

Project Name	Location	Lead Institute	Total Funding Level	Start Date	End Date	Funder	Type	Links	Notes:
Aerosol Intervention Technologies to Cool the Climate: Costs, Benefits, Side Effects, and Governance (COOL)	Finland	Finnish Meteorological Institute, Finnish Environment Institute, University of Eastern Finland, University of Helsinki, University of Eastern Finland	€ 1,446,001	2011	2014	Academy of Finland's research programme on climate change (FICCA)	natural and social sciences	<a href="https://www.aka.fi/globalassets/awanhat/documents/tiedosto/ficca/ficca-16.04.2013/cool_puolivali.pdf">https://www.aka.fi/globalassets/awanhat/documents/tiedosto/ficca/ficca-16.04.2013/cool_puolivali.pdf</a>	
Carnegie Climate Geoengineering Governance Initiative (C2G2)	US	Carnegie Council	\$4,747,000	2017	2020	V. Kann Rasmussen Foundation, OAK Foundation	social sciences, advocacy	<a href="https://www.c2g2.net/c2g2-funders/">https://www.c2g2.net/c2g2-funders/</a>	
Climate Geoengineering Governance Project	UK	Oxford University, UCL, SPRU, University of Sussex	\$1,634,641	2012	2014	Economic and Social Research Council (ESRC), Arts and Humanities Research Council (AHRC)	social sciences	<a href="http://geoengineering-governance-research.org/about.php">http://geoengineering-governance-research.org/about.php</a>	
Collaborative Research: Evaluation of Suggestions to Geoengineer the Climate System Using Stratospheric Aerosols and Sun Shading	US	UCLA, Rutgers	\$699,846	2008	2013	NSF	natural and social sciences	<a href="https://www.nsf.gov/awardsearch/showAward?AWD_ID=0730452">https://www.nsf.gov/awardsearch/showAward?AWD_ID=0730452</a> and <a href="https://www.nsf.gov/awardsearch/showAward?AWD_ID=0730761">https://www.nsf.gov/awardsearch/showAward?AWD_ID=0730761</a>	
Cornell Climate Engineering	US	Cornell University	\$650,000	2015	2020	PNNL	natural sciences	<a href="http://climate-engineering.mae.cornell.edu/research/">http://climate-engineering.mae.cornell.edu/research/</a>	
DECIMALS Fund	International	SRMGI, The World Academy of Sciences (TWAS)	\$450,000	2018	2020	Open Philanthropy Project	natural sciences	<a href="http://www.srmgi.org/decimals-fund/">http://www.srmgi.org/decimals-fund/</a>	
Emmett Institute Project	US	UCLA School of Law's Emmett Institute on Climate Change and the Environment	\$1,076,095	2017	2020	Open Philanthropy Project, Emmett Institute	social sciences	<a href="https://law.ucla.edu/news-and-events/in-the-news/2017/04/emmett-institute-takes-on-climate-engineering-project/">https://law.ucla.edu/news-and-events/in-the-news/2017/04/emmett-institute-takes-on-climate-engineering-project/</a> <a href="https://www.openphilanthropy.org/focus/global-catastrophic-risks/miscellaneous/ucla-climate-engineering-governance">https://www.openphilanthropy.org/focus/global-catastrophic-risks/miscellaneous/ucla-climate-engineering-governance</a>	
European Transdisciplinary Assessment of Climate Engineering (EuTRACE)	EU	IASS, adelphi, The Keil Earth Institute, The Klima Campus Hamburg, the Karlsruhe Institute of Technology, The Tyndall Centre for Climate Change Research, The University of Exeter, Bristol University, The University of Edinburgh, The University of Oslo, the Norwegian Meteorological Institute, The Center for International Climate and Environmental Research, The Centre National de la Recherche Scientifique, and The University of Graz	€ 1,360,324	2012	2014	FP7-Environment	social sciences	<a href="https://cordis.europa.eu/project/rcn/103896_en.html">https://cordis.europa.eu/project/rcn/103896_en.html</a> and <a href="https://www.iass-potsdam.de/de/forschung/eutrace">https://www.iass-potsdam.de/de/forschung/eutrace</a>	
