Case Study: Carbon Charge Program

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SWARTHMORE COLLEGE

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Synopsis Swarthmore's carbon levy on departments and offices engages the campus community with carbon pricing solutions while the shadow price integrates the cost of carbon into institutional cost-benefit analysis. President Valerie Smith has co-signed a letter calling on elected officials to take action on state and national carbon pricing. The Office of Sustainability provides relevant education and engagement opportunities for the entire campus community.

Primary stakeholders involved The initial effort to create the Carbon Charge Program was led by a group of faculty from economics, environmental studies, and peace and conflict studies, in consultation with facilities, finance, the Office of Sustainability, the Sustainability Committee, and the Social Responsibility Committee of the Board of Managers.

The Carbon Charge Program is managed by the Carbon Charge Committee, which includes representation from sustainability, finance, facilities, information technology, advancement, faculty, and students.

Timeline Effort started Fall 2015; approved February 2016; implemented in July 2016.

Scope The levy on departments and offices covers Scope 1 (natural gas) and Scope 2 (electricity) emissions, excluding emissions from fertilizer and the campus fleet.

The shadow price is applied to all emissions we can estimate that are associated with construction, renovation, and campus utilities projects, including building materials.

The Carbon Charge Committee is working to expand the program to cover air travel.

Determining a carbon price The levy on departments is assessed at $23/metric tons of carbon dioxide equivalent (MTCDE), which corresponds to about 1.25% of each department's budget. Arriving at this number required consideration of the social cost of carbon, the deduction that each department and office can reasonably manage, and how much the Carbon Charge Committee can effectively spend. As they are able, departments and offices are invited to (and do) make voluntary additional contributions to more closely match the accepted cost of carbon and to reflect their own specific emissions.

The shadow price is assessed at $100/MTCDE, which was primarily a result of research on what price would be necessary to align developed economies with a two-degree warming scenario. It was also informed by social cost of carbon estimates and by internal prices at other institutions. We expect this price will be reassessed every three years.

Development process In the summer of 2015, a group of Swarthmore faculty and staff convened a reading group to learn more about carbon pricing policy solutions. After studying the topic, the group considered ways to adapt carbon pricing solutions to the campus context. Internal carbon prices in the private sector and Yale's Carbon Charge program informed this work. The program aimed to reduce Swarthmore's emissions, provide a platform for community education and engagement, and build momentum for state and national carbon pricing policies.

The group developed a draft proposal in September that outlined both a carbon levy on departments and offices and a shadow price for financial cost-benefit analyses. They brought the proposal to the president, who raised no objections, but requested additional community input and buy-in. The group iteratively solicited feedback from stakeholders and incorporated that feedback into five different drafts.

The final draft was presented to the Social Responsibility Committee of the Board of Managers, and the Board approved the levy on departments and offices in February of 2016. The start date was set for the following fiscal year. The Carbon Charge Committee was convened in September 2016 to manage the Carbon Charge Program, which allocates the revenue from the levy, and to work with capital planning and project management to incorporate the shadow price into construction and renovation processes. In November of 2017, the shadow price was approved by the Ecosphere Executive Committee, which includes the vice president for finance and administration.

Sources/uses of funds The Carbon Charge Committee allocates the revenue. Annually, the program brings in at least $300,000. $200,000 is directed towards energy efficiency projects through a green revolving fund. $90,000 is earmarked for sustainability planning, analysis, and metering improvements. $10,000 is earmarked for campus education and engagement in carbon pricing solutions.

Other key implementation/context notes While the direct price incentive in this structure is distributed across the whole college, and thus very diluted, we do have examples of offices deciding to reduce emissions substantially as a result, such as Development and Admissions working to reduce their air travel. The Peace and Conflict Studies Program determined that $125/MTCDE was a more appropriate price and voluntarily quintupled their contribution to the Carbon Charge Fund.

In November of 2016 Swarthmore's president signed a letter hosted by the Put A Price On It campaign that calls upon elected leaders to take action on state and national carbon pricing.

Student education and engagement is central to Swarthmore's program, and students convened a Swarthmore Put A Price On It chapter, which is working to advance carbon pricing legislation, including working for a county endorsement of a carbon pricing policy.