

Leveraging a solar climate engineering patent pool for international regulation of field experiments

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Solar climate engineering (SRM) field experiments warrant some form of international regulation, even in the absence of expected transboundary impacts. This is presently difficult because no existing international legal institution has the clear authority and support to do so; because the relevant states have divergent interests; because SRM remains highly uncertain and dynamic; and because the scientists who would be both the regulatory targets and integral to regulation's development are resistant to potentially restrictive policies. This paper suggests a possible innovative means to overcome these challenges by linking the international regulation of SRM field tests to a voluntary intellectual property (IP) regime. Indeed, concerns over personal IP interests in SRM have been expressed inside and outside the SRM research community. There appears to be an emerging consensus that SRM should not be a for-profit enterprise and that researchers and scientific institutions should forego IP claims. However, that would not prevent problematic IP claims by outlying scientists and other actors. I suggest that a voluntary patent pool could act as a lever to induce participation in an emerging, broader, and responsive regulatory regime. Once a pool is established and seeded with key patents, scientists, institutions, funders, and state regulators would have incentives to join, while agreeing to abide by an array of broader research standards and best practices regarding e.g. public engagement, transparency, assessment, monitoring, and international coordination. Notably, such a mechanism does not require national governments or intergovernmental institutions in order to begin; transboundary private regulation may suffice. These standards could subsequently be gradually legalized. The presentation considers existing cases of international patent pools and of using IP access as a regulatory incentive, as well as potential legal, economic, and political impediments.