Letters to the Editor

The Social Cost of Carbon: A Global Imperative

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To solve the unprecedented global commons problem posed by climate change, all nations must internalize the global externalities of their emissions (van der Ploeg 2016); otherwise, collective abatement efforts will never achieve an efficient, stable climate outcome. Yet lately, the U.S. government's standard valuation of carbon pollution's externalities has come under attack in both academic journals and courtrooms. This metric—the "social cost of carbon" (SCC)—is used to analyze and set climate policy, and since 2010 federal agencies have emphasized *global* valuations of climate damages (Interagency Working Group on Social Cost of Carbon 2010). Recently a handful of economists and policy experts have instead begun advocating *domestic*-only valuations (Dudley and Mannix 2014; Fraas et al. 2016), based on dubious arguments. The same arguments have been repeated in two major challenges in federal court against energy efficiency standards and the regulation of power plants' carbon emissions. Even the U.S. Forest Service has proposed making important decisions about the management of coal mines based on the domestic-only SCC value. Finally, in a recent article published in this journal, Gayer and Viscusi (2016) try to make an economic and legal case for a domestic-only SCC. We are writing this letter to express our strong support for the continued use of a global SCC.

There are several important arguments for federal agencies to use a global SCC. First, the United States benefits tremendously if other countries set policy based on global rather than local effects (Howard and Schwartz 2015). Modern game theory predicts that strategic use of the global SCC by the United States can induce international reciprocity (Axelrod 1984; Madani 2013; Howard and Sylvan 2015; Howard and Schwartz, forthcoming). Ethical frameworks similarly instruct that the United States should model the actions it wants all other countries to take (Kant 1997). Indeed, the Obama administration has strategically incorporated the global SCC into climate negotiations, most recently harmonizing its

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global SCC valuation with Canada and Mexico. Reverting to a domestic-only metric would risk signaling that the United States disregards the global effects of its actions, which could undermine the climate commitments of other countries.

From a legal perspective, not only does international law—the U.N. Framework Convention on Climate Change—commit the United States to account for global effects, but domestic laws like the Clean Air Act and the National Environmental Policy Act also either require or give discretion to agencies to consider global climate costs (Howard and Schwartz, forthcoming). In fact, a recent ruling by a federal circuit court of appeals confirms that key statutes give agencies discretion to consider the global consequences of U.S. climate policies (*Zero Zone v. Dept. of Energy* 2016).

Finally, from a practical standpoint, a domestic SCC lacks transparency. The models underlying the SCC oversimplify and wrongly assume that the United States is an island unaffected by migration, national security, global economic disruptions, and other cross-border externalities. Many seemingly "foreign" climate damages would actually spill over to harm the United States (Howard and Schwartz, forthcoming). Thus, focusing on only the domestic SCC value is deeply misleading.

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