

Warm Up New Zealand: Heat Smart

Lessons in large scale implementation of a residential energy efficiency grant programme



Dr Sea Rotmann, Principal Scientist, Energy Efficiency & Conservation Authority, New Zealand

Improving energy choices

What is EECA?

- A Crown Entity
- Energy Efficiency & Conservation Act 2000
- Aims: to encourage, promote and support energy efficiency, energy conservation, and the use of renewable sources of energy
- Undertakes research and monitoring activities
- Provides policy advice
- Allocates government funding



Energy Efficiency and Conservation Authority Te Tari Tiaki Pūngao

- Provides information
 Provides information
- Our stakeholders are all NZ homes, businesses and local and central Government



The Issue: New Zealand's sub-standard housing



The opportunity: Create warm, healthy, comfortable homes and help economic recovery

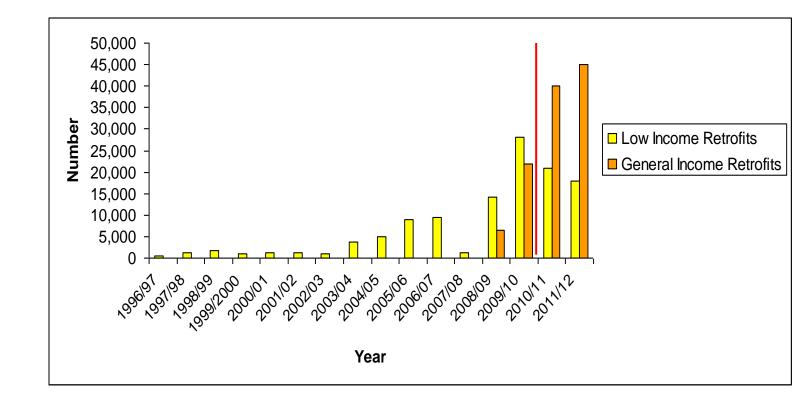
Programme Lifecycle Impacts from Actions in 2009/10 based on 27,500 retrofits

- \$NZ148m in energy savings (\$16b pa total use)
- 1.9PJ energy demand reduced (500PJ total use)
- 800 FTE jobs in construction and related industries (incl flow-on effects) – unemployment doubled to 7.3% since recession
- 0.1Mt of CO₂e avoided
- \$NZ70m health benefits (\$825m pa cost of asthma incl 500,000 lost school days pa)

The Solution: Warm Up New Zealand: Heat Smart

- A government programme providing house owners and tenants with grants for insulation and clean heat
- Funding is available for approx 180,000 houses over 4 years, worth > €150m
- All homeowners can get 33% off the cost of installing ceiling and underfloor insulation, and other insulating measures up to NZ\$1,300
- A low income household can get 60% off the total cost of insulation, not incl third party funding
- In some regions local organisations, incl district health boards, contribute additional third party funding for low income groups

Delivery of retrofits



Red line indicates predicted future values

Barriers to insulation

- Cultural
- Priority
- Financial
- Implementation
- Knowledge
- Regulation
- Compliance

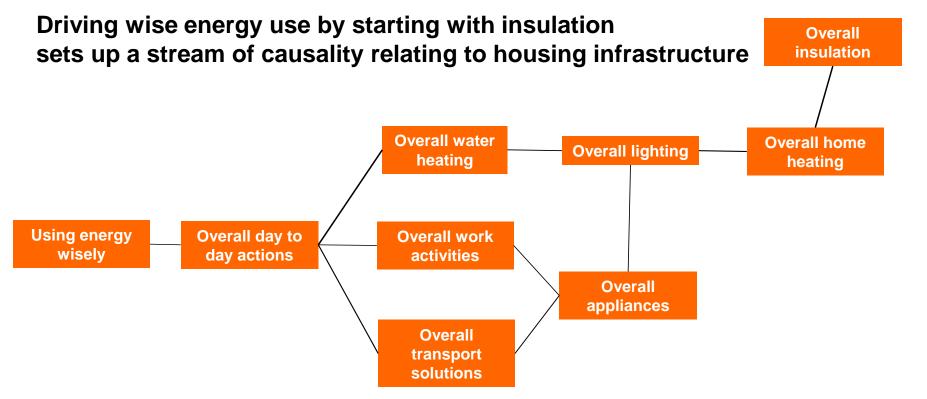
Policy Changes – generating social benefits from energy efficiency

- The Government led this change by making the programme its flagship social programme in the 2009 Budget
- It sealed the Government's pre-election promises in the energy and environmental sphere
- The programme's KPIs showed that the Government understood the wider benefits of retrofitting:
- KPI 1. Uptake by the public
- KPI 2. Effectiveness of delivery
- KPI 3. Level of support from Third Party Funding
- KPI 4. Change in Energy Use
- **KPI 5. Health Benefits**
- KPI 6. Stimulating Demand and Supply Side of the Market

Policy Changes – addressing the financial barrier

- Expansion of the programme to include landlords
- Expansion of the grants to cover all pre-2000 houses – regardless of income of the owner
- Medium to high-income uptake is lower than for low income households, but growing
- Creates fewer health benefits than in low income households but research suggests it's paying off by increasing awareness of household energy efficiency.

