



Earth Building Association of New Zealand

**eb news**

EBANZ - Promoting the art and science of earth building - P.O. Box 1452 Whangarei

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**EB News 48 - Special Edition: Climate Change  
July 2009**

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**EB News** is an email newsletter featuring events & workshops promoting earth building & low impact living.

**Please feel free to pass this newsletter on!**

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Contact Editor: [EarthBuildingAssociationNZ@gmail.com](mailto:EarthBuildingAssociationNZ@gmail.com)

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FROM THE EDITOR:

**Special Edition: Climate Change**

Please all [sign on](#) - Lets urge John Key to do his duty in Copenhagen at the United Nations climate change negotiations and **push for 40% emissions reduction on 1990 levels by 2020.**

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**Issue 47 Content:**

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[Sign on](#) fight Climate Change!  
Right now!!

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**Ecofest Nelson**  
15-16 August 2009, Nelson

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**Earthbuilding Workshop,**  
Fri 4 to Sun 6 Sep 2009, Nelson

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**Stoves and Ovens**  
September 19, 2009, Torere, Bay of Plenty

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Composting Toilets  
Saturday September 26, 2009, Torere, Bay of Plenty

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Build your own Pizza Oven!  
Saturday 17th October 2009 9 - 4, Kaiwaka

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Light Earth Building  
Saturday November 21, 2009, Torere, Bay of Plenty

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**Appropriate Technologies**  
Saturday November 28, 2009, Torere, Bay of Plenty

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**Build a schoolhouse**

9 - 25 January 2010, Mali

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**Links & ongoing courses:**

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**Earthbuilding Workshops and other courses**

Nelson area, 03 528 4751

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**Ongoing Permaculture Design Course,**

Horowhenua, Jan - Dec 2009

(06) 3626684 [gary@waterscape.co.nz](mailto:gary@waterscape.co.nz)

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**9. Hazards & Catastrophes - 19 Sep**

**10. Built Environment - 3 October**

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**Ongoing Modular Permaculture Design Course**

Tarakaki, June 2009 - Feb 2010

Ph 06 756-8229 or 06 756-9100 [kamaburwell@iconz.co.nz](mailto:kamaburwell@iconz.co.nz)

<http://www.environaki.co.nz/courses-education.htm>

**4. Climates, Soils, & Gardening**- Dee Turner & Jodi Roebuck, - 12 & 13 Sept

**5. Urban Living & Waste** - Lisa Talbot & James Bellamy, - 24 & 25 Oct

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**Fight Climate Change > [Sign On](#)**

Do it right now!

In December 2009 the United Nations will hold Climate Change Negotiations in Copenhagen. Prime Minister John Key will be there representing you.

To have your say, the most effective thing you can do is [Sign On](#) to this site - <http://www.signon.org.nz>

Simply add your name & email to the database and you'll join the petition of over 61,880 New Zealanders urging John Key to do his duty when world leaders meet at Copenhagen at the United Nations Climate Change Negotiations

**- push for 40% emissions reduction on 1990 levels by 2020.**

**And** please attend the public meeting in your city - voice your support for this move toward a brighter future for you, me, and our children!

(sorry, some cities have had their meeting already)

- Wed July 8 - **Christchurch** - 7.30pm - 9pm, Hall C, Convention Centre, Kilmore Street,

-Thursday July 9 - **Dunedin** - 7.30pm - 9pm, Clifford Skeggs Gallery, Dunedin Centre, 1 Harrop Street, Dunedin

-Friday July 10, **Queenstown** - 7.30pm - 9pm, Icon Room, Heritage Hotel, 91 Fernhill Drive.

-Monday July 13 - **Hamilton** - 7.30pm - 9pm, Waikato Room, Sky City Hamilton, 346 Victoria Street, Hamilton

-Tuesday 14 July - **New Plymouth** - 7.30pm - 9pm, Conference Room Plymouth International, Corner Courtenay and --Leach Streets, New Plymouth

-Wednesday 15 July - **Napier** - 7.30pm - 9pm, Ocean Suite East Pier, Hardinge Road Ahuriri,

Napier

-Friday 17 July – **Nelson** – 7.30pm – 9pm, Waimea Room Rutherford Hotel, Trafalgar Square, Nelson.

