



CLIMATE ACTION NETWORK
SUBMISSION on the Third meeting of the
Structured Expert Dialogue under the Second
Periodic review of the UNFCCC
February 2022

Climate Action Network expresses its support to the Second Periodic Review (PR2) and the Structured Expert Dialogue (SED). The Review and Dialogue present important opportunities affirming the role of science in international climate policy development and hence must remain a priority process under the UNFCCC. We thus are pleased to be given the opportunity to submit our views on the third meeting of the Structured Expert Dialogue under the Second Periodic Review of the long-term global goal under the Convention and of overall progress towards achieving it.

We want to focus this submission on 7 elements:

1. Definition of the long-term goal
2. Consideration of the risks of overshooting the long-term goal
3. Scenario development to reach the long-term goal
4. Recognition of the gap to reach the long-term goal
5. Identification of action delivered until now
6. Contribution from the IPCC to the third Structured Expert Dialogue
7. Suggestions for further research on the long-term goal

1. Definition of the long-term goal: CAN considers that the only acceptable long-term goal that truly reflects the Paris Agreement is to limit temperature rise to 1.5°C compared to pre-industrial levels by the end of this century. As unequivocally stated in the Paris Agreement, limiting temperature rise to 1.5°C will significantly reduce the risks and impacts of climate change. There is a substantial difference between a 1.5°C and a 2°C temperature rise, including extreme heat events occurring 1,5 times as much at 2°C, more frequent, more intense, and longer extreme weather events reduced changes in high mountain ecosystems and melting glaciers. While warming of 1.5°C would destroy at least 70% of coral reefs, at 2°C more than 99% would be lost. By limiting global warming to 1.5°C we could prevent most of the Greenland and West Antarctic ice sheet from collapsing while higher levels of warming will substantially increase the risk of crossing tipping points. At the same time, there is a need to assess whether the objectives of the Paris Agreement are in line with Article 2 of the Convention. Such an assessment, even while not aiming to change the Paris Agreement's goals, would be timely and necessary, as eg. the impacts of multiple century timeframes at 1.5°C warming on the cryosphere beyond 2100, and over time frames of centuries, cause reason for serious concern. The Second Periodic Review should improve our collective understanding of the long-term scenarios that will help achieve the highest ambition from all actors.

2. Consideration of the risks of overshooting the long-term goal: the reference in the Paris Agreement to keeping temperature rise well below 2°C is opening the door for substantially overshooting the 1.5°C thresholds during the course of this century. CAN considers this a dangerous option. As evidenced in the scientific literature **there are many risks and uncertainties both around the impact of even a temporary overshoot as well as on realistic possibilities to bring the temperature down, at least at the scale that might be needed.** Scenarios that envisage temporary overshooting the 1.5°C target do need substantial amounts of removals in order to achieve the high level of net negative emissions needed to bring the temperature down. Such levels of removals have raised substantial concern about negative side effects on biodiversity, land rights and indigenous peoples and local communities' right to self-determination, and on future generations. On top, the impacts of overshooting 1.5 °C may be irreversible, particularly for vulnerable systems such as coral reefs or wildfire risks and for systems with a time-lag, such as long term sea-level rise, the disappearance of glaciers, ecosystem and species loss, melting of permafrost and crossing other tipping points.

3. Scenario development to reach the long-term goal: since the adoption of the Paris Agreement, substantial progress has been made on the development of scenarios that would limit temperature rise to 1.5°C by the end of this century, as evidenced in the IPCC's Special Report on Global warming of 1.5°C. Since its adoption in October 2018 substantial additional progress has been made. **The Structured Expert Dialogue should present an overview of the latest findings of 1.5°C pathways with limited or no overshoot.**

4. Recognition of the gap to reach the long-term goal: it is very clear that we are facing a gap between current action and the scenarios that will allow us to limit temperature rise to 1.5°C. The October 2021 revised UNFCCC Synthesis Report of Nationally Determined Contributions under the Paris Agreement indicated we are heading towards 2.7°C of warming by the end of the century with current National Determined Contributions (NDCs). UNEP's 2021 Emissions Gap Report, which not only looked at submitted pledges but also those publicly proclaimed but not (yet) submitted to the UN concluded that we are heading towards 2.6°C warming. And even the most lenient approach by Climate Action Tracker, not only taking into account pledges made but also existing policies and trajectories that would reduce emissions beyond pledges still projected a temperature rise of 2.4°C. All these assessments show that even full implementation of current pledges would not bring us close to the 1.5°C goal. And unfortunately, there are still open questions about the likelihood of full implementation of current pledges.

5. Identification of action delivered until now: in the assessment of the gap, it will be useful to look at emission reductions and limitations that have been realized up till 2020, which is an important milestone in particular for assessing commitments made under the Second Commitment Period of the Kyoto Protocol (KP2). As it looks now, but further data would be needed, countries with commitments under KP2 have collectively reduced their CO₂ emissions from fossil fuel use by 32% in 2020 as compared to their 1990 emissions. When looking at all Annex 1 countries, reductions have been smaller but still reach -22% in 2020. This compares to overall global emissions that have increased by 53% in 2020.

6. Contribution from the IPCC to the third Structured Expert Dialogue: the IPCC's Sixth Assessment Report will be a crucial contribution to the work of the Structured Expert Dialogue and the Second Periodic Review. **It is therefore of utmost importance that the Third meeting of the Structured Expert Dialogue provides sufficient time for an extensive presentation by lead authors of the findings of IPCC Working Groups II and III.** A thorough understanding of the findings of AR6 and its consequences is part of the core tasks of the Structured Expert Dialogue.

7. Suggestions for further research on the long-term goal: while the IPCC has done tremendous work in the past and both the Special Reports and the WG I, II, and III contributions to the 6th Assessment Report are crucial contributions to the work of the Second Periodic review, more research would still be useful to guide policies and decision at all levels. **We recommend for the Structured Expert Dialogue to request the IPCC to develop further Special Reports on the following specific areas: Tipping Points; Cities; and on carbon Dioxide Removal in the next cycle.** In particular, with regard to the concept of CDR, there is a need to better understand the existing options for negative emission strategies concerning their potential (in time and space) to absorb CO₂ and permanence and sustainability characteristics, while also serious attention must be given to understanding their long-term impacts on the environment, biodiversity, local communities, and indigenous peoples and their rights, and to ensuring that they will not exacerbate the climate crisis and existing inequalities, or result to unintended negative consequences.