Overall, people's attitudes to using energy wisely are driven primarily by day to day activities



Graphical model based on partial correlations

Persuading people to act at the store, at work and on the road are inter-linked (out of home activities), but still need to push towards day to day activities to cause actual change

Addressing the Barriers: Getting private sector support

- EECA designed this programme to be based on partnerships with the private sector
- By making the programme about businesses in the private sector helping NZ households, more money is available to address the financial barriers and makes the programme – and energy efficiency - higher profile

Policy Changes – Addressing the implementation barrier

- Adding heating and other energy efficiency measures to the general insulation measures to increase efficiency of delivery
- Having contracted service providers means that EECA is also better able to ensure that the installations are done to the required Standards

Policy Changes – addressing the awareness and knowledge gap

- The programme has been extensively promoted through advertising and PR.
- Because the programme is available to many more NZers, it has received a much higher profile.
- In addition, service providers are encouraged to tell house owners about other energy efficiency measures that might suit their lifestyles – Energy Star ® appliances, solar water heating, double glazing...
- Market research suggests the programme has increased the profile of energy efficiency overall.

Marketing and Communications

The launch campaign utilised PR, web and advertising strategies that lead to a successful launch

Campaign Objectives:

- Lead generation
- Awareness
- Programme retrofit targets achieved

Addressing the knowledge gap



Ever said "Cripes it's chilly in here."? Well, if you live in one of the many homes in our country that isn't insulated properly, you probably have. So act now and take advantage of a great ENERGYWISErw offer.

You could receive an ENERGYWISEw grant of a third of the cost to install insulation - up to \$1125 - or an interest subsidy up to \$1400. If your house was built before 2000 and your household income is less than \$100,000 for one and two earners, or less than \$140,000 for

It'll save you money and you'll enjoy a warmer, healthier home that could cost less to heat. We'll even save you the trouble of finding the

www.energywise.govt.nz to apply.

Opiny IR.

Profile of a mass market programme







If your home was built before 2000 and you think it could do with better ceiling & underfloor insulation to keep all those inside warm and healthy through winter, you might qualify for an ENERCYWISE, grant. It could help reduce heating bills, save you from coughs and colds, and up to \$1300 on the installation cost. There are a few simple criteria to meet, you can find out all about them at www.itm.co.nz or you can call us on OSOO FOR ITM"



We'll see you right 🔍



Over the next four years, we're going to make New Zealand's winters a lot warmer.

With ENERGYWISEM funding, from July 1 you can get up to \$1800 to insulate and heat your home.

Warm Up New Zealand: Heat Smart

GET 33% towards your home insulation, up to \$1300, PLUS 5500 (inc gst) towards clean heating systems.

GET 60% towards home insulation if you hold a Community Services Card, PLUS \$1200 (inc gst) towards clean heating systems.

GET 60% towards home insulation if you are a Landlord with tenants who hold a Community Services Card, PLUS \$500 (inc gst) towards clean heating systems.

Around 900,000 New Zealand homes have inadequate insulation. Warm Up New Zealand: Heat Smart is a new Government funded programme that will change that for many New Zealand hom

Better insulation means warner, drier and healthier homes that are easier and cheaper to heat. It's especially important for people with respiratory liness or other conditions brought on by living in cold, damp houses. If you're a homeowner, and your home was built before the year 2000, you can get a third of the cost of installing ceiling

and under-floor insulation, and other insulating measures up to \$1000. Pre-2000 homes that are already insulated properly can get funding of up to \$500 for clean heating systems like approved wood burrers, pellet burrers. heat pumps or flued can beaters.

Installation has to be carried out by a provider who is registered to take part in the programme. Because it's write, demand for provider will be high. Although homeowene in some clear and regions will be able to take advantage of Warm Up New Zasiand Heer Zoward on we how for a day of the provider strong/board to sourch your the coming months.

for a list of available providers in your area visit our website from 1 July. Then all you have to do to apply is get in touch with a local provider – they will arrange for an assessment of your home, provide you with a quote, organise installation and access the ENERGYMISE-r funding. Remember, Warm Up New Zeoland: Hest Smart is open to New Zeoland homeowners on any income and is a four-year programme, so you have plenty of time.

