Consumers’ Green Conscience Fosters Clean Innovation

By Alexandra Roulet and Philippe Aghion, INSEAD

It’s not cheap talk; when market competition is fierce, the effect of consumers’ values on green innovation can be as strong as a large fuel price increase.

Before the Yellow Vest protests roiled France in 2018, many believed a carbon tax was the best solution to climate change. Tax proponents argued that, through their wallets, people would be forced to reckon the cost of their actions on the planet and future generations. Yet, the protests, sparked by a rise in fuel taxes, showed that such policies might not be practical.

The far-reaching socioeconomic impact of the protests made it clear that governments can't rely solely on carbon pricing to encourage environmental change. People may not be able to pay to mitigate their CO2 emissions, particularly those without an alternative to driving a car. So, if carbon tax is hard to implement, could social norms help? After all, surveys do show that people are increasingly concerned by global warming.

As economists, we know that professing to care about the environment can be perceived as “cheap talk”. Some assume it’s not going to make a
difference. But in a recent paper we co-authored with Roland Bénabou and Ralf Martin*, we show that, in fact, consumers’ values do push firms to offer greener products.

**Reliance on market forces**

Why would firms offer greener products? In competitive markets, where companies typically compete on price, offering environmentally friendly products can be another way to stand out. We found that the more competitive a market is, the more consumers’ values lead firms to invest in clean innovation.

We looked at the car industry, where firms can offer electric cars as a greener alternative to petrol-engine cars. Our data covered 7,060 firms and 25 countries. Our empirical analysis suggests that the combination of realistic increases in green concerns and in product market competition can have the same effect on green innovation as a 17-percent increase in fuel prices worldwide.

The social values of consumers can nudge them to “do their part” through consumption choices. Firms seeking to escape stiff competition react accordingly by investing in clean technologies that could give them an edge.

All of this represents pure market forces. We controlled for government interventions meant to boost green innovation. In strongly competitive markets, sheer exposure to consumers who value the environment can yield the same effect on clean innovation than if a government were to impose a tax.

**How will we reach green goals**

When thinking about the environment, a key question is what climate goals do we want to reach. The other key question is, how will we reach these goals. Various tools exist and economists sometimes consider them equivalent so long as they yield the same outcome. But as the Yellow Vest protests in France and political gridlock in the United States show, these tools are not equivalent in terms of the reaction they elicit.

Leveraging market forces through consumer preference for green products could be an effective way to achieve environmental goals. The government's responsibility would involve endorsing policies that bolster prosocial attitudes and uphold competitive markets. Clearly, this proposition holds
more appeal than implementing punitive taxes.

**Tips for business leaders**

In a competitive environment, getting ahead of your rivals means understanding current trends and, more importantly, predicting the trends of the future. Paying attention to the values and interests of younger people can provide clues, even if they are not your current customers. People's values can change as they age. For instance, they tend to become more conservative. However, each generation also has unique values shaped by experiences such as wars or harsh economic conditions.

Even if your current customers are older, it's important to prepare for the time when younger generations will become your main market. This forward-thinking approach can give you an advantage over competitors. Many business leaders now realise that ignoring the environment is not an option. Perhaps this wasn’t so obvious ten years ago.

The challenge is to find relevant social attitude surveys and identify the values that will influence future demand -- before they become mainstream.

This concept also applies beyond just environmental issues. Our paper suggests that price is not the only factor that matters in today's economy, especially in technology and digital markets where many products are free. Instead, the non-price attributes of products, including how they align with societal norms and values, are increasingly important.

*Roland Bénabou, Princeton University, NBER, CEPR; and Ralf Martin, Imperial College London, CEP and CEPR

**Find article at**
https://knowledge.insead.edu/economics-finance/consumers-green-conscience-fosters-clean-innovation

**About the author(s)**

**Alexandra Roulet** is an Assistant Professor of Economics at INSEAD and a CEPR Research Affiliate.
Philippe Aghion is a Professor of Economics at INSEAD. He is also a Professor at the College de France, a visiting professor at the London School of Economics and a fellow of the Econometric Society and of the American Academy of Arts and Sciences.

About the research

“Environmental Preferences and Technological Choices: Is Market Competition Clean or Dirty?” is published in American Economic Review.