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What is a Proxy Price on Carbon?

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A proxy carbon price is a tool that acknowledges and internalizes the social, ecological, and/or economic costs of emitting one metric ton of carbon dioxide equivalent (MTCDE). For carbon emissions from design and construction projects or other future expenditures, this price creates a virtual cost that can be included in financial decision-making. Consider an electric vehicle, which may be expensive up front: a proxy carbon price attaches a dollar value to the carbon emissions that are saved by driving the electric vehicle. Combined with the direct savings on fuel, this can justify the higher initial cost. Unlike a carbon charge, the proxy carbon price is not paid to anyone; it is simply used to inform decisions. When used correctly, it will sometimes result in more money being invested in options that reduce carbon dioxide emissions, and may save money, over the long-term.

Integrating a proxy carbon price into the financial strategy of an institution is a way to anticipate and guide the transition to a carbon-constrained world. Proxy prices can be used in multiple ways, including: modeling the financial risks posed by future carbon regulation (e.g. a carbon tax); representing the cost to society from climate change damages; and aligning decision-making with an institution's strategic climate goals. One particularly useful way to integrate a proxy carbon price into financial decision-making is through lifecycle cost (LCC) evaluations, which combine the up-front costs (i.e. purchase price) and future costs (e.g. fuel costs, maintenance) of an investment, and can easily include a carbon price. Analyzing lifecycle costs is especially important for buildings and other long-term investments, since many of the costs and carbon emissions occur over the operation of the investment. A proxy carbon price helps the LCC reflect the true social costs of an investment or the full private costs under a future climate policy. As a result, the proxy carbon price can change the estimated lifecycle costs and payback periods of potential investments.

Overall, a proxy carbon price is a valuable tool for translating some of the disparate impacts of climate change into the comparable metric of money. It can also be tailored in its application to a narrow set of decisions, such as the largest construction projects. At the same time, it is important to have institutional support for vetting lower-carbon options, considering the proxy price in decisions, and using resources for low-carbon options. For more details see Barron et al. 2018 "Carbon Pricing in the Third Sector".