

FUEL POVERTY AND DECARBONISATION

Fuel poverty is a longstanding problem that has a number of implications for individuals and society in terms of physical and economic health. Equally, decarbonisation has become a matter of extreme urgency, the fate of many individuals and societies dependent upon its success.

RESEARCH QUESTIONS

1. What prevents people from optimising the energy efficiency of their home?
2. How can these obstacles be overcome?

AIMS

To facilitate the adoption of energy saving technologies to (a) reduce the prevalence of fuel poverty and (b) move localities towards decarbonisation.

OBJECTIVES

1. Identify a demographic most affected by fuel poverty.
2. Establish to what degree the installation of energy saving technology could alleviate their situation.
3. Determine the specific barriers to installing energy saving technology (e.g., cost, education, availability of assistance, etc.).
4. Generate six design concepts that could be used to overcome these barriers.
5. Subject the six design concepts to testing.
6. Select three design concepts to further develop.
7. Subject the three concepts to further testing.
8. Select one design concept to further develop.
9. Establish a delivery/distribution pathway for the intended design.
10. Create a prototype to test and refine the design concept.
11. Establish a feedback loop for quick iterations and evolution of design concept.
12. Deliver a final design for deployment to target audience.

PURPOSE

My intention is to address two distinct but related issues, namely fuel poverty and decarbonisation, such that those most in need become aware of how to reduce energy bills and save money and progress is made towards meeting national decarbonisation goals (cf. Isle of Man Action Plan for Achieving Net Zero Emissions by 2050).

TARGET AUDIENCE

Early research indicates that single parents are among the people most affected by fuel poverty. Particularly, single parents of low-income households may struggle to adopt/embrace energy saving technologies. The reasons for this are yet to be established.

SUBMISSION TYPE

The final report will be of an applied research nature.