

Structured public consultation

In the following, Climeworks provides further input on the draft recommendation: Requirements for the development and assessment of mechanism methodologies. Version 0.5.0. Comments are structured according to the sections in the document.

- **Section 3, normative reference**
 - Para 5: Climeworks encourages the A6.4SB to distinctly refer to emission reductions and increasing removals and not commensurate within a single term. The IPCC state that: "CDR cannot substitute for immediate and deep emissions reductions, but is a part of all modelled scenarios that limit global warming to 2°C or lower by 2100" (Source). To avoid an impression of CDR acting as a substitution and to accommodate for CDR specific rules and requirements, we strongly recommend to avoid subsummations of reduction, adaptation and removal efforts within a single term.
- **Section 4 [Baseline setting] [Methodology Principles]**
 - To accommodate for both emission reduction and removal, we encourage to set [Methodology principles] rather than [baseline setting] as a title. This follows from our perception that for many industrial CDR activities, the baseline should correspond to 0 emissions, i.e. no other activities are done as e.g. in the case of DACS the CDR activity presents a stand-alone approach to sequester CO₂ from the atmosphere. The resulting quantification will thus be following a performance assessment of an individual facility, rather than determining the impact based on a counterfactual.
- **Section 4.1 Encouraging ambition over time**
 - We understand that CDR activities have not been at the forefront of minds when the encouragement of ambition over time has been included within the RMPs. Since, for CDR activities, ambition over time is not a straightforward concept. CDR activities under the A6.4. mechanism will increase anthropogenic removals and could – in various contexts – be seen as an additional ambition at all times. I.e., without ongoing investments into CDR, nothing is likely to happen. By suggesting a baseline scenario of 0 emissions for industrial CDR activities such as DACS, we believe to be aiming for highest ambition by quantifying only additional and anthropogenic CDR activities that are decoupled from ongoing (but hopefully shrinking) emissions. Note that once a party to the Paris agreement has a legally binding net-negative CO₂ emissions target and corresponding policy in place, this baseline setting approach for CDR methods needs to be reviewed and/or the activity should not pass a regulatory additionality test.
- **Section 4.2 [Being real, transparent, conservative, credible], [below BAU]**
 - As of today, anthropogenic CDR activities provide for marginal contributions only and a substantial increase of activities must lead to overall atmospheric concentrations that are below BAU. As industrial CDR activities will rely on engineered processes and are thus likely to be done by actors that are accustomed to engineered activities, an additional aspect of "business sensitive" information should be considered when drafting data disclosure requirements. For industrial CDR activities, we see it promising to have a thriving ecosystem with (friendly) competition that will require some business sensitive data to be restricted to the public. An independent third party auditor (likely under an NDA) should have access to all data and calculations to safeguard integrity of the A6.4 mechanism.
 - In addition to the points above, we strongly believe in a need to assess and account CDR activities separately from emission reductions. This will lead to additional safeguard concerning a substitution effect of CDR towards emission

reductions and allows for the assessment of CDR activities based on a stringent and conservative LCA approach that is taking into account all life cycle emissions based on a cradle to grave assessment scope (i.e. including all embodied emissions (and future reversals – where applicable) caused by the activity).