Visit www.energywise.govt.nz for updates, and find out more about Warm Up Now Zealand: Heat Smart



www.energrowise.govt.nz

New Zealand Government



Answer questions



The answer to a warmer home, starts with a few questions.

and this will vary across the country. This programme is for the next four years, and demand is likely to be high in the early stages. Q. How do I find a Provider in my area?

A. Look out for insulation and heating providers that carry the ENERGYWISE w

mark. These are the Providers who are registered with ENERGYWISEs to

deliver the programme and access the funding. Check the ENERGYWISErs

Q. How do I know what type of insulation or heating is best for my home?

A. There are several types of products that may be appropriate for your

That's why it's important to get assessments and quotes from more than

one Provider so that you have enough information to choose what is best

for your home. More information about different products is available on

A. No. Installation must be carried out by a Provider who is registered with

ENERGYWISE™ to take part in the programme, in order for you to receive the funding. A Provider will arrange an assessment of your home, give you

A. The average cost of installing both ceiling and underfloor insulation is

approximately \$3000 - \$3500". In order to find out what is right for your house, contact a Provider for an assessment. Up to a third of this cost - to a

maximum \$1300 (incl. GST) - of ceiling and underfloor insulation and other

measures will be met by ENERGYWISEw funding. If you are a Community

Services Card holder at least 60% of the cost is covered by the funding.

Q. Are there different options for how I can pay for my insulation or heating?

A. Yes. EECA has worked with all the main banks who have agreed to

waive their fees for mortgage top-up loans to pay for the insulation retrofits.

Each bank operates slightly differently, so talk to them about your specific

circumstances and what they offer. Also, some councils offer ways to pay

the remaining costs through your rates bill. EECA is working on future options with other parties. Talk to your Provider about what is on offer in

A. Go directly to Providers who are registered to take part in the programme.

All you have to do is get in touch with a local Provider who will arrange a free assessment of your home, give you a quote, organise installation, and access the ENERGYWISErw funding on your behalf. Remember, different

Providers will offer different products and prices, so you might want to contact more than one. For a list of available Providers in your area visit

a quote, organise installation and access the ENERGYWISEr funding.

home. Some Providers specialise in one type of heating or insulati

website for regular updates of Providers in your area.

Q. Can I do it myself and still access the funding?

Q. How much will it cost me to insulate my home

based on an average sized NZ home. Actual prices will vary.

Over the next four years we're going to warm up 180,000 homes that were built before the year 2000. The most effective way to do that is with better insulation. Better insulation means warmer, drier, healthier homes, that are easier and cheaper to heat.

Here are the answers to questions you might have about how Warm Up New Zealand: Heat Smart can work for you.

Q. Who is eligible for funding?

A. Funding is available to all New Zealand homeowners whose houses were built before 2000 – there is no income restriction. Landlords of houses built before 2000 are also eligible.

Q. How much funding can I receive?

A. A third of the cost of installing ceiling and underfloor insulation, and other efficiency measures, up to \$1900 (incl. GST).

Once your home has ceiling and underfloor insulation to a level approved by EECA then you could qualify for \$500 (incl. GST) towards an approved clean heating system. Funding is limited.

Homeowners who hold Community Service Cards and fand/ords who have tenants with Community Service Cards are eligible for 60% of the total cost of insulation. These homeowners can qualify for \$1200 (incl. GST) and landords \$500 (incl. GST) for an approved clean heating system. In some regions this may be higher, where thirth party funding from local organisations is provided. Ask your provider what is svaliable in your area.

Q. What can I use the funding for?

A. The majority of funding is for underfloor and ceiling insulation. Other energy efficiency measures such as hotwater cylinder wraps, draught stopping, and ground moisture barrier can also be included.

Once your ceiling and underfloor insulation is to a level approved by EECA, limited funding is available for a clean heating system if you don't already have one in your primary living space. Systems include approved wood burners, pellet burners, flued gas heaters or Energy Star rated heat pumps.

Q. How do I know if I have insulation, or if my insulation is adequate? A Hyoro how was built before 2001 maynch have sufficient insulation to meet today's standards. Check the ENERGYWISE-w website for tips about what to look for. By example, if there are gaps in your celling insulation, if it has moved, or it's less than about 200m thick it's probably insufficient. As part of the programme you will need to get a free assessment by a Provider who will confirm if your insulation in sidequate or not.

Q. How soon can I get my house insulated?

A. You first will need to get your house assessed, free of charge, by a Provider who is registered to take part in this programme. When the work can actually be done depends on the demand on Providers in each region,



Visit www.energywise.govt.nz or call 0800 749 782 to find out more about Warm Up New Zealand: Heat Smart

www.energywise.govt.rz

your area.

