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## Essential outcomes for COP26

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The UK Government is hosting COP26 in Glasgow between 31st October and 12th November 2021. It plans to make progress in four key areas which summarize as 'coal, cars, cash and trees' (Carbon Brief, 2021). The first two of these aims—to get agreement for the rapid phase out of coal, the most polluting of fossil fuels, and to ensure a rapid transition away from cars fuelled by fossil fuels—are very important, but are not directly related to the remit of Global Change Biology. The latter two aims—ensuring that the financial support of \$100 billion per year promised in 2010 by wealthy countries to developing countries finally gets delivered and ensuring that climate solutions adopted also co-deliver to nature—are squarely within the remit of Global Change Biology.

With respect to the ‘cash’ aim, this flow of finance is essential to allow poorer countries to adapt to, and to mitigate, climate change. We know that a vast proportion of the potential for natural climate solutions is located in the developing world (Griscom et al., 2020), so if we are to realize that global potential, developing countries must have the financial backing to ensure that this happens in an equitable and just way. Not all of this cash will be used for nature-based solutions, of course, but a proportion of it will be, and nature-based solutions would almost certainly not happen at the scale and speed required to help us meet net zero greenhouse gas emissions targets without this cash.

With respect to the ‘trees’ aim, the first thing to note is that nature-based solutions are about so much more than just planting trees (Seddon et al., 2021)! ‘Trees’ is just shorthand for nature-based solutions, but the broad variety of nature-based solutions available, beyond just tree planting, must be encouraged at COP26. The recent joint workshop report by IPBES and IPCC (Pörtner et al., 2021) demonstrated that we cannot successfully resolve either of the existential threats of climate change or biodiversity loss unless we tackle them both together. Mainstreaming nature into our thinking on climate action is essential, so encouraging all countries to include nature-based solutions in their nationally determined contributions to meet the goal of the Paris Agreement will be the first step in formalizing these considerations.

But not all greenhouse gas removal options available on land or in the oceans constitute nature-based solutions—nature-based solutions must also provide benefits to human well-being and biodiversity—so the way in which they are implemented is crucial. Parties to the COP should be encouraged to adopt international guidelines for nature-based solutions, such as those provided by IUCN (2021), or those suggested by the Nature-Based Solutions Initiative (NBSI, 2021), which are as follows:

- Nature-based solutions are not a substitute for the rapid phaseout of fossil fuels and must not delay urgent action to decarbonize our economies.
- Nature-based solutions involve the protection, restoration and/ or management of a wide range of natural and semi-natural ecosystems on land and in the sea; the sustainable management of aquatic systems and working lands; or the creation of novel ecosystems in and around cities or across the wider landscape.
- Nature-based solutions are designed, implemented, managed and monitored by or in partnership with Indigenous peoples and local communities through a process that fully respects and champions local rights and knowledge, and generates local benefits.
- Nature-based solutions support or enhance biodiversity, that is, the diversity of life from the level of the gene to the level of the ecosystem. COP26 provides the promise of progress for climate change and nature, and for kickstarting the urgently required transition from pledges to real-world action. Time is running out—so we watch with interest to see whether this promise can be converted into concrete action.

## **CONFLICT OF INTEREST**

The authors declare no conflict of interest.

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