- **Section 4.3 [Establishing that the selected baseline is below BAU]**
 - Setting a below BAU baseline seems not applicable to some CDR activities, especially DACS. I.e. there are no plausible emissions in providing the same outputs, as the sole focus of DACS is to sequester CO₂ from the atmosphere. In line with the IPCC definition of CDR as deliberate technologies, practices and approaches that remove CO₂ from the atmosphere, we conclude that without a project, there will be no deliberate CDR activities. We therefore suggest to work with a positive list for relevant activities.
- **Section 4.4 Contributing to the equitable sharing of mitigation benefits between participating parties.**
 - We encourage the operationalization of this principle via designated national authorities. The vast range of mitigation activities at hand limits the applicability of general principles and should thus be determined based on national circumstances, best known by DNAs. The A6.4SB should nevertheless engage in activities around guidance and tools that should prove helpful in a faster operationalization by DNAs.
- **Section 4.7 [Requirements on baselines] [BASELINES (The approaches)]**
 - (46/46bis) Responding to the first question for additional inputs:
 - Yes, the paragraph should be split to improve clarity.
 - (47ter) Responding to the second question for additional inputs:
 - No, this downward adjustment shouldn't be applicable for all approaches to setting the baseline. I.e. in the case of DACS based CDR activities, the baseline we are arguing for is no other activity taking place and thus 0 emissions in the baseline scenarios/a performance assessment of indi, as this best reflects the distinct nature of DACS based mitigation activities and allows for a robust cradle to grave assessment.
 - (51) Responding to the third question for additional inputs:
 - No, it shouldn't be specified that only activities triggered by policies can be credited. For one, this will lead to high complexities concerning regulatory additionality and will trigger a need for additional additionality assessment tools. Still, the A6.4SB is encouraged to think of a public/private partnership in certain A6.4 activities and provide additional guidance on how regulatory additionality can be squared in cases where both, governmental incentives (/policies) and private initiatives overlap. Additionally, through the need to approve and authorize A6.4 activities, governments remain in full power over the decision of authorizing A6 activities in the first place.
- **Section 5 Additionality**
 - **{Question for additional inputs: how does this issue link to policy crediting where policies deliberately intended to generate credits? What considerations are needed in this regard?}**
 - For industrial CDR activities like DACS, it is likely that public/private partnerships will be instrumental to further develop the sector and increase overall effectiveness of this approach. It is to be expected that governmental incentives and policies make for a part, but not all the financial investments needed to deploy additional capacities. If governments are deliberately setting up policies for the sake of credit generation, it needs to be safeguarded that the party remains on track of its own NDC pledges and that credited activities i) go beyond domestically

- required mitigation and ii) present benefits to the host country. For DACS based mitigation, these obstacles could be overcome by positive lists.
- **{Question for additional inputs: should there be a statement about the general additionality test before specifying how it may be simplified in certain cases, or be subject of a positive list? Could be a more nuanced approach, i.e. all projects need to demonstrate additionality, some can be excluded or included based on one sort of assessment while others require more detailed assessment:**
 - **What are the general rules?**
 - No comment
 - **Where may they be simplified?**
 - We encourage that engineered CDR activities with no other purpose than the delivery of negative emission (credits) shall be placed on a positive list.
- ***{Question for additional inputs: are positive lists needed? If yes, is the above guidance on positive lists too specific and detailed, and may the guidance be shortened?}***
 - Yes, positive lists are needed and encouraged for activities fulfilling e.g. the requirement in para 93(a). DACS as one example presents a technology that has no other revenues than carbon finance and will thus rely on it in all cases. However, as additional public finance might spur DAC investments (e.g. consider the recently announced DoE subsidies around DAC Hubs) and thus present questions concerning the additionality of DACS approaches, it is important to keep a specific and detailed guidance.
- **Section 6, Leakage**
 - **{Question for additional inputs: should pre-project activity emissions and upstream emissions be accounted as activity emissions or leakage emissions, or be identified by the Supervisory Body as being beyond the scope of activity accounting guidance? What further assessment is needed in this regard?}**
 - Following the approach to quantify CDR activities based on a robust cradle to grave LCA basis, upstream emissions and pre-project activity emissions should be accounted as activity emissions and correspondingly reflect a lower amount of A6.4ER.

About Climeworks:

Climeworks is a leading direct air capture (DAC) company with the most advanced DAC deployment experience worldwide. DAC is a technology that removes carbon dioxide (CO₂) directly from the atmosphere. Paired with permanent geologic storage of the captured CO₂ (DAC+S), it provides a carbon dioxide removal (CDR) service, meaning that, when properly deployed, it effectively creates negative CO₂ emissions to reduce atmospheric levels of CO₂.

Climeworks has already implemented more than 15 DAC projects globally, including the world's first and currently only commercial direct air capture and storage (DAC+S) facility, located in Iceland, and has collected more than 120,000 hours of real-world data and operating experience. Headquartered in Switzerland with subsidiaries in several countries, Climeworks today employs more than 300 people.