

ARE ENERGY EFFICIENT APPLIANCES IMPORTANT FOR HOUSEHOLDS?

- Energy efficiency is an attribute importantly valued by households in their purchase of appliances.
- Households are aware of the label on appliances and declare it influences their purchasing decision.
- The current label is not providing the energy related information in an understandable unit of measure.
- Additional monetary information would better support the purchasing decision to integrate the running costs of appliances.

How useful are energy labels?

The household sector is responsible for about 25% of the total energy consumption in Europe and of the corresponding CO₂ emissions. A climate change mitigation policy promoted by the European Union (EU) is to increase the energy efficiency of energy-related products. The EU seeks to achieve energy savings of at least 27% by 2030.

It is observed that in many cases households invest less in energy efficiency than what may appear economically rational: consumers often fail to account for running costs during the life cycle of the product and undervalue future savings. Energy labels are commonly used to make households aware of future savings and consumption.

Citizens consultations in focus groups for the CONSEED project revealed that labels for appliances are not always well understood and not fully satisfactory to guide consumers in their purchasing decision. We tested this hypothesis as well as potential improvements in a survey.

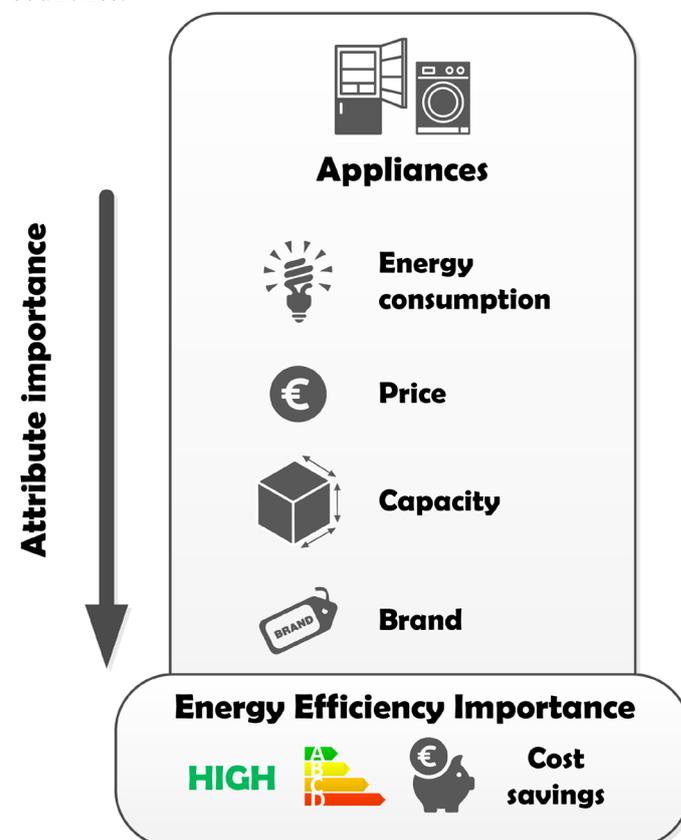
The CONSEED project

The CONSEED project is examining how important energy consumption information is in consumers' decisions. The researchers are running a range of focus groups, surveys, field experiments and discrete choice experiments with households and professional consumers from the services, agricultural and industrial sectors. These cover five European countries - Greece, Ireland, Norway, Slovenia and Spain.

The attributes of the purchasing decision

The results of the surveys on appliances, washing

machines in Spain and refrigerators in Greece show that energy efficiency is an important attribute in the purchasing decision. It is the most important in the case of refrigerators and the third most important for washing machines. Price and technical attributes such as capacity are also rated as important by households in both countries.



Importance of the attributes in the purchasing decision of appliances.

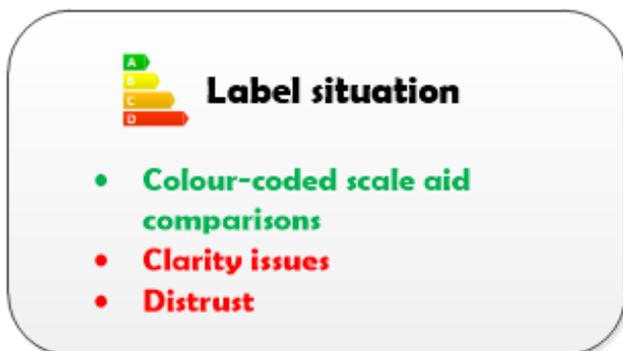
Attitudes toward energy efficiency

Households generally believe in the role of energy efficiency in reducing environmental impacts from energy consumption. In both countries they are willing to take a chance on new technologies to reduce their energy consumption, and respondents believe that buying a more energy efficient product would help to reduce their environmental impact.

However, differences regarding knowledge and financial barriers are observed between the two countries. In Spain, far fewer people declare being aware of the electricity price than in Greece (20% in Spain versus 80% in Greece). Financial barriers to upgrading the energy efficiency of the product are much more present in Greece than in Spain. In Greece 6 out of 10 respondents declare they could not afford an upgrade in energy efficiency, in Spain the proportion is close to 2 out of 10 respondents.

The diffusion of energy efficient appliances

The appliances label scheme is rather well known in both countries. More than two thirds of households are aware of the existence of the label scheme. The awareness is, however, significantly different across countries: 7 out of 10 respondents in Greece are aware of the refrigerator label versus 9 out of 10 respondents in Spain. In both countries, the label is a significant selling argument that influences the purchasing decision: 7 to 8 persons out of 10 declare the label influences the decision. The distribution of energy efficiency grades of appliances is significantly



Evaluation of the current EU label for household appliances.

different between countries. The most frequently observed grades are A+++ and A++ in Spain yet are A++ and A in Greece.

The current and potential monetary label

A certain degree of distrust is associated to the labels. The current label on appliances fails to provide an information understandable for consumers. The addition of



Evaluation of the potential monetary label for household appliances.

monetary information would help consumers to better understand the label and the running costs of the product in order to take a rational purchasing decision. However, the monetary information would not significantly improve buyers' trust in the label or would not change the belief that labels are exposed to manipulation.

Profile of a pro energy-efficient consumer

The characteristics of consumers more likely to value energy efficiency as a very important attribute are dealing with their concerns for the environmental footprint of the products, with their willingness to reduce energy consumption thanks to new technologies and with gender. Indeed, women would be about 8 to 9 % more likely than men to value energy efficiency very importantly. Pro technological progress people would be about 13 to 17% more likely to very important value energy efficiency and people worried about environmental footprint of the product would be about 11 to 17% more likely to very importantly value energy efficiency. More country or product specific determinants have been found: higher income and awareness of electricity price.

The CONSUMER Energy Efficiency Decision making project (CONSEED) does research to understand better how European consumers make energy efficiency decisions.

Do households and professional consumers pay attention to energy labels? What information are they looking for? We focus on three products: cars, appliances/machinery and buildings.

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CONSEED is led by Trinity College Dublin (Ireland), and includes four other research institutions: CICERO Center for International Climate Research (Norway), Basque Centre for Climate Change BC3 (Spain), University of Ljubljana (Slovenia) and Agricultural University of Athens (Greece).