Exploring Democratic Governance of Solar Geoengineering Research	US	The Consortium for Science, Policy and Outcomes (CSPO) at Arizona State University (ASU)	\$299,574	2017	2019	The Alfred P. Sloan Foundation	social sciences	<a href="https://cspo.org/research/governance-of-geoengineering-research/">https://cspo.org/research/governance-of-geoengineering-research/</a> and <a href="https://sloan.org/grant-detail/8250">https://sloan.org/grant-detail/8250</a>	
Exploring the Potential and Side Effects of Climate Engineering (EXPECT)	Norway	University of Oslo, Norwegian Meteorological Institute, UNI Research/BCCR	\$1,300,000	2014	2017	Norwegian Research Council	natural sciences	<a href="https://expected.bitbucket.io/">https://expected.bitbucket.io/</a> <a href="http://www.yr.no/magasinn/preparing-the-world_s-largest-experiment-1.13538673">http://www.yr.no/magasinn/preparing-the-world_s-largest-experiment-1.13538673</a>	
Forum for Climate Engineering Assessment (FCEA)	US	American University (School of International Service)	\$210,000	2013	current	Open Philanthropy Project	social sciences	<a href="http://ceassessment.org/who-we-are/">http://ceassessment.org/who-we-are/</a>	
Fund for Innovative Climate and Energy Research (FICER)	US	Harvard University	\$7,765,000	2013	current	Bill Gates	natural sciences	<a href="https://www.openphilanthropy.org/focus/global-catastrophic-risks/miscellaneous/ucla-climate-engineering-governance">https://www.openphilanthropy.org/focus/global-catastrophic-risks/miscellaneous/ucla-climate-engineering-governance</a>	FICER provided \$100,000 to SRMGI and \$150,000 to MCB. These amounts have been excluded from the FICER funding total but have been added to the SRMGI and MCB funding totals. Additionally, the FICER estimate assumes that approximately 70% of total FICER funding supported solar geoengineering research. This 70% estimate is listed in the table, and was provided by David Keith.
Geoengineering Climate: Technical Evaluation and Discussion of Impacts	US	National Academies of Sciences, Engineering, and Medicine	\$630,000	Mar-13	Dec-15	CIA, NOAA, NASA	natural and social sciences	<a href="https://www.motherjones.com/politics/2013/07/cia-geoengineering-control-climate-change/">https://www.motherjones.com/politics/2013/07/cia-geoengineering-control-climate-change/</a>	
Geoengineering Model Intercomparison Project (GeoMIP)	US	Coordinated jointly at Pacific Northwest National Laboratory (moving to Indiana University in 2019) and Rutgers University. Simulations being carried out by climate modeling groups around the world.	\$2,500,000	2008	current	NSF	natural sciences	<a href="http://climate.envsci.rutgers.edu/GeoMIP/about.html">http://climate.envsci.rutgers.edu/GeoMIP/about.html</a>	
Geoengineering Research Governance Project	Canada	University of Calgary	Unknown	2015	Unknown	University of Calgary, Institute for Science, Innovation and Society	social sciences	<a href="http://www.ucalgary.ca/grgproject/">http://www.ucalgary.ca/grgproject/</a>	
Geoengineering: Basic Mechanisms, Impacts and Strategies	China	Beijing Normal University	¥2 000 000	2013	2015	Joint Center for Global Change	natural and social sciences	<a href="http://www.china-geoengineering.org/">http://www.china-geoengineering.org/</a>	
Geoengineering: Integrated approaches and impacts	China	National Basic Research Program of China	¥15 000 000	2015	2019	China Global Change Program (973 Project)	natural and social sciences	<a href="http://www.china-geoengineering.org/">http://www.china-geoengineering.org/</a>	
Global Governance of Climate Engineering	Germany	Marsilius Kolleg, Heidelberg University	Unknown	2009	2012	Unknown	natural and social sciences	<a href="http://www.climate-engineering.uni-hd.de/">http://www.climate-engineering.uni-hd.de/</a>	
Gordon Research Conference (GRC)	US	GRC	\$109,875	2017	2017	NSF, NASA, DOE, and GRC	natural and social sciences		
