POLFREE
POLICY OPTIONS FOR A RESOURCE EFFICIENT ECONOMY

POLICY BRIEF 2
MARCH 2016

Constraints to Resource-Efficient Consumer Behaviour

SUMMARY OF KEY POINTS

- Despite the resource dimension having a low salience amongst consumers, we find that many people are interested in pursuing resouce-efficient practices.
- People are not making consistent choices when it comes to resource efficiency.
- Resource consumption patterns are influenced by numerous factors that interact with each other: the availability of products, services and infrastructures, social norms and personal factors (values, preferences, attitudes, experiences, knowledge, location of work and home).
- A large majority of people support the policy goals of resource efficiency and energy efficiency, and express support for regulations towards such ends.

The POLFREE (POLicy options For a Resource-Efficient Economy) project explored drivers and barriers for a resource-efficient economy in Europe. The project investigated why resources have been used inefficiently, developed new concepts and paradigms for resources efficiency, and examined through modeling different policy scenarios for resource efficiency. This Policy Brief belongs to a series of five, listed below. These, and all other project outputs, may be found at www.polfree.eu

POLICY BRIEF SERIES

1 Understanding the Web of Constraints to Resource Efficiency in Europe – Lessons for Policy
2 Constraints to Resource-Efficient Consumer Behaviour
3 Constraints to Resource-Efficient Business Models and Practices
4 Global Governance for Resource-Efficient Economies
5 Policy Mixes for a Resource-Efficient Europe
6 Pathways to a Resource-Efficient and Low-Carbon Europe – Lessons from the Modelling

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Conclusion 1

There is a great interest among people to adopt resource-efficient behaviour... but mostly for non-environmental reasons

The motivation of people to engage in resource-efficient behaviour was studied in focus groups and examined in a survey in three countries: The Netherlands, Austria and Hungary.

THE SURVEY AND FOCUS GROUP ANALYSIS

Goal: to assess people's views on resource matters, their current consumption practices in several domains, (namely food, mobility and space heating), as well as their willingness and perceived barriers to change

Survey sample: 412 households in the Netherlands, 404 in Austria and 401 in Hungary

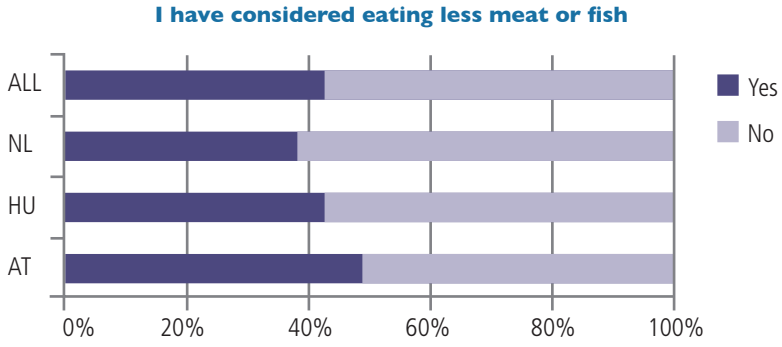
Type of data: panel data

Domains (for which behavior is studied): mobility, food and energy use for heating

Focus groups: 10 people in Austria and 12 in Hungary

Qualitative interviews: 6 in Austria and 6 in Hungary

Overall, people expressed a great interest in more resource-efficient practices. 42% of those who eat meat and fish expressed a desire to reduce consumption of these products.

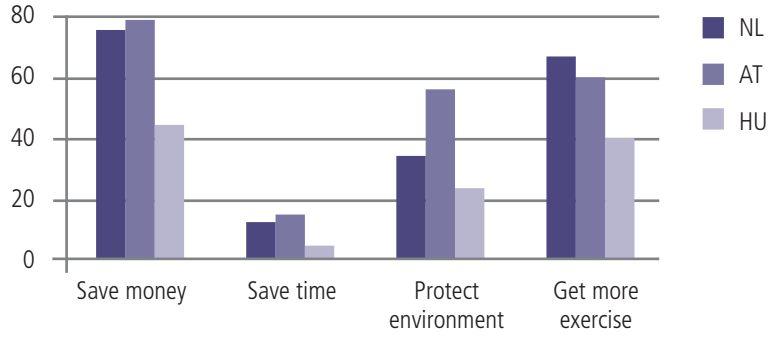


AT = Austria, NL = Netherlands, HU = Hungary

The main reasons for considering eating less meat and fish are health benefits (in Hungary), animal welfare (in Austria) and climate change (in the Netherlands). As for the reasons for not following this up with action, Dutch respondents were more likely to argue that they enjoyed eating meat and that it is healthy to do so. Austrians and Hungarians were more likely to indicate that other members of their household like meat. Hungarians indicated difficulties in changing food habits.

