Guilt is Good: A New Approach to Environmental Problems

Published : September 08, 2004 in Knowledge@Wharton

Fines, fees, pollution credit-swaps – policymakers have advocated many different approaches for sustaining the economy, often with mixed success. Now two Wharton professors have concluded that re-framing environmental issues in such a way that individuals feel encouraged to take a personal initiative may be a better approach.

While simply asking people to "do the right thing" might sound naïve, Paul R. Kleindorfer, a professor of management science, and Ulku Oktem, a senior research fellow at Wharton's Risk Management and Decision Processes Center, argue that such an approach may be the most effective way to prevent a global ecological catastrophe. Since environmental degradation is the sum of individual choices, they say, the best route for policymakers who want to promote environmentally sustainable policies must be through appeals to individuals. However, they add, those appeals would need to be made in a way that emphasizes personal responsibility.

The public generally sees environmental issues as problems that must be solved by governments and corporations, but Kleindorfer says that he and Oktem believe that perspective overlooks the crucial role that individuals play – both as actors in larger organizations and as consumers. "That individual perspective is one that we believe is absolutely central to this issue of the environment and environmental sustainability," he says.

Kleindorfer and Oktem presented their findings at the first United Nations Global Compact academic conference held in Istanbul, Turkey, from May 30 to June 1. The conference, titled "Bridging the Gap: Sustainable Environment," brought together academics and industry experts from around the world to discuss issues related to facilitating innovation and transfer of environmentally sound technologies. Wharton and Turkey's Sabanci University worked with the United Nations to organize the conference, whose second phase will be held in Philadelphia on September 17 and 18. The sessions in Philadelphia will focus on globalization, development and environmental management.

UN Compact Goals

In their paper titled, "Assessment of Environmentally Sustainable Technologies as if Individuals Matter: And They Do!" Kleindorfer and Oktem wrote that the "interaction of the public's mental models and preferences for processes and outcomes…must be the focal point for education and policy initiatives" if the goals of the UN compact are to be advanced.

One of the key challenges policymakers face, the authors write, is that people typically act within what one decision theorist has referred to as "bounded rationality", meaning that "human decision makers are intended to be rational but that information processing limits to memory, perception and judgment bound their abilities to evaluate complex choices and to act completely consistently over time."

As an example of this kind of limitation, they cite homeowners who live in a 100-year-flood plain.

Following a severe flood, many people will believe that there's a 50% chance of a flood next year, while others will say that there won't be another flood for 99 years.

The way decisions are framed can also influence the choices made, according to Kleindorfer and Oktem. In their paper, they note that psychologists G.A. Quattrone and A. Tversky found in 1988 that if people were asked to choose between two economic programs, one of which led to 10% unemployment at a cost of 12% inflation, another that led to 5% unemployment at a cost of 17% inflation, 36% would choose the first option. However, asked whether they would choose a program with 90% employment and 12% inflation over a program of 95% employment and 17% inflation, 54% preferred the former program – even though the alternatives are in fact identical.

A similar kind of mental glitch that has a particular impact on environmental choices is a tendency toward what some behavioral scientists call myopia – which in this context means discounting the future heavily while overweighing the near-term "costs of money." As a result, some studies have found that energy efficient appliances have often not sold well, even when consumers were told the new machines would save them money in the long run. "[P]eople act as if they have a very high discount rate for future energy conservation, much higher than interest rates they might have to pay to borrow the additional money on credit to pay the upfront increase in purchase costs…" they write.

What makes these limitations on reasoning especially serious in an environmental context is that many of the most complex environmental problems are difficult to see first hand, according to Kleindorfer and Oktem. People don't dump garbage in their own house because they can immediately see the consequences, but they might litter the street of a big city – and they're even more likely to pollute if the consequences are either hundreds of miles downwind or won't be felt for generations.

But understanding the consequences of such behavior is only a first step, say Kleindorfer and Oktem. Before people change, they need to see that changing their behavior is urgent – and could make a difference.

Creating such a sense of empowerment is difficult, the professors note, because individual contributions are often quite small. Ultimately, the most effective way to do it is to change a society's mores. The professors argue that people need to see that their own environmentally friendly actions – such as buying biodegradable detergent, for example – is not only necessary, but the right thing to do.

"Not carrots and sticks but sermons come into play," explains Kleindorfer. While the form of those sermons would vary by society, he believes that a respect for life is a value that can be translated into every culture.

Interestingly, although the paper cites a variety of academic sources, from anthropologists to behavioral economists, one non-academic source of inspiration apparently influenced the authors' understanding of the usefulness of moral persuasion: their daughters' examples. Oktem says that her daughter pushed her family to wear seatbelts, a lesson she had learned at school, encouraging the family to do something that Oktem as an engineer knew logically was the best choice but had not yet put into practice. Kleindorfer also recalls a time when his daughter came home from school after some lessons on recycling. "My daughter was a terror when it came to recycling," he says. After some pushing, she got the family to change its behavior.

As the two prepare for the follow-up conference on sustainability next month, they still sound convinced about the importance of reframing environmental issues. Oktem compares today's global environmental situation to an early stage of cancer: "You don't feel the effect very much at the moment, although people tell you that it will kill you later on," she says. "And a lot of times people do something about it only [when] there is no point of return."