

# Research and analysis: Study of over-consuming household cold appliances

Cold appliances account for approximately 10.5 TWh of electricity consumption in England.

Previous studies by government indicated that a significant number of cold appliances consume much more electricity than expected, however, the sample was small.

The study was undertaken to investigate the proportion of cold appliances that over-consume. It estimates the amount of extra electricity consumed and the impact on bills, in order to help consumers understand how they can minimise costs. The study also examines the causes of over-consumption and makes design and operational recommendations for minimising this. Finally, the study also includes analysis of the electricity consumption of a small sample of appliances sent for recycling.

This study investigates the reasons and comprises 4 reports:

1. Study of over-consuming household appliances – this monitors around 1000 domestic cold appliances
2. Supplementary report 1: Literature review
3. Supplementary report 2: Energy consumption of cold appliances sent for recycling – an assessment of the electricity consumption of 100 appliances sent for recycling
4. Supplementary report 3: Inspection of 100 appliances due for recycling – an assessment of the potential for reconditioning appliances sent for recycling.

Data monitored for the study will be made available on the [UK Data Archive](#).