



BLOG POST December 10th 2021

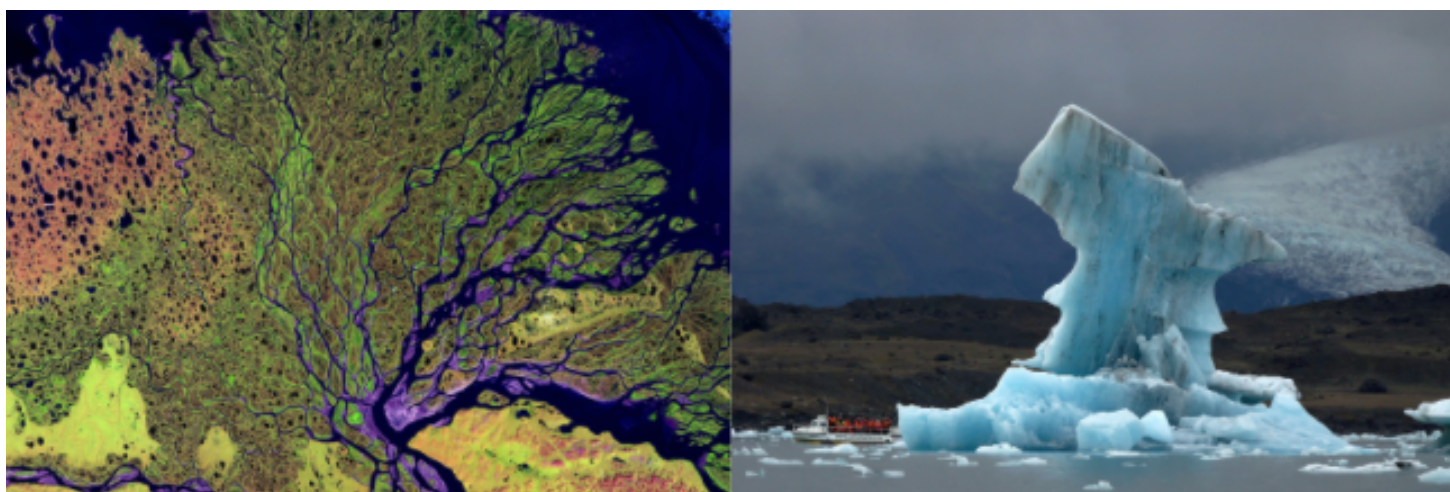
Building off COP26: Delivering on 1.5°C and 'net zero integrity' through integrated climate and biodiversity action

Auteur

Alexandra Deprez

Research Fellow, International climate governance

🕒 Reading time: 12 min



IPCC and IPBES are increasingly clear, through their [Co-Sponsored Workshop Report](#), that we can only succeed in reversing the climate change and biodiversity loss crises through an integrated, ambitious response. 'Nature' had a very clear seat at the COP26 table, within the UK Presidency's thematic 'real economy' campaign and across side events, and climate-biodiversity linkages also made their way into technical and political negotiations. The Glasgow Outcomes offers key steps forward on the climate change and biodiversity nexus, yet more integrated political ambition and implementation is still needed in the run-up to the 2023 Global Stocktake, as Parties and Non-State Actors (NSA) face growing pressure to be accountable towards 'net zero integrity'.^{[1](#)}

This blog post builds off the recent [IDDRI Policy Brief – Aligning climate action to 1.5°C with biodiversity planetary boundaries: Three key priorities at COP26 and beyond](#), and draws on contributions from Catalina Gonda (FARN).

Did COP26 help advance integrated climate and biodiversity responses?

The [Glasgow Leaders' Declaration on Forests and Land Use](#) to halt forest loss by 2030—one of the key outcomes of the UK Presidency's 'Nature' campaign—took a lot of headlines given its scale (endorsed by 141 countries, covering around 90% of global forest) and the significant associated [public and private finance pledged](#) (\$12 billion and \$7.2 billion respectively). Yet the Forest Deal faced [criticism from some NGOs](#) for the 'logging loophole' they claim it leaves open to unrestrained continued exploitation of forests for paper, pulp, and biomass². Further, concerns were raised on the good will of key Parties that committed to the deal, most notably Brazil, whose [government withheld until after COP26](#) data already available in October on soaring Amazon deforestation (up 22% in 2021 from 2020 levels). Finally, the fact that the 2014 non-binding New York Declaration on Forests to half deforestation by 2020 [failed to even slow down deforestation](#) raises the question on whether the equally non-legally binding Glasgow Forest Deal has enough 'teeth' (despite the significant associated new finance) to be well implemented.

