

Corporate lobbying for environmental protection

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When might polluting firms support environmental protection, and what difference does this make? The answer to this question matters because many environmental policies that would benefit society are not politically feasible to implement. For example, economists have been recommending implementing a strong carbon price for many decades, but almost no countries have one (above \$5 or so). Political support for environmental protection can come from a number of places, but it is arguably most valuable when it comes from business.

Firms spend significant resources on lobbying (for example, in the US, energy and fossil fuel companies spent \$0.54 billion on lobbying over the 2013-14 Congress). There is a general perception that polluting firms inevitably use their lobbying power to oppose environmental protection. This is indeed the case much of the time, but there have been major and important exceptions to this rule.

The first exception concerns protection of the ozone layer, the biggest environmental problem of its time. In the 1980s, regulators were attempting to draw up global rules to limit the production of ozone-depleting CFCs, which had been effectively opposed by all the major ozone polluting firms. However, in March 1988 US firm DuPont, the largest CFC producer, abruptly announced that it no longer opposed regulation and in fact now wanted a complete phase-out of global CFC production. DuPont's political support for regulation is widely seen as the key turning point in the story of ozone protection: the European producers continued to lobby against reductions but were ultimately unsuccessful. DuPont's lobbying for regulation may have been in its economic self-interest. Since it had already made some investments in cleaner production technologies that would give it an advantage over its rivals in the clean substitute market, DuPont potentially stood to gain market share. In the words of DuPont director Joseph Glass, 'when you have \$3 billion of CFCs sold worldwide and 70 percent of that is about to be regulated out of existence, there is tremendous market potential.'

Similar factors are also likely to be operating on various levels in the more complex case of climate change. In the run up to the Paris Agreement, a coalition of major oil and gas producers was among those calling for the introduction of a global carbon price. Europe's six largest oil and gas companies (BG, BP, Eni, Shell, Statoil and Total) argued for the introduction of an ambitious carbon price. A moderately strong carbon price would almost certainly shift market share away from coal (with a global market share of 30%) and towards gas. It is hard not to see this lobbying, at least in part, as an attempt by the oil and gas companies to steal market share from coal. Although climate regulation is on-going, stronger political support from the private sector is considered by many policy makers to have helped achieve the Paris Agreement in 2015.

Hence there are clear examples of major polluting firms lobbying for environmental regulation of their markets, and the political support this provides can substantially increase the ability of governments to protect the environment. This paper explores when and how a polluting firm might choose to invest in a costly clean technology, knowing it will be able to influence the political process to get regulations passed that will result in increased market share and so greater profits.

I use a simple two-firm model to explore this process. Each firm can invest in a new green production technology or keep their old polluting technology. A government then chooses the emissions tax they are subject to, and the firms can influence this choice through lobbying. The result is that competition between the firms can cause one firm to choose to go green and lobby for strong environmental protection, so that it gains market share in the new regulated market, while the other keeps the old technology and opposes environmental regulation. The lobbying results in the equilibrium emissions tax being distorted above the Pigouvian level, and increasingly so as the government becomes more open to lobbying. The key result concerns the interaction between the political process and firms' green investment choices: there are situations where it is only because a firm can lobby, and therefore secure strong environmental protection, that it will see it as worthwhile to go green. At the same time, it is only because of a firm's political support that the government can take environmental action. Lobbying can therefore induce a transition to a greener economy.

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