

ECOVILLAGE HOME A LIVING RESEARCH LABORATORY

A new research home in the Gold Coast hinterland has been endorsed by the Queensland Government's Smart and Sustainable Homes Program.

The Living Laboratory home has been developed by Landmatters as part of The Ecovillage at Currumbin, a highly-sustainable residential development on 110 hectares.

The Smart and Sustainable Homes Program provides communities throughout Queensland with display homes that demonstrate the principles of sustainable design and performance.

Smart Housing Design Objectives are used as minimum standards.

Minister for Public Works, Housing and Information and Communication Technology Robert Swarten said the design objectives demonstrated the range of smart housing solutions available.

"They assist designers, architects and home-owners to draw up a brief for a house," he said.

Mr Swarten said buildings featured in the Smart and Sustainable Homes Program displayed the triple bottom line approach to housing design and construction.

"They show how we can balance the three essential smart housing elements to make homes more socially, environmentally and economically sustainable.

"Homes built throughout Queensland as part of the program are designed and constructed as practical examples of sustainability, suited to each of the State's four climatic zones.

"In houses of this kind, you can move around more easily, feel safer, save money and help the environment at the same time," he said.

Mr Swarten said the Currumbin project would focus on monitoring the effects of passive solar design on thermal comfort, building skirt performance, under-floor insulation efficiency, gas usage and the performance of a water pump system for rainwater reuse.

"It will provide valuable facts on day-to-day use of energy, water and gas, further demonstrating the resource savings that sustainable homes can achieve," he said.

As well as an architecturally interesting design and extensive use of recycled materials, the Living Laboratory home features innovative WaterCell modular concrete water tanks incorporated into its polished concrete floor.

Developed by Landmatters working with Humes, the WaterCell system saves space, acts as a structural component and, at the same time, uses water density to assist in maintaining a constant temperature within the home.

To cater for the Currumbin Valley's chilly winters, an underfloor heating system employs the sun's energy to passively heat the home.

During the warmer months, passive cooling is provided by design features such as high-level windows and a floor plan that encourages efficient cross-ventilation.

Mr Schwarten said the Living Laboratory home would be the first of its kind in the Smart and Sustainable Homes Program to be permanently occupied.

He said the house's monitoring system included a touch screen located in the kitchen and a variety of sensors and meters.

"The project will provide real-world information on energy, water and gas use from an EcoVision monitoring system, which was prototyped in the Ecovillage and customised to cater for Living Laboratory's specific needs," Mr Schwarten said.

"The facts collected will help measure the benefits of sustainable design to the community and the environment," he said.

"Like the Queensland Government's Research House in Rockhampton, the Currumbin project has the ability to have elements altered for researching the best approach to design.

"For example, the angle of the solar power array can be seasonally adjusted to suit the angle of the sun for a particular month of the year," Mr Schwarten said.

The Living Laboratory home is expected to be completed by the end of November.

It will be open for inspection on nominated days, with the dates and times to be announced.

For further information on the Smart and Sustainable Homes Program and display homes, visit www.sustainable-homes.org.au and www.smarthousing.qld.gov.au

Living Laboratory is the second Ecovillage demonstration project endorsed by the Government's Smart and Sustainable Homes Program.

The other project, Innovation House 3, is open for inspection until 12 December 2007 from 10.00am to 4.00pm on Mondays, Wednesdays and Saturdays.

The Ecovillage has been planned to be self-sustaining in water, energy and waste and provides a high degree of self-sufficiency by creating edible landscapes and streetscapes, as well as household farming.

For further information on Living Laboratory and the Ecovillage, visit www.theecovillage.com.au

The estate is located at 639 Currumbin Creek Road, Currumbin Valley.

Last year, Ecovillage took out the top prize in the inaugural Environmental Protection Agency Sustainable Industries Awards.

[ends 2-11-07]