

## **How the Department of Housing is addressing energy and water use and conservation**

Presentation to Shelter NSW conference, 'Climate change', University of Sydney, 15 November 2007

By Mark Singer – Manager, Asset Policy and Technical Advice, Asset Performance Unit, of the Department of Housing

Climate change is already affecting low-income households in New South Wales, with extreme weather, people moving from drought-affected rural towns to coastal areas and cities, water and energy tariff increases, food price increases, and health impacts.

Utility charges over the next decade are increasing, due in part to climate change. Ironically, this improves the financial basis for energy and water efficiency investment.

Many tenants lack the financial resources to meet price increases, or to adapt to the impacts of market tools such as emissions trading. Tenant households are aware that over-consumption is the major driver of global warming and are keen to do their bit to contribute to solutions, although their modest lifestyles contribute little to climate change.

The Department of Housing is committed to supporting its client households adapting to climate challenges and the environmental sustainability of its operations. The NSW Government houses 127,000 low income households in social housing, in a portfolio of some 140,000 dwellings. The Department of Housing's purpose, 'helping to build a stronger community by providing housing solutions for people in need', is the basis for addressing environmental impacts on social housing households.

The Department is developing a corporate framework for environmental sustainability and climate risk. The environmental sustainability of the dwelling portfolio is a key to managing climate change risks.

Energy and water savings are being achieved through dwelling efficiency improvements, pilots and trials of renewables, demand management, consultation and advice, tenant endorsement and support, stakeholder partnerships, and corporate arrangements.

Public housing households pay for electricity, gas and water. Efficiency improvements are paid for by the Department, and lower bills benefit tenants. Although debate continues about the bottom line, in a sustainability context the costs of efficiency improvements can be seen as an investment in 'climate proofing', household viability and social stability, as well as contributing to the environment in reduced emissions.

NSW and Federal governments now subsidise energy efficiency improvements through the national Mandatory Renewable Energy Target, the NSW Renewable Energy Target and the NSW Greenhouse Gas Reduction Scheme (GGAS). The Department is holding discussions with the Department of Environment and Climate Change NSW about their Climate Change Fund Residential Rebate Program assistance.

Housing NSW has been piloting a number of initiatives to improve energy and water efficiencies including:

- Blacktown Solar City participation with Solar hot water and photovoltaic systems,
- South-West Sydney solar hot water installation pilot,
- Blandville Court large solar hot water system.
- EnergyMatters pilots, partnered by AGL and WorkVentures,

- Building Stronger Communities program initiatives,
- Designing Out Maintenance pilot projects with water and renewable energy efficiencies,
- A grant program for nongovernment organization and Council green initiatives in social housing communities,
- Expansion of community gardens,
- publicity campaign and household advice on water and energy efficiency in the *Your Home* newsletter.

Since water charges were introduced in December 2005, overall water consumption has fallen by 9%, assisted by the WaterFix program that has retrofitted 70,000 dwellings to date, and is funding another 23,000 across the State. Public housing tenants have reduced their water use from 25% more to 8% more than private tenants. Some 20 kL are now saved annually in each dwelling. Department savings are reinvested in water retrofits, and for building, purchase or upgrading of 30,000 additional dwellings over 10 years.

Inefficient old and secondhand tenant appliances have higher utility bills and repair costs. Zero interest loans to households for replacement energy-efficient appliances are being explored by utility companies in consultation with Housing NSW, such as the EnergyAustralia FrigAssist pilot.

The adoption of energy contracts with time of use tariffs (peak, shoulder and off-peak) needs to be trialed to identify potential impacts on tenants. Smart meters are being trialed in public housing in the Blacktown Solar City project.

To address future water utility charges, the Department is looking at further water saving measures such as rainwater tanks plumbed to fittings, grey water use, low-water cisterns, appliance efficiency and additional metering.

The increasing impacts of demand management on low income households will be an ongoing issue. The Department's client services refer clients with payment difficulties to utility services to avoid disconnections. Advice, training and support help tenants to take advantage of energy efficiency improvements provided by the Department. The Department's quarterly newsletter, *Your Home*, provides information and tips on energy and water use and saving.

Energy and water efficiency programs provide opportunities to inform client households, and support behaviours that take advantage of energy-efficiency. The Department's maintenance program is potentially a vehicle for supporting client sustainability practices.

User-pays issues are high on social welfare agendas as subsidies to low-income households are removed. Housing NSW's structure and consultation processes allows grass roots contact with tenants and access to decision-makers within the Department, providing a degree of self-management and ownership for tenants on climate change.

Partnerships reduce energy and water use, such as with maintenance contractors, the WaterFix program, and EnergyMatters pilots, providing access to a large household market and leverage for partners to achieve shifts in energy and water issues and the capacity to 'climate proof' the portfolio.

Stakeholder relationships with client households and communities make a difference to environmental sustainability generally, and water and energy use specifically.

Corporate initiatives include researching the likely impacts of a national emissions trading scheme on its operations, an insurance review of climate change risks, a triple bottom line analysis of Housing NSW activities, a Water Management Unit, and leadership to ensure that sustainability issues are integrated into Department practice.

A sustainable future will become more attractive as our values change, consumption moderates, and our ecological footprint shrinks. The Department's clients have a head start in understanding how to live sustainably, and sustainability can only look better when shared with the rest of the community.