

Facing

Newsletter of Beacon Pathway

March 2006



NOW Home saves 25% off water bills

Remote monitoring of the Waitakere NOW Home shows that harvesting rainwater for use in the home has resulted in 25% less consumption of mains supply water. Of the average 820 litres used per day, 270 litres were supplied by the rainwater tank. This is a direct saving on water bills for the tenants.

These figures are part of the first six-monthly report on the performance of the NOW Home while it is tenanted. The report reflects the results of the remote monitoring including electricity consumption, water use, and temperature and humidity levels.

The report shows that the solar water heating system has so far supplied all hot water needs in the house, although this is over the summer period and the hot water heating may need boosting in cooler weather. On average, heating water accounts for 28% of a household energy bill, so once again the tenants are saving money.



Tenants enjoy NOW Home comfort

Part of the feedback on the performance of the NOW Home is post-occupation interviews with the tenants. The first of these gives an emphatic vote of confidence to the NOW Home design and performance.

“Everything seems bigger!” commented the tenants about the spaciousness and flexibility of the home. They especially liked the open plan nature of the layout, the way the rooms are arranged, and the indoor outdoor flow.

Highly appreciated too was the warmth and comfort of the home. Despite arriving near the end of winter, the family found they did not need their dehumidifier or space heater at all – in fact they did not even unpack them. Nor have they needed to use their clothes drier – clothes dry quickly on the clothes line or on a clothes horse in the garage. The polished concrete floors are warm and easy to clean, although they have proven a bad combination with the nearby gravel and chip paths.

The tenants describe the house as being so quiet they do not even notice traffic or storm noises from outside. “I can tell the moment a window is open on the south (traffic noise) side of the house” said one of the tenants.

All this adds up to a house which the tenants feel is contributing to making their family happier and healthier.

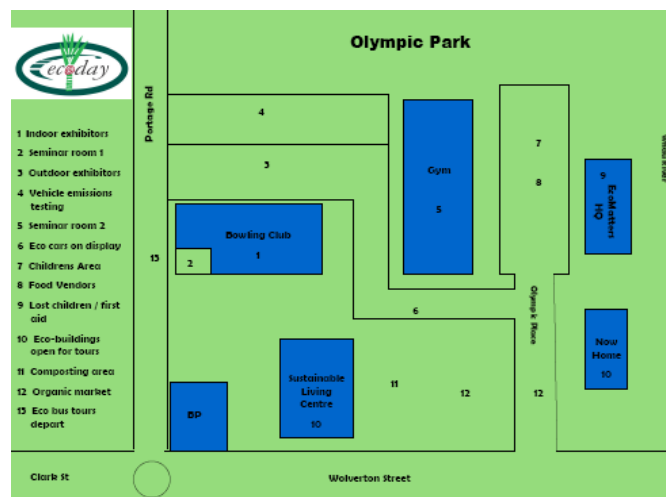


NOW Home Open Day

The NOW Home will be open for public tours as part of the Waitakere City Eco-Day at Olympic Park, New Lynn, on Sunday 2 April 2006. Visitors can hear about what lies beneath this ordinary looking house, how the performance of the home's features are being tested, and what the first results show.

EcoDay is a free community event which aims to inspire our city's residents to live in a more sustainable way. It will include information and practical ideas for making sustainable living easy, as well as tours of local environmentally friendly initiatives. Read more about Eco Day at www.ecomatters.org.nz/14_EcoDay/140_ECODAY.htm

At the NOW Home, tours will be conducted every half hour from 10.30am – 3.30pm. Parking for the Eco-Day will be off Portage Rd.



LCA workshop provides well-informed overview

A recent Environmental Life Cycle Assessment (LCA) workshop received very positive feedback from its participants as providing a “very good overview of LCA, how it is applied and the outcomes that can be expected.”

Representatives from Beacon shareholders, NOW Home suppliers, industry, Ministry for the Environment, Department of Building and Housing and Housing New Zealand attended the workshop in Auckland on 24 February 2006.

The workshop provided a general overview of LCA and how it can be applied to the building sector. LCA was introduced by Barbara Nebel (Scion) as an analytical tool for the systematic evaluation of the environmental aspects of a product or service system through all stages of its life. A detailed case study demonstrated the data requirements and methodology of the approach. Participants were also invited to go through the process of defining the goal and scope of an LCA study for different building components of the NOW Home.

Roman Jaques (BRANZ) gave an overview of building-related LCA activities in New Zealand, and Zsuzsa Szalay (Scion) introduced tools that are used internationally for LCA work in the building and construction sector.

In discussion the following key steps forward were identified:

- Research on the effects, impacts and costs of LCA in other industries/markets.
- LCA of a NOW Home as an illustrated example.
- Education of stakeholders and the construction industry in general.

Sustainable Residential Building Manual Project well underway

In December we reported that Beacon had successfully drawn together a consortium of specialist providers to win a Ministry for the Environment tender bid for the development and supply of an on-line information resource about sustainable residential building.

The planning phase is now complete and the project is underway in earnest. It is expected that the new website will be complete for testing and market commentary later this year.

The resource will draw on the successful Australian YOUR Home manual and website, but information will be tailored to New Zealand conditions and regulatory requirements. It will be a 'one-stop shop' for those wishing to learn more about sustainable design, construction and living. Sustainable practice will be promoted as mainstream best practice – not as a fringe alternative or added extra.

Consumers' Institute has been contracted to develop the content for the new website. A team of 4 researchers has been assembled.

The new website will have extensive links to, and share some content with, the successful **ConsumerBuild** website that is managed by Consumers' Institute and the Department of Building and Housing (www.consumerbuild.org.nz). **ConsumerBuild** will maintain its current focus while the new website will feature additional information for designers, builders and tradespeople, and those with a more specific interest in sustainable design and construction.

Development of a third element - a site containing specifications and installation details for practitioners and industry - is currently being investigated.

Beacon's role in the project is to provide leadership, and engage with the wider audience to ensure that the resource meets its users' needs and expectations. General Manager Nick Collins has contributed extensively to the development of a key aspect of strategic planning: stakeholder and industry relationship building. He will continue to support and develop this aspect of the project as it progresses.

It is widely recognised that widespread industry support of the new website, during development and after launch, will be crucial to the project's success.

If you know of any interesting research, tools or case studies that you think should be incorporated in this resource, or have any opinion in regards to its content and structure, please get in touch with our Project Manager, Marta Karlik-Neale, at marta_karlik-neale@urscorp.com

Keep watching this space for regular project updates.

Project consortium partners include Consumers' Institute (editorial management, writing and technical provision), Presence (Marketing Communications), and URS NZ Ltd (project management)

NOW Home for Rotorua

A more sustainable approach to home building will be tested in a first-time collaboration between Beacon Pathway and the Housing New Zealand Corporation.

A three bedroom state rental home in Fordlands, Rotorua is being designed to focus on energy efficiency, sustainable water use, selection of sustainable materials, waste reduction and improved air quality.

Beacon Pathway will monitor the performance and comfort of the Rotorua NOW Home over two years, sharing the results with the property owner, Housing New Zealand and project participants from the construction industry.

The home is being designed by local architectural firm, APR Consultants, with plans to involve Rotorua's Construction Trade Training Unit and the Tumahaurangi Trust in its construction, which is due to begin mid-April.

Research results from the project will contribute to Housing New Zealand's future building projects, standards and designs.

The Rotorua NOW Home project follows on from the successful collaboration between Beacon and Waitakere City Council to build the Waitakere NOW Home.