Beyond these real-economy deals, the climate-biodiversity nexus was also present in the negotiating rooms. The technical Article 6 negotiations on carbon markets were particularly relevant. The compromise outcome closed the largest loopholes that would have allowed for double counting of emissions traded, and excluded REDD+ credits³, although uncertainty still remains on the extent to which avoided emissions could count towards a carbon credit⁴. Yet the Parties making up the [San José Principles Coalition for High Ambition and Integrity in International Carbon Markets](#) regretted the final Rules "do not deliver the clarity, robustness, and integrity needed to guide international market-based approaches towards the goals of the Paris Agreement", and are therefore calling for a more ambitious implementation (e.g., avoiding Kyoto-era units, and preventing double-counting in voluntary corporate climate commitments). Beyond identifying and implementing 'high-quality carbon credits', an open question also remains on the extent of the role carbon markets can play over coming decades in reaching net zero within 'ecological limits' to land-based CDR (e.g., techniques such as reforestation, soil carbon, afforestation, and Bioenergy with Carbon Capture and Storage (BECCS)), which recent scientific studies reveal are likely severely more limited than previously assessed.^{5, 6}

The inclusion of climate-biodiversity linkages in the Glasgow Pact—COP26's political outcome—was the most extensive to date in a UNFCCC COP final decision⁷, which manifests the growing importance various Parties are giving to linking both agendas, and civil society organisations' role in elevating this issue. Following foundations laid in Madrid's final COP25 Decision⁸, the final Glasgow Pact Decisions (1/CP.26 and 1/CMA.3): (i) note the importance of ensuring the integrity of all ecosystems and biodiversity conservation, and reiterate that the global climate and biodiversity loss crises are interlinked, (ii) explicitly recognize the importance of protecting, conserving, and restoring ecosystems to achieve the Convention's long-term global goal and the Paris Agreement's temperature goal "by acting as sinks and reservoirs of greenhouse gases and protecting biodiversity, while ensuring social and environmental safeguards," (iii) encourage Parties to take an integrated approach on ecosystems in national policies, and (iv) establish a recurring dialogue on the ocean-climate nexus.

These inclusions in the Glasgow Pact are significant for at least three reasons: (i) they anchor in the COP's political message the key importance of halting and reversing biodiversity loss in this decade to maintain global temperature rise below 1.5°C, and addressing biodiversity and climate in an integrated manner, sending a political signal that can be built upon in 2022 by the CBD COP15, and by G7 German and G20 and Indonesian Presidencies to tackle specific tricky issues (e.g. bioenergy), (ii) they offer legal hooks to operationalize further climate-biodiversity coherence within the UNFCCC bodies in coming years, (iii) the mention of "ensuring integrity of all ecosystems" and the paragraph on protecting, restoring ecosystems offer hooks for Parties to develop further safeguards to ensure mitigation actions are not being promoted that may severely undermine ecosystem integrity (e.g. afforestation, or bioenergy).

Nevertheless, Parties at COP26 missed at least two opportunities in the Glasgow Pact to promote a more integrated climate and biodiversity approach. Firstly, while the Pact includes strong language on mitigation and ecosystem conservation, it could have more explicitly linked them, to underscore the importance—to reach the 1.5°C goal—of prioritizing deep decarbonization and unprecedented ecosystem conservation and restoration⁹—not one *at the expense of, or instead of*, the other. Parties also failed to recognize the importance of ensuring coherence in mitigation policy to ensure it does not severely compromise biodiversity conservation. To the contrary, the COP26 Decision's wording “phasing out unabated coal”, appears to leave the door to promoting wood-based biomass and coal co-firing—even as [scientists have repeatedly warned](#) of that replacing coal with the burning of trees (i.e. wood-based biomass) severely exacerbate biodiversity loss and has questionable climate-neutrality claims.¹⁰

Four priority action areas to build greater climate and biodiversity integration towards 1.5°C in the run-up to the Global Stocktake

Building off the COP26 outcomes, below are four concrete priority areas for Parties (and NSA leaders) to tackle in a more integrated way the climate change and biodiversity loss crises in 2022 and beyond. These are all relevant as Parties and NSA face growing pressures to demonstrate 'net-zero integrity' towards 1.5°C, in the run-up to the 2023 Global Stocktake (GST).

