

Motive analysis regarding the choice of residential energy supply systems (RESS)

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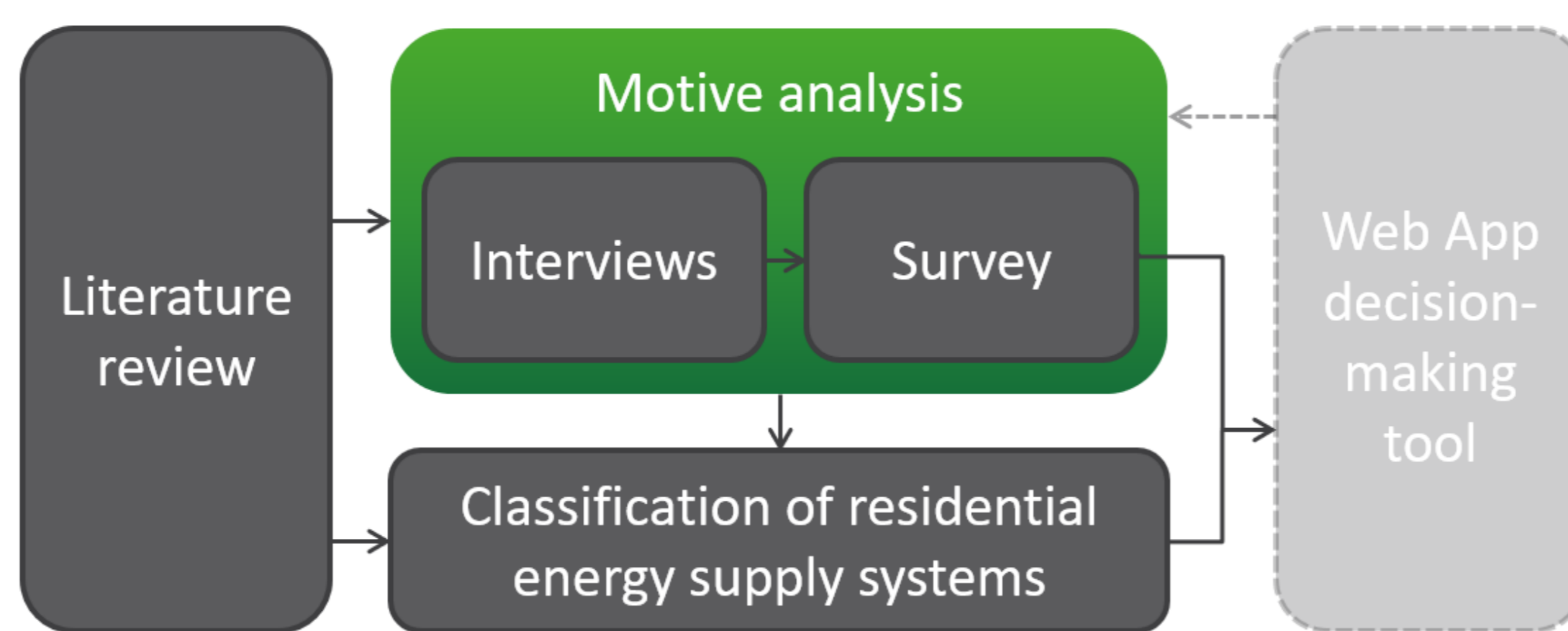
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Introduction

A better understanding of the underlying motives of consumers considering a new RESS (heating, cooling and electricity) can contribute to create favorable conditions for an energy transition. Therefore, the main objectives of this research project are to:

- Identify motives of consumers interested in or deciding for a certain RESS
- Assess the impact of gender and intersecting aspects, such as age, income and education on these motives.