## **Further action you can take on climate change to reduce climate change and live a healthier life:**

### **1. Stream Edge Planting**

- multiple benefits as well as being permanent carbon sink - by planting natives encourage biodiversity, native birds etc, act as sediment and nutrient trap from farm runoff, to keep streams cleaner, shade streams so better enviro. for aquatic life, provide employment for planters, fencers.

### **2. Forest expansion -**

Into areas where currently wilding pinus contorta is "a problem" eg Craigburn range, McKenzie country,

Into lower productive areas of farms eg steep slopes into gullies

Make dairy conversions of forestry land only available if on a carbon neutral basis

### **3. Stop Burning Coal -**

Provide help to convert every school boiler from coal to woodchip

Provide carrot & stick to convert all other coal boilers to biomass

Ban domestic burning of coal

### **4. Promote Non Ruminant farming - its not all farm animals, just ruminants that are the problem!**

Make ruminant farmers progressively pay for their greenhouse pollution over time, until they are paying for half their pollution or means are found to prevent methane emissions from ruminants.

Encourage people to eat less dairy products, less mutton, lamb and beef and more pork, chicken, ostrich etc

Encourage everyone to eat one ruminantless meat meal a week

### **5. Modify Power Stations to take Renewable Peaks**

Run Geothermal stations hard when low renewable power available, rest them and let pressure build up when plenty of renewable power is available

Install additional turbines at hydro stations so can increase power generation at any one time to cover renewables

Look at using existing stations as virtual pumped storage eg run water backwards from Pukaki to Tekapo (apparently the canals are built so flat that this is possible)

### **6. Encourage Logburners not heatpumps or gas heating**

Overtake bans on logburners with smoke alarms on chimneys - persistent offenders fined

### **7. Auckland PV Feed -in Tariff**

Since Air-con load in Auckland is almost the main peak and that this load closely matches max power from solar power generation, use feed in tariffs for those feeding in renewable power at peak times in Auckland

### **8. Bring back Cheap Ripple Control Rates to Lop off Power Peaks**

Legislate if need be to have ripple controlled rates considerably below uncontrolled rates so more people use them - we would all have not just our hot water cylinders on ripple control, but also our freezers. We might also wire socket outlets for our dishwashers, clothes dryers and washing machines differently - having a controlled and uncontrolled plug for each - in the normal situation you would leave the appliance plugged into the controlled outlet and only unplug it from there and plug into the uncontrolled if you particularly wanted something done immediately. At present there are hot water cylinders going in not wired to a controlled rate because there is now so little difference between controlled and uncontrolled.

### **9. Modify Power Stations to take Renewable Peaks**

Run Geothermal stations hard when low renewable power available, rest them and let pressure build up when plenty of renewables (presently they are run steady state and their use as virtual storage is untapped)

Install additional turbines at hydro stations so can increase power generation at any one time to cover renewables

Look at using existing stations as virtual pumped storage eg run water backwards from Pukaki to Tekapo (apparently the canals are built so flat that this is possible)

#### **10. Change Thermal Power Stations to Biomass**

Move from burning coal and gas to woodchip and producer gas

Legislate that any new electricity generation connected to the grid be carbon neutral

#### **11. Stop Urban Sprawl**

- one of the big growth in transport emissions is car commuting - living closer to town means more chance of being able to use public transport, cycling or walking.

Encourage councils to change planning laws to allow townhouses so people live closer to town in denser settlements where public transport might actually work

#### **12. Disincentivise New Dairy conversions**

Legislate that new dairy conversions must be carbon neutral in recognition that it is dairy farms that have really ramped up our emissions compared to other sorts of farming or land use.

