



Submission to the Ad Hoc Working Group on the Paris Agreement on Nationally Determined Contribution Guidance

30 September 2016

We thank the APA for the opportunity to present our views on “[f]urther guidance in relation to the mitigation section of decision 1/CP.21 on: (a) features of nationally determined contributions, as specified in paragraph 26; (b) information to facilitate clarity, transparency and understanding of nationally determined contributions, as specified in paragraph 28; and (c) accounting for Parties’ nationally determined contributions, as specified in paragraph 31.”

Context

Article 2 of the UN Framework Convention on Climate Change states that the ultimate objective of the Convention is not only to “prevent dangerous anthropogenic interference with the climate system”, but to also act “within a timeframe sufficient to allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened and to enable economic development to proceed in a sustainable manner.”

The warming that occurs over the next few decades could lock in place irreversible self-amplifying feedback mechanisms that have the potential to push the rate of warming beyond the scale at which ecosystems and societies can safely adapt and puts at risk our objectives for near-term sustainable development and stabilizing warming below 1.5/2°C above preindustrial temperatures, with net zero emissions by mid-century.

The Paris Agreement as well as numerous other publications released in the last few years, including the UNEP-WMO report released in 2011 and the Bending the Curve report released in 2015 by fifty researchers drawn from the 10 campuses of the University of California, have made it clear there may still be time to achieve our long-term climate targets while avoiding self-amplifying feedbacks in the next few critical decades, provided we act fast and enact drastic reductions in pollution.

These goals can only be met with fast cuts to the short-lived super pollutants, starting with HFCs, but also black carbon, methane, and tropospheric ozone, along with aggressive cuts to long-lived CO₂. Long-lived CO₂ and short-lived climate pollutants (SLCPs) are two levers for slowing climate change that can and must both be pulled immediately to achieve our climate goals. The climate impact of each of the two levers operates on fundamentally different timescales. (Strategies to remove CO₂ also will be needed.)

Cutting SLCPs has the potential to avoid 0.6°C of warming by 2050, compared with 0.1°C from aggressive CO₂ cuts, and 1.5°C of warming by 2100 (with HFC cuts providing up to 0.5°C of this), compared with 1.1°C from CO₂.

Black carbon and other warming particles (such as brown carbon) are particularly critical for achieving near-term speed and scale of climate mitigation. Recent estimates of black carbon’s radiative forcing confirm that it is the second leading cause of global warming today, behind CO₂. While aerosols are not currently addressed within the UNFCCC, countries are beginning to include black carbon in their INDC submissions, starting with Chile, Mexico, and Nigeria. Black carbon is also a substantial component of PM_{2.5} air pollution, which causes approximately 7 million premature deaths annually, making it one of the most important links between climate mitigation and sustainable development.

Article 2, paragraph 1 of the Paris Agreement explicitly links the world’s long-term climate and near-term

sustainability agendas, emphasizing that efforts to address climate change should occur within “the context of sustainable development and efforts to eradicate poverty.” The preamble to the Paris Agreement also places the actions to address climate change within a broader context by emphasizing “the social, economic and environmental value of voluntary mitigation actions and their co-benefits for adaptation, health and sustainable development.”

Further, Article 4, paragraph 8 of the Paris Agreement states that “In communicating their nationally determined contributions, all Parties shall provide the information necessary for clarity, transparency and understanding.” However, the UNFCCC’s practice of converting emissions of different gases into carbon dioxide equivalents (CO₂e), using 100-year global warming potentials, or indeed any single metric, is a significant barrier to both transparency of the Nationally Determined Contributions (NDCs) and harmonization of our long-term climate stabilization goals within the broader context of near-term sustainable development.

Focusing on a single metric obscures crucial differences between substances with varying impacts and lifetimes. It sends the message that actions to reduce long-lived and short-lived climate pollutants are interchangeable, when they are actually complementary, with different impacts and benefits on different time-scales.

One of the most valuable aspects of the Paris Agreement is that through the NDCs, it has encouraged countries to look at climate action through the lens of their national goals and objectives, and define their contributions in the ways that are most meaningful to their citizens. In the INDCs submitted in the lead-up to the Paris Climate Change Conference, this often meant highlighting near-term sustainable development objectives, including specific actions to reduce near-term climate change impacts and air pollution. Still, all 190 INDCs expressed pledges in CO₂e for a number of different greenhouse gases. Mexico was the only country to submit a separate pledge for another substance, black carbon, given in CO₂e and tonnes.

Moving away from CO₂e in NDC pledges and progress reporting would make the system more precise and transparent, and would facilitate a more holistic approach to climate action, aligning closely with social, economic, and environmental priorities. This would send a powerful message to developing countries that they need not choose between emission reductions and development; the Paris Agreement invites them to find options that will yield both climate and development benefits.

Therefore, we propose the following:

Guidance on features of NDCs and on up-front information

The guidance on features of the NDCs should:

- 1) Include emissions reduction pledges for all climate pollutants, including non-greenhouse gas emissions such as aerosols that affect the climate, health, and ecosystems (e.g. black and brown carbon);
- 2) Consider the key metrics of speed and scale (both in terms of deployment and of climate response) of actions taken to achieve mitigation pledges. This could include e.g. consideration of the timescale for climate benefits from BECCS, as such measures are not carbon neutral initially, and generally not for several decades.

This can be achieved by encouraging countries to:

- Pledge emission reductions of all climate pollutants individually (e.g. as tonnes of each substance) rather than in CO₂e, including for aerosols and precursor gases; and,
- Report on progress made in implementing and achieving their NDCs substance by substance, in tonnes.

Pledging and reporting progress towards separate targets could help with the quantification of impacts and benefits, such as those relating to warming in the near- and long-term, changes in rainfall patterns, sea-level rise, human health, and agriculture. In addition, it could highlight the implications for climate vulnerable regions such as the Arctic, Himalayas, Andes, and low-lying countries. Countries could determine the implications for

climate change of any emission reduction in terms of peak warming, the trajectory of warming, and outcomes for any specific year or time period. It could also fit with key national concerns such as the human health effects of air pollution.

Guidance on Accounting

Article 4, paragraph 14 of the Paris Agreement states that “Parties should take into account, as appropriate, existing methods and guidance under the Convention,” when accounting for their NDCs. Article 3, paragraph 31 of decision 1/CP.21 further requests that “the Ad Hoc Working Group on the Paris Agreement to elaborate, drawing from approaches established under the Convention and its related legal instruments as appropriate, guidance for accounting for Parties’ nationally determined contributions, as referred to in Article 4, paragraph 13, of the Agreement.”

Countries already report substance-by-substance emissions of greenhouse gases, in tonnes, in their national greenhouse emissions inventories for the UNFCCC. And although aerosols and precursor gases are not covered by the UNFCCC, the Intergovernmental Panel on Climate Change (IPCC) has developed guidelines for estimating and reporting emissions of carbon monoxide (CO), nitrogen oxides (NO_x), sulfur dioxide (SO₂) and volatile organic compounds. The IPCC also relies on methodologies developed for the Convention on Long-Range Transboundary Air Pollution, which includes black carbon.

Scope and coverage of the NDCs

Ideally, Parties should pledge and report progress towards mitigation targets for all relevant emissions in all economic sectors needed to understand the implications for the impacts and benefits of implementation. This should include aerosol and precursor emissions such as black and brown carbon.