Harvard's Solar Geoengineering Project (SGRP)	US	Harvard University	\$16,225,000	2017	2024	J. Baker Foundation, The Blue Marble Fund, OW Caspersen Foundation, The Crows Nest Foundation, The William and Flora Hewlett Foundation, The Open Philanthropy Project, Pritzker Innovation Fund, Ronin Private Investments LLC, The Alfred P. Sloan Foundation, Teza Technologies LLC, VoLo Foundation, The Weatherhead Center for International Affairs, Laura and John Arnold, G. Leonard Baker, Jr., Alan Eustace, Howard Fischer, Ross Garon, Bill Gates, Drew Myers, John Rapaport, Chris and Crystal Sacca, Michael Smith, Bill Trenchard	natural and social sciences	<a href="https://geoengineering.environment.harvard.edu/funding">https://geoengineering.environment.harvard.edu/funding</a>	
Implications and Risks of Engineering Solar Radiation to Limit Climate Change (IMPLICC)	EU	Max Planck Institute for Meteorology (coordinator), Max Planck Gesellschaft, Max Planck Institute for Chemistry, Laboratoire des Sciences du Climat et l'Environnement (CEA/CNRS), University of Oslo, Center for International Climate and Environmental Research	€ 1,000,000	2009	2012	European Commission FP7	natural and social sciences	<a href="http://implicc.zmw.de/index.php?id=551">http://implicc.zmw.de/index.php?id=551</a>	
Institute for Advanced Sustainability Studies (IASS)	Germany	IASS	€ 3,333,000	2012	2018	German Federal and State Government	natural sciences	<a href="ftp://ftp.eil.noaa.gov/psd3/arctic/ArcticAirPollnWorksh2015/4.%20The%20me%203%20%20%20Collaborative%20Development/7.%20IASS%20End%20to%20End%20Model.pdf">ftp://ftp.eil.noaa.gov/psd3/arctic/ArcticAirPollnWorksh2015/4.%20The%20me%203%20%20%20Collaborative%20Development/7.%20IASS%20End%20to%20End%20Model.pdf</a>	IASS also received and administered funding for €152k to EuTRACE. This amount has been excluded from the IASS funding total but added in the EuTRACE total.
Integrated Assessment of Geoengineering Proposals (IAGP)	UK	University of Leeds	£2,074,608	2010	2015	EPSRC, NERC, LWEC	natural and social sciences	<a href="http://www.iagp.ac.uk/who-we-are.html">http://www.iagp.ac.uk/who-we-are.html</a>	

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Integrated Climate Assessment – Risks, Uncertainties and Society (ICARUS)	Japan	Institute of Applied Energy (IAE)	¥90,000,000	2012	2017	Environmental Research and Technology Development Fund of the Ministry of the Environment of Japan	social and natural sciences	<a href="http://www.nies.go.jp/ica-rus/en/overview.html">http://www.nies.go.jp/ica-rus/en/overview.html</a> <a href="https://link.springer.com/article/10.1007/s11625-018-0539-4">https://link.springer.com/article/10.1007/s11625-018-0539-4</a>	
Linköping University Climate Engineering Research Programme (LUCE)	Sweden	Linköping University	Unknown	Unknown	Unknown	Swedish Research Council	social sciences	<a href="https://liu.se/en/research/linkoping-university-climate-engineering-research-programme-luce">https://liu.se/en/research/linkoping-university-climate-engineering-research-programme-luce</a> <a href="http://www.mcbproject.org/about.html">http://www.mcbproject.org/about.html</a> <a href="http://www.geoengineeringmonitor.org/2018/04/marine-cloud-brightening-project-geoengineering-experiment-briefing/">http://www.geoengineeringmonitor.org/2018/04/marine-cloud-brightening-project-geoengineering-experiment-briefing/</a>	
Marine Cloud Brightening Project (MCB)	US	University of Washington	\$150,000			FICER	natural sciences		
Network for Sustainable Climate Risk Management (SCRIM)	US	Penn State	\$2,261,000	2012	2019	NSF	natural and social sciences	<a href="http://www.scrihub.org/research/areas/">http://www.scrihub.org/research/areas/</a>	This total has been adjusted to reflect the approximate amount of funding that supported solar geoengineering (SG) work only. To derive this approximation, we calculated the fraction of the project's papers (19%) that focused on SG, and multiplied that by the total, per the principal investigator's recommendation.
