



Creating home and neighbourhoods
that work well into the future
and don't cost the earth



Transforming New Zealand's Homes

Marta Karlik-Neale

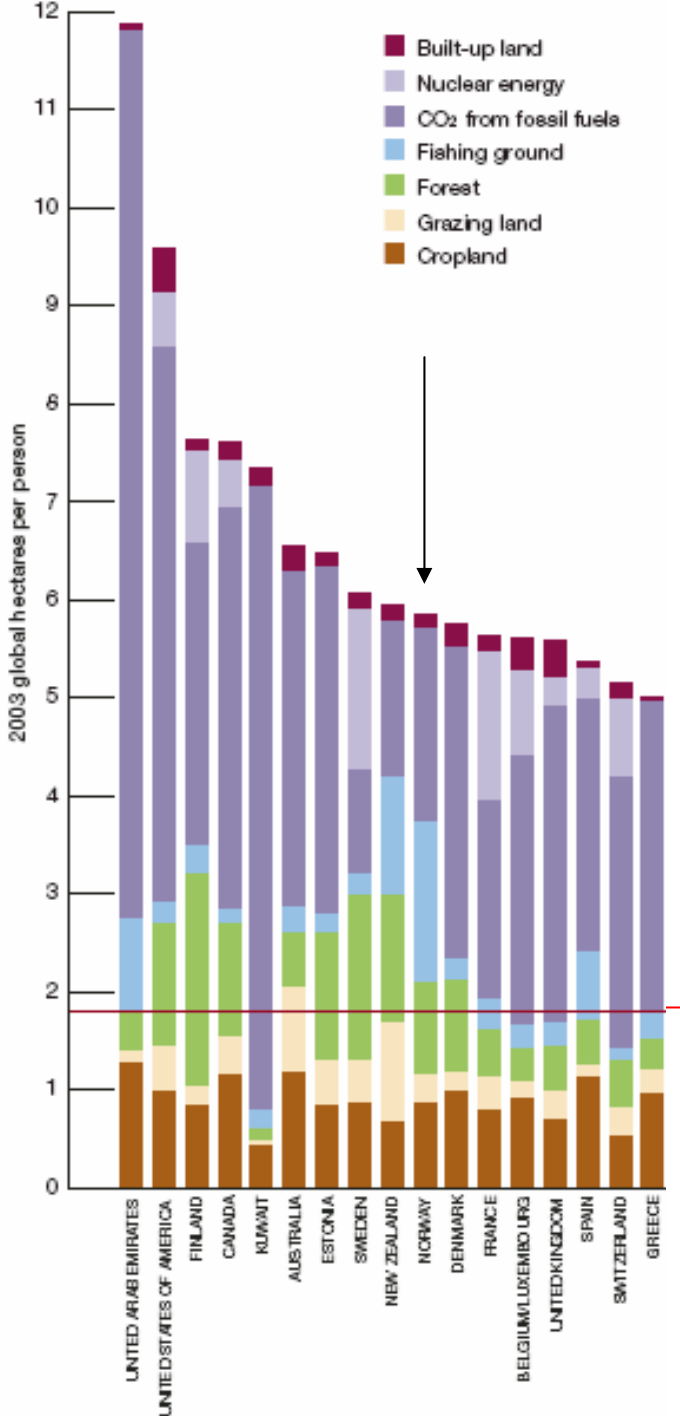
30 May 2007

Beacon Pathway Limited

Web-based guide to sustainable building



- Smarter Homes website to be launched June 2007
- Beacon's role
- Trusted information
- Coordinating across other initiatives
- Why would you do this?



