

## Submission to Joint Workshop of Experts on Geoengineering

The Plurinational State of Bolivia hereby expresses its position on geoingeneering and its respective treatment within the IPCC framework.

# **Fundamental problems of Geoingeneering**

- 1. Geoengineering proposes "options that would involve large-scale engineering of our environment in order to combat or counteract the effects of changes in atmospheric chemistry". As it focuses on the EFFECTS, it does not even in theory attempt to attend to and solve the problems that *cause* climate change, but rather, deliberately manipulate the climate to palliate its symptoms.
- 2. Understanding that geoingeneering does attack the effects of climate change, and not its causes, it cannot be considered a mitigation action. E.g. several options of geoingeneering would affect only temperature, but not change greenhouse gases concentrations, which do affect the climate, ocean acidity, among others, in ways other than only temperature increase.
- 3. The IPCC has had a pioneering role in demonstrating to the world the gravity of climate change and the fact that global warming is a consequence of uncontrolled industrial civilization, fossil fuels, the agro-industrial system, the devastation of the natural ecosystems and biodiversity. Geoengineering could worsen all these causes, offering a path in which high-risk technologies could be used to control the effects of climate change instead of eliminating the causes of climate change at their very sources and taking serious and rigorous mitigation measures. Even under the presumption that this worked, it would create a new dependence in perpetuity on those that control said technologies.
- 4. The proposals of geoengineering would mean that the attention and commitment of the countries that have contributed most causing climate change would be even further diverted from the issues of real mitigation and contributing to real funds for adaptation. Although thus far there is only talk about financing more research into geoengineering, this would be, without a doubt, a drain on already scarce resources for real mitigation and contributing to adaptation for the countries that suffer the effects of climate change without having caused them.
- 5. Geoengineering repeats the same scenario of environmental injustice that provoked climate change: the most powerful countries, primary historic contributors to climate change, would be free to experiment with high-risk technologies on the planet we all share, the impacts of which would again



affect the majority of the countries that have done the least to cause climate change.

- 6. In October 2010, the Convention on Biodiversity established a moratorium on geoengineering by consensus among the 193 countries, emphasizing the precautionary principle and preventing the advance of unilateral geoengineering measures. We believe that this moratorium should never be violated, and moreover, it should be strengthened, broadening its definition and clearly establishing that field experiments should not occur under any circumstances.
- 7. The only way to be certain whether geoengineering will really affect the global climate would be to deploy it on a grand scale, which would probably have enormously grave impacts on many countries. There is, therefore, no real experimental phase in geoengineering.
- 8. To this we must add the issue of unforeseability, given that these are unknown technologies marked by their irreversibility and multiple inherent risk factors, ranging from human error to the fact that it entails trying to manipulate highly complex global systems whose interactions are not totally understood, and can never be predicted with a total degree of security, such as the climate, biodiversity, and oceans. Climatic interventions through geoengineering could have unforeseeable consequences due to many factors: mechanical errors, human error, insufficient understanding of the Earth's climate and the complexity of biodiversity, future natural phenomena, irreversibility or financing problems.
- 9. Geoengineering also has a history of belligerent use, and nothing guarantees that, in the current context, those that control such powerful technologies would not use them to hostile ends if they consider it convenient, although they may initially propose them as measures to face global warming. Therefore research on geoingeneering can pose a possible future threat on fulfillment of the United Nations Environmental Modification Treaty (ENMOD), which prohibits the hostile use of environmental modification.
- 10. If geoengineering is truly would be an emergency plan for climate change, then it would have to come: 1) in conjunction with a really constringent mitigation plan, that is to say ambitious reduction goals for Annex I Parties, and 2) its consideration within any kind of carbon markets would be impossible, as "emergency measures" cannot give place to granting rights for emissions in another place. But actually geoingeneering is being proposed in a context of low ambition pledges and of carbon markets, which shows that it is a proposal for maintaining the status quo and generate new sources of profit, potentially creating a situation of dependency for States.



**11.**The use of geoengineering unilaterally or by a handful of powerful countries, which at the same time are the historical responsibles for climate change, that have funds and technology, is a highly dangerous scenario.

## Geoingeneering in the multilateral process

- 12. Being a proposal that will not at all change the causes of climate change, but that implies enormous environmental, social, economic, and geopolitical risks and threatens international justice and multilateralism, the repeatedly stated position of the Plurinational State of Bolivia is that this technology should be prohibited.
- 13. Despite calls for caution from within the United Nations and the fact that the issue has been discussed in multilateral settings, the joint workshop of experts from Working Groups I, II and III of the IPCC on geoengineering, to take place these days in Lima, proposed to work, <sup>1</sup> among other things (emphasis added):
  - WGIII needs to take into account the possible impacts and side effects and their implications for mitigation cost in order to define the role of geoengineering within the portfolio of response options to anthropogenic climate change. Furthermore, this includes an evaluation by WGIII of options for appropriate governance mechanisms.
  - To be added to the goals of the workshop:

#### 2.1 Objectives:

- (...) The following issues will be discussed in more detail:
- Effect of impacts and side effects on mitigation cost and **the role** within the portfolio of mitigation options
- Suitability of existing **governance mechanisms** for **managing** geoengineering, including **social, legal and political factors**
- 14. The consideration of the IPCC of the "role of geoengineering within the portfolio of mitigation options," puts it in a framework that is totally inadequate and contrary to the declaration expressed by the IPCC that it is "policy neutral," given that it is taking geoengineering into account as an option.
- 15. Therefore we require that its consideration as an "option within the portfolio of mitigation options" be eliminated from the agenda of this workshop.

<sup>&</sup>lt;sup>1</sup> http://www.ipcc-wg3.de/meetings/expert-meetings-and-workshops/em-geoengineering



- 16. We also wish to point out that discussion of the mechanisms of governance for geoengineering and the "social, legal, and political factors for its management" is outside the mandate of the IPCC.
- 17. The discussion of governance is not a scientific, but rather, a political issue that should be taken up in multilateral fora with the open and democratic participation of governments, not in a closed workshop of scientists. As long as there is no multilateral decision to accept geoingeneering as a valid action to tackle climate change, and taking into account the actual tendency in multilateral forum against climate change, defining governance for geoingeneering is totally irrelevant.
- 18. The IPCC appears to have taken the prior position that geoengineering is a mitigation option, despite declaring that there exists a wide lack of knowledge on the subject, and that the technology is subject to an international moratorium, and those affirmations of the IPCC are in open contradiction with its self-described status as a "politically neutral" scientific panel.
- 19. Multilateral mechanisms such as the moratorium agreed at COP 10 of the CBD are essential for impeding unilateral attempts to manipulate the Earth's ecosystems, as technical capacity, as well as access to funds and opportunities for application will be concentrated in a few hands.

### Conclusion

20. Therefore, the Plurinational State of Bolivia wishes to reiterate its appraisal of geoengineering as a misguided approach to dealing with climate change that wrongly focuses on its symptoms rather than its causes, and moreover, involves undue and imbalanced risks for the international community. We consider that no geoingereering techniques can be allowed by the multilateral community, as the effects can negatively affect to any of its members. We also call to respect the proper channels for debate and discussion.