

7 Conclusion

The Home Energy Efficiency Upgrade Program (HEEUP) was a Low Income Energy Efficiency Program (LIEEP) trial funded by the Department of Industry, Innovation and Science, which assisted 793 households in greater Melbourne and regional Victoria to upgrade to more efficient hot water systems.

This report outlined the delivery of the HEEUP trial and the related research. This is important because there has been little study of programs designed to increase the uptake of higher cost household fixtures, such as more efficient hot water systems, by low-income households.

The trial sought to address information, trust and capital barriers to upgrades in low income households. It showed that owner occupier households will change their purchasing decision to a more efficient hot water system if they are provided with independent information, a subsidy, and the offer of a no interest loan.

Other significant barriers to energy efficiency upgrades in low income households were not addressed including the landlord-tenant split incentive barrier in private rental households.

Major recommendations

Recommendation 1: New program to address barriers to energy efficiency and energy savings in low-income households

HEEUP showed that:

- *with information, a subsidy and the option of a no interest loan, low-income home owners will switch to a more efficient hot water system;*
- *households have varying levels of need;*
- *high-needs households require greater support.*

The HEEUP This approach can be applied to other major energy efficiency upgrades.

Recommendation:

Introduce a program to assist low-income Australians improve the energy efficiency of their homes and so lower their energy bills. The program should:

3. Provide three critical enablers:
 - targeted information from trusted sources on energy efficiency upgrades and residential solar photovoltaics (solar pv)

- subsidies for efficient hot water (solar, heat pump and instant gas), residential solar pv, and selected other upgrades (including insulation and highly efficient appliances such as refrigerators)
 - access to low-cost loans.
4. Provide graduated levels of support according to household need:
- base level: all households should have access to relevant information on energy upgrades and this should be tailored for segments of the low-income population including pensioners and CALD communities
 - intermediate level: access a subsidy to reduce the up-front cost of an upgrade, a no interest loan to help manage the out-of-pocket expense, and the option of in-depth, independent decision support
 - high level: increased subsidies with minimal or no co-payments, where clear hardship can be established. This may be needed for households with high energy consumption relative to income, or in energy billing hardship, or with specific health or disabilities that may place them in energy hardship, or who are low income and have specific energy efficiency needs, such as a highly inefficient hot water system

Recommendation 2: Accelerate action in community housing

Community housing providers and tenants wanted energy efficiency upgrades and considerable scope exists to engage them further. Information and brokerage may be needed to do this.

Recommendation:

Introduce an incentive scheme to accelerate the uptake of energy efficiency upgrades in community housing. Funding could focus on the marginal additional cost of installing more efficient fixtures as part of regular maintenance.

Consideration should be given to identifying a broker to assist community housing providers plan a transition to efficiency upgrades of existing housing.

Other recommendations

Recommendation 3: Subsidise solar and heat pump to keep householder contributions low.

Upgrades to solar and heat pump systems were achieved in 65% of participating households with the following subsidy mix:

- \$2,300 to \$2,900 for upgrades to solar (with a householder contribution around \$2,000)

- \$2,000 to \$2,300 for upgrades to heat pumps (with a householder contribution between \$1,600 and \$1,800)

Recommendation:

Provide subsidies of up to \$2,900 to keep householder contributions for solar hot water below \$2,000 and for heat pump below \$1,800.

Recommendation 4: Widen the options available for improving energy productivity

Many HEEUP participants reported they were interested in upgrades other than hot water: rooftop solar photovoltaics (solar PV) was identified as a particular interest.

Recommendation:

Future policy and programs should facilitate householders' access to the most appropriate solutions for reducing their costs and improve energy efficiency including:

- energy efficiency upgrades in existing dwellings
- rooftop solar.

Recommendation 4: Facilitate low cost financing

Low cost financing through NILS was an important enabler for some HEEUP participants. Concessional loans are particularly suitable for low-income home owners when used in conjunction with a subsidy.

Recommendation:

Future programs or policy should fund concessional loans that enable low-income households to improve the efficiency of their homes. Consideration should be given to existing schemes such as the No Interest Loans Scheme (NILS) and council concessional loans (such as Darebin Solar Savers).

Recommendation 6: Quantify the multiple benefits of energy efficiency upgrades

HEEUP found participants had a range of motivations for improving energy efficiency. The program also contributed to a series of non-energy benefits including greenhouse gas emissions reductions, improved amenity, improvements and wellbeing and reduced stress; however, these were not quantified.

Recommendation:

Further research should be funded to quantify the multiple benefits of residential energy efficiency upgrades and develop valid and reliable assessment tools. Specific attention should be given to the benefits for health, wellbeing, and reduced stress.

Recommendation 7: Partner with not-for-profits

The BSL was trusted by HEEUP participants because it is a known, not-for-profit community services provider. This had two benefits described by participants: a demonstrated capacity in engaging with low-income households and communities and a commitment to the best interests of the householder, unlike for-profit service providers.

Recommendation

Opportunities for not-for-profit organisations to provide energy efficiency services to low-income and vulnerable households should be developed. This will expand the reach of energy efficiency programs and address trust barriers.