NZ >> 5.9 gha pc

Available >> 1.9 gha pc

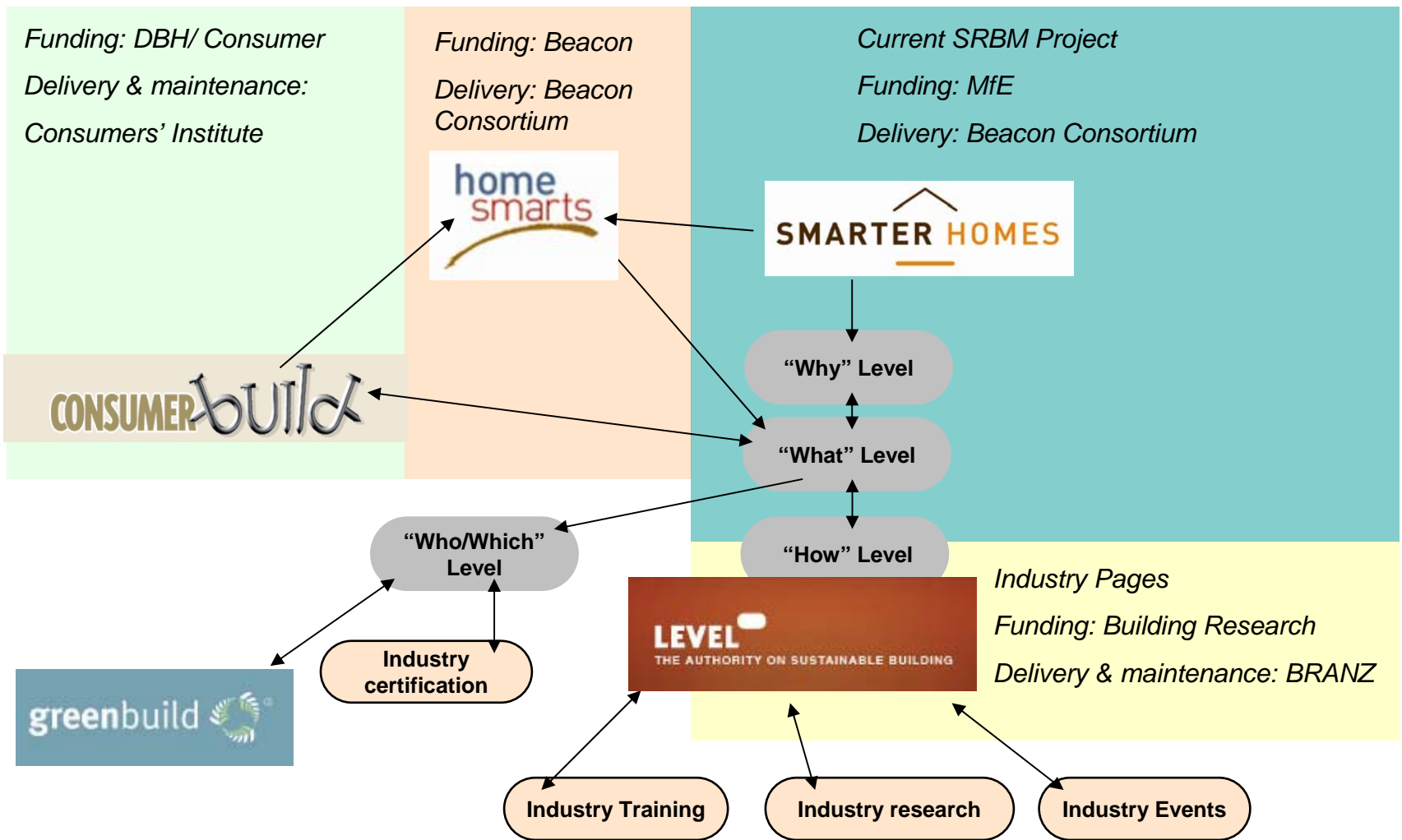
**WWF, 2006
Living Planet Report**



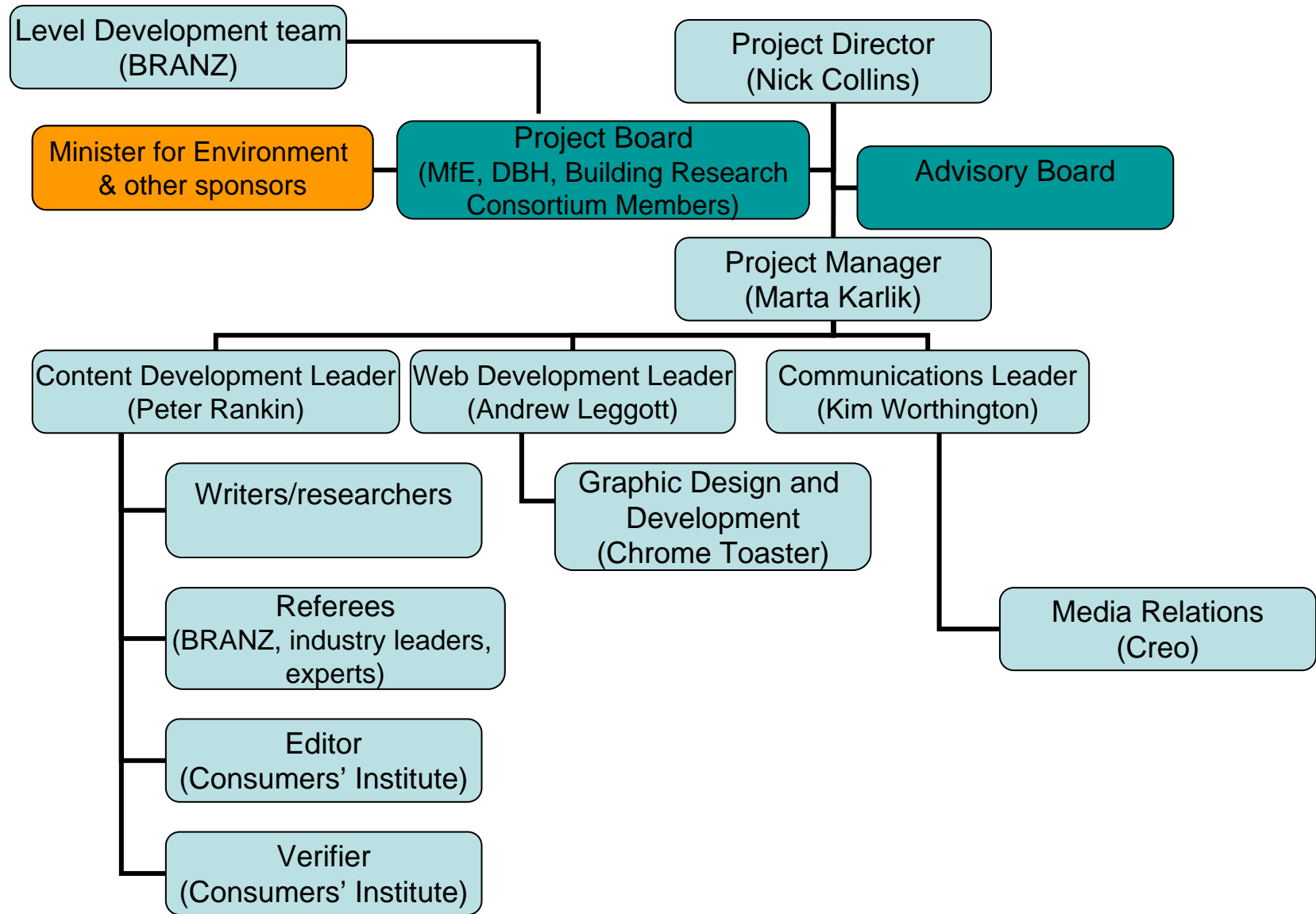
If everybody led the lifestyle of New Zealand, within current technological systems, we would need five planets to sustain us.

- Well designed, well built and run homes could have a minimal impact on the environment, while at the same time providing great benefits to people living in them:
 - Health
 - Warmth
 - Comfort
 - Affordability
 - Investment
 - Attractiveness

- The project will **create/stimulate consumer demand** through credible and accessible information and, at the same time, **enable designers and tradespeople** to use the information to develop the knowledge and skills to both anticipate and meet that demand.
- The project will **produce 'one-stop-shop' information** for sustainable residential building and renovating in a format **that is endorsed and used** by consumers, developers, tradespeople, councils, and industry trainers.



The overall success of the SRBM project can only be achieved within the larger framework.





Creating healthy, affordable homes for better living

[Contact & Feedback](#) | [Sitemap](#) | [Glossary](#)

SEARCH

Welcome

You've just taken the first step towards a home that's warmer, drier, healthier, more comfortable, more affordable and kinder to the environment. [Find out more.](#)

Did You Know?

An effective solar water heating system can cut your water heating bills by about 75% in summer and up to 30% in winter.