1. Ensure 'ecosystem conservation measures are taken in addition to, and not instead of, deep decarbonization, and that implementation of 'nature-based solutions' (NBS) be conducted with the full respect of indigenous peoples and local communities. The term NBS did not make it into the final version of the COP26 Decision—given pushback from some Parties who objected to new concepts being introduced that have not been previously discussed in plenary form, with some denouncing a commodification of nature. A number of [NGOs](#) also fear that NBS be connected to offsetting and greenwashing. The civil society Climate Action Network at COP26 broadly underscored the key importance that where NBS be implemented, this be with the strongest environmental and social safeguards, and respecting the free and prior consent of indigenous peoples and local communities¹¹. There is also a connected issue on ensuring Article 6 is implemented in such a way that does not undermine deep decarbonization on the way to net zero, while ensuring biodiversity and social safeguards.¹²

2. Heed [the warning of over 500 scientists](#) that replacing burning of fossil fuel (namely coal) with burning of trees (i.e. wood-based biomass) risks severely undermining climate and biodiversity goals; and develop strong environment safeguards for practices such as bioenergy. In the G20 Statement and COP26 Outcome commitments on coal phase-out or phase-down, Parties did not yet heed this call: in addition to COP26 leaving the door open to promotion of wood-based biomass and coal co-firing, G20 Statement explicitly mentions bioenergy as a 'renewable' energy that Parties should collaborate on up-scaling. In 2022, the German G7 and Indonesian G20 would be key arenas to tackle these tricky issues—which will only continue rising in importance in the run-up to the GST. At COP27 Parties can operationalize the Glasgow Pact by developing environmental and social safeguards to ensure coherent implementation of climate and biodiversity policies.

3. Call upon IPCC and IPBES to clarify the 'ecological limits' to land-based carbon dioxide removal (CDR), and viable pathways to the 1.5°C goal within ecological planetary boundaries. As detailed in IDDRI's Policy Brief, an IPCC-IPBES Special Report that addresses these research gaps (while building upon the IPCC-IPBES co-sponsored Workshop Report)¹³ could play a key role in helping guide Parties and NSA towards emphasizing deep decarbonization over unsustainable over-dependence on sinks and CDR. Indeed, recent science on 'ecological limits' of land-based CDR questions the viability of a number of 1.5°C pathways presented in the IPCC 1.5°C SR which use even 'medium' amounts of CDR.¹⁴ This therefore places further onus on the priority of deep

decarbonization, and highlights Parties and NSA may be in their net-zero plans banking on larger amounts of CDR than will be truly available given ecological constraints, with the risk of deterring important up-front mitigation ambition. To inform the 2023 Global Stocktake (the timeline is too short for such a Special Report to be developed by then) the IPCC could also synthesize in a technical note climate-biodiversity nexus data included in IPCC reports so far.

4. Better integrate climate and biodiversity coherence within national policies. Parties can further operationalize the Glasgow Pact at COP27 by calling for increased climate-biodiversity coherence in Nationally Determined Contributions (NDCs), National Adaptation Plans (NAPs), and Long-Term Low Emission Development Strategies (LT-LEDS). Greater integration within LT-LEDS would be particularly promising, to help identify and prevent tensions between different land uses (agriculture, conservation, and mitigation) that will arise if land-based CDR is scaled up extensively; and help in developing more coherent near-term policies. The LTS community can already start taking up this greater integration, (e.g., within the Climate Neutrality Coalition, which is currently developing a framework assessing how to best reach net-zero goals).

1 'Net-zero integrity' is understood here as the importance for Parties and NSA to demonstrating their commitments and plans are truly aligned with 1.5°C, namely by ensuring they do not use natural sinks (e.g. reforestation) and projections of large-scale land-based Carbon Dioxide Removal (CDR) deployment (e.g. BECCS) as a distraction from the priority of deep decarbonization.

2 This given the fact that the UNFCCC defines 'deforestation' as "is the direct human-induced conversion of forested land to non-forested Land", thereby excluding forest degradation. See 7/CP.11 Definitions, modalities, rules and guidelines relating to land use, land-use change and forestry activities under the Kyoto Protocol.

