Author's Accepted Manuscript

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www.elsevier.com/locate/rie

PII: S1090-9443(16)30248-4

http://dx.doi.org/10.1016/j.rie.2016.12.001 DOI:

Reference: YREEC702

To appear in: Research in Economics

Received date: 25 October 2016 Revised date: 28 November 2016 Accepted date: 1 December 2016

Cite this article as: Juan B. Moreno-Cruz and Sjak Smulders, Revisiting th economics of climate change the role of geoengineering, Research in Economics http://dx.doi.org/10.1016/j.rie.2016.12.001

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Revisiting the Economics of Climate Change The Role of Geoengineering *

Sjak Smulders[‡] Juan B. Moreno-Cruz[†]

December 7, 2016

Abstract Technically simple measures to directly reduce mean global temperatures could be available in the near future. We introduce "geoengineering" into a simple analytical model of climate change. We model the technical and economic characteristics of geoengineering in line with the recent literature from physical and environmental management sciences. We investigate (i) under which circumstances geoengineering can substitute, partly or completely, for traditional abatement strategies, (ii) under which conditions and at what level geoengineering is optimally employed, and (iii) whether geoengineering can mitigate free-riding problems.

^{*}We thank Paco André, Rob Hart, David Keith, Timo Goeschl, Mark Jaccard, Robert Oxoby, Daan van Soest, M. Scott Taylor and participants at the Grenoble Workshop on Innovation and the Environment, the IEW 2007 meeting at Stanford, and the UNU-MERIT research seminar for comments on a previous version. All mistakes remaining are our own.

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