IS ENERGY EFFICIENCY IMPORTANT FOR CAR BUYERS?

- Energy efficiency rated as very important by 45% of Norwegian car buyers.
- 91% agree that buying a more energy efficient car would reduce the environmental impact of their household.
- Expanding the current energy label for cars to include cost information would make the label easier to understand, would help understand energy use, and may be more effective in influencing behavior.

How useful are EU energy labels on cars?

The European Union has set itself a 20% energy savings target by 2020, and at least 27% by 2030. This can help consumers lower their energy bills and reduce climate change. Still, consumers do not always choose the products that would give them the largest energy savings over time. This gap between the energy savings potential and actual consumer decisions is called the "energy efficiency gap".
To bridge this gap, we need to understand the wide range of factors that potentially influence consumer decisions. So far, we know relatively little about how consumers use energy efficiency labels on appliances, buildings and cars, and whether the labels make them pay more attention to energy efficiency.

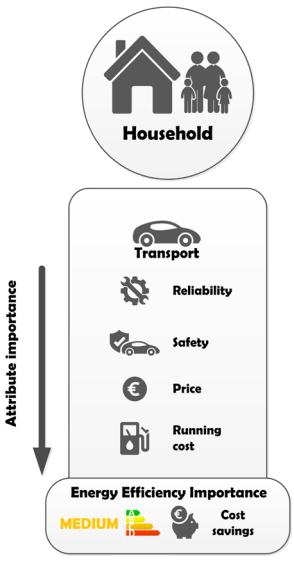
Comparable studies from other countries indicate that providing monetary information rather than information on physical energy/fuel use alone might be more effective. In the survey we explore how well this approach works in a Norwegian setting where financial incentives to choose energy (fuel) efficient cars are already very strong due to the tax regime.

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 will cover five European countries - Greece, Ireland, Norway, Slovenia and Spain. The survey in Norway, conducted in November 2017, had 1093 respondents.

Importance of energy efficiency

Energy efficiency ranked as the fourth most important factor in the Norwegian transport survey. 45% of respondents rated it as very important factor. The three top rated factors were reliability (75%), safety (64%) and price (50%). The figure below shows how this ranking compares to the other household product categories explored in CONSEED - properties and household appliances. The transport survey also showed that more than half of respondents strongly agree that they are aware of fuel prices and of their own car's fuel consumption. In some contrast to this, only 29% strongly agree that they understand how much fuel they would save if they bought a more fuel efficient car.



Energy efficency was rated less frequently as a very important attribute by car buyers than by buyers of properties or household appliances.

It seems that car buyers in Norway are aware of the environmental impact of the choice they make. Fully 91% of all respondents agreed (strongly or slightly) that buying a more energy efficient car would reduce the environmental impact of their household

Attitudes towards monetary labels

When consumers are trying to decide which new car to buy there are a wide range of factors that they must consider. One of the foremost is the energy use (fuel or electricity use) of the car, and the associated running costs that it will impose upon them.

The EU has mandated an energy labelling scheme that ensures consumers have information about the fuel use of new cars. However, the label does not include estimated energy costs, and as consumers are more familiar with cost information, it is possible that providing monetary information would lead more consumers to purchase energy efficient cars.

The survey explored attitudes towards both the current energy label, and an alternative label – shown to the right – that included cost estimates. Our results show that the alternative label is seen as more understandable, and would make it easier to understand energy use and calculate running costs. It is, however, only seen as marginally more trustworthy and safe from manipulated. Respondents are somewhat more convinced that the alternative label could influence their decision regarding which car to buy than the current label.

As the most important question is the effect on actual behavior, we will explore this further in CONSEED in two ways. First, we have conducted a survey experiment that allows us to calculate how much more consumers are willing to pay for more energy efficient cars when provided with the information on the alternative labels.

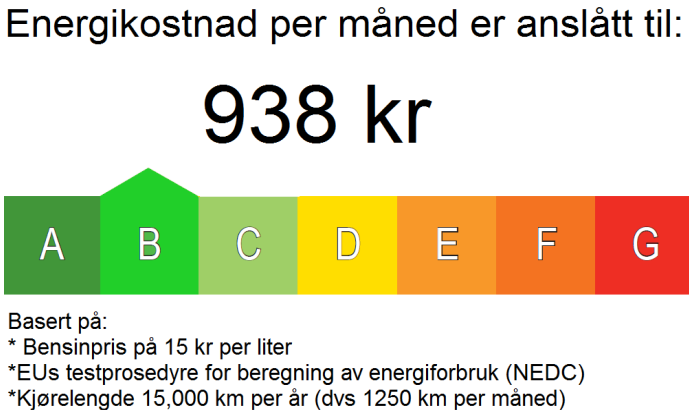


Illustration of the alternative label including monetary information. The text says «estimated energy costs per month», and the bullet points explain the assumptions the calcuation is based on.

Second, we are conducting an experiment with car retailers that may allow us to observe in practice how these labels influence consumer behavior. Combined with the insights from the survey this will help us draw important conclusions regarding the attractiveness of expanding current EU energy labels for cars to include monetary information on energy costs.

Insights from the survey

Norwegian car buyers rate energy efficiency as an important factor when deciding which car to buy. However, energy efficiency is competing with other concerns such as reliability, safety and price. The current energy labels for cars may help make energy efficiency a more salient factor, and could lead to consumers choosing more energy efficent cars. However, our results indicate that the labels might be more effective yet in influencing behaviour if they also include cost information. The main reason is that consumers can more easily relate to cost information, as they do so on a daily basis and in a wide variety of settings, than to physical energy use information, which is much more rarelely encountered in everyday life.

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).