0. How do Lapph?

ourwebsite

Look out for insulation and heating providers that carry this ENERGYWISEm mark. www.energywise.govt.nz



Right now, we're turning cold houses into warm homes

Make sure you look around to find a Provider that's right for you

Over the next four years we're warming up 180,000 homes that were built before the year 2000. It'll mean warmer, comfortable, healthy homes that are easier and cheaper to heat.

We are contraining to bring on a national network of Providese over the coming months. If you're looking to be advantage of Warm U field we caland: Heat Gamai Anding we recommend you make enquisites with a number of Providers in your area. They will offer different products and solutions, and will quote accordingly. One you have a range of options you can compare 'tike withi like'. This will help you choose the right solution for you and your home.

Check out the Questions & Answers to see how Warm Up New Zealand: Heat Smart can work for you.

Q. How much will it cost mo to insulate my home?

A. Prices vary, bit the typical cost of installing both celling and underfloor insulation in an average abad New Zeeland home is about \$5500, Up to a third of this cost (\$1%), to a maximum \$1100 (not CST), will be met by ENERGYWISEw funding. If you hold a Community Services Card at least 60% of the cells is covered by the funding.

Q. How will I know I'm getting an insulation or heating Provider that's right for me?

A. Talk to several approved Providers. They will come to your house and give you a free assessment, To ensure the existion is right for your home, they will be quoting on products and installation to a loved approved by EEGA. Resemble, if it not just about the product – comer installation is wry important.

Q. How do I know what type of insulation or heating is best for my home?

A. There are several types that may be right for your home. Some Providers specialise in one type of insulation or heating, so get an assessment and quotes from more than one Provider to decide why is best for your home. Once you have a range of options you can compare 1ke with lifer, to help used to be the provider to decide whe fight solution for you. There is more information on products no our weblie.

Q. How do I know If I have insulation, or if my insulation is adequate?

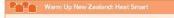
A. Homes built before 2000 may not have sufficient insulation for today's standards. Check the DBRR2WUSE's website for tips on what to look for for stample, if your insulation is less than t20mm deep it's probably insufficient. You will get a free assessment by a Provider that will confirm whether your insulation is advectate.

Q. How soon can I get my house insulated?

A. Demand is ournetly very high so check multiple Providers and see who is available in your area, they will tell you when they can get to your home. We will also be adding more Providers over the coming months.

Q. How do I apply?

A: Go directly to Providera who are registered to take part in the programms. They will arrange a free assessment of your home, give you a quote, organise institution, and access the DNEROWEELtanding on your behalt. Make surveyou tak to a her Providers in your area. They're listed on our ourwelster.



If you are a homeowner or a landlord you can get 22% towards your insulation and other measure up to \$1300 (incl GST)

If you are a homeowner holding a Community Services Card, or you're a landlord with tenants who hold a Community Services Card, you can get 00% towards your invalution

If your horse has celling and underfloor insulation to a level approved by EECA, limited handing is analities for a clean heating system; \$500 (inc) GST (if you're a horsevener or landbord, \$1000 (inc) GST (if you're a horsevener who holds a cleansurity Services Card.

Look for A ENERGYV Visit www Or call 08

New Trakend Covernment



EECA energywise.

New Zealand Government

EECA energywise.

Make it easy



Mass market and make it fun

http://www.energywise.govt.nz/how-to-be-energy-efficient/energyspot/10808

Energy Spot.mpg

Results (Evaluation of marketing campaign May – August 2009)

- 20,000+ calls to call centre
- 244,000+ visits to ENERGYWISE website.
- Awareness of funding 48%
- Leads provided via website 6,600+
- 8,260 retrofits within first two months

→ 37,000 retrofits by March 2010

Addressing regulation and compliance issues

- Strict requirements for insulation products
- Championed Insulation Installation Standards and assisted on strengthening Building Code
- EECA stimulated formation of the industry body (IAoNZ) that is now leading the development of the installer training scheme
- Contractual obligations, audits and 3-strikes policy
- Continual research
- Monitoring and Evaluation of the Programme KPIs and co-benefits



Issues around safety



Are there mechanisms more appropriate for particular sectors or technologies?

- This Government intervention covers the whole of the market – from consumers to manufacturers
- It has been highly successful in increasing demand, creating a market and improving service provider quality and choice
- It fits with the Government's social, environmental and economic policy agendas
- Insulation has enough inherent barriers (financial, implementation, regulation, knowledge etc) that Government intervention is warranted
- Once NZers know what a warm, healthy house feels like, it will become part of their culture
- The Building Code will catch up to increase the minimum insulation standard

Are there lessons to be learned from programmes that were not successful?

 Previous programmes were running for >10 years and less successful. This programme was designed to address past inadequacies



Let's discuss!



Sea.rotmann@eeca.govt.nz

www.eeca.govt.nz

www.energywise.org.nz

www.eecabusiness.govt.nz

Improving energy choices