

# Facing

Newsletter of Beacon Pathway

July 07



## Smarter Homes now up and running!

The latest addition to a suite of websites designed to provide independent authoritative information to homeowners and industry was launched on 21 June.



Smarter Homes is for anyone who owns or rents a home, is looking to buy or build a new house or is renovating their existing home. It gives clear and objective advice on how to design, build and renovate homes that use less energy and water, cost less to run, and are warmer, drier, and healthier to live in.

Smarter Homes provides information on how to design a house which:

- is energy efficient (heating, retaining warmth, appliances)
- is water efficient (plumbing, re-use, appliances)
- has a healthy indoor environment (warm, no mould or mildew)
- uses passive design solutions to make the most of the sun's free heat and energy.
- creates less waste in construction and during occupancy
- uses materials which are renewable, recyclable and less costly to the environment

It provides wide-ranging tips from simple things people can do to improve their home at little or no cost, to easy fixes and worthwhile investments that need the input of building professionals. There are plenty of examples, case-studies and tools to help people make the right choices for their specific projects.

Smarter Homes was commissioned by the Ministry for the Environment and is a collaborative project between key agencies from the public and private sector. It was developed by Beacon Pathway Ltd in conjunction with Consumers' Institute.

Smarter Homes was developed to form a wider resource in combination with two other websites: Consumer Build ([www.consumerbuild.org.nz](http://www.consumerbuild.org.nz)) – a one-stop-shop consumer advice on building, renovating and maintaining homes; and Level ([www.level.org.nz](http://www.level.org.nz)) - a more technical resource for industry professionals developed by BRANZ Ltd.



Beacon's GM, Nick Collins, and Consumers' Institute CEO, Sue Chetwin, check out the website on launch day

[www.smarterhomes.org.nz](http://www.smarterhomes.org.nz)

Beacon Pathway is a collaborative research consortium of organisations with a considerable stake in the quality of the residential sector: Building Research, Scion, Waitakere City, Fletcher Building and New Zealand Steel

## Homesmarts – advice and information about your home

Every home is different, and so are the needs, wants and budgets of the people who live in them. There is no simple ‘one-size-fits-all’ solution to improve the performance and comfort of *your* home.

Recognising this, Beacon Pathway has developed the **Homesmarts** tool to give people individualised advice on how to make their home warmer, healthier, cheaper to run and kinder to the environment. It’s a quick, easy way to find how a particular home measures up to recommended standards and to learn about simple steps that can be taken to create a better living environment.

The user is asked a number of easy-to-answer questions about their home and its occupants, perceived problems in the home, building or renovating priorities, and budget. They can then choose one (or all) of three options:

- **SMART HOME TOUR**

Users can take a quick tour of a smart home and compare rooms in their own home (living areas, bedrooms, kitchen, bathroom/laundry, exterior and garden/outdoor spaces). Individualised charts are then generated to show how rooms in the user’s home compare with recommended standards.

- **HOME HEALTH CHECK**

People are asked to provide details about their home to determine how comfortable and healthy it is to live in, and whether it is costing more to run than it should. A number of variables are considered: temperature, water use, moisture/humidity, air quality, lighting, noise, and safety/security.

- **GET ADVICE**

Here users are given advice specific to their needs and home. **Homesmarts** considers the variables of the user’s individual home, budget and project and offers top suggestions for improvements. Some involve simple actions that can be taken at no cost; others involve investments that will pay for themselves through lower running costs or other household benefits like improved family health.

Homesmarts can be accessed from the Smarter Homes website ([www.smarterhomes.org.nz](http://www.smarterhomes.org.nz)) or directly by visiting:



[www.homesmarts.org.nz](http://www.homesmarts.org.nz)

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## Beacon’s Stakeholder Symposium presentations now available

At the end of May, Beacon held a Symposium in Wellington to share our research with stakeholders. It was a great opportunity to meet and discuss the issues with others involved in sustainable housing. Attendees came from a variety of organisations: central government agencies, local councils, industry (e.g. business owners, representatives of industry bodies, IPENZ) and NGOs engaged in a variety of ways with sustainable housing.

Thank you to all those who attended. We look forward to holding further symposia in other parts of the country.

The presentations from the Symposium are available on Beacon’s website at:

[www.beaconpathway.co.nz/research+symposium.aspx](http://www.beaconpathway.co.nz/research+symposium.aspx)

Beacon recognises that New Zealand's 1.4m existing homes are a priority for bringing New Zealand's houses to a high standard of sustainability. We've started addressing that through a ten house retrofit project in Papakowhai. As part of the project, we've reviewed what other retrofit programmes are underway or completed in New Zealand and overseas in the energy and, most recently, water areas.

## Water retrofit programmes

Beacon's **Demand Management through Water Retrofit Programmes** report considers the breadth and scope of demand management water conservation/retrofit initiatives taking place within and across New Zealand.

Access it online at  
[www.beaconpathway.co.nz/research+reports.aspx](http://www.beaconpathway.co.nz/research+reports.aspx)

It shows that, at present, there is very little effective or comprehensive strategic activity in this area, and that few councils have identified and implemented programmes to significantly reduce annual water consumption per capita at the household level.