#### **13. Nitrogen Inhibitors promoted for farmers**

- this big block of 16% of our emissions can be wiped almost immediately with current nitrogen inhibitor technology

#### **14. Carbon Footprint of government buildings mandated**

To encourage use of carbon sequestering timber construction including multistory building rather than building with steel and concrete mandate an ambitious but achievable carbon footprint for new buildings and alterations. Using Big lumps of timber to actually store carbon rather than steel that has a big carbon footprint (and performs poorly in a fire relative to big timber that gets protected by the 1st inch of char) is potentially a zero cost change.

Encourage low carbon mass materials for heat & coolth storage such as earth walls, floors and plasters.

Encourage low carbon insulation such as wool rather than high energy content fibreglass

**15. Energy Efficiency of Houses Rated and Displayed at Sale** - there are simple rating tools becoming available.

**16. Energy Efficiency of Rental accommodation** must be rated and displayed.

#### **17. Change NZ Building Code to ensure Daylighting of Commercial Buildings, without heat gain**

1/3 of office building energy use is in lighting, the heat given off from lighting contributes significantly to the next biggest electricity load for these buildings - air conditioning. Yet we know how to give good daylighting, without summer overheating to commercial buildings by using Southlight Clearstories. There is no excuse for single story buildings, top floors of multistory buildings and big parts of other floors of commercial buildings.

**18. Campaign in your city / region for better, cleaner public transport** - Electric tramways etc

**19. Join a permaculture group** or do a permaculture course <http://www.permaculture.org.nz>

**20. Investigate alcohol as a fuel** as part of community-supported agriculture

Please email the editor if you have any further helpful ways to reduce emissions and climate change in our lives.



Making it easier being Green!

## Ecofest Nelson

15-16 August 2009, Nelson

Ecofest Nelson/Tasman held 15/16 August 2009 at the **Trafalgar Centre** in Nelson. Environmental expo with everything for living more sustainably. Energy efficiency, water conservation, organics, sustainable transport, eco-fashion, and kids' education are just the start

**Only** \$2.50 entry per adult. Ongoing seminars and workshops throughout the weekend, in conjunction with the Expo, as well as the extremely popular eco-home bus tours and business tour. Tickets for the tours go on sale in July – please check local papers for availability.

Did you know the average home spends approximately \$100 per year just on stand-by power for appliances. This is just one of the fascinating facts you can learn at the [Expo](#).. (<< click)



## EARTHBUILDING WORKSHOP

Fri 4th September to Sun 6th September 2009, Nelson

Course topics to be confirmed, but may include:

- \* Experiment with earthen plasters, natural paints and sealants
- \* Build walls and furniture from adobe brick, cob, light-earth and wattle-and-daub
- \* Lay a small adobe tile floor
- \* Sculpt a pizza oven
- \* Do artwork such as mosaics and reliefs
- \* Learn more about basic earthbuilding and professional techniques
- \* Visit a commercial adobe brick manufacture

SOLID EARTH  
Verena Maeder & Carlo Wiegand  
Main Road, Wakapuaka  
RD1 Nelson  
New Zealand

Workshop fee \$270.00

phone: (03) 545 0240  
mobile: 021-036 3938

e-mail: [contact@SolidEarth.co.nz](mailto:contact@SolidEarth.co.nz)



## Stoves and Ovens

September 19, 2009

Saturday September 19th. 2009  
Koanga Institute, Torere 9am- 6pm

Bob Corker and Max van Ginkel \$90

Koanga Institute is exploring how we can make low cost stoves and ovens. This workshop will bring you up to date with our progress using rocket stoves (mainly light earth and some steel) and wood fired ovens (all clay and earth composites). We'll build both a stove and an oven during the day, and give you enough notes that you can build your own at home for less than \$100.