Likewise, a large proportion of car users expressed a willingness to reduce the use of their car: 40% in the Netherlands, 51% in Austria and 58% in Hungary. The most important drivers for this are 'to save money', 'to get more exercise' and 'to protect the environment'. Reducing environmental pressures is more important in Austria (57%) than the Netherlands (38%) and Hungary (28%).

Main reasons for wanting to use the car less



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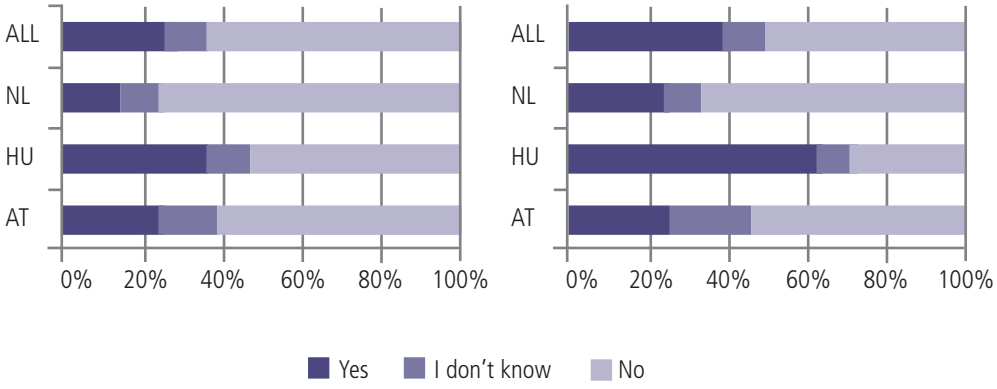
As for residential heating, a significant proportion of people said that they had considered investing in a new heating system and better insulation. Hungarian respondents were significantly more likely to state they had considered investing in a heating system and insulation. This may be due to the somewhat lower-quality housing structure and older heating systems in Hungary, and a lower average income (and thus lower ability to pay for higher heating bills).

Considered investing in a new heating system over the past year (in %)

Considered investing in better building insulation over the past five years (in %)



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Conclusion 2

People are not making consistent choices with regard to resource efficiency

In the survey analysis, but also in focus groups, it was observed that individuals do not consistently opt for resource-efficient options. People who drive a car may live in a very energy-efficient house and those who are living in energy-inefficient houses may not use a car. Buying local and seasonal food is not related to being a vegetarian. Within the domains of food, mobility and residential heating, a positive correlation exists between resource-efficient behaviour, but the correlation is rather low (below 0.3). Across domains there is less consistency in resource-efficient behavior. Waste separation is unrelated to car use but positively related to fuel-efficient driving behaviour. Seasonal food and organic meat/fish is not correlated with waste separation, car use distance, the energy efficiency of the building and turning down heat when airing the room and leaving the house, and the use of second-hand products.

One reason for the observed inconsistencies is that environmental motivations are a weak driver for resource-efficient choices for most people. Even 'green-minded' people balance sustainability with other considerations (convenience, costs, etc.).

Conclusion 3

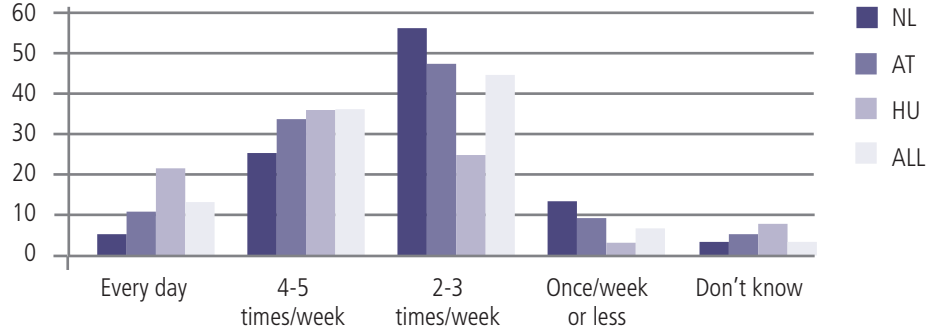
Resource consumption patterns are influenced by numerous factors that interact with each other

Resource consumption patterns are influenced by numerous factors. In POLFREE, factors affecting behaviour are grouped into 4 categories.