The report also details some of the initiatives being used in other countries including those facing more immediately obvious and pressing water scarcity and supply issues. In particular, most cities in Australia have now identified significant reduction targets for annual water consumption per capita and have initiated a broad range of measures and programmes to reduce water consumption. Impressive water savings from the Sydney programme are highlighted.

### Sydney Water

The 2005-06 Water Conservation and Recycling Implementation Report summarises some of the key residential achievements for the latest financial year as being:

- Sydney's water leakage reduction initiatives inspected 18,011 kilometres of mains in 2005-06 achieving savings or more than 18 billion litres of water per year
- Almost 320,000 homes have now been fitted with water savings devices under the WaterFix programme, achieving savings of more than six billion litres per year
- Almost 25,000 rainwater tank rebates have now been paid saving almost 1 billion litres of water per year
- Almost 30,000 Department of Housing homes have now

been fitted with WaterFix devices, saving more than 600 million litres per year

- More than 37,000 'Do-It-Yourself' Water Saving Kits have now been distributed to residents throughout Sydney, the Illawarra and the Blue Mountains, saving more than 250 million litres per year
- More than 7,000 washing machine rebates have now been paid, saving more than 140 million litres per year
- Almost 1900 properties have participated in a programme to determine the irrigation needs of gardens – and a web-based plant selector has been developed to identify low-water using plants for the garden.

## Progress in Papakowhai

Ten houses in Papakowhai have been selected for sustainable retrofits in the Papakowhai NOW Home® Renovation Project. The houses are located in a middle income suburb of Porirua, Wellington and all of the homes are owned by the occupiers. The ten houses include single and two storey houses with a range of sizes, materials, and designs, and a variety of household types are represented.

The homes have now been retrofitted with energy, waste and indoor environment quality improvements and water efficiency improvements will be put in place in August-September 2007.

Prior to any changes being made, the ten houses have all been monitored for energy and water use, temperature and humidity. The homes will be monitored for the following 12 months to enable a clear comparison between the before and after performance of the homes.





**Sustainable Building Conference (SB07) 2007**  
New Zealand – 'Transforming Our Built Environment'  
14<sup>th</sup> - 16<sup>th</sup> November 2007 Auckland

SB07 New Zealand aims to expand the adoption of sustainable practice in the design, construction and use of our built environment. This is NZ's only conference and trade exhibition bringing together a wide range of industry experts, leaders, stakeholders for a stimulating three days focusing on 'Transforming Our Built Environment'. At this event you will:

- learn more about sustainable building from national and international experts;
- hear from the developers of some of the most innovative new buildings and retrofits;
- gain practical insights techniques and information that will enable you to deliver sustainable buildings in this growing market
- identify trends and future directions in sustainable building, what products and policies are needed to drive change

The Conference is being held from 14<sup>th</sup> - 16<sup>th</sup> November 2007. Wednesday and Thursday will be at the Hyatt Regency, Auckland and Friday will be at the Waitakere City Council Chambers, Henderson. A trade exhibition of a range of sustainable building products and services will be held as part of the conference on Wednesday 14<sup>th</sup> and Thursday 15<sup>th</sup>.

For further information please visit: [www.sb07.org.nz](http://www.sb07.org.nz)

**Who Should Attend?**

This conference will be useful for:

- building owners, specifiers and managers
- designers and engineers
- developers and builders
- suppliers of products and services
- central and local government policy makers, and planners
- researchers and academics

**Confirmed Speakers include:**

- Jan Wright (Parliamentary Commissioner for the Environment)
- Ray Cole (University of British Columbia and co-founder of the Green Building Challenge)
- Shane Gray (Meridian Energy - about the new Meridian Energy Building, Wellington)
- Nils Larsson (International Initiative for Sustainable Built Environment)
- Professor Brenda Vale (Victoria University)
- Nick Collins (Beacon Pathway Ltd)
- Mick Pearce (DesignInc Melbourne and designer of Melbourne's CH2 Building)
- Jane Henley (New Zealand Green Building Council)
- Nigel Howard (BRANZ Australia)
- Peter Nielson (New Zealand Business Council for Sustainable Development)
- Professor Toshiharu Ikaga (Keio University, Japan)
- Sean Bignell (Hobsonville Land Corporation)
- Roger Bayley (Merrick Architecture, Vancouver and Design Director of the Olympic Village in Vancouver)

Further information on the above speakers can be found on the website

**Outline program**

The draft programme includes plenary speakers and parallel sessions of over 80 peer reviewed conference papers covering the following themes on Wednesday 14<sup>th</sup> and Thursday 15<sup>th</sup> November.

- What sustainable building is, and why it is good for business
- How policy can influence sustainable building
- Case studies: hear from the developers of some New Zealand's most exciting new commercial and residential buildings, and retrofits
- Beyond buildings: the link between sustainable buildings and sustainable neighbourhoods
- Tools for sustainable design, building and assessment
- Materials and products for sustainable building
- Resource efficiency
- Dealing with existing buildings
- Life cycle analysis

The Conference Dinner will be held on Thursday evening at the New Zealand National Maritime Museum located on the waterfront in the Viaduct Harbour.

