

Sustainability decisions in Australian households

HOUSEHOLDS REPORT THAT THEY HAVE MADE SIGNIFICANT CHANGES TO WATER AND ENERGY USE OVER THE PAST THREE YEARS. HOUSEHOLDERS SUPPORT STRATEGIES THAT ENCOURAGE VOLUNTARY CHANGE BROUGHT ABOUT BY INFORMATION, INCENTIVES AND SERVICES RATHER THAN THROUGH PRICING OR TAX MECHANISMS.

KEY POINTS

- Respondents expressed overwhelmingly positive attitudes to water and energy conservation and waste minimisation, with the average responses falling between 'quite good' or 'extremely good' on a seven point attitudinal scale.
- Survey respondents reported that a range of water and energy conservation practices had become a habit and reported a high level of commitment to engaging in these practices in the future.
- In Brisbane, 57 per cent of householders reported that they had reduced their water use over the past three years, 41 per cent reported that they had reduced energy use in the same period, and 40 per cent reported that they had reduced the amount of waste they produced.
- Differences in attitudes towards water and energy conservation related mainly to household tenure. Owners were more inclined to engage in everyday sustainability behaviour as well as install water and energy saving appliances. Differences across household income groups were few. Single person households engaged in conservation through everyday actions, whereas multi person households and families were more inclined to install efficiency devices. Older people and those less educated were reportedly more inclined to curtail water use.
- Key triggers for households to engage in everyday sustainability practices included: good feedback about appropriate water and energy usage; media reminders and incentives; cost savings associated with conservation; and bottom up education processes.

This bulletin is based on research by Dr Kelly S Fielding, Ms Alice Thompson, Dr Winifred R Louis and Associate Professor Clive Warren of the AHURI Queensland Research Centre. The research explored the water and energy use and waste reduction attitudes and practices of Australian households and how these have changed over time.

CONTEXT

The threat of climate change has placed environmental sustainability at the centre of policy agendas. Governments around the world, including Australia, are developing policies aimed at reducing carbon emissions and promoting sustainable practices.

Australia's per capita greenhouse gas emissions are among the highest in the world and households account for a fifth of Australia's greenhouse gas emissions. Consequently, there is a need to understand how to facilitate more efficient use of resources through installation of devices that promote resource conservation and efficiency (efficiency actions) and through changed household practices (curtailment actions).

This project sought to understand the key factors that underpin household sustainability decisions, the ways that more sustainable decisions can be promoted, and to explore householders' responses to current and future policy options.

RESEARCH METHOD

The theoretical framework adopted in the research was an extended version of the theory of planned behaviour, a well established model of decision making. The theory provides a methodology for investigating the social and psychological determinants of behavioural intentions and actions. The research comprised two parts:

1. A quantitative online survey of 1194 Brisbane and Melbourne households. In relation to water and energy conservation, a distinction was made between everyday water and energy saving actions, and efficiency actions (one-off installation of efficient appliances).
2. Qualitative interviews with 22 householders who varied in their tenure, household composition, and household income level.

KEY FINDINGS

Positive attitudes, high levels of commitment and normative support

Householders in the study had very positive attitudes to water and energy conservation and waste minimisation practices. These attitudes were based on beliefs about the positive economic and environmental benefits of these practices.

Respondents perceived relatively high levels of support to engage in conservation practices from key people in their lives. They also had a sense that others in the community were engaging in practices to conserve energy and water—especially water conservation—and to minimise waste.

Respondents had high levels of perceived control and confidence in their ability to engage in conservation practices. Confidence and perceived control was greater for everyday behaviours to conserve energy and water than installing energy and water efficient appliances.

Differences across tenure, household composition and household income groups

Although the differences across tenure, household composition and household income groups on attitudinal and behavioural measures were not always clear or consistent, the strongest differences emerged between owners and renters. The general pattern was for owners to engage in more water and energy conservation practices than renters.

The differences across household composition groups were less frequent and less marked; where they did emerge the general pattern was for single person households to conserve through everyday actions whereas multiple person and family households were more likely to conserve through installing efficiency devices.

Differences across household income groups were few; where they did emerge they indicated more positive attitudes and more sustainable behaviour from low income households than medium or high income households. However, the level of education was a good predictor of energy conservation efficiency intentions.

Barriers and facilitators to household sustainability

The factors most often mentioned as encouraging everyday sustainability practices were:

- Receiving positive feedback about usage.
- Developing 'good' habits.
- Media reminders and incentives to 'do the right thing'.
- Cost savings associated with conservation.
- Bottom-up education processes.

