' right to free, prior and informed consent (FPIC).[65] FPIC is necessarily an iterative process that requires ongoing consultations with Indigenous Peoples to secure their consent, or lack thereof, and any process to achieve FPIC must respect local customs and decision-making practices.

Independent Grievance Mechanism

Paragraph 62 of the Article 6.4 rules, modalities, and procedures establishes an independent grievance process that allows stakeholders, activity participants, and Participating Parties to request that a grievance be addressed. This independent grievance mechanism must be in place prior to any activities, including any activities involving removals, under the Article 6.4 mechanism taking place.

The independent grievance mechanism must be able to address allegations regarding direct harms from market activities to affected communities and environments, and harms stemming from fraud, misrepresentation, or greenwashing. Carbon market activities can and do contribute to human rights abuses and environmental harm both directly (i.e., displacing a community in the construction of a large hydropower dam or a run-of-river hydro project)[66] and through their failure to deliver promised mitigation impacts.[67]

Ensuring the right to remedy requires avenues being in place through which people can seek redress for harms. Even when activities take steps to avoid environmental and social risks and comply with all safeguards and other rules in place, harms can and do occur. In those instances, people need an avenue to seek redress/remedy. To be effective, this independent grievance mechanism must be legitimate, accessible, predictable, equitable, transparent, rights-compatible, and a source of continuous learning.[68] These effectiveness

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[65] See G.A. Res. 61/295, United Nations Declaration on the Rights of Indigenous Peoples, arts. 10, 19, 32(2) (Sept. 13, 2007) [hereinafter UNDRIP].

[66] Daniel Grossman, "Dam Lies: Despite Promises, an Indigenous Community's Land Is Flooded" (Mar. 5, 2018), https://therevelator.org/dam-lies-indigenous-flooded/; CIEL, *Rights, Carbon, Caution*, pg. 9; Reuters, "Kenyan wind power project cancelled due to land disputes" (Feb. 23, 2016), https://news.trust.org/item/20160223123846-9mdhy/?source=fiOtherNews2; Carbon Market Watch, "The Clean Development Mechanism: Local Impacts of a Global System" (2018); Wolfgang Obergassel et al., "Human rights and the Clean Development Mechanism," 8 J. Hum. Rights & Env't. 51 (2017).

[67] Greenfield, "Revealed: more than 90% of rainforest carbon offsets by biggest certifier are worthless, analysis shows," *supra*; Creeze & Gijzel, *supra*.

[68] *See, e.g.*, United Nations Human Rights Office of the High Commissioner, Guiding Principles on Business and Human Rights, Implementing the United Nations "Protect, Respect and Remedy" (2011), https://www.ohchr.org/documents/publications/guidingprinciplesbusinesshr_en.pdf (setting forth effectiveness criteria for non-judicial grievance mechanisms); Report of the United Nations High Commissioner for Human Rights, Improving accountability and access to remedy for victims of human rights abuse through non-State-based grievance mechanisms, U.N. Doc. A/ HRC/44/32 (May 19, 2020), https://undocs.org/A/HRC/44/32; CIEL, *Rights, Carbon, Caution: Upholding Human Rights under Article 6 of the Paris Agreement*, pgs. 14-16; CIEL, *Funding Our Future: Five Pillars for Rights-Based Climate Finance*, pgs. 19-21.

criteria can help guarantee that those who are harmed are not only able to easily access the process to obtain redress or remedy (including that they should be able to do so free from fear of reprisal or retaliation), but also that the mechanism is capable of providing real remedy.

The Supervisory Body should begin the process of establishing the independent grievance mechanism and should develop it in a transparent and participatory manner. There are numerous examples of such mechanisms and this independent grievance mechanism for activities under Article 6.4 should draw from existing good practice.[69]

For more information about Environmental and Social Safeguards, Meaningful Consultation and Public Participation, and Independent Grievance Mechanisms, please see CIEL, *Rights, Carbon, Caution: Upholding Human Rights under Article 6 of the Paris Agreement* (Feb. 2021), https://www.ciel.org/reports/rights-carbon-caution/.[70]

Conclusion

Neither carbon markets under the UNFCCC nor voluntary carbon markets have demonstrated an ability to provide real climate action. History has shown that any and all activities pursued under the Article 6.4 mechanism could have real and potentially severe consequences for people and ecosystems. This risk is especially acute with respect to removals whether land- or engineering-based as both carry significant direct and indirect risks. The Supervisory Body and CMA must take their time and carefully consider the requirements and processes necessary to operate the Article 6.4 mechanism in a way that does not enable it to threaten human rights and undermine ecosystem integrity or the integrity of the Paris Agreement itself. The urgency of the climate crisis cannot be used to justify expediency nor to eliminate the need for precaution in matters related to human rights and environment.

If you have any questions regarding this submission, please contact Erika Lennon, elennon@ciel.org.

[69] *See* Multiple Authors, *Good Policy Paper: Guiding Practice from the Policies of Independent Accountability Mechanisms* (2021).

[70] While it focuses on climate finance, the following report also contains detailed information about how to ensure respect for human rights and the environment as well as elements of an effective independent grievance mechanism: CIEL, *Funding Our Future: Five Pillars for Rights-Based Climate Finance* (Mar. 2021), https://www.ciel.org/reports/funding-our-future-five-pillars-for-advancing-rights-based-climate-finance/.