

Science for Environment Policy

How do you measure something that's not there? The case of waste prevention

The challenge of measuring the 'absence of waste' makes it particularly difficult to monitor and evaluate waste prevention policies. Researchers have examined the strengths and weaknesses of nine methods of assessing waste prevention, and recommend a hybrid approach, which combines the best of many methods, as particularly valuable.

Waste prevention is a vital part of breaking the link between economic growth and environmental damage. In 2008, the total amount of [waste](#) produced in the EU was calculated to be 2.62 billion tonnes, or 5.2 tonnes per person, and this has since increased. Waste prevention, defined as reducing the amount and/or toxicity of waste, is therefore a pressing objective. The EU Waste Framework Directive¹, places waste prevention, rather than recycling, as a top priority, and requires Member States to develop waste prevention plans by the end of 2013.

The authors of the study suggest that effective monitoring and evaluation of waste prevention should be a key priority as part of these efforts, and examined five main approaches to assessing household waste prevention.

Self-monitoring schemes, where individual householders weigh their waste and record the data, were found to be a good motivational tool for increasing waste prevention. However, they can only be carried out with a limited number of individuals, data are often inconsistent and drop-out rates from these programmes can be high.

To monitor changing levels of waste prevention local authorities can also use data from waste collections from small groups of the population. This does return accurate data, which is extremely useful for policy development. However, the authors caution that groups must be representative of the whole population and that large numbers of households need to be included to allow meaningful statistical analysis.

An important step towards achieving waste reduction is to change attitudes which leads to changes in behaviour. For example, the authors identify the common confusion of recycling with waste reduction, as a particular problem. Attitude and behaviour surveys, which can include interviews and focus groups, as well as data on, for example, the number of compost bins sold, are valuable to policy development because they can provide an initial baseline, i.e. a picture of current behaviour, to compare against subsequent rates of change following policy implementation. Such data can also be used to design information campaigns. However, participants often fail to return surveys, which can hinder this kind of evaluation and monitoring.

'Point of sale' data, i.e. exactly which products are bought, is another useful source of information and can be used to identify how waste can be reduced even before reaching the consumer. For example, combining sales data with information on packaging creates potential for waste prevention through product redesign to be assessed.

Finally, the methodology identified by the researchers as having the greatest potential is a hybrid approach, which incorporates several of the methods already discussed. For example, after an initial survey to establish a baseline, using interviews or focus groups, changes can then be monitored using householder monitoring, which can help change attitudes, alongside waste collection monitoring, which can provide more accurate data.



30 May 2013
Issue 330

Subscribe to free
weekly News Alert

Source: Zorpas, A. A. & Lasaridi, K. (2013). Measuring waste prevention. *Waste Management*. DOI: 10.1016/j.wasman.2012.12.017.

Contact:
antonis.zorpas@ouc.ac.cy ;
antoniszorpas@yahoo.com

Read more about:
[Waste](#)

The contents and views included in *Science for Environment Policy* are based on independent, peer-reviewed research and do not necessarily reflect the position of the European Commission.

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.

1. <http://ec.europa.eu/environment/waste/framework/>