

4 Did HEEUP change purchasing decisions?

In assessing the impact of the HEEUP program it is important to ascertain to what extent HEEUP led to hot water upgrades that would not otherwise have occurred. In other words, would the participants have upgraded to the same system even if HEEUP had not assisted them?

Two approaches have been used to assess whether HEEUP participants changed their purchasing decision as a result of the program:

- 1 HEEUP participant survey and installation results
- 2 HEEUP case studies

HEEUP SURVEY AND INSTALLATION RESULTS

Summary of results

HEEUP shifted upgrades to a planned decision

Without HEEUP, (73%) of HEEUP participants would not have changed their hot water system until it broke down. HEEUP brought forward these households' upgrade decisions and made them a planned upgrade. In doing so HEEUP was able to prevent ad-hoc decisions, when there is limited opportunity for households to weigh up the relative costs and benefits of different hot water systems.

HEEUP participants upgraded to a more efficient system than they would have without HEEUP

HEEUP also shifted participants' upgrade choices to more efficient hot water systems. Without HEEUP, only 19% said they would have upgraded to solar and 7% to heat pump. With HEEUP participants opted for more efficient systems, with 47% purchasing solar and 27% purchasing heat pumps.

HEEUP also shifted participants to their ideal upgrade choice

Participants final upgrades were more in line with their overall preference than they would have been without HEEUP.

Introduction

HEEUP aimed to change the hot water system purchasing decisions of low-income households by bringing them forward as a planned upgrade, which increased the opportunity of a shift to more efficient solar or heat pump system.

Data and methodology

To assess whether the program shifted purchasing decisions, participants' views on upgrades were compared with their final upgrade choice.

During the home visits, energy engagement officers asked the HEEUP participants three questions to ascertain whether they had changed their purchasing intentions as a result of the program:

- 1 If not for the HEEUP program (this program), when do you think you would have replaced your hot water system?
- 2 If not for this program, what type of hot water system would you have replaced your existing system with (taking into account what you know of the existing price and with no additional rebates)?
- 3 Cost aside what would be your preferred hot water replacement?

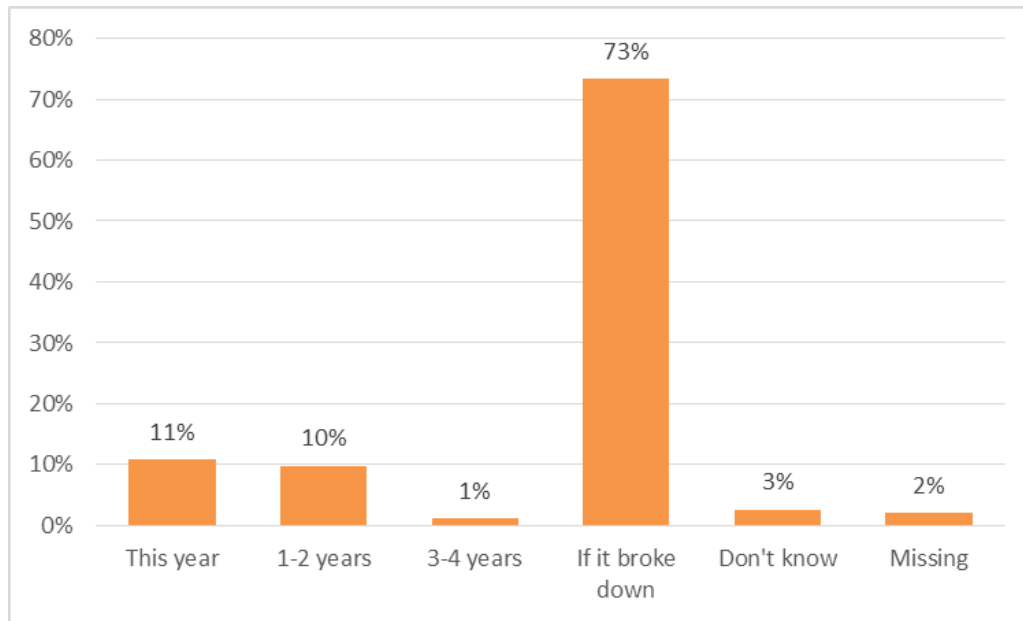
These questions, part of the collection of CSIRO/DIIS data, were asked of 548 standard HEEUP participants and 19 emergency replacement participants. Community housing tenants were not asked the questions because they do not control the upgrade decision. Independent installers were not asked the questions either because they decided to upgrade independently of HEEUP.