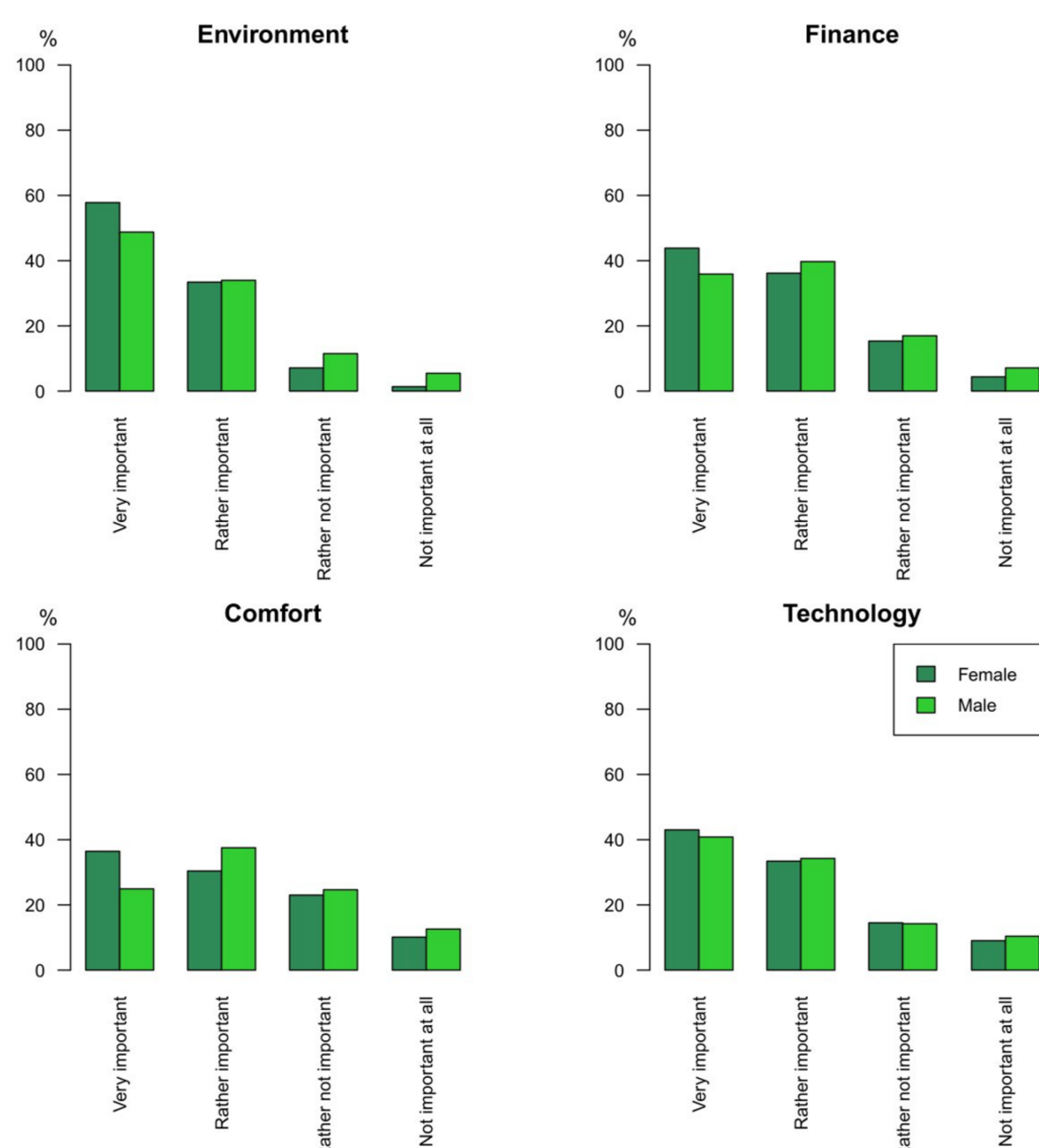
Methodology



Selected results of the survey

Regarding clustered motives, environmental aspects were considered most important by the respondents, even more by women. Significant differences in the rating by men and women were found for the following individual motives, which are more important to women:

