

Carbon Is Free?

Greenhouse Gas Emissions and the Diffusion of No Regrets Innovation

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In the 1990s a debate raged in the economics and engineering literature over the existence of so-called “no regrets” measures in energy efficiency—actions that could be taken to improve energy efficiency with a net economic gain to the actor. This debate has resurfaced in the context of the climate change problem. I analyze the International Panel on Climate Change’s assessment of carbon-dioxide reduction technologies and use them to impute a supply curve for carbon dioxide remediation. I summarize the economists’ arguments that no-regrets technologies do not really exist in a significant way in this arena. Finally, I bring to bear two recent insights that shed light on the prospects for the existence and diffusion of such no-regrets technologies. One insight relates to the interaction between carbon-dioxide emissions reductions and firm-level productivity, and the other relates to the potential consumer benefits of environmentalism. In this discussion, I attempt to bring together the perspectives of economics, engineering, marketing, and operations management.