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THE GOVERNANCE OF SOLAR GEOENGINEERING

Climate change is among the world's most important problems, and solutions based on emission cuts or adapting to new climates remain elusive. One set of proposals receiving increasing attention among scientists and policymakers is "solar geoengineering" (also known as solar radiation modification), which would reflect a small portion of incoming sunlight to reduce climate change. Evidence indicates that this could be effective, inexpensive, and technologically feasible, but it also poses environmental risks and social challenges. Governance will thus be crucial. In *The Governance of Solar Geoengineering*, Jesse Reynolds draws on law, political science, and economics to show how solar geoengineering is, could, and should be governed. The book considers states' incentives and behavior, international and national law, intellectual property, compensation for possible harm, and nonstate governance. It also recommends how solar geoengineering could be responsibly researched, developed, and – if appropriate – used in ways that would improve human well-being and ensure sustainability.

Jesse L. Reynolds is an Emmett / Frankel Fellow in Environmental Law and Policy at the University of California, Los Angeles School of Law, as well as an associate researcher at Utrecht University and a research affiliate at Harvard University. He has degrees from Tilburg University; the University of California, Berkeley; and Hampshire College, and has been a US Environmental Protection Agency Science to Achieve Results Graduate Fellow and a Fulbright Scholar.

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MANAGING CLIMATE CHANGE IN THE
ANTHROPOCENE

JESSE L. REYNOLDS

University of California, Los Angeles
School of Law



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Abbreviations

C2G2	Carnegie Climate Geoengineering Governance Initiative
CBD	Convention on Biological Diversity
CERN	European Organization for Nuclear Research
CFR	Code of Federal Regulations
CLC	International Convention on Civil Liability for Oil Pollution Damage
CLRTAP	Convention on Long-Range Transboundary Air Pollution
COP	Conference of the Parties
EEZ	exclusive economic zone
ENMOD	Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques
EPA	Environmental Protection Agency
EU	European Union
IAEA	International Atomic Energy Agency
ICCPR	International Covenant on Civil and Political Rights
ICESCR	International Covenant on Economic, Social and Cultural Rights
ICJ	International Court of Justice
ILC	International Law Commission
IMO	International Maritime Organization
IPCC	Intergovernmental Panel on Climate Change
MARPOL	International Convention for the Prevention of Pollution from Ships
NEPA	National Environmental Policy Act
NETs	negative emissions technologies
SCoPEx	Stratospheric Controlled Perturbation Experiment
SGO	Solar Geoengineering Organization
SPICE	Stratospheric Particle Injection for Climate Engineering
SRM	solar radiation management
SRMGI	Solar Radiation Management Governance Initiative
TWAS	The World Academy of Sciences

UDHR	Universal Declaration of Human Rights
UK	United Kingdom
UN	United Nations
UNCLOS	UN Convention on the Law of the Sea
UNECE	UN Economic Commission for Europe
UNEP	UN Environment Programme
UNESCO	UN Education, Social and Cultural Organization
UNFCCC	UN Framework Convention on Climate Change
US	United States
USC	United States Code
WMO	World Meteorological Organization