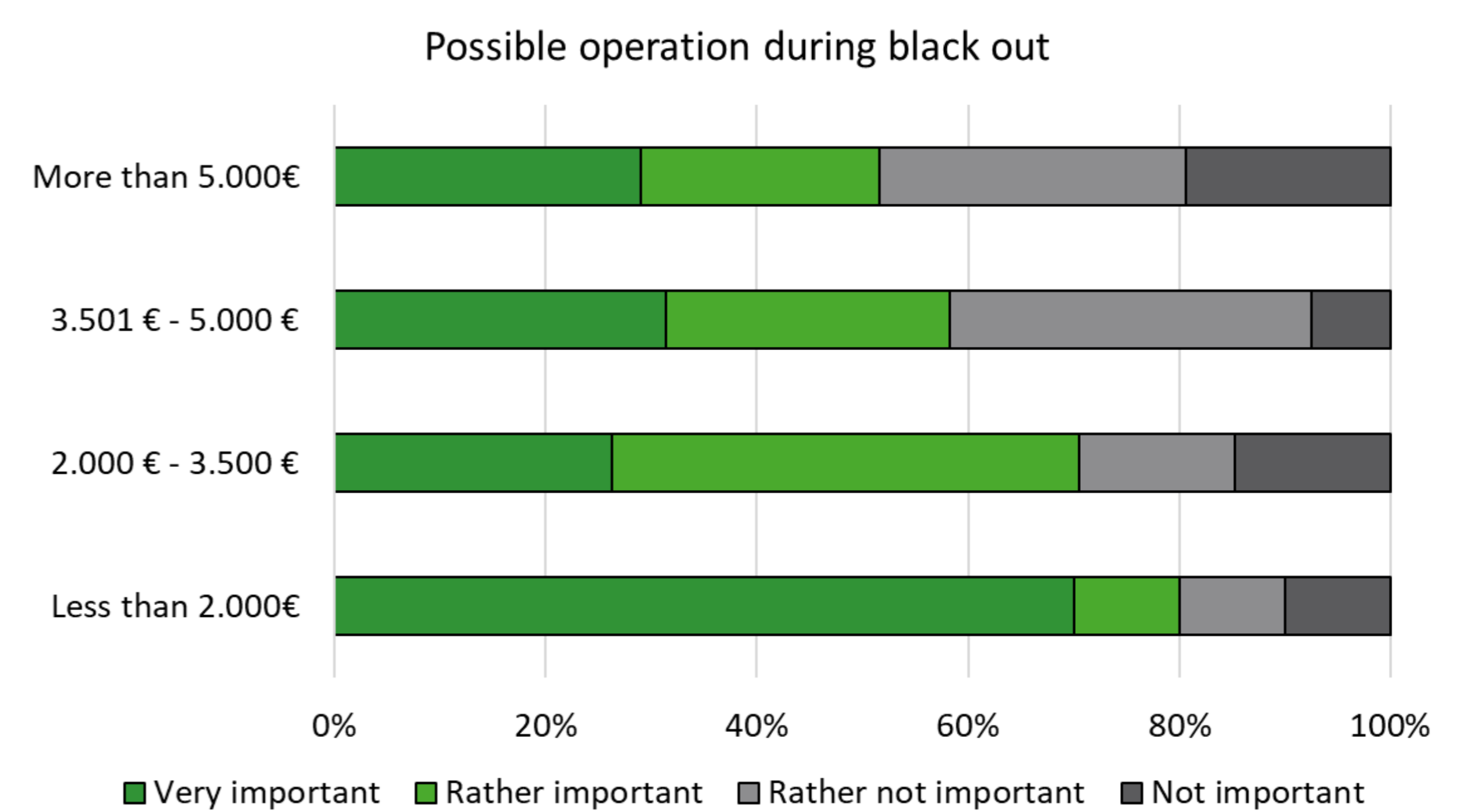
- Aesthetic appearance
- Possibility to use locally available fuel
- Possible operation during black-out
- Operation independent from electricity grid