1. **Personal factors:** Individual characteristics, preferences, attitudes, experiences, motivation, knowledge, awareness, trust and time, location of work and home.
2. **Societal factors:** culture, norms, costs, social practices and traditions.
3. **Policy factors:** regulations that prevent more resource-efficient behaviour, unhelpful policies and areas in need of policy intervention (such as education).
4. **Organisational factors:** availability, market and supply, commercials and advertisement as well as infrastructure.

Car use depends on the quality of alternatives, the distance from work and the pleasure taken from driving. Meat consumption depends on personal taste preferences and perceived healthiness, but also on cultural norms. It is more normal to eat meat and fish in the Netherlands than it is in Austria and Hungary.

What do you consider a reasonable or normal frequency for people to eat meat or fish?



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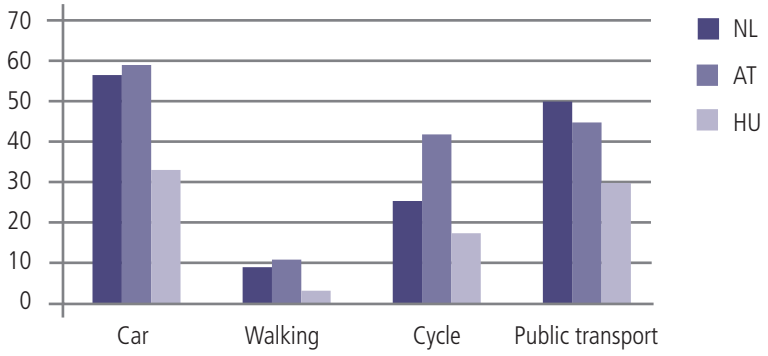
The reported use of regional, seasonal and processed food different greatly. We were unable to determine the precise reasons for this, but they have to do with eating culture and the availability of seasonal food in restaurants. Consumption of simple snacks throughout the day and a cooked meal for dinner is typical in the Netherlands. In Austria and Hungary, lunch plays a more prominent role in everyday life. Such dominant food patterns are deeply rooted in society, passed on from one generation to the next, and typically remain relatively stable over time. Younger generations are more likely to eat processed food than older generations (Backhaus et al. 2016).

The pattern of reported food waste is rather comparable across countries. The reported percentages are slightly below the 16% found by a study by the European Commission's Joint Research Centre (JRC) (which includes food waste from restaurants and schools) (Vanham et al., 2015).

In each country, car use is the dominant mode of transport, but for short trips (between 2 and 5 km) bicycles are the preferred mode of transport in the Netherlands (substituting for public transport in particular).

Modal split across countries for short distances (2-5km)



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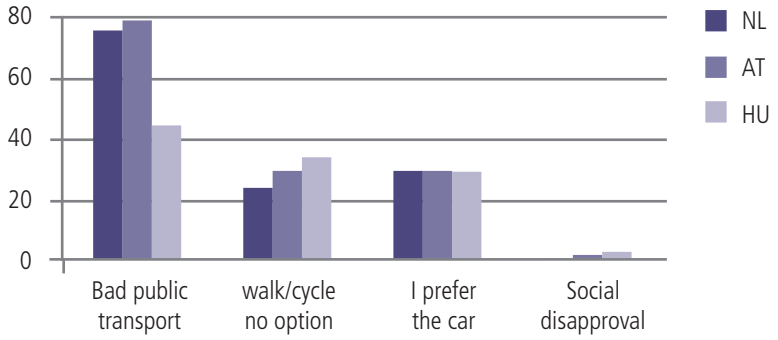
Reported barriers to a reduction of car use (amongst car users) are: poor public transport, preferences for the car and 'walking/cyclng not being an option'. Poor public transport was mentioned more often by respondents in the Netherlands and Austria than in Hungary, despite the former two countries have a higher-density public transport network. An explanation may be the expectations many travellers hold, as people accustomed to a high level of convenience (of individual car mobility) may appreciate public transport services less. Costs are the most reported reason for not-owning a car (56%), with 'care for environment' chosen by 15% or fewer of the respondents.

