

## Designing policy to influence consumers

### Briefing note 5: consumer behaviour and white goods

**W**hen designing policy aimed at influencing the purchase and use of white goods, such as washing machines and refrigerators, you must take into account the way in which people make choices. Consumer choice is strongly influenced by mental short-cuts and emotive factors – it is not just a rational assessment of information on quality and price. Often these short-cuts lead to biases, which mean consumers do not always buy the best product for them. Effective policy must work with these mental short-cuts and account for the many factors that influence consumer choice.

#### Those working on policy aimed at influencing the purchase and use of white goods should remember that consumers...

- **... read information when they perceive it as beneficial.** This means that for many consumers, labels are more effective if they translate energy efficiency into costs or savings. Where feasible, labels should provide the life-cycle costs of white goods, which indicate to consumers the potential savings over the expected lifetime of the product. Policy should also work with retailers to promote consideration of the life costs of white goods, rather than just the purchasing price.
- **... are very averse to loss.** Individuals want to avoid loss (or costs) more than they want to benefit from gains. Highlighting the costs associated with high energy-using white goods will be more motivating to consumers than focusing on the savings associated with low energy-using goods. It also means consumers find additional taxation more off-putting than a similar-sized incentive, such as a tax rebate. Requiring consumers to pay more (for example, higher VAT) for energy-inefficient white goods is likely to prove a more effective means of changing consumer behaviour than offering money-back rebates or incentives.
- **... are heavily influenced by in-store marketing** and by the price of similar products encountered while shopping. Policy should work with retailers to encourage price promotions and in-store offers that promote energy efficient white goods.
- **... in many countries are attracted to things that are 'free'.** This means that a white good, such as a washing machine, that offers something for free (for example, is free from VAT or provides a free extended warranty) will be much more attractive than a similar washing machine with a very low rate of tax or a cheap warranty, however marginal these extra costs.
- **... become attached to products once they own them.** This makes people reluctant to part with products they own, even if it would be cost-effective to purchase newer, more energy efficient models. 'Buy back' and 'trade-in' schemes, which allow consumers to trade in old for new, are effective ways of overcoming this attachment. The effectiveness of such schemes can be enhanced through the use of financial incentives.

## Make choices easier...

- **... by using recognition.** Consumer choice is often driven by recognition of products, brands or labels. Labels need to be consistent and easily recognisable, something which the current colour-coding system used within the European energy label will aid. Future labelling schemes should take advantage of the fact that consumers may already recognise 'A' rated products as the most energy efficient. A 'frontrunner' approach, whereby classes are updated periodically so that the most energy efficient products are always awarded an A label, would help to maintain this existing recognition.
- **... by making it easier for people to do their own research.** People are increasingly using the Internet and consumer guides to research the purchasing of white goods. Easy-to-understand price comparison sites, or other ways of helping consumers compare product options can highlight potential savings and encourage replacement. Consumers do, however, need to trust these sources. Policy has a role in ensuring the authenticity of these sources and working with independent, trusted providers of consumer information.
- **... through the use of standard models.** Default options are powerful tools because when consumers feel overwhelmed by choice or unable to make informed decisions they will often assume that the default is preferable. Ensuring that efficient white goods are offered as the default option when fitting new kitchens or moving into newly built homes will encourage uptake.
- **... by recognising the importance of intermediaries.** Intermediaries, such as sales assistants, can play a very influential role in the purchasing of white goods. Working with retailers and trade associations to ensure their staff and members are well-informed about the advantages (and potential long-term cost savings) of energy efficient white goods will increase the chances of these messages reaching consumers. Encouraging in-store and online retailers to give energy efficient appliances more visibility will also improve product uptake.

## Tailor your policies...

- **... in recognition that all people are different.** Consumers buy different products for very different reasons so one policy will not motivate all. A mix of policy options is likely to be required to achieve widespread changes in consumer behaviour.
- **... by ensuring they are based on specific consumer research.** Make sure you know how consumers will react to different formats of your policy instrument. Policy needs to be based on research that explores behaviour in different contexts.



## The way that consumers buy and use white goods

The nature of white goods means that consumers are subject to far fewer emotional influences than when buying other products. Consumers usually have limited emotional attachment to white goods; they tend to think of them in terms of their use rather than how they make us look or feel. Where a consumer is seeking to replace an old but working appliance, the high cost and use of white goods means they are unlikely to be bought on impulse. Consumers typically focus on price and efficiency, and recognise the EU energy label even if they do not fully understand the details. However, sometimes a white good will be needed quite quickly because an existing appliance has broken. In these instances, less time is available to reflect on the purchase. In all cases, a number of opportunities exist for encouraging the purchasing of environmentally-preferable white goods:

- **Price.** Consumers often find it difficult estimating the price of white goods. They are bought very infrequently and people often do not understand all of the different features that they have to offer. In such circumstances, consumers might compare the price to that of a friend's washing machine or to a recommended retail price (RRP) that is advertised in-store. They might also be guided by the price paid for their previous appliance. Technological progress may mean that the very first appliance someone considers will appear both cheaper and more efficient than might be expected.