Actual upgrades, recorded in the administrative data, were compared with this survey data.

Results

HEEUP brought forward upgrade decisions

The overwhelming majority of responding participants (73%) said if not for HEEUP they would not have replaced their hot water system until it broke down. Another 22% said they would have replaced their system within 4 years, including 21% within 2 years (Figure 20).

Figure 20: When households would have upgraded their hot water system

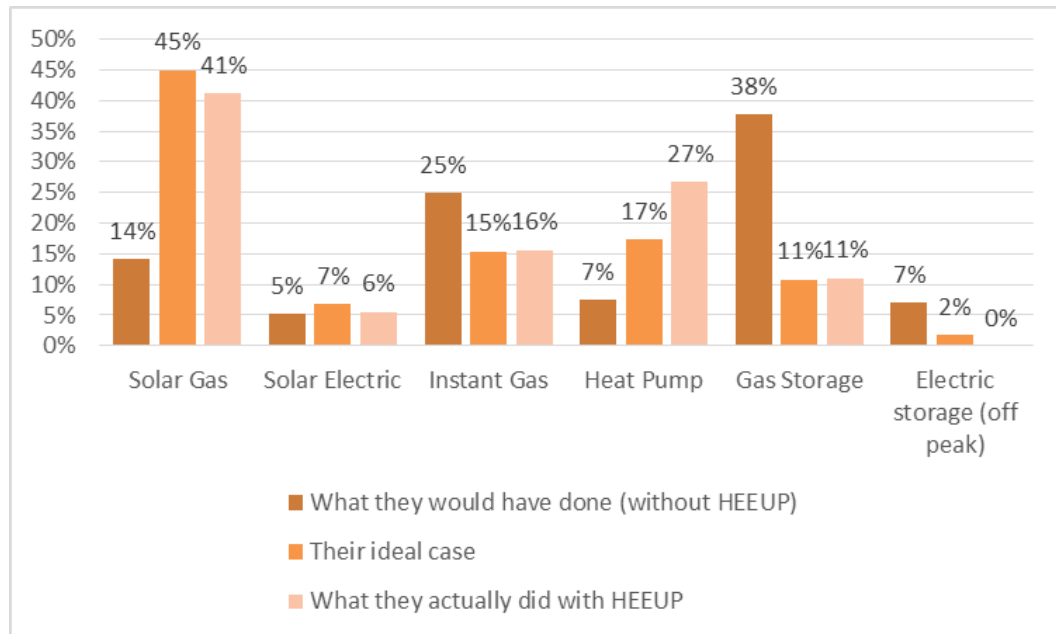
n=416

Participants shifted to preferred options: solar and heat pump

If not for the HEEUP the majority of participants said they would have upgraded to natural gas storage (38%) or instantaneous (25%) hot water systems. Only 19% would have upgraded to solar (gas or electric boosted) and 7% to heat pump, which are the more efficient systems.

By contrast when participants were asked what their ideal upgrade would have been, 52% selected solar hot water as their ideal upgrade and 17% selected heat pump.

The actual upgrade choice the participants made closely aligned with their ideal for the solar hot water preferences, with 47% upgrading to solar. However, there was an increase in the number of clients who actually installed heat pumps (27%), compared with those who chose it as their ideal (17%). The actual installations of instant gas (16%) and gas storage (11%) aligned closely with the proportion who chose it as their ideal upgrade (15% and 11% respectively).

Figure 21: Changing preferences as a result of the HEEUP intervention

n=416; 2 missing results

Discussion

Participant responses indicate that for the majority of households, HEEUP brought forward hot water system purchasing decisions from an emergency breakdown scenario to a planned early upgrade.

This change was a key objective of the HEEUP program. HEEUP was able to circumvent a last minute upgrade decision. At such times, with pressure to replace the broken system, there is often limited opportunity for households to fully assess the relative costs and benefits of different hot water systems.

This had important implications:

- 1 More households were able to upgrade to the type of hot water service they wanted
- 2 More households were able to upgrade to highly energy efficient systems

Further research

While no attempt has been made to assess the savings achieved by early upgrades in the HEEUP program, it would be possible to model the age of the replacement system and the estimated working life of the corresponding systems. This would enable a calculation of the savings associated with an early upgrade to a more efficient system.