



Investing in insulation for a healthy return

Warmer homes are healthier homes.

How the Energy Efficiency and Conservation Authority (EECA) is working with community organisations and other partners to improve insulation in homes around New Zealand.

Home insulation brings measurable health benefits

A new study has shown there's a lot more than financial savings to be gained from insulating houses – it also brings important and measurable health benefits.

It's been demonstrated by a two year study into the effects of improving insulation levels in homes, conducted by Otago

University's Wellington School of Medicine and Health Sciences. Preliminary results covering 5,000 people in 1,400 households over seven different regions were released in October 2003.

The results showed that the occupants of insulated homes needed fewer GP visits, fewer hospital admissions for respiratory problems and fewer days off work or school.

The insulated homes were warmer and had significantly less humidity or dampness. As a result, the occupants recorded an increase in 'self-rated' health. Put simply, they felt healthier – widely accepted as a reliable indicator of current and future health status.

Working nationwide to improve home insulation

For several years EECA has been encouraging community organisations and other partners to help install insulation measures in older houses. This study reinforces the growing body of anecdotal evidence from both health professionals and home insulators of the benefits of these projects.

The examples that follow show how the investment is creating warmer, drier, healthier homes for New Zealanders right around the country.

Napier patients “cannot believe the difference”



Nurse Donna O'Sullivan
with local resident
Patricia Forrest.

“Our patients have told us they cannot believe the difference insulation has made to their homes,” says Donna O'Sullivan, Practice Nurse at the Carlyle Medical Practice in Napier.

“Because of the warmth they haven't been chronically unwell with the usual lingering chesty coughs.”

An innovative programme run by the Hawke's Bay Power Consumers Trust with the assistance of EECA has helped several hundred people with asthma, respiratory diseases and other illnesses to improve their living conditions along with their health and quality of life.

“Rather than just look at insulation in terms of saving power and money, we thought we should consider the situation of people with health needs,” recalls Trust Chairman Ken Gilligan.

The programme was launched in 2000, initially targeting homes with children and young people that were damp and clearly deficient of warmth. Doctors and nurses are contacted to identify suitable applicants and the installation is contracted out to a local firm. So far around 400 homes have been insulated for an investment of around \$500,000.

“We've had dozens of comments from householders” says Ken “and a letter from a group of local doctors reporting that they believe the programme had made a substantial difference for their patients.”

Patricia Forrest is one local who has benefited.

“It's been really choice,” she says. “I don't get as sore as I used to with arthritis and my breathing is a lot better than for a long, long time.” Patricia, who says she has “got everything – asthma, the lot,” says all her friends want her to swap houses because hers is so warm. “I tell them 'I don't think so – not after all the wait I've had!'”

Another to benefit has been Tammy Porter.

“I was top of the list at my doctor's for chronic asthma, but it hasn't been as bad this season, and I haven't had to go back to the specialist for several months.”

Tammy's 10 year old daughter Caitlin also has asthma, although more mildly. For Caitlin too the insulation seems to have brought improvement, enabling her to do without the preventer she had used previously.

Opotiki's acorn that became an oak tree



George McManus is one of hundreds of locals who have benefited.

"I've got folders full of thank you letters," says Jo Hunt, of Opotiki Trade Training. "There are people who say their children have been able to come off their asthma steroid inhalers – and a woman who'd been on oxygen 24 hours a day who was able to come off it."

Jo's organisation found and trained local labour for a project that has made nearly 2,200 homes in and around Opotiki warmer, drier and healthier – not to mention less costly to heat.

The project was initiated by the Eastern Bay Energy Trust, with the support of EECA. According to current Chair Toni Owen, "it was an acorn that grew into an oak tree."

The Trust's first step was to contribute \$67,000 to a pilot scheme initiated by EECA in response to a housing condition survey conducted by the Opotiki Development Project.

The scheme looked at 50 houses and it was quickly apparent most of them needed insulating. In fact, many didn't even reach 1977 building standards.

The health benefits of the ceiling and underfloor insulation, polythene ground-sheeting and the weather stripping of doors and windows were immediately apparent.

"The obvious benefits were energy efficiency and healthier, warmer housing," says Toni. "Plus there were definite economic spin-offs, with the project providing training and jobs for local unemployed."

Since the Pilot scheme, the Trust has funded a further eight projects and committed over \$2.5 million of community funds to the projects. An additional \$500,000 has recently been committed to retrofit 300 more houses.

Healthier homes change lives in Manukau



The Tuwhangai family home was one of 200 involved in the project.

“One woman told me that after her house had been insulated she had her first night that she was able to sleep without pain,” says Sharon Wilson, CEO of South Auckland’s Tamaki ki Raro Trust. “And our staff get really well fed – the Maori and Pacific Island way is to say thanks with food!”

The Trust has worked with EECA, using EnergyWise Home Grants, to insulate hundreds of older homes in Manukau and South Auckland. More projects are underway and it is even ‘exporting’ its newly-skilled labour force to other retrofitting projects in Gisborne and Tawa.

Tamaki ki Raro was set up around 20 years ago by the Tainui Maori Trust Board to support Waikato people living in Auckland. Late in 1999 it launched the Te Whare Ahuru o Manukau - Healthy Homes Project, aiming to install a range of energy efficiency and moisture prevention measures in 200 low income South Auckland households, free to the homeowner. The work was carried out by a team of previously unemployed Maori, specially trained for the project.

This first project, completed in 2000/01, proved the Trust’s professionalism, infrastructure and leadership. It has since been awarded two further projects by EECA, with the current contract to insulate 50 houses in South Auckland set for completion by June 2004. It has begun working in conjunction with the Manukau City Council and has also been awarded a Housing New Zealand contract to insulate 240 of its homes throughout Auckland.

Applicants for the home insulation must meet the Trust’s criteria, which are that they must own their own home; be a low income earner; and have family members in the house with respiratory health problems such as asthma.

Sharon says that initially people were afraid to commit to the program, because it sounded too good to be true. “People were worried they’d be landed with a bill, but once they found out they could keep the insulation, they were overjoyed.”

The Trust has had wonderful feedback from the recipients of home insulation. “We get heaps of letters, cards and phone calls,” says Sharon. “What we’re doing here works. It’s making a difference to people’s lives.”

For more information about EnergyWise Home Grants or to discuss investing in a retrofit project through EECA's strategic partnership fund, contact **Mike Fairfield, Account Manager Partnership Funding on 04 470 2212.**



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Te Tari Tiaki Pūngao