

Waste Generation, Recycling and Prevention

Addressing the issue of municipal solid waste is a challenge in many countries, and households are directly responsible for the generation of a large proportion of municipal waste. This book summarises results which improve our understanding of household behaviour with respect to waste, assisting policy makers in the design of efficient policies that induce people to minimise waste through waste recycling and prevention. This publication addresses key policy issues such as the impact of waste charges on waste generation and recycling rates and waste prevention efforts. The question of whether the presence and characteristics of recycling programmes (e.g. door-to-door, drop-off, frequency of pick up) significantly affect the generation of mixed waste for disposal and waste recycling is examined. The role of general attitudes towards the environment in influencing household behaviour is considered as well.

The main conclusions of the work undertaken can be summarised as follows:

- With regard to waste generation, results show that household waste generation is significantly affected by household characteristics including gender, age, education, location of residence, and household size. As such, changes in household living patterns and demographic attributes will have an impact on waste generation. For instance, continued falls in household size will result in increased waste per capita. These factors need to be taken into account in waste management planning decisions.
- Charge per unit of waste generated in volume terms has a significant impact on reducing waste generation. Unit pricing by volume also affects the rate of recycling. However, it has a limited impact on the decision to recycle or not.
- The provision of recycling services has an even greater impact on recycling and the quality of recycling collection systems (e.g. door-to-door versus drop-off) has a significant effect on recycling rates.
- There is a significant difference in the effect of collection of recyclables door-to-door, and drop-off systems. The costs associated with the former system are likely to be much greater, and this must be taken into account.
- Waste charges have little apparent effect on waste prevention, although this is an area which is difficult to address empirically.
- Stated concern for environmental matters and social motivations have an important influence on waste management decisions. These should be taken into account in policy design, e.g. through the use of “soft” instruments.

Figure 4.2. Relationship between waste generation and waste policies

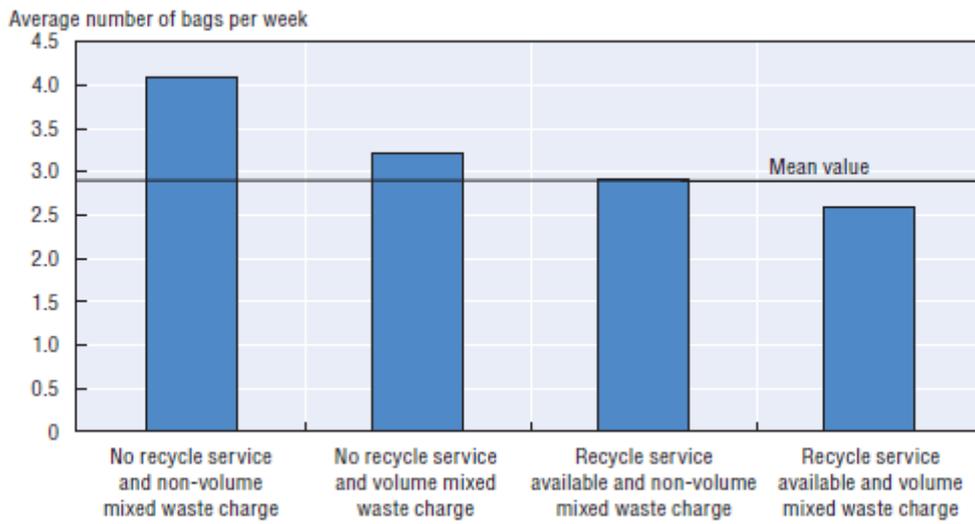
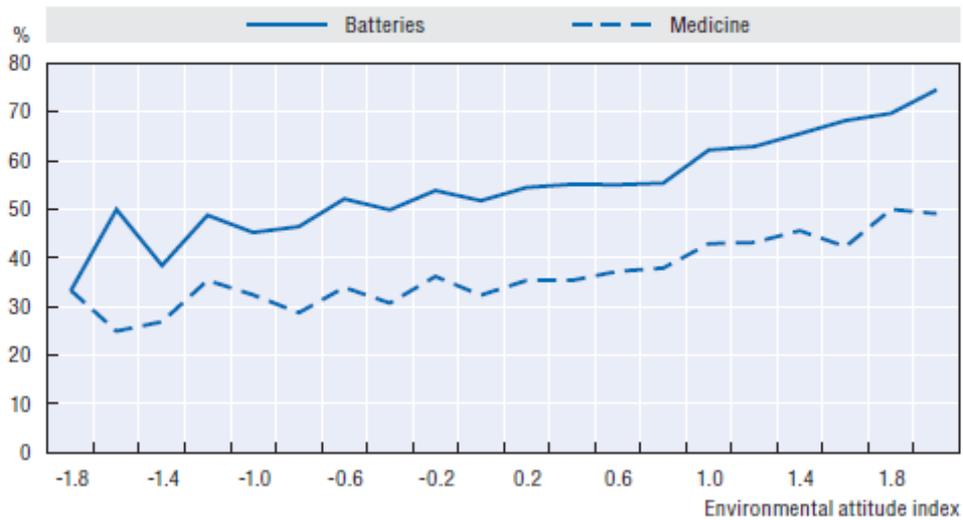


Figure 4.4. Relationship between environmental attitude and percentage of households reporting that they disposed of hazardous household waste properly



Source: *Greening Household Behaviour: The Role of Public Policy* (OECD, 2011)