3 The OECD argues that carbon markets may not be the most appropriate for financing avoided emissions given namely "their high vulnerability to the risk of non-permanence". Jeudy-Hugo, S. et al (2021) 'Understanding Countries' Net-Zero Emissions Targets, OECD.

4 The UNFCCC SBSTA is set to address this further in the upcoming SB.

5 One recent study by Nolan et al. (2021) finds that when accounting for environmental, economic and governance implementation challenges and biogeochemical constraints, the additional terrestrial biosphere's sustainable carbon storage capacity (e.g., through techniques such as reforestation) is between 100-200 Gt up to 2100, significantly lower than previous studies (which had assessed up to 800Gt, through large-scale afforestation, implying very large land-footprints). Another study by Creutzig et al. (2021) finds one third of 1.5°C and 2°C scenarios bank on very large-scale removals by 2050, with BECCS (bioenergy with carbon capture and storage) deployment scales of 5 Gt/CO₂/yr or more, at least twice above the upper sustainability threshold identified by the IPCC-IPBES Co-Sponsored Workshop Report.

6 The OECD and IEA highlight there exists a risk that if given the mid-century net-zero goal, Parties increasingly trade carbon credits focused on technological-based CDR approaches such as BECCS, this may hit at some point land and storage limits. Yet the recent research above on the ecological limits of natural sinks and BECCS suggests the 'land' limits may be reached much sooner.

7 As a point of comparison, 1/CP.26 includes five paragraphs on climate-biodiversity linkages, while 1/CP.25 only one.

8 "Underlines the essential contribution of nature to addressing climate change and its impacts and the need to address biodiversity loss and climate change in an integrated manner" (1/CP.25, paragraph 15).

9 As called for in the IPBES GAR, and to prevent further emission losses from these natural carbon stocks.

10 In February 2021, over 500 scientists addressed to President Biden, EU Commissioner Van der Leyden and other leaders an open letter warning them of the risks they take in undermining climate and biodiversity goals including net-zero emissions, if they persist in subsidizing the burning of wood for energy. This followed on a similar letter in 2018. <https://www.woodwellclimate.org/letter-regarding-use-of-forests-for-bioenergy/>

11 Safeguards to ensure that NBS put in place for climate benefit biodiversity appear to be key. Indeed, researchers have underscored that "trade-offs can arise if climate mitigation policy encourages NbS with low biodiversity value, such as afforestation with non-native monocultures [which can also] result in maladaptation." (Seddon et al (2020). An open question therefore remains on whether safeguards and standards will be sufficient to limit countries and NSA to promote, under the cover of NBS, practices that risk harming biodiversity. One example is large-scale afforestation, which requires extensive land to remove carbon (1Gt/CO₂/yr would require an area twice the size of California (Nolan et al. 2021), and when planted on landscapes such as savannahs, which have naturally evolved to have few trees, would have severe negative biodiversity impacts (Veldman et al.

(2015)). The highly-cited paper by Griscom et al. (2017) does not include afforestation in its list of 'natural climate solutions'. Seddon N. et al (2020) Understanding the value and limits of nature-based solutions to climate change and other global challenges, Phil. Trans. R. Soc. Veldman J. W., et al. (2015). Where tree planting and forest expansion are bad for biodiversity and ecosystem services. Bioscience

12 See footnote #5.

13 Research gaps include: (i) the land-footprints of land-based mitigation throughout the IPCC's various 1.5°C Pathways, (ii) an authoritative assessment of the ecological thresholds of natural sinks and other land-based CDR as afforestation and BECCCs, (iii) the range of viable pathways to the 1.5°C goal in keeping with ecological boundaries.

14 Of the IPCC 1.5°C SR's 4 illustrative 1.5°C Pathways, P2 projects BECCS removals of 1.3 Gt/CO2/yr by 2050 –which is above the 'precautionary threshold value' identified Creutzig et al. (2021), while P3 use 6.2 Gt/CO2/yr –this is over than double above the upper sustainability limit the IPCC-IPBES Co-Sponsored Workshop Report identified (1-2.5 Gt/CO2/yr). P4 projects a scale of 16 Gt/CO2/yr, which would require bioenergy crops cultivation on an area larger than Australia.

CLIMATE

BIODIVERSITÉ

CARBON NEUTRALITY

IPCC

CLIMATE INTERNATIONAL NEGOTIATIONS

PARIS AGREEMENT

COP 26