Barriers to further reduction of car use



The answers in the survey are based on closed answer categories. The interviews and focus groups were useful for deepening our knowledge of people's considerations and identifying deeper cultural factors. In the focus groups the following reasons were identified as working against resource efficiency: viewing animal as products instead of as creatures, individual preferences for convenience and comfort, a high mobility lifestyle and the subliminal influence of advertising and commercials.

The following statements (from interviews in Austria and Hungary) bring out the different frames and disparity of considerations pertaining to consumptive behaviour:

"As a small child I was vegetarian. Then I ate meat until I was 14 years old. The reasons for becoming vegetarian then were high resource consumption for meat and the ethics of industrial production of meat. I don't miss meat at all and I don't need it."

"Basically I think that no resources should be wasted. The main reason for this is financial: saving of money."

"I do not like restrictions on my freedom (...). Convenience is of utmost importance."

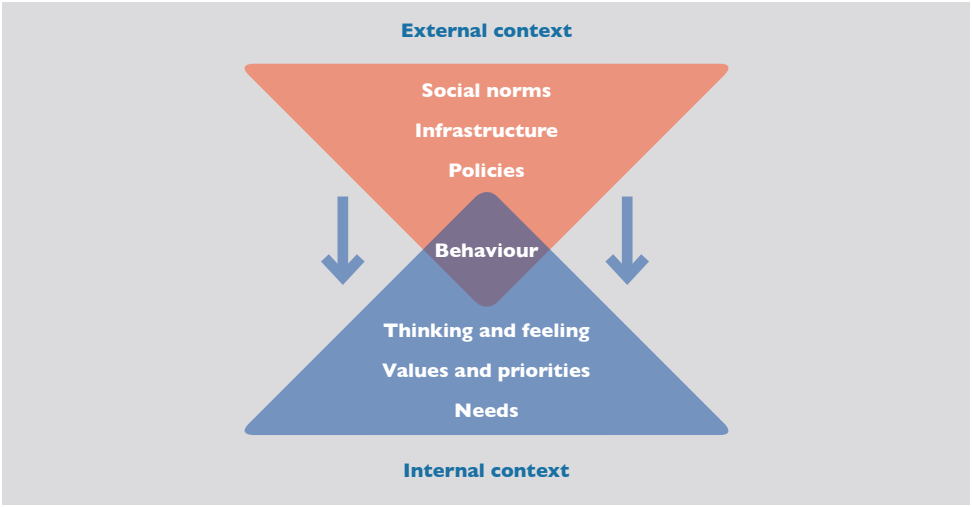
"My concern [about the environment] increases only if there is something in the media or something happens, which directly affects me."

"Other topics are currently more important for me. I have no time for contemplating such topics as environment or resource use."

Money, age and health are found to act as drivers and constraints for resource-efficient behaviour. Lack of money is a reason for not owning a car, but also restricting investments in thermal insulation. Young people were less frequent car users, but they were less likely to eat regional and seasonal food, more frequent eaters of convenience food and more likely to produce food waste. As for health, some consider meat to be healthy, others not. Cycling and walking was seen by some as healthy travel modes and as dangerous by others.

The results confirm the hypothesis that resource-efficient behavior is affected by external and internal factors which make up a web of constraints. This implies that there is a need for policy mixes for resource efficiency, well-aligned to these constraints.

Behaviour as influenced by the internal and external context according to the framework of InContext



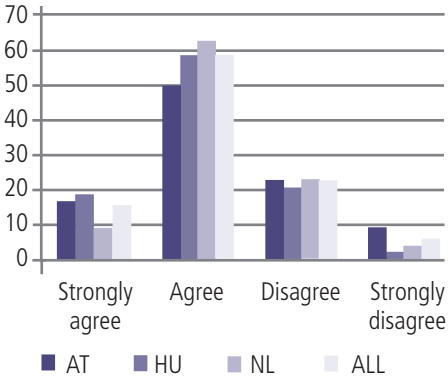
Demand and supply are part of causal loops involving positive stimuli and impediments, creating a web of drivers/enablers on the one hand and a web of constraints on the other hand. For example, the purchase of seasonal food depends on the availability of season foods in local shops. It also depends on culture, in the sense of widely shared assumptions, and family-based traditions and the extent to which these reflect on the practices of the individual (for a more detailed discussion we refer to Backhaus et al., 2015, and Policy Brief N.1).

