

European Commission (DG ENV)

REFERENCE: ENV.G.1/ETU/2009/0079r

**EXPANDING THE EVIDENCE BASE FOR THE
DESIGN OF POLICY INFLUENCING
CONSUMER CHOICE FOR PRODUCTS AND
SERVICES WITH ENVIRONMENTAL IMPACTS**

Policy Briefing

30 May 2011

In association with



Contact BIO Intelligence Service
Shailendra Mudgal – Jonathan Bain

+33 1 53 90 11 80

shailendra.mudgal@biois.com

jonathan.bain@biois.com

Project Team

BIO Intelligence Service

Mr. Shailendra Mudgal

Mr. Jonathan Bain

Ms. Mary Ann Kong

Mr. Kurt Muehmel

Policy Studies Institute (PSI)

Mr. Ben Shaw

Ms. Kate McGeevor

Mr. Robin Vanner

Ecologic

Mr. Max Gruenig

Disclaimer:

The project team does not accept any liability for any direct or indirect damage resulting from the use of this report or its content.

This report contains the results of research by the authors and is not to be perceived as the opinion of the European Commission.

Designing policy to influence consumer choice related to products and services with environmental impacts

– POLICY BRIEFING –

Consumer policy can use a range of tools, such as financial incentives and disincentives, product and service labels, information provision, or combinations of these measures, to enable and encourage citizens, as consumers, to make sustainable choices.

Currently, consumer policies are frequently designed under the assumption that consumers act as 'rational' economic agents, hence policy interventions are frequently designed to remedy a market failure – for example a lack of information. However, policy makers should reconsider this perspective on consumer behaviour, as research from the field of behavioural economics and marketing strongly suggests that consumers do not behave like 'rational economic agents', but that they rely on mental short-cuts when making purchasing decisions.

This policy briefing, summarising extracts of the full report, discusses actions to achieve more effective design and evaluation of policy to influence consumer decisions for purchases that lead to environmental impacts, benefitting from this behavioural economics understanding of consumer decision making. The brief includes discussion of the need to effectively integrate evaluation and monitoring measures into policy, and summarises instruction provided in the report related to the design and testing of research experiments.

A first step for policy makers in the process of designing effective policy to influence consumer choice is to understand how consumers make their purchasing decisions in real life situations. The study identified several important drivers and other key aspects, some of which cover behavioural aspects often ignored in traditional consumer policy, that influence consumer behaviour, including:

- Concepts of behavioural economics, which considers social, cognitive and emotional factors when assessing the economic decisions of consumers (e.g. the impact of anchoring and adjustment, loss aversion, framing discounting, and endorsement).
- The presentation and framing of information: the way in which information is presented and the decision-making context can have a substantial impact on the choices made by individuals.
- Product differentiation: *Comparability* is one of consumers' most important demands. Consumers want simple and meaningful comparisons.
- Influence of society: People want to feel their behaviour is normal and thus subscribe to perceived norms.

- Consumer segmentation: Consumers do not think alike, being influenced by factors such as their religion, gender, age, socio-economic group, education, etc. However, groupings can be made to divide populations into generalised preferences – consumer segmentation is an approach that policy makers could potentially use to target particular audiences with specific policy tools that are best suited to address the drivers and preferences of that audience.

Once policy makers have an understanding of how certain types of consumers may react to the policy in question, hypotheses on consumer behaviour can then developed and tested through research experiments to gain further understanding about uncertainties related to the potential policy tool in question. Designing research experiments to test consumer behaviour also raises awareness about how behavioural and social sciences can contribute to policies by providing better understanding of consumer behaviour.

Several stages are involved from the the design of the research to the policy making process:

1. Real world issue characterisation: explore the issue in question from a real world perspective.
2. Understanding the issue from a real world perspective using the existing evidence base and possibly initial data gathered to understand the issue within a real world perspective.
3. Hypothesis development: when developing a hypothesis, it should be possible to use an objective method to test it.
4. Hypothesis testing including a pilot study: the hypothesis needs to be tested within a research trial.
5. Implementation / piloting: If the results of the experiment suggest that the policy would be enhanced by adopting behavioural elements, the policy might be developed based on this.
6. Review and revision: in light of the information gained through the policy implementation or piloting, the design of the policy can be reviewed and refined.

When designing any research trial or attempting to measure the impact of an intervention on consumer behaviour, there are a number of important key concepts to consider. These are discussed in full within the report, and include:

- The counter factual: the outcome that would have occurred had the intervention not been implemented.
- Sampling frame: the extent to which research is reliable and able to be generalised is heavily determined by the people (or ‘subjects’) that are the focus of the research itself.

The study identified a certain number of uncertainties about consumer behaviour that could provide areas of investigation for future studies and research. These uncertainties

are considered as priority, in terms of their potential to improve understanding around how consumer may react to certain policies:

- The potential for an accurate and reliable consumer segmentation model across EU: understanding the different groups of consumers, future trends in the evolution of the EU population and demographics, and how they would react to specific policy instruments is a key step in designing effective consumer policy. However, it is currently uncertain whether such models can be applied at the EU level.
- The effects of displaying price: consumer policy instruments often involve the use of financial instruments such as taxes and subsidies. The way in which a price change due to government intervention is displayed to consumers is important and can determine the effectiveness of the policy.
- Consumer behaviour in relation to specific products: depending on the type of product in question (e.g. vehicles, energy using products, food, cosmetics, clothing, etc.), different types of policies may be more effective.

When designing consumer policy, integration of evaluation and monitoring techniques also need to be considered. Policy evaluation can contribute to the better understanding of consumer behaviour and is beneficial both prior to the implementation of policies (ex-ante), where they can contribute to the design, and for analysis of existing policies (ex-post). Evaluation steps proposed include:

- Linking measures to policy: In a first step, it is essential to recognise that consumer policies at the EU-level or at the national level are not sufficiently specific to enable a direct evaluation of the impact of the policy on consumer behaviour.
- Linking measures to consumer behaviour: Once all the measures of a policy have been identified, it is possible to plan the evaluation on a per-measure basis. A set of research questions or hypotheses which articulate the predicted consumer responses to each measure should be developed. The main challenge is thus to determine which factors are relevant to which measure.
- Understand possible outcomes: different measures in different policy areas will entail different outcomes. It is essential to understand the potential outcome of a measure in order to find the correct data to assess its impact.
- Examine how to make use of all evaluation results and derive ex-ante predictions about the likely outcome of certain measures; a complex EU-level database could be set up to collect the data and allow for information sharing and more informed consumer policy-making.

To conclude, the study has highlighted how consumer targeted policies can be more effectively designed with knowledge from consumer behaviour research. However, key barriers to more widespread research into consumer behaviour in the EU, and effective use of this research, should also be addressed. The barriers include:

1. Incorporating consumer behaviour into decision-making is not common practice for policy makers, who do not always make the link between priority environmental issues and consumer behaviour.
2. Interdisciplinary research programmes are not common practice among universities and institutions, as research tends to focus on one specific area (such as transport or energy).
3. Retailer-academic collaboration is rare, and there may be barriers to overcome in terms of sharing of commercially sensitive findings.

Such barriers could be overcome by setting up funding requirements to promote more interdisciplinary research, that also include actors from the commercial and marketing sectors.

In summary, the study has presented the key drivers of consumer behaviour and identified a number of uncertainties about consumer behaviour that merit further research. Guidance on designing and carrying out consumer behaviour experiments, and on setting up policy evaluation frameworks, has been provided. The aim of this information is to encourage research into consumer behaviour and policy evaluation, in order to improve the effectiveness of policy to influence consumer choice related to products and services with environmental impacts.