Click > [www.koanga.org.nz](http://www.koanga.org.nz) - enrolment info & other courses

contact [info@koanga.org.nz](mailto:info@koanga.org.nz), call 07) 315 5363  
location Koanga Institute, Torere, Bay of Plenty

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## Composting Toilets

Saturday September 26, 2009

Saturday September 26th. 2009 Koanga Institute, Torere 9am- 6pm

Bob Corker and Max van Ginkel \$90

We'll show you how you can make a non flush composting toilet ( for a large family) with materials you can purchase for less than \$400 (excluding the building). It will be low maintenance and acceptable to council

Click > [www.koanga.org.nz](http://www.koanga.org.nz) - enrolment info & other courses

contact [info@koanga.org.nz](mailto:info@koanga.org.nz) call, 07) 315 5363  
location Koanga Institute, Torere, Eastern Bay of Plenty

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## Build Your Own Pizza Oven

Saturday 17th October 9 - 4, Kaiwaka

**Tutor: Wolf Heipe** Cost: \$120

Wolf has been playing around with earth for a few years now and lives in a beautiful light earth home that he built with others. Wolf will show you how to build an earth oven using mainly clay and sand. You will learn everything you will need to know in one day. These ovens can cook bread, pizza, casseroles. The venue for this workshop is still to be confirmed.

For workshop bookings, or if you have any questions, please email: [info@koanga.co.nz](mailto:info@koanga.co.nz) or phone us at the shop: 09 4312732.

We ask for a deposit of 50% of the cost of the workshop when you make your booking. Payment can be by cheque or internet banking.

Bookings can also be made through [this](#) website, then click **Pizza Oven** - This gives you the option to pay your deposit by credit card. Your deposit will be refunded in full if the workshop is cancelled.

It is really helpful to us if you can confirm your place on any workshop that you book into at least 2 weeks before the workshop. Workshops may be cancelled if numbers are insufficient, so this gives us time to consider and to notify everyone whether the workshop will go ahead or not.

Tea and coffee is provided when you arrive, mid morning, lunchtime and mid afternoon on all workshops.

Please bring your own lunch.



## Light Earth Building

Saturday November 21, 2009

Saturday November 21st. Koanga Institute, Torere 9am- 6pm

Bob Corker and Max van Ginkel \$90

An introduction to earthbuilding techniques for owner builders, and their use in low cost healthy, comfortable sustainable housing, and/or landscaping. Includes:

An overview of different techniques, their advantages and disadvantages

How to assess local clays and other earth materials for use

A focus on light earthbuilding techniques, including:- clayslip and composite fibre/earths.

A hands on demonstration

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contact [info@koanga.org.nz](mailto:info@koanga.org.nz), call 07) 315 5363

location Koanga Institute, Torere, Eastern Bay of Plenty



## Appropriate Technologies

Saturday November 28, 2009

Saturday August 1st. 2009  
Koanga Institute, Torere 9am- 5pm

Bob Corker and Max van Ginkel \$90

We'll explore some technologies that make self reliance easier, many we can make ourselves with local materials, or materials that are common and low cost. This will include:-  
charcoal making and use  
solar food dryers  
non-electric cool storage  
hand washing machines  
common grinders and uses  
greenhouses

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contact [info@koanga.org.nz](mailto:info@koanga.org.nz), call 07) 315 5363  
location Koanga Institute, Torere, Eastern Bay of Plenty

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## Build a Schoolhouse

9 - 25 January 2010, Mali

### Book Now!

**January 9th - 25th, 2010 - Dogon Country, Mali, West Africa**

### Build a schoolhouse with the Dogon people of Tirelli.

Experience the daily life of the people of Tirelli, an off-grid traditional village. Visit ruins of old Dogon towns comparable to Mesa Verde and Chaco Canyon.

Early registration (7/09) is 20% less tuition than later registration (11/09).

See details and sign up today at: [www.earthenhand.com](http://www.earthenhand.com)

**Scott Howard** started **Earthen Hand Natural Building** in 2002, with the goal to build and promote artistic earthen architecture.

Participants will learn everything that they need to build structurally stable domes using little more than earth from the site. The design is a catenary dome with two windows and a door. Dome building by hand is an ancient art that is still used today in many parts of the world. It is one of the fastest and simplest ways to enclose a space, and is ideal for environments such as the Dogon country. The design for the schoolhouse demonstrates wood-less construction in an area where wood is scarce. .... {More to follow}

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## Spotlight:

<http://www.signon.org.nz/>