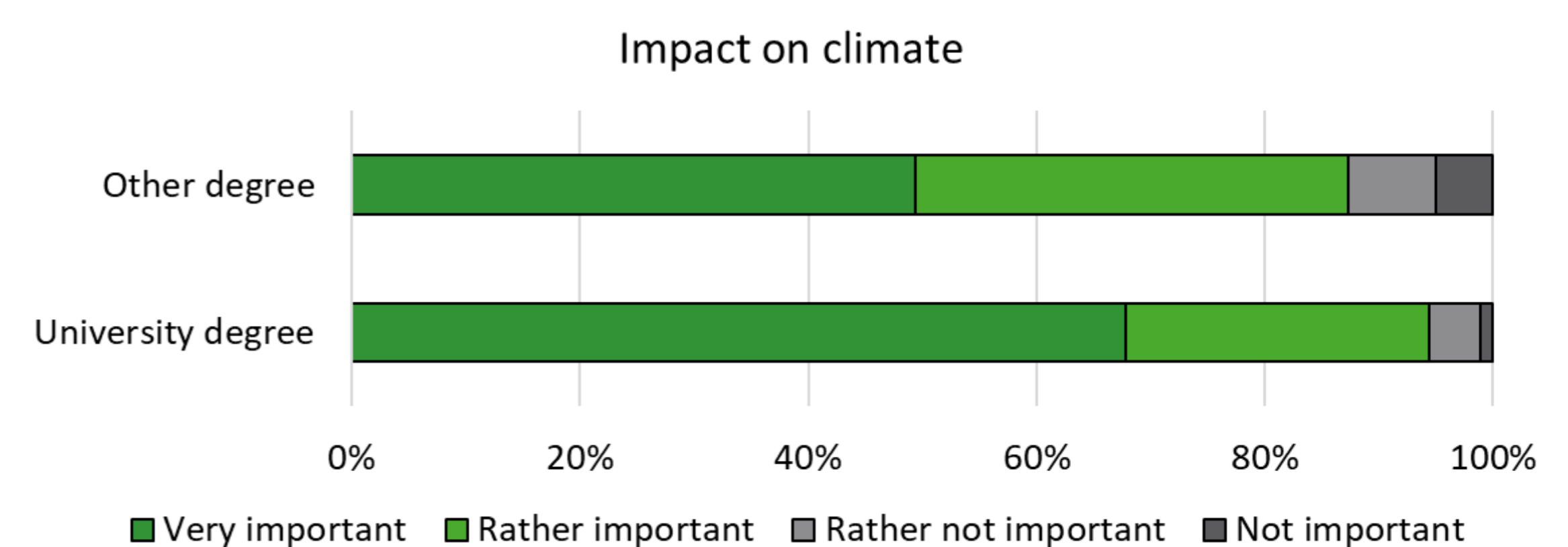
Survey

- Online, Nov. 2020 to Feb. 2021
- Assessment of 24 motives, clustered to
 - Comfort, environment, finance and technology
- Consideration of gender and intersecting aspects, such as age, income and education
- 169 respondents
 - 40% women, 60% men
 - Mainly between 30 and 45 years old
 - About 50% with university degree

A low monthly net household income significantly increases the importance of little space requirement, but also of enabling an autonomous life and the possibility of operating the RESS during a black out.



Regarding age, the possibility to obtain funding, the suitability to existing infrastructure and the possibility to use locally available fuel were significantly less important for elderly respondents (> 60 years). A university degree significantly increases the importance of using renewable fuels and the impact on climate.



Outlook

The Motiva project also investigated the impact of gender in relation to interest in/decision for certain RESS and the decision-making process. One aim is to develop a technology-open, unbiased online decision-making tool based on the optimization program OptEnGrid.

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