

Project Description

The legal subproject within the Marsilius project “The Global Governance of Climate Engineering” assesses intentional human interferences into the climate under international law.

The first part of the thesis focuses on the compatibility of the research activity and enforcement of different technical measures with current international law. In the second part, feasible forms of action under international law for future research activities and application of the envisaged forms of intervention in the climate will be analysed and evaluated.

To begin with and hypothesising the research and actual enforcement of Climate Engineering technologies, the thesis explores existent rules under international law that could contradict these endeavours. In this respect, different measures discussed in the field of climate engineering have to be distinguished. Until now, climate engineering technologies designed to combat climate change have not been included in any international agreement. Regarding Solar Radiation Management by means of deploying sulfur particles into the stratosphere the Environmental Modification Convention (ENMOD), the Convention on Long-Range Transboundary Air Pollution (CLRTAP), and the Vienna Convention for the Protection of the Ozone Layer have to be taken into consideration. Measures such as ocean fertilisation or chemical CO₂ capture within the seabed may contravene the London Dumping Convention, the United Nations Convention on the Law of the Sea (UNCLOS), the Convention on Biological Diversity (CBD), and the United Nations Framework Convention on Climate Change (UNFCCC). Furthermore, it has to be analysed whether any rules of environmental law constituting customary international law restrict or prohibit measures of climate engineering.

The second part of the thesis focuses on the presentation and legal comparison of feasible (environmental) governance schemes for various measures of climate engineering.

First, the different legal and non-legal forms of action relevant under environmental law will be delineated. Then, the thesis examines which governance instruments appear to be feasible with respect to climate engineering, thereby addressing their potential designs, their advantages, and disadvantages. It is important to bear in mind the particularity of climate engineering in that it does not require the entire international community to cooperate. In fact, measures can be realised both technically and monetarily by groups of individuals under international law or even unilaterally. Consequently, governance structures used in the fields of climate protection under international environmental law, the Kyoto and Montreal processes in particular, cannot be directly transferred to the area of climate engineering. A unilateral interference or one which is implemented by only a few states raises the question of competence and the democratic legitimacy of the actions undertaken even if it is based on an international treaty by and between the involved states. With

this in mind, the question of how to deal with risks and uncertainties under international environmental law regarding potential negative side effects resulting from the measures has to be addressed within a comprehensive evaluation of governance instruments.

Thus, different regulatory approaches from global governance to unilateral actions will be analysed according to different measures to undertake a legal evaluation as to how a governance structure of climate engineering could be shaped under international law.