Your money or your conscience? How policy makers should promote environmentally friendly products

April 2 2009

Refuelling with sunlight: Pollution free cars are in trend. This can be purposefully supported by political means. Image: pixelio.de

(PhysOrg.com) -- How can policy makers be more effective in motivating consumers to opt for environmentally friendly products whenever possible? Using information campaigns or financial incentives? A research group at the Max Planck Institute of Economics in Jena headed by Julia Sophie Wörsdorfer examined this question. Their conclusion: the two strategies appeal to different groups of buyers and should be implemented on a staggered and coordinated basis.

Information campaigns appeal to ecologically aware customers who are pioneers in terms of acquiring environmentally relevant innovations. Financial incentives tend to appeal to the subsequent buyer groups. Both positive and negative financial incentives carry the risk of being counter-productive in that, for example, the voluntary environmentally-friendly action of the first group of buyers may be eroded. The greater the democratic foundation for policy measures, the lower is the likelihood that such negative effects will arise.

The Max Planck researchers and their colleagues from the Zurich Institute for Environmental Decisions (ETH) developed a dynamic model for the adoption of environmentally-relevant innovations based on the example of consumer decisions for the purchase of environmentally-friendly cars. "We were interested in the motivations that exist for the purchase of environmentally friendly cars and the associated implications for suitable policy measures," reports Wörsdorfer. Based on the researchers' observations, such purchasing decisons are largely based on two motivations: either the purchaser's own ecologial awareness or external, mainly financial, incentives.

As part of their study the research group compared their model with data from a survey of 1581 car buyers in Switzerland and evaluated the findings. The participants had to assess, among other things, the expediency of different policy measures geared to reducing carbon dioxide emissions. "It was actually possible to identify a small group of consumers who were motivated by internal ecological attitudes, who value information, support an increase in gas prices and the introduction of taxes on fuel hungry cars," said Wörsdorfer. Although this group is relatively small, it is important in terms of policy strategy "because it drives technical progress and societal opinion formation." If financial incentives are introduced too early and their scope is not tailored to the motivations of consumers, this environmentally-friendly behaviour could ultimately be reduced. Consequently, policy runs the risk of not providing the desired ecological motivation, on the one hand, and exercising a counter-productive influence on the behaviour of some consumers due to economic considerations, on the other: for example, if consumers "purchase" the right to burden the environment through the payment of higher taxes.

The researchers propose a two-stage policy strategy: first, the smaller group of ecologically motivated consumers are won over by providing the relevant information. This also increases the societal acceptance of the second stage which involves monetary incentives aimed at the large group that responds to external motivations. "This avoids the risk of scaring off the group of buyers motivated by a good conscience. 'Green' consumers have already adapted their behaviour and would now like to see their behavior acknowledged by policy measures", says Wörsdorfer.

The Max Planck Institute of Economics in Jena addresses a wide range of quesitons concerning economic change and transition in general, as well as experimental economics and entrepreneurial behavior (www.econ.mpg.de).
Original work:

More information: Coad, Peter de Haan, Julia Sophie Woersdorfer (in alphabetical order) Consumer support for environmental policies: An application to purchases of green cars. Journal: *Ecological Economic*s doi: 10.1016/j.ecolecon.2009.01.015

Provided by Max Planck Institute