The main factors mentioned as encouraging the installation of efficient appliances were rebates and labelling.

The key factors that were cited as barriers to everyday sustainability actions were:

- The difficulty of breaking old habits.
- The behaviour of others (e.g. household members who take long showers).
- A household situation not conducive to fit energy and water efficient appliances.
- Living in rental properties, where the cost of retrofitting energy and water efficient appliances was difficult and costly.
- Lack of access to government rebates.

Acceptance and support for household sustainability policies

In response to a set of policies aimed at promoting household environmental sustainability, respondents were much more supportive of strategies that facilitated voluntary change (installing efficient appliances, labelling, government campaigns) than of strategies that used pricing mechanisms (taxes, increased price of water, energy, waste collection) as a way of promoting positive change.

Strategies involving regulation were more supported than the pricing policies but less than the voluntary change policies. Householders also deemed the tax and pricing strategies to be less fair than other strategies and these were most often nominated as unfair to vulnerable groups in Australia.

Reported changes in water and energy use and waste minimisation

Households reported that intentions to engage in efficient waste, water and energy practices in the future were high. There was some evidence of greater commitment to everyday water and energy conservation practices rather than installing

water and energy efficient devices. Respondents reported that they always engage in many of the everyday practices aimed at conserving water and energy, largely out of an acquired habit.

The practices with the lowest uptake were: taking shorter showers; using grey water on the garden; switching off appliances at the power point; and switching off unused computers and electronic equipment.

The majority of respondents reported they had installed water efficient appliances including: low flow taps and showerheads; hoses with trigger or a timed watering system; water efficient washing machines; and dual flush toilets. The majority of respondents had also installed compact fluorescent lighting and energy efficient white goods. Only a small minority (between 5% and 12%) had installed solar hot water or solar panels. Householders indicated a reluctance to implement changes in energy conservation practices such as switching off appliances at the wall.

Practices aimed at minimising waste were less established than water saving practices however, reusing plastic bags was the only practice that a majority engaged in all the time. Householders who were interviewed reported that the biggest changes had been using one's own bags when shopping and avoiding disposable products.

Householders reported that they had, over the past three years, reduced their water and energy use and the amount of waste they produced, with a majority (between 57% and 62%) in Brisbane and Melbourne reporting decreased water use. The key reasons cited for decreased water use were awareness of environmental threat (e.g. drought), government regulation (e.g. water restrictions), environmental concern, and awareness of ways to save water. The major reason provided for reductions in energy use was awareness of ways to save energy. For waste reduction, awareness of ways to reduce waste and environmental concern were the key reasons cited.

POLICY IMPLICATIONS

Moving households towards sustainability is a process of ongoing social change. Despite householders' preferences for voluntary change policies, the likelihood is that a mix of regulation, pricing, and voluntary behaviour change will provide the most appropriate triggers and signals to achieve household sustainability.

Significantly, current policy approaches already reflect this mix and the research suggests the effectiveness, in the main, of these approaches.

The research clearly indicates that strategies likely to be the most successful are those that:

- Promote environmental concern and awareness.
- Foster positive attitudes.
- Encourage the emergence of social norms supporting sustainability.
- Provide householders with knowledge and awareness of how to go about being sustainable.
- Overcome the very real economic constraints that households face in their efforts to become more sustainable.

Participants in the research suggested that there is a role for regulation even though it does not appear to be effective as a major driver for change. Policy responses that address the barriers to environmentally sustainable practices should continue to be developed. Where they already exist (e.g. rebates that address cost related barriers), these policies should be maintained and in some cases enhanced, reinstated or extended.

Consideration should also be given to directing policy towards private rental investors to respond to the barriers private renters experience in their efforts to achieving household sustainability.

Policies need to continue to focus on making sustainability practices easier to implement through technological changes and information. Information assists in highlighting advantages and addressing perceived disadvantages of household sustainability actions and can help develop more positive attitudes to sustainability practices.

Policy responses that communicate to the general community real life sustainable practices could also encourage greater engagement in this area. For example, recent Brisbane and Melbourne water conservation campaigns (e.g. Target 140, Target 155) are powerful examples of providing both goals and descriptive norm feedback. Finding out that others in the community save energy or recycle or minimise waste sends a message that these are sensible and effective things to do.

FURTHER INFORMATION

This bulletin is based on AHURI project 20550, *Household attitudes and behaviours in relation to environmentally sustainable resource use*.

Reports from this project can be found on the AHURI website: www.ahuri.edu.au or by contacting the AHURI National Office on +61 3 9660 2300.

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