Reflections on Environmental Geoengineering (REAGIR)	France	Institut Pierre Simon Laplace	€ 200,000	2013	2014	ANR	natural and social sciences	<a href="https://cmc.ipsl.fr/national-projects/arp-reagir/">https://cmc.ipsl.fr/national-projects/arp-reagir/</a>	
Reversing Climate Change via Geoengineering: Impacts on Developing countries like India	India	Indian Institute of Science	\$200,000	2017	2020	Department of Science and Technology, Government of India	natural sciences		
Schwerpunktprogramm 1689 (SPP 1689)	Germany	Kiel Earth Institute	€ 3,000,000	2013	2019	German Research Foundation (DFG)	natural and social sciences	<a href="https://www.spp-climate-engineering.de/objectives.html">https://www.spp-climate-engineering.de/objectives.html</a> Open Progress Estimate	This total has been adjusted to reflect the approximate amount of funding that supported solar geoengineering work only.
Solar Radiation Management Governance Initiative (SRMGI)	UK	The Royal Society, The World Academy of Sciences, Environmental Defense Fund	\$2,412,000	2010	2020	Open Philanthropy Project, Zennstrom Philanthropies, Carbon War Room, FICER, IAP (formerly InterAcademy Panel)	social sciences	<a href="http://www.srmgi.org/about/">http://www.srmgi.org/about/</a> <a href="http://www.srmgi.org/about/mission/">http://www.srmgi.org/about/mission/</a>	SRMGI provided \$450,000 to DECIMALS and received \$100k from FICER. The total SRMGI amount excludes the DECIMALS funding but includes the FICER funding.
SOUSEI	Japan	JAMSTEC	\$800,000	2012	2016	Culture, Sports, Science and Technology)	natural sciences	<a href="https://www.jamstec.go.jp/sousei/eng/results/index.html">https://www.jamstec.go.jp/sousei/eng/results/index.html</a> <a href="https://www2.ucar.edu/atmosnews/news/129835/new-approach-geoengineering-simulations-significant-step-forward">https://www2.ucar.edu/atmosnews/news/129835/new-approach-geoengineering-simulations-significant-step-forward</a> and <a href="http://www.cesm.ucar.edu/experiments/cesm1.2/GLE/">http://www.cesm.ucar.edu/experiments/cesm1.2/GLE/</a>	
Stratospheric Aerosol Geoengineering Large Ensemble (GLENS)	US	NCAR, PNNL, Cornell	\$1,000,000	2015	2017	Defense Advanced Research Projects Agency	natural sciences	<a href="http://www.spice.ac.uk/">http://www.spice.ac.uk/</a> <a href="https://www.nature.com/news/geoengineering-experiment-cancelled-amic-patent-row-1.10645">https://www.nature.com/news/geoengineering-experiment-cancelled-amic-patent-row-1.10645</a> <a href="https://portal.nifa.usda.gov/web/crisprojectpages/0222861-the-ethics-of-geoengineering-investigating-the-moral-challenges-of-solar-radiation-management.html">https://portal.nifa.usda.gov/web/crisprojectpages/0222861-the-ethics-of-geoengineering-investigating-the-moral-challenges-of-solar-radiation-management.html</a> and <a href="http://www.umt.edu/ethics/ethicsgeoengineering/aboutus.php">http://www.umt.edu/ethics/ethicsgeoengineering/aboutus.php</a>	
Stratospheric Particle Injection for Climate Engineering (SPICE)	UK	University of Bristol, University of Cambridge, University of Oxford, and University of Edinburgh	\$2,600,000	2010	2014	EPSRC, NERC, STFC	natural sciences		
The Ethics of Geoengineering: Investigating the Moral Challenges of Solar Radiation Management	US	University of Montana	\$375,272	2010	2014	USDA, NSF	social sciences		
TOUGOU	Japan	JAMSTEC	\$800,000	2017	2021	MEXT (Ministry of Education, Culture, Sports, Science and Technology)	natural sciences	<a href="http://www.jamstec.go.jp/tougou/eng/research/theme_b.html">http://www.jamstec.go.jp/tougou/eng/research/theme_b.html</a>	