

## Episode 21

# Creating Healthier Homes For New Zealand

The show notes: [www.houseplanninghelp.com/21](http://www.houseplanninghelp.com/21)

Ben: Today's podcast is a little bit different because quite often I feel like I'm one of few people who's got into podcasting in this niche area but very excitingly the other day I discovered that I was not alone so I thought this would be a great opportunity. It's a long distance interview, the longest one that we've ever had and we're going to speak to a certain gentleman out in New Zealand, so let's say hello to Matthew Cutler-Welsh.

Matthew: G'day, Ben. Good to speak to you. It's early in the morning down here in New Zealand. It's evening for you right now?

Ben: That's right. So I think I've definitely got the good end of this bargain. [Ben and Matthew laugh.] But I wanted to have a chat with you because you run a podcast which I am really getting into now called Home Style Green but I wanted to know about why you set this up? And I feel we've probably got some similarities here, which I hope will come out during the course of the interview. So, yeah, maybe you can set us off on Home Style Green?

Matthew: Yes, so my vision is to create houses that are beneficial to the people inside them and also beneficial to the planet. That's what I want to achieve and the reason for that is because I'm really interested in sustainable urban systems, how we live, the fact that we are becoming more urbanised around the world and when we look at the natural environment it's a bit ironic that we tend to have most of the impact on our natural environment in these urban environments that we're creating. That's because that's where we live, that's where we consume resources and that's where we create our waste is in these urban centres. That can be quite overwhelming when you start looking at it.

I think houses are something that I've, just through the work that I've been involved in, is something that seems a little bit more manageable to focus on. We can all influence the way we live, in some ways, and I'm very interested in the way we design our houses and build them. I've always enjoyed that design aspect

and after training in engineering, I thought that this is something that I can probably get interested in and maybe, hopefully, influence house design a little bit. So I created Home Style Green to really share my interest and knowledge, connect with people such as yourself, but also provide a resource for people who are wanting to build a better home, who aren't satisfied with the status quo and the way we're tending to do things. But also as a way to get some professionals, get some knowledge from them and also to them about how they can build and provide better homes for people.

Ben: Sustainability is an interesting one and particularly when you start to look in the towns and cities, so what elements would you say are sustainable and what are the points we have to work on?

Matthew: Well, it's interesting, as well as Home Style Green, my day job if you like, I work, I'm quite lucky to be working in a field that I'm really interested in, which is called Homestar, so it's a little bit confusing – my day job is at Homestar and at night I come home and work on Home Style Green! [Matthew laughs.]

The Homestar is our New Zealand sustainability tool for residential property and it's run by the New Zealand Green Building Council, so I'm employed at the New Zealand Green Building Council and the way I like to think of Homestar is that it really defines what sustainability means at the moment for a house. What that looks like is a set of 6 categories for all the aspects of the house and they are things like energy use, water use, how comfortable the house is, how much waste is created both during the construction and then also the ability for that house to deal with waste on an ongoing basis, the site, the area around the home, the garden and what's outside, things like permeable area, permeable surfaces for dealing with rainwater and also where the house is located in the wider context of the local amenities.

So, within those categories is much more detail, which we've defined, what we think are the really important issues, say for energy, you know it breaks down to things like lights and heating and your appliances. By doing that we step back from that and we say this is potentially a definition of what sustainability means for a house. If you score the maximum points on all these, what we call credits, then theoretically you could say you have a sustainable house, if you like.

We could probably talk for hours just on the word sustainability. In fact I've been to many conference sessions that have done just that. It's quite a big issue but I quite like the general concept of doing things better that are going to reduce the impact and allow that activity to carry on pretty much indefinitely.

Ben: Is this something the most people are interested in? What are the key drivers in the New Zealand market?

Matthew: I think people are always interested in health and the general well being of themselves and their family. I am always seeking to find from homeowners and also builders and people in the industry, the truth about what are the key drivers, and I think it does depend a lot on who you speak to. Even within an individual family, the person who's got to look after the children all day might have different ideas and priorities from the person who's holding the purse strings and paying all the bills.

I think it's a fallacy that homeowners and people in homes are purely driven by cost benefit and we see that in the choices that get made, particularly in new homes. It gets proven again and again that a lot of decisions aren't logical when it comes to new build home design. If all decisions were logical then we would probably not choose granite or marble bench-tops and some of these sorts of things.

I don't know if that answers the question or not but I think there are so many potential drivers. One of the big issues here is availability and affordability, and that's something that I'm seeing more and more across the whole world, that housing affordability is a key issue. That's a huge topic as well and one that I think is often misconstrued because it's usually just talking about purchase price and like any building the largest cost tends to be the actual running cost over the life of that building. That's just something that's not really considered in that housing affordability topic in the mainstream media.

Ben: So, how would you describe the housing stock that you have in New Zealand at the moment?

Matthew: Terrible. [Matthew laughs.]

Ben: I've heard you mention it in your podcast a couple of times. I just wanted you to say it again!

