



## Carbon labels most effective when combined with low prices

**New research in Australia** has investigated the impact of labelling groceries with their level of CO<sub>2</sub> emissions. A convenience store that introduced these labels found that the share of green (low CO<sub>2</sub> emissions) purchases increased by 5 per cent. If these products were also low priced, the share of green purchases from the store increased by 20 per cent.

**Voluntary reductions in emissions** by households play an important role in mitigating climate change and preventing environmental damage. Groceries account for a substantial proportion of the environmental burden of the average household in terms of their production, their transport and their consumption. There has been an abundance of labelling initiatives, such as the EU's Ecolabel<sup>1</sup>, but there have been few formal evaluations of consumer response.

The research took place in a grocery store. Five categories of product were identified with a high-turnover and sufficient product choice: milk, spreadable butter, canned tomatoes, bottled water and non-perishable pet foods. 37 products were categorised and labelled according to their CO<sub>2</sub> emissions produced up to the point of sale. There were three labels: average (yellow footprint), lower than average (green footprint) and higher than average (black footprint). The classification was strongly influenced by the energy used during transport (for example, some bottled water was freighted long distances by road) and by the energy embodied in packaging.

Labels were in place for eight weeks and their introduction was communicated via leaflets and media coverage. The media interest was high and, in the first fortnight, gross store turnover increased by 12 per cent. Over the eight weeks, the share of black-labelled sales fell from 32 per cent to 26 per cent, whilst the share of green-labelled sales increased from 53 per cent to 57 per cent. Further analysis revealed three different trends of customer response. Firstly, if a green-labelled product is also the cheapest in its category, there was a strong consumer response and sales increased by about 20 per cent. However, if the green-labelled goods were not the cheapest then the response to labelling was weaker.

The study also found that if other factors dominate over carbon footprint and price, such as with perishable goods, labelling is unlikely to have an impact. For example, with fresh milk it appeared consumers had a strong preference for a particular size of package, which was more important than the footprint associated with this package. The researchers highlighted that the strong media interest could have affected consumer choice, however, the changes did appear to continue for the full eight weeks of the research once the media attention had diminished. They also suggested that the type of store – a convenience store – could influence the impact of labelling as people tend to buy produce in smaller quantities and for immediate use.

While the media attention and store type may have influenced results, the study still provided an insight into carbon labelling in a real-life context and there is potential for applying the findings to a broader context. The strong response of consumers when price and carbon are both low indicates that combining a carbon label and price incentive (via a carbon tax or emissions trading system) could be effective in encouraging sustainable consumption.

1. See <http://ec.europa.eu/environment/ecolabel/>

**Source:** Vanclay, J.K., Shortiss, J., Aulsebrook, S. *et al.* (2011). Customer Response to Carbon Labelling of Groceries. *Journal of Consumer Policy*. 34(1):153-160.

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**Theme(s):** Environmental information services, Sustainable consumption and production

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To cite this article/service: "[Science for Environment Policy](#)"; European Commission DG Environment News Alert Service, edited by SCU, The University of the West of England, Bristol.