- House construction / Interior design / Domestic architecture—Designs and plans

Make your home healthy, sustainable

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Words like "eco-friendly", "green" and "sustainable" get bandied about a bit. But when you're building or renovating a house, what does true sustainability look like?

How can you reduce your own carbon footprint while also ensuring your house is future proof, saving you money on running costs in the long run?

And how about making it as healthy as possible for you and your family?

Try these great ideas, from Absolutely Positively Wellington City Council and Houzz magazine.

- Insulation is your priority. Install wall, ceiling and underfloor insulation to help keep your home warm and dry and save on energy costs.
- Double-glazed windows are another must-have to keep your home as warm as possible and reduce energy costs.
- The sun is your best friend. Try to orient your house to trap the sun during the day, reducing heating costs and utilising natural light, rather than relying on artificial light. Talk to your designer about passive heating.
- Select appliances with high energy-efficiency ratings. Swap regular light bulbs for eco bulbs.
- Opt for non-toxic building materials the Environmental Choice tick of approval will help you find these. Environmentally friendly materials carry fewer health risks for humans, as they have less harmful VOCs (volatile organic compounds).
- Using natural, sustainably-farmed timbers is a great way to encapsulate the carbon dioxide that is naturally released from wood; when timber is used in a building, the gases are locked in and no longer emit carbon dioxide.
- Source materials locally, to reduce the environmental impact of transport and support Kiwi businesses.
- Install a rainwater collection tank. Choose water-efficient appliances and sanitary fittings.
- Minimise waste and recycle where possible, especially when demolishing and building.
- Use renewable electricity sources where possible, by generating onsite. For example, install a small-scale wind turbine or micro-hydro system, or choose a power company that generates from renewable sources.
- When landscaping, choose native and local flora.

Eco options

Rammed earth

Made from gravel, soil and cement, this beautiful, earthy material is fireproof, and a great insulator and sound absorber. Touted to last for centuries, it's also bug-proof. However, it can be expensive, it doesn't really suit very wet areas, and it can be hard to make or source it.

Concrete

No longer just an industrial product, concrete is being seen in shows like Grand Designs, making it a fashionable, versatile choice. A mixture of aggregate or gravel and cement, concrete is strong, low maintenance, fire resistant and becomes more attractive over time. On the flip side, it's not as eco-friendly as many think, so it's best used in conjunction with other materials.

Natural stone

Rustic and warm, natural stone has long been a favourite for many, and it's becoming increasingly popular, in part thanks to being natural. It's also fire resistant, sound absorbent and strong, usually outlasting its inhabitants. However, it's not renewable, and if not available in your area, transporting it makes it less eco-friendly. Green roofs and walls

Softening the hard lines of a building, this living building material is having a moment.

Made from gravel, steel, geo cloth and plants, these structures are great at insulating your home. Not super expensive to make, they do require an engineer to complete roofing guidelines. Consistent water and care is needed for these stunning natural features.