Matthew: Ah, it's appalling. In fact the people who tend to have most impact on houses in New Zealand are from overseas, because they are coming in and they're the ones that really understand and are quite shocked, rightly so, about the condition of some of our houses.

I think the people who have grown up in a typical New Zealand house, unwittingly contribute to the preservation of that standard because there's a culture of, ah well it's always been like that and you just toughen up and that's just the way we build houses here. But people coming from overseas, where it's colder climates are just not satisfied with huge amounts of condensation on the windows and being able to see your breath inside and having NZ \$300, \$400, \$500 electricity bills each month.

So it's people who have experienced what quality housing can look and feel like who tend to want to make a difference, I think. That's not exclusively but we are a country with lots of expats and lots of people come here for the lifestyle. Fortunately, a lot of those people do come from places like Germany, the UK, even North America where they've experienced much better quality houses.

We didn't have insulation, insulation wasn't required in New Zealand in the building code until 1978 and even prior to that in 2004, the level of insulation required wasn't spectacular. One of the presentations I give at work at the moment, I cite a building that's less than two years old in Christchurch, which has a totally un-insulated concrete floor slab and that's code compliant. So even the current code is, I would say, below par.

Ben: Yeah, it's a tricky situation and I know that you say we have the right idea every so often but it sometimes feels in the UK that we're way behind things as well. We always look to countries such as Germany who are really pushing boundaries and not dragging their feet and saying we can't change all of this.

Matthew: Well, having said that though I think that one of the great things that UK seems to have going for it is some pretty decent goals around carbon neutrality in buildings and that seems to be driving things in a positive direction. We, as far as I can tell, lack that sort of visionary, over-arching goal here at the moment, so it's much more reliant on market forces and differentiation of people saying: "Hey look, we can provide something that performs better and we think that that's a better product." That's really where it's

at now. It's just relying on people to . . . It's relying on industry which is a risky business.

Ben: I'm wondering about climate change, whether that registers at all on the scale of consciousness over there?

Matthew: I don't think so to the same level. My previous comment about . . . . Correct me if I'm wrong, it's carbon neutral buildings by 2016 in the UK?

Ben: Yes, but it's quite a tall order, I think. I'm not sure whether we'll get there.

Matthew: But, I mean, that's been stated and it's out there. Climate change in general is discussed here but we, for example, pulled out of Kyoto, which a lot of people were very disappointed by, myself included. Partly the reason why, one of the reasons why there's not a real connection between carbon and our building and energy use here is because 60-70% of our electricity production is hydro. So we don't have the same sorts of emission issues from our energy sector as, say, Australia or parts of America or the UK. A lot of our emissions come from the agricultural sector. So, it is out there.

I think one of our greatest strengths is also one of our greatest weaknesses and that's our isolation. We can hide behind the fact that we're this little island in the Pacific and it's easy to ignore those bigger issues, I think, of climate change. Having said that, all of the north island is officially in drought and that's when those real changes and real issues do start to affect things like agriculture, which is such a hugely important part of the New Zealand economy. I think that's when people do start to think, *oh, maybe something is not quite right here and this is different from what it was in the past, and what's actually going on here?*

Unfortunately I don't think we are as switched on the realities of some of those issues as perhaps we should be but there are definitely people, and there's an undercurrent of people, who are motivated for some change.

Ben: I think part of the difficulty is that we're all so wrapped up in what we're doing first of all and until we get that palpable side of it, which I think will happen more and more, it's just too easy to forget about it. You don't see it on that local scale, but I do wonder as you get, for example, in Australia they had the really hot summer, didn't they, a few months back, whether it might

start speeding up a bit and that could be almost a good for action against it. I feel we need to focus on the action rather than getting scared by the size of the problem because it is huge.

Matthew: Yeah, definitely. I think the reality though in a lot of situations is that people are still going to look after their own families first and because, particularly in winter time, we have houses that have damp issues and that are very hard to heat and people are struggling with utility bills.

Those issues are still going to be top of people's minds and I think for those of us that have a real drive to improve things for the sake of the environment I think we can tap into those things and address those issues, I call it sustainability by stealth, in that you address the issues that people are facing and look at the connection with those and some of the environmental goals that you want to achieve. That's relatively easy to do on things like improving the insulation of a home because that's going to help people's health. It's going to help reduce their power bills and it's going to help them look after their family.

They're the things that a family who's in fuel poverty or just really struggling to keep warm and healthy during the winter, they're the things that are going to matter for them. By fixing those then you also have an ongoing wider environmental impact. So I think it's all about framing it for what's important for the people.

I find it quite interesting that my first failed attempt at university was in health, in the health sector, and I sort of dropped out of that because I figured that there were enough humans. We probably didn't need that much help in looking after our health and I wanted to go down more of the environmental path. I've actually found myself back in a health issue because our houses are a health issue.

Ben: Home Style Green mentions health a fair amount. What are you worried about health wise? Is it going back to mould and all of these things that you mentioned a little bit earlier?