Conclusion 4

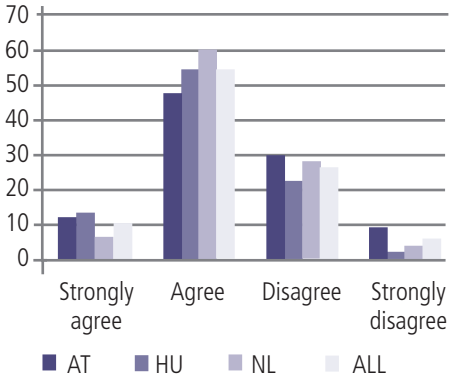
A large majority of people support the policy goal of resource and energy efficiency

In the POLFREE survey, people were asked about their views regarding the desirability of particular policies for reducing resource use. We learned that many people agreed that national or EU government should regulate resource consumption to safeguard the wellbeing of future generations, but there was also a good deal of disagreement. Highlighting that such policies could affect them personally through higher costs did not alter the results significantly.

Support for regulation on resource consumption to safeguard the well-being of future generations (in %)

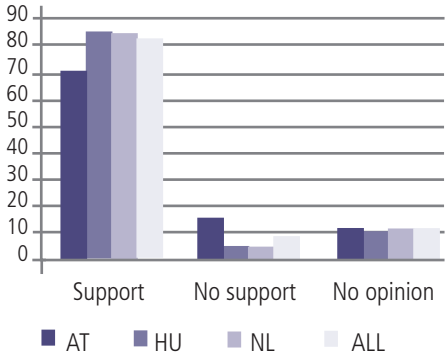


Support for regulation on resource consumption even if it requires changes in personal habits (in %)

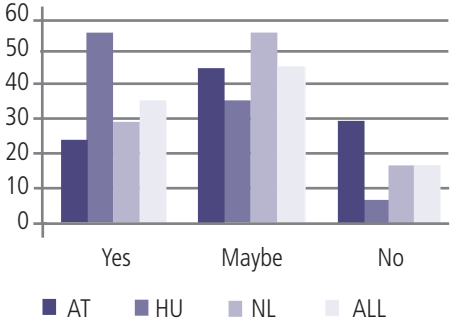


We also established that the vast majority of the respondents in Austria, Hungary and the Netherlands support the use of energy efficiency regulations for new appliances. The results also indicate a good deal of support for stricter regulations, particularly in Austria. Of the three countries, respondents in Hungary are found to be more in favour of stricter energy efficiency regulations than those in Austria and the Netherlands. In Hungary, only a small proportion of the respondents are against such regulations.

People's views on current energy efficiency regulations for new appliances (in %)



People's support of stricter energy efficiency regulations (in %)



An analysis of the responses across various demographic groups indicated that:

- Women tend to be more in favour of stricter regulations than men.
- Older people are more supportive of interventions to improve energy efficiency and reduce resource consumption than younger people.
- Higher education is positively correlated with support for energy and resource efficiency regulation (but only the findings for energy efficiency regulation are statistically significant).
- Support for regulation is not related to household income.
- People living in cities are more in favour of regulations for energy efficiency and resource efficiency than people living in villages and towns.
- Regulations for stricter energy efficiency are strongly supported by people "feeling a (spiritual) connection with nature" and those who "like to spend time in nature".
- People who value career and status, people that consider customs and traditions to be important and people who prefer safety and security over adventures and excitement were less in favour of stricter regulation, while people who agreed with the statements "I like spending time in nature", "I go out of my way to achieve goals I set for myself" and "I try to fit in much more than to stand out" are in favour of stricter regulation.
- People who think that future generations will be less wealthy than present generations and/or will experience a reduction in welfare due to resource depletion support regulation quite strongly. People who think that future generations will enjoy an increased well-being despite resource depletion also tend to support regulation but the results are not significant.

Further Reading

Kammerlander et al. (2014). *Individual Behavioural Barriers to Resource Efficiency* (2014), Deliverable 1.6 of POLFREE project, SERI, MU-ICIS and UCL http://www.polfree.eu/publications/publications-2014/Del_1.6_FINAL_20VERSION_clean_20lay-out_20-2.pdf

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