Title



Home Smarts helps you - Nulla non massa. Nam aliquet. Morbi portitor, dolor sit amet tincidunt pretium, mi elit lacinia. [Go](#)



Design

[Smart Design Overview](#)
[Orientation](#) [More >](#)



Energy

[Lighting](#) [Appliances](#) [Heating](#)
[Cooling](#) [More >](#)



Water

[Easy Ways To Save Water](#)
[More >](#)



Siting & Landscaping

[Understanding Your Property](#)
[Climate](#) [More >](#)



Materials

[Materials Overview](#) [Insulation](#)
[Materials](#) [More >](#)



Whether you're building your dream home, doing up an existing one, or looking for easy ways to improve your quality of life, Smartbuild's ideas are for you. A smart home is warmer, drier, and more comfortable. It has more natural light. It's healthier for you and your family. And it's affordable too. [Find out more.](#)

Smart homes are the way of the future. Increasingly, home buyers and renters are likely to demand homes that are energy efficient, comfortable, healthy and enjoyable to live in. By understanding what

Case Studies

See our [case studies](#) for in-depth information about making your home a Smart home.

Checklists & Tools

Take a look at our helpful [checklists and tools](#) to help you get started.

Latest News:

[Switch on the Sunshine](#)

23.11.06

The Government is investing \$15.5 million in a Green Party initiative to increase the use of solar...

[\[read more\]](#)

Introduction

Design

- ▶ **Smart Design Overview**
- ▶ **Orientation**
- ▶ **Passive Heating**
- ▶ **Passive Cooling**
- ▶ **Insulation**
- ▶ **Glazing**
- ▶ **Using Thermal Mass For Heating and Cooling**
- ▶ **Air Quality**
- ▶ **Ventilation**
- ▶ **Designing For Your Needs**
- ▶ **Exterior Design**
- ▶ **Safety and Security**

Energy

Water

Siting & Landscaping

Materials

Construction

Homepage ▶ Design

Design

Smart design is the first step towards a great home.

Whether you're building, buying, or making alterations, design is important. Good design can make you're a home warmer, drier and more comfortable and enjoyable to live in. It can also make a home healthier and safer, cut your energy bills, and save water.



Though good design involves using resources wisely, there are no rules. A smart home can stand out from the crowd, or it can be just like the house next door.

Whatever your budget and circumstances, it's about finding the best way to meet your needs and aspirations – now and in the future.

Smart Design Overview

Wherever you live, and whatever type of home you have, smart design can provide benefits. [More ▶](#)

Orientation

If your home is oriented to take advantage of warm sun and cooling breezes, you'll achieve greater comfort at lower cost. [More ▶](#)

Tip

If you're designing a new home or renovation, one of the best investments you can make is to insulate above the required levels. In a well-insulated home you'll be healthier and more comfortable. And, what's more, insulation can pay for itself.

Introduction

Design

▶ Smart Design Overview

▶ Orientation

▶ Passive Heating

▶ Passive Cooling

▶ Insulation

▶ Glazing

▶ Using Thermal Mass For Heating and Cooling

▶ Air Quality

▶ Ventilation

▶ Designing For Your Needs

▶ Exterior Design

▶ Safety and Security

Energy

Water

Siting & Landscaping

Materials

Construction

Orientation

If your home is oriented to take advantage of warm sun and cooling breezes, you'll achieve greater comfort at lower cost.

In general, ideal orientation means:

- you get the **right amount of sun** – plenty in winter and in cooler climates, not too much in summer and in warmer climates
you're protected from strong/cold winds but can **take advantage of breezes** to cool your home when it is too warm.

When you're designing a home or planning renovations, there'll also be **other considerations** such as local climate, view, terrain, vegetation, street access and noise. You'll need to balance these against the benefits you can achieve through harnessing the sun's energy for heating and breezes for cooling.

ON THIS PAGE

- ▶ **When should you think about orientation?**
- ▶ **Positioning for sun**
- ▶ **Letting in breezes, keeping out wind**
- ▶ **Other considerations**
- ▶ **More information**

When should you think about orientation?



SEARCH

[Home](#) [Homepage](#) [Help](#) [Case Studies](#)

Introduction

Design

Energy

Water

Siting & Landscaping

Materials

Construction

Case Studies

All over New Zealand, people are improving their quality of life by making their homes smarter.

Alterations and renovations

Solar water heating: From north to south, solar water heating is giving New Zealand households a good supply of hot water at reduced cost.

Insulation – Natalie’s home, Roxburgh: Natalie and her partner Paul have noticed an enormous difference in the comfort and warmth of their house since having ceiling and floor insulation installed.

New homes

Wairarapa - Matt and Julie’s home: Walk into Matt and Julie’s rural Wairarapa home and the first thing you notice is the sense of space and light.

Waitakere City - NOW Home: Welcome to ‘the ordinary home of the future’.

Contribute

Submit a Case Study

home
smarts



[Login](#) | [Register](#) | [About](#) | [Privacy](#) | [Contact](#) | [Smartbuild](#)

Welcome

Nulla non massa. Nam aliquet. Morbi porttitor, dolor sit amet tincidunt pretium, mi elit lacinia libero.

Vitae eleifend metus leo id augue. Quisque nunc lorem, feugiat ut, mattis luctus, facilisis nec, risus. Nulla non massa. Nam aliquet. Morbi porttitor, dolor sit amet tincidunt pretium, mi elit lacinia libero, vitae eleifend metus leo

Welcome Back

Noah Butcher

Nulla non massa. Nam aliquet. Morbi porttitor, dolor sit ame.

→ [View your profile](#)



Smart Home Tour

About the Smart Home Tour - Nulla non massa. Nam aliquet. Morbi porttitor, dolor sit amet tincidunt pretium, mi elit lacinia libero, vitae eleifend metus leo id augue.



Home Health Check

About the Home Health Check - Nulla non massa. Nam aliquet. Morbi porttitor, dolor sit amet tincidunt pretium, mi elit lacinia libero, vitae eleifend metus leo id Go.



Get Advice

About Get Advice - Nulla non massa. Nam aliquet. Morbi porttitor, dolor sit amet tincidunt pretium, mi elit lacinia libero, vitae eleifend metus leo id augue. Quisque nunc.





Smart Home Tour

View Your Results

[↓ Click here](#)

Nulla non massa. Nam aliquet. Morbi porttitor, dolor sit amet tincidunt pretium, mi elit lacinia libero.

Welcome Back Noah Butcher

Nulla non massa. Nam aliquet. Morbi porttitor, dolor sit amet.

- [→ View your profile](#)
- [→ Logout](#)



Bathroom and Laundry

Nulla non massa. Nam aliquet. Morbi porttitor, dolor sit amet tincidunt pretium, mi elit lacinia libero, vitae eleifend.



Bedrooms

Nulla non massa. Nam aliquet. Morbi porttitor, dolor sit amet tincidunt pretium, mi elit lacinia libero, vitae.



Gardens/Outdoor Spaces

Nulla non massa. Nam aliquet. Morbi porttitor, dolor sit amet tincidunt pretium, mi elit lacinia libero.



Living Rooms

Nulla non massa. Nam aliquet. Morbi porttitor, dolor sit amet tincidunt pretium, mi elit lacinia libero.



Kitchen

Nulla non massa. Nam aliquet. Morbi porttitor, dolor sit amet tincidunt pretium, mi elit lacinia libero.



Exteriors

Nulla non massa. Nam aliquet. Morbi porttitor, dolor sit amet tincidunt pretium, mi elit lacinia libero, vitae eleifend.



Results

Explanation

How your home stacks up against the HoV Home. Nulla non massa. Nam aliquet. Morbi porttitor, dolor sit amet tincidunt pretium, mi elit lacinia libero, vitae eleifend metus leo.

Technology Score

Your Score (64 of 80)



Smart Home



Behaviour Score

Your Score (72 of 120)



[Save](#)

[Print](#)



Welcome Back

Noah Butcher

Nulla non massa. Nam aliquet. Morbi porttitor, dolor sit ame.

→ [View your profile](#)

Home Health Check — Results

Nulla non massa. Nam aliquet. Morbi porttitor, dolor sit amet tincidunt pretium, mi elit lacinia libero.

Vitae eleifend metus leo id augue. Quisque nunc lorem, feugiat ut, mattis luctus, facilisis nec, risus. Nulla non massa. Nam aliquet. Morbi porttitor, dolor sit amet tincidunt pretium, mi elit, feugiat ut, mattis luctus, facilisis nec, risus. Nulla non massa. Nam aliquet. Morbi porttitor, dolor sit amet tincidunt pretium, mi elit lacinia libero. Vitae eleifend metus leo id augue. Quisque nunc lorem, feugiat ut, mattis luctus, facilisis nec, risus.

