

# What you can do about global warming

There's plenty for everyone to do to reduce global warming emissions and help save the world as we know it for present and future generations. **RIK BAZELEY** reports.

Global warming is a huge problem, but we can get it down to size if we all deal with it – and you'll feel better about it too! A lot of people are saying: "I'd like to do something, but I feel so helpless!" But, all you need is a little knowledge, and you can be part of the solution.

This article outlines some practical steps people can take. Just being aware of your energy use at home and thinking of ways you can reduce it is a good start.

## Easy ways to reduce energy consumption at home

1. Turn off electrical appliances (toaster, kettle, TV, computer, radio, etc) at the wall socket when you are not using them, and lights as well. A recent New Zealand Climate Change Office review found the average household wasted \$80–90 a year this way – around 10% of the total electricity bill! Stand-by power uses around 5% of domestic electricity consumption in the U.S. – see [www.aceee.org/pubs/a981.htm](http://www.aceee.org/pubs/a981.htm)
2. Replace old incandescent light bulbs with low-energy fluorescent bulbs now available in supermarkets. Standard light bulbs give off 90% of their energy as heat. Compact fluorescent "spiral" bulbs are 75% more efficient and fit in standard sockets. They are three times as expensive but last ten times as long, so save you money on purchase and energy.
3. Wash clothes in cold and reduce energy use. This change alone can save at least 200 kgs of carbon dioxide annually over a hot wash in most households. Use the energy-saving settings on your dishwasher and let the dishes air-dry.
4. Dry your washing outside with nature's clean power instead of the electric clothes dryer. It costs nothing and the sunlight kills bacteria.
5. Use cloth nappies rather than disposable ones. The average number of throw-away nappies used per baby

is in the region of 3,000! It takes a lot of energy to produce, transport and dispose of all those nappies, and they take decades to breakdown in landfills. You will also save yourself lots of money.

## More ways to reduce energy use at home

6. With new appliances, buy an energy-efficient one. Look for the stars – first the yellow & red star label for annual running costs – and the blue Energy Star label for the top models in a range.
7. Old fridges and freezers can be very inefficient. Make sure fridge doors are well sealed – put a piece of paper in the door – if it slips out easily, replace the door seal. And turn on the beer fridge in the garage only when you need it for parties and special occasions.
8. Hot water is among the big home energy consumers. Turning the thermostat on your hot water system down to 55°C is a good start, and you can save more if it's over five years old by wrapping it in an insulating blanket – see [ceca.govt.nz](http://ceca.govt.nz) for more tips. A water-efficient shower head also saves energy and money.
9. Consider solar water heating and heat pumps rather than electric heating – see [enviro-friendly.com](http://enviro-friendly.com) and [www.solarhart.com](http://www.solarhart.com) in Australia. In New Zealand, some finance for solar water heating is available through a government programme for larger households, up to \$500 from February 2007, subject to conditions – see [ceca.govt.nz](http://ceca.govt.nz).
10. Use a fuel-efficient heater. Install a double-burning wood stove in place of the old open fire, or block up the chimney and get a heat pump. You'll need to check this out with your local energy supplier either in person or via their website.
11. Consider changing your energy supplier to one that generates some or all of their energy from renewable sources. In Australia see [greenpower.gov.au](http://greenpower.gov.au).



For a rating of all Green Power products available in your state, visit [www.greenelectricitywatch.org.au](http://www.greenelectricitywatch.org.au). In New Zealand, Meridian Energy generates all its electricity from renewables like hydro and wind – see [cleanenergyguide.org.nz](http://cleanenergyguide.org.nz).

12. Consider installing photo-voltaic (PV) cells for lighting and other electrical needs and be independent of the national grid. Several suppliers can be found readily on the Internet in both countries. Still a bit pricey at present electricity charges, but likely to pay off in the 10-year timeframe.

### And for next winter (do it now)

13. Insulate your home as much as you can afford. Most homes in Australasia were built with little or no insulation and require a lot of energy to heat or cool. Insulate floors, walls and ceilings. Double-glazing windows conserves energy, reduces noise and eliminates condensation.

### Reduce food waste emissions

14. Compost food scraps at home, and prevent them creating greenhouse gas emissions in landfills. Compost is a great way to improve soil, helping it retain water, giving greater water efficiency in garden and provides lots of nutrients. Ask your local council about compost bins and worm farms – they may offer rebates. Many local authorities distribute leaflets about making compost.

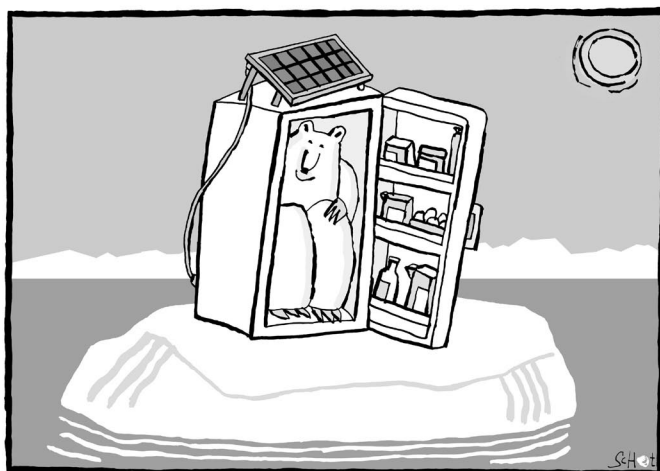
Try EM (Effective Micro-organisms) Bokashi, a composting method useful for houses and ideal for apartments. The eco-friendly Bokashi Bucket and EM Bokashi eliminate odours from putrefaction. You can compost most kitchen food waste in your Bokashi bucket, including fruit, vegetables, prepared foods, cooked and uncooked meat and fish, cheese, eggs, bread, coffee grinds, teabags, wilted flowers and tissues – see [bokashi.com.au](http://bokashi.com.au) and [www.bokashi.co.nz](http://www.bokashi.co.nz).

Further composting links: within New Zealand, [www.ccc.govt.nz/waste/composting/](http://www.ccc.govt.nz/waste/composting/) and [www.sustainablehouseholds.org.nz](http://www.sustainablehouseholds.org.nz); for Australia: [www.permaculture.org.au](http://www.permaculture.org.au) and [www.livingthing.net.au/RC\\_Guide.htm](http://www.livingthing.net.au/RC_Guide.htm)

### Improve buying habits – reduce emissions

Note: The average New Zealander contributes seