



CSSN Briefing

CSSN Position Paper 2021:1: Potential obstruction of climate change mitigation through ISO standard on radiative forcing management

Background

Over the past few years, geoengineering has received increased attention as a potential way to address climate change. Since the end of 2018, a working group within the [International Organization for Standardization](#) (ISO) has been developing a document called ISO/WD 14082: "Radiative forcing management – Guidance for quantification and reporting of radiative forcing climate footprints and mitigation efforts." It aims to standardize the measurement of how a number of non-greenhouse gas climate forcers (such as soot or other particulate matter) affect the climate.

Radiative Forcing Management as an Offset Mechanism?

The standard was originally initiated to address the problem of short-lived climate pollutants, and to support the reduction of those pollutants that contribute to global warming. However, observing and negotiating parties are concerned that it may be used to quantify the reflective quality of particulate pollutants (as emitted by ships or airplanes) to offset greenhouse gas emissions.

Initial developments in the discussion are pointing in this direction. For example, [a leaked working draft from 2019](#) explicitly includes the certification and accounting of so-called "climate coolants", i.e. substances with negative radiative forcing (RF) on the climate system. The associated aim would be to facilitate the establishment of radiative forcing reduction markets, which according to the draft, includes "the buying and selling of RF reduction allowances or credits". With a plus/minus system that calculates their "RF footprint", countries or companies could offset their GHG emissions via the emission of reflective pollutants.

Key Players

The individuals leading this initiative are affiliated with [SCS Global Services](#) and [First Environment](#), two US-based private companies that specialize in sustainability standards and certifications, as well as environmental remediation. In 2019, SCS Global Services paid at least \$28,000 to lobbyists within the Californian government to advance legislation in [Senate Bill 682](#) on establishing a "radiative forcing management climate accounting protocol."

Opposition to the initiative comes from negotiating parties outside the US. In April 2020, an internal briefing by the German Standard Setting Organization DIN expressed substantial concern on the interference of the ISO/WD 14082 standard with other international climate- and environmental goal setting processes, its deflection from the core causes of climate change, its potential legitimization of solar radiation management projects, and the lack of representation from non-industrialised countries in the negotiation process. The briefing explains that in the absence of further clarifications from the Intergovernmental Panel on Climate Change (IPCC) and the United Nations Framework on Climate Change (UNFCCC), Germany, Canada and France opposed the initiative. The highly controversial nature of the discussions has led to an extension of the negotiations.¹

Overall, the negotiation process of ISO standards is strictly confidential, with little possibility for public discussion or broader involvement. Working drafts cannot be shared beyond the working group, and registering as an ISO expert is extremely difficult. In 2019, public coverage of this issue was provided by [Agence France Press](#) and the independent journalist blog [DeSmog](#). In October 2020, [an observing concerned NGO raised this issue before the Parties of the Aarhus convention](#), which deals with access to information and public participation in decision making on environmental matters.

Implications and Concerns

The relevance of this document should not be underestimated. Despite [assurances by the ISO technical committee](#) that “geoengineering techniques such as Solar Radiation Management and Earth Radiation Management are out of scope”, the standardization of negative radiative forcing as a valid offsetting mechanism would provide a formalized guide on how to measure and integrate the reflective property of particulate pollutants into carbon markets. Incentivizing this type of approach to reducing the effects of global warming is highly controversial for four reasons. First, its widespread and un-coordinated use could have significant [effects on critical weather systems](#). Second, it does not reduce carbon dioxide concentrations and therefore has [no effect on ocean acidification](#). Third, it must be continually applied to avoid [rapid snapback of climate impacts](#). And fourth, it provides a way of further [delaying urgently needed emissions cuts](#). Sectors like air travel and shipping likely would face less pressure to decarbonize, as the [reflective effect of their sulphur pollutants](#) (which are harmful to human health and ecosystems) could be balanced against their emissions of greenhouse gases. Furthermore, the introduction of a completely new method of measuring and accounting for climate forcing could undermine international climate negotiations and existing, globally negotiated and agreed-upon greenhouse gas accounting methods. By introducing negative radiative forcing as a standardized offsetting mechanism, the urgent transition to clean energy and the phase-out of fossil fuels is very likely to be further delayed.

More Resources

A leaked 2019 draft of the working document can be found [here](#).

The complaint at the Aarhus convention can be found [here](#) (under PPIF > III. Update on items considered at previous thematic sessions > Ms. Linda Schneider)

California Senate Bill SB 682 can be found [here](#).

Information on the lobbying activities of SCS Global Services can be found [here](#).

¹DIN Mitteilungen April 2020. Klimaschutz - im Fokus der internationalen Normung. ISO-14060er-Normenreihe zu Treibhausgas-Management revidiert und Ergänzungen. Gremienarbeit.