Ratings by Category

Problem Category



Explanation - Morbi porttitor, dolor amet tincidunt pretium, mi elit lacinia libero, vitae eleifend metus leo id augue. Get Advice on how to Fix this issue using the [Get Advice Section of the Site](#) →

Problem Category



Explanation - Morbi porttitor, dolor amet tincidunt pretium, mi elit lacinia libero, vitae eleifend metus leo id augue. Get Advice on how to Fix this issue using the [Get Advice Section of the Site](#) →

Problem Category



Explanation - Morbi porttitor, dolor amet tincidunt pretium, mi elit lacinia libero, vitae eleifend metus leo id augue. Get Advice on how to Fix this issue using the [Get Advice Section of the Site](#) →

Problem Category



Explanation - Morbi porttitor, dolor amet tincidunt pretium, mi elit lacinia libero, vitae eleifend metus leo id augue. Get Advice on how to Fix this issue using the [Get Advice Section of the Site](#) →

Problem Category



Explanation - Morbi porttitor, dolor amet tincidunt pretium, mi elit lacinia libero, vitae eleifend metus leo id augue. Get Advice on how to Fix this issue using the [Get Advice Section of the Site](#) →

Results Overview

Overall Score

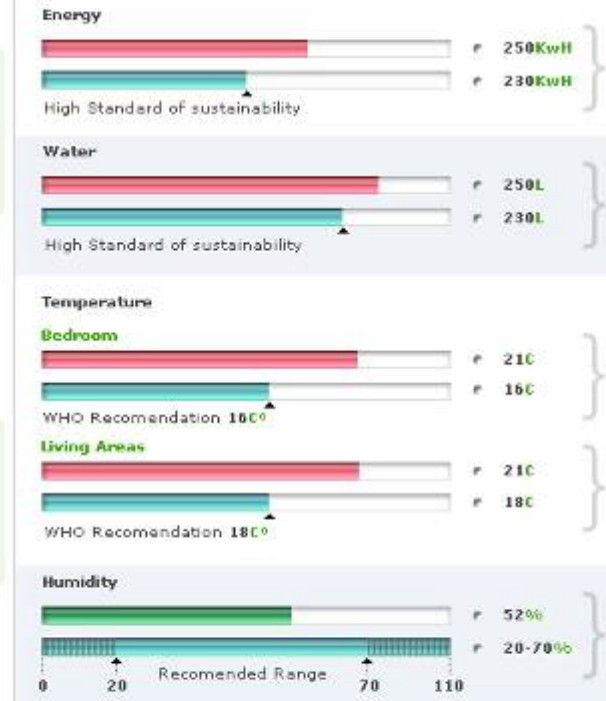


Vitae eleifend metus leo id augue. Quisque nunc lorem, feugiat ut, mattis luctus, facilisis nec, risus. Nulla non massa. Nam aliquet. Morbi porttitor, dolor sit amet tincidunt pretium, mi elit, feugiat ut, mattis luctus, facilisis nec, risus. Nulla non massa. Nam aliquet. Morbi porttitor, dolor sit amet tincidunt pretium.



Your Statistics

Id augue. Quisque nunc lorem, feugiat ut, mattis luctus, facilisis nec, risus. Nulla non massa. Nam aliquet. Morbi porttitor, dolor sit amet **Positive** tium, mi elit lacinia libero. **Indicates your level**, vitae eleifend metus **Recommended range** leo id augue. Quisque nunc lorem, feugiat ut, mattis luctus, facilisis nec, risus.





Welcome Back

Noah Butcher

View your profile to see previous results, change your answers, and/or amend personal details.

→ Logout

Get Advice - Results

Vitae eleifend metus leo id augue. Quisque nunc lorem, feugiat ut, mattis luctus, facilisis nec, risus. Nulla non massa. Nam aliquet. Morbi porttitor, dolor sit amet tincidunt pretium, mi elit lacinia libero, vitae eleifend metus leo.

Add view/hide interaction description (why you would want to use it - ie to filter what is printed). This message would need to be added using Javascript as this functionality will be dependent on JS being enabled.

