SOLAR GEOENGINEERING COULD **KEEP WINTERS COOL** IN THE EUROPEAN ARCTIC

Currently no mechanism for public participation













Three-phase research design introduced solar geoengineering and collected local concerns on climate change in Finnish Lapland during the first year, analysed climate models (output from GLENS) for answering locally important questions, and returned to the field the next year with the plots produced. Solar geoengineering would mostly restore Lapland's current winter conditions, but also the impacts of climate change were seen relatively mild. Concerns on impacts of solar geoengineering in the Global South, along with perceived lack of knowledge on SRM, the risks involved, and problems in democratic decision-making on deployment led to lack of "social license" for cooling the Arctic by SRM. Co-production of knowledge could serve as a form of governance.

Buck, H.J., Mettiäinen, I. & MacMartin, D.G. (in peer review) "Bog here, marshland there" - Co-producing scientific knowledge on climate geoengineering in the Arctic.

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