The presentation of information can also affect the way in which a consumer reacts to it. For example, telling someone that an energy inefficient washing machine will cost them an extra €100 in energy bills will have a greater impact than telling them that an energy efficient washing machine will save them €100. This is because consumers are more averse to losses than they are to gains.

Consumers in many countries are also attracted to things that are 'free'. For example, if a fridge is sold with a free warranty, it will be more attractive to many consumers than a fridge with a very low cost warranty, however insignificantly low the cost of this warranty may be.

Finally, consumers may become heavily swayed by variations in features that are actually of little value to them. This is because consumers evaluate new products in relation to other easily comparable items. For example, if a consumer is presented with two dishwashers of similar price with little to tell them apart except that one has three extra washing cycles, the consumer is likely to choose the dishwasher with extra cycles, irrespective of whether they will ever need them.

- **Energy efficiency.** Since the introduction of the EU energy label in 1995, consumers have increasingly judged product performance on energy efficiency which tends to be conceptualised in terms of long-term cost savings. Where consumers are left to value long-term savings against increased purchase costs themselves, they apply very high discount rates to future costs. This means that the value of future costs is assumed to be very low which can lead to an underestimation of future savings. In the case of white goods, energy labelling is one attempt to standardise information on energy efficiency and the estimated energy consumption of a product.

In addition, labels do not always lead to more informed choices because it is recognition of the label, rather than a full reading of its information, that affects consumer choice. Although the label is intended to help consumers make more informed choices, consumers actually find it difficult to link energy consumption with cost. In the case of washing machines, individuals have been found to significantly over-value the cost advantage of products featuring an energy label, while tending to under-estimate the cost advantages of low energy consumption washing machines that do not carry a label. This adverse effect should be considered in policy design.

- **Design and technical innovation.** Compared to other products, the design of white goods has relatively limited impact on consumer choice. White goods tend to look relatively similar and have a low profile in people's kitchens. As such, manufacturers' marketing strategies tend to promote white goods by focusing on price and energy efficiency, rather than on branding or iconic features. Consumers are therefore likely to buy a familiar brand of white good because they rely on brand as a short-cut to speed up decision-making, rather than because they feel any particular brand loyalty.

In the case of refrigerators this is changing. The emergence of 'luxury' fridges (or large 'American-style' fridges) has partly been driven by manufacturers using bright colours and iconic designs to make their products status symbols. This allows the consumer to make a visual statement about their lives. There may be similar potential to use social influence and the desire for iconic statements to promote the most energy efficient appliances.

- **Choice.** When faced with too much choice, people have difficulty managing their decisions, and both satisfaction with the product and ability to make decisions are reduced. As choice increases, consumers actually consider fewer choices, process less overall information and evaluate information differently. Consumers may also be less happy with a decision when they consider their options in detail. This is because emotional attachment can result from too much consideration leaving the consumer missing the options not chosen. One way in which consumers might choose a product when faced with too much choice is by simply relying on one of the mental short-cuts such as choosing a recognised brand or label, or by being unduly influenced by information provided by retailers at the point of sale.
- **Information provision.** Consumers tend to compare products with reference to other products on sale. Retailers and sales personnel are highly influential in suggesting what consumers compare a product against. For example, retailers decide which appliances are on display in the show room, and sales personnel often propose what attributes the consumer should consider when makes their purchasing decision. Efforts to promote the sales of energy efficient appliances can therefore be aided by retailers promoting consideration of the life costs of an appliance, rather than just the purchasing price.

**The decision to replace white goods.** The maximum amount people pay to obtain a good is typically less than they would need to be paid to give it up; in short, we value something more once we own it. This trait also makes people reluctant to trade in old inefficient goods for newer, more efficient models. Consumers are likely to favour sticking to their old inefficient fridges and washing machines if they fail to properly weigh up the upfront costs against the long-term running costs. The European Association of Home Appliance Manufacturers (CECED) states that more than 188 million home appliances across Europe are more than 10 years old. Renewing these appliances represents a huge potential reduction in greenhouse gas emissions.

**Using white goods: choosing when to wash.** Social norms – the way in which we think others behave or we should behave – determine our attitudes to cleanliness, and therefore the frequency with which we wash our clothes. We may think of social attitudes to cleanliness and laundering as fixed but actually these have shifted significantly over time and may be further influenced by the right policies.

*The briefing provides a summary of evidence from behavioural economics and marketing relating to the purchasing of white goods. Full references for all of the evidence presented here can be found in the full project report 'Designing policy to influence consumers' from which a series of briefs has been produced, including an overview of consumer behaviour and product policy (Briefing note 1).*