Behavioural - Easy

Turn off the Lights When You Leave The Room | Hide —

Optional supporting text here

Some kind of relevant [link to additional information](#)

Change to Energy Efficient Lightbulbs | Hide —

Optional supporting text here

Some kind of relevant [link to additional information](#)

Suggestion Description | Hide —

Optional supporting text here

Some kind of relevant [link to additional information](#)

Suggestion Description | Hide —

Optional supporting text here

Some kind of relevant [link to additional information](#)

Your Progress

1 Choose Project

2 Choose Room

3 Identify Problems

4 Results

- ConsumerBuild – general consumer advice on building, renovating and maintaining homes
- LEVEL – detailed advice to industry professionals (home providers)
- Greenbuild – repository of products rated based on their quality and environmental performance

ConsumerBuild – homepage

www.consumerbuild.org.nz



The screenshot shows the ConsumerBuild website homepage. At the top is a navigation bar with links for ABOUT, CONTACT, HELP, and SITEMAP, along with a search box. Below this is a large banner with the 'CONSUMERbuild' logo and a collage of home-related images. A sidebar on the left lists various topics. The main content area features a 'Welcome to ConsumerBuild' section with an introductory paragraph. Below this are three featured articles: 'Step by step' on building a new home, 'Your GUIDE to Sustainable Building', and 'The Building Act'. To the right, there are sections for 'HOT TOPICS', 'PROBLEMS?', and 'NEWS & UPDATES', each with a list of links and a date.

CONSUMERbuild

NZ'S INDEPENDENT RESOURCE FOR BUILDING, RENOVATING AND MAINTAINING HOMES

[ABOUT](#) | [CONTACT](#) | [HELP](#) | [SITEMAP](#)

SEARCH

TOPICS

- [Building Act](#)
- [Buying a house](#)
- [Buying a section](#)
- [Construction phase](#)
- [Dealing with tradespeople](#)
- [Design & architects](#)
- [Do-it-yourself?](#)
- [Leaky buildings](#)
- [Legal issues](#)
- [Maintenance & repairs](#)
- [Materials & features](#)
- [Moving a house](#)
- [Project management](#)
- [Renovations & alterations](#)

STEP by STEP

- [Building a new home](#)
- [Renovating](#)

RESOURCES

Welcome to ConsumerBuild

ConsumerBuild aims to provide clear, independent and up-to-date information to the public about building, renovating and maintaining houses in New Zealand.

+ Step by step



Building a new home?

[Start here »](#)



Your GUIDE to Sustainable Building

[Start here »](#)



The Building Act

[Start here »](#)

! HOT TOPICS

[Design costs](#) [Buying an apartment](#) ['Green' homes](#)

? PROBLEMS?

[Leaky buildings, problems with a tradesperson...](#)
[Get help here »](#)

! NEWS & UPDATES

- [What to check before buying a new home](#) Dec 23, 2005

LEVEL homepage

www.level.org.nz



RAINWATER INLET

HOLE PREVENT
OVERFLOW FROM
WATER FROM

LEVEL

THE AUTHORITY ON SUSTAINABLE BUILDING



THIS WEBSITE WILL
BE LAUNCHED IN THE
MIDDLE OF THE YEAR

Welcome to Level.

Level will help you design and build homes which have less impact on the environment and are healthier, more comfortable, and have lower running costs.

This sustainability resource for the building industry is currently being developed by BRANZ, the independent research, testing, consulting and information company.

FOR MORE INFORMATION,
CONTACT:

DAVID HINDLEY,
PROJECT MANAGER, BRANZ,
PH (04) 238 1357

- Home
- News Headlines
- About GreenBuild™
- Contact Us/Feedback
- Project Product List
- Building Law & Compliance
- Site Safe
- Occupational Health & Safety
- ConsumerBuild
- BRANZ
- Standards NZ

Pitched Roofing

Expand Sub-Categories below	Companies	Products	BUILDING COMPLIANCE STATUS	ENVIRONMENTAL CERTIFICATION	FULL PRODUCT LISTING AVAILABLE	GREENBUILD ASSESSMENT	NZ PRODUCT	NZGBC CREDIT
+ Asphalt Shingle Roofing	7 Companies	8 Products						
+ Clay Tile Roofing	4 Companies	5 Products						
-Metal Clad Insulating Roofing	Bondor New Zealand	MetricRoofing						
	HH Robertson (Aust) Pty Ltd	Insulated Roof and Wall Cladding						
	Kingspan Limited	Kingspan Insulated Roof Systems						
+ Natural Slate Roofing	1 Company	1 Product						
+ Pressed Metal Tile Roofing	4 Companies	13 Products						
+ Profiled Bitumen Impregnated Sheet Roofing	2 Companies	2 Products						

Search by GreenBuild category

Adhesives - Tapes - Solve

GO

Search by Manufacturer

3-form

GO

Search by keyword