

Little Greenie – Get the Facts



How your new home could be exceptionally comfortable and better value for your money

Thinking of building your own home, or renovating? You don't have to pay heaps to build a warm and low maintenance house. Little Greenie shows for your money you could get significantly better performance than – more comfort, reduced costs and higher financial returns.

Little Greenie in Golden Bay is probably New Zealand's best example of a home built with energy performance in mind. A report by Little Greenie Design & Build, The Hikurangi Foundation, and EECA proves that *Little Greenie*'s exceptional performance is possible and affordable. This is a summary of the key facts in that report



Owner/builder, Lawrence McIntyre built *Little Greenie* in 2008/2009 using world-best practices based on five simple principles – energy efficiency, low maintenance and longevity, quality craftsmanship, and value for money.

Lawrence intended to show what could be done when traditional kiwi techniques and materials are combined with innovative

practices from Germany - practices yet to be widely used in the New Zealand building industry.

The results are impressive and completely achievable now for people building or renovating.

"A very comfortable house to stay in with no hot or cold spots. All new houses should be built to this standard." Little Greenie Guest

"What this house clearly shows is that by using a combination of good planning at the outset, good workmanship and quality materials people can have a home that is exceptionally comfortable and super-efficient all year round - and it doesn't cost that much more than the average new build. There are no space-age design and construction methods here; no expensive niche technologies, just conventional methods and materials, used in a much smarter way."
~ Christian Hoerning, Senior Technical Advisor - Buildings

"If Kiwis are planning to build or do major alterations to their house they should read this report. It tells us that we could be far better off spending money on a model like Little Greenie than other designs."
~ Liana Stupple, Director of The Hikurangi Foundation - an independent charity

Key benefits of *Little Greenie*

It performs exceptionally, providing comfort and safety

- A year round constant temperature ranging between 18 – 24°C achieved with minimal additional heating. That means a **comfortable indoor environment** that consistently meets World Health Organisation (WHO) recommended indoor temperatures and is **better for you and your family's health**.
- The **only house in New Zealand with a 9/10 star HERS** (home energy rating) as compared to a 4.5 HERS rating for a normal minimum standard building code compliant house. This is largely due to the extremely high standard of insulation, which **retains all the heat that the house naturally collects**. *Little Greenie* has double the insulation of a normal house, with very little extra cost.
- High efficiency double glazed windows and doors providing **ventilation you can control**.
- Enables you to **use every square inch of your home in winter**. Imagine, the teenagers can do homework in their bedrooms instead of snuggling up to the wood burner, and you'll be comfortable in every room.
- Has simple, high strength, well insulated raft floor and foundation system which can be used at sites with **different ground conditions** including those requiring pile foundations.
- Suitable for **earthquake areas** - the floor and foundation system is on the ground and the requirement for trenches is eliminated. This greatly reduces labour costs and the amount of excavated material on site, as well as the obvious benefits in an earthquake.
- All construction aspects of *Little Greenie*, like insulation, are designed and built to an incredibly **high level of craftsmanship** and attention to detail. This is imperative to the end result.

"Effective insulation is a one off cost that you don't have to plug in."

~ Lawrence McIntyre, builder of Little Greenie.

It saves you money and hassle

- Potential **energy cost savings of \$670** per annum.
- The average annual cost to heat *Little Greenie* is less than \$69.
- Designed to minimise electricity demand with provision of 24 volt low energy lighting and super efficient appliances like fridge and gas cooking facilities.
- Low maintenance - constructed as a traditional kiwi frame house, the exterior cladding is durable, vertical pre-painted Coloursteel, which **does not require painting**.

It returns value for your investment

- The cost to build *Little Greenie* comes in the range of \$1,925/m² - \$2,136/m². This is a lower than many specially designed "eco" houses and is only a little more than a minimum building code level equivalent at \$1,660/m² - \$1,766/m². That means you can get **significantly better performance for relatively little extra investment**.
- Just counting energy costs *Little Greenie* pays back after 21 years.

- Research shows that homeowners value comfort 2.5 times more than just energy cost savings, which would probably reduce the **payback to about 14 years.**
- An estimated return on investment in excess of **\$77,000 over a 50 year period** when lower maintenance costs are also taken into account.
- It is likely that added **capital value** will accrue (overseas experience shows that people will pay a premium for a warm comfortable house that has a high rating).
- Easier to sell - studies have found that houses like *Little Greenie* **sell quicker**, and for a premium, due to the increasing demand for energy efficient homes.

If you're planning to build, or do major alterations: Take Action Now

- View testimonials of *Little Greenie* at http://goldenbayhideaway.co.nz/design_build/testimonials
- Read the full report at <http://www.hikurangi.org.nz/?p=2020>
- Get your builder or architect to tell you whether they can develop the performance of *Little Greenie*.
- Experience *Little Greenie* yourself. *Little Greenie* is available as a self-contained rental. Enquiries to: http://goldenbayhideaway.co.nz/abodes/little_greenie
- Find out more about how to make the most of the energy you use every day at www.energewise.govt.nz
- Lawrence McIntyre is available as a consultant. Contact: <http://goldenbayhideaway.co.nz/contact>