Matthew: Yeah, well New Zealand has the second highest asthma rate in the whole world, which is pretty scary for a so-called first world country, a developed country. Asthma is the leading cause of hospitalisation for our children and 1 in 4 of our children have relatively severe asthma. So they are kind of scary statistics and that's just one condition.

We know that mortality rates increase quite rapidly during wintertime. They're the fairly extreme examples but it also affects productivity and sick days off work and having to take days off if the kids are sick. Just general quality of life – people being in a home that's cold and damp is miserable, and that affects your health, too.

As much as I'd like to stay doing engineering I do realise more and more that our houses do affect our health, because we spend so much time inside them as well. They can't help but affect our physical well being in some way.

Ben: Well, I really like what you do at Home Style Green but from your side, where is it going? Who are you aiming Home Style Green at and what would you like to achieve in the coming years?

Matthew: I started aiming at people who are wanting to build and looking into getting into their own renovation or new build, sort of similar to the work that you do, but I'm focussing more now on the industry. That's not to exclude people who are interested in building because we often find there's quite an overlap there between the highly educated consumer and the sort of fresh tradesperson who's just learning these things, usually from a passionate customer.

So my aim, my focus, my target market is people who are builders, designers, architects, who are interested in helping their customers to build better homes and my vision is really that, to help people to create homes that are better for themselves and better for the environment.

In terms of where it's going, in some ways I'd like to be the New Zealand equivalent of Kevin McCloud. [Matthew laughs.] That would be nice.

Ben: Do it.

Matthew: I'd really like to put things out there, really good examples of houses out there, show people visually as much as possible. I'd like to get into a little bit more video. It's a little bit tricky but that's where I'd like to go because I think that medium does a really good job of inspiring people, showing people, other people's journey.

People like stories and building a house is a story, it's a bit of an adventure, and if that can be condensed down and some good

learning extracted from that then I think people enjoy that but they can also really benefit from it and it's a great way to spread some good messages about the way things can be done better. A key message that I have for all people who are building is that we do deserve better and things can be better and you shouldn't just accept the status quo, particularly the way we're doing things now in a lot of subdivisions here in New Zealand.

It's just silly some of the things that get built and once people see that and once people experience a better way of doing things then I'm sure that they won't be satisfied with the status quo.

Ben: Is there a good source of information, a resource, a website, that other people might find interesting, a recommendation of yours?

Matthew: Yeah, we have quite a few over here. One of the most active ones for the industry is set up by a friend from Christchurch called Eco Bob. [www.ecobob.co.nz](http://www.ecobob.co.nz). That's got quite a lot of resources. On Home Style Green shortly I'm hoping to put up a list of the web resources.

There's a book, which inspired me quite a lot back probably when I was at school actually [Matthew laughs] by a guy in Sydney who converted a terraced house, an old terraced house – old by Australian standards – [Ben laughs] and made it completely sustainable. It's called The Sustainable House and his name is Michael Mobbs and I can send you a link to that. I still pull it off the shelf every now and then, and look at it because, gee, I don't know when it was written. It was a long time ago now and a lot of the stuff he did was revolutionary at the time, particularly for suburban Sydney.

It was a terraced house and he managed to put in everything from PV to solar hot water, even a little wetland and compost. I think it's got a . . . I'm not sure whether it's got a composting toilet or a flush toilet but he managed to deal with a lot of storm water and waste water on site in this tiny little terraced house section. And he still runs tours in the house today. The other exciting thing about that story is that he, I can't remember if he was a lawyer or some other profession but he wasn't a builder and he wasn't someone with a building background. So there's lots about that story that is very inspiring and I still think back to that every now and then.

Ben: Well, it's been fascinating to have a chat with you today and I'm sure we're going to hook up again but maybe you could tell us

how we find out about you, the website address, if you're on Twitter?

Matthew: I am on Twitter, @mcutlerwelsh, all one word. The website address is [www.homestylegreen.com](http://www.homestylegreen.com). You can also find my podcast on iTunes if you look in the iTunes Store for Home Style Green but I've got links to that. Probably the easiest way is to jump on the website and I've got links to a Facebook page and I'm also playing around a little bit with Pinterest and Google+ as well, but the other place that there's some great activity going on at the moment is LinkedIn. There are some great groups, particularly for people who are in any industry but particularly anything to do with sustainability or building and housing. There are some really good groups on LinkedIn.

I'm finding there's some great discussion going on there. Internationally I've got no idea where some of the people I interact with live. I suspect a lot of them are in the US but it's a really valuable source of information on LinkedIn groups.

Ben: I'm definitely a member of a couple of groups on LinkedIn but maybe I should fish around some more.

I do love this idea of having a connection with what's going on outside your home area and that's why I think it's valuable we've brought you onto the podcast and had a chat, you know, almost forming a little community online as well. I love it. I think it's such a good idea. I'm sure there's a lot more I can learn from you but another time, Matthew.

Matthew: Yeah, another time. Definitely.

Ben: Thank you very much for coming onto the podcast.

Matthew: Thanks very much, Ben. I appreciate it.