

The Legal and Policy Implications of Geo-engineering Technologies: An Evaluation

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In light of the apparent failure to agree to directly address climate change through emissions reductions, attention is increasingly focusing on alternative options to reduce the impacts of climate change. Some of these options involve engineering the earth to reduce the impact or affect of climate change and include technologies such as ocean fertilization, the creation of ‘artificial’ trees and albedo enhancement using reflective substances or materials in space, the atmosphere or within the terrestrial environment. Collectively, these technologies are referred to as geo-engineering. This paper will explore some of the policy and legal implications posed by geo-engineering and, in particular, will analyse the extent to which these technologies are permitted by the current international legal framework. To date, no instrument directly addresses geo-engineering although a regulatory framework for ocean fertilization is in the process of being developed under the auspices of the 1996 Protocol to the 1972 London (Dumping) Convention. Nevertheless, instruments including the 1992 UN Framework Convention on Climate Change, the 1982 UN Convention on the Law of the Sea and the 1977 Convention on the Prohibition of Military or any other Hostile Use of Environmental Modification Techniques are potentially relevant to any decision to deploy geo-engineering technologies. This paper will assess the current legal framework applicable to geo-engineering and identify key policy questions associated with decisions to deploy these technologies. It will conclude with the outline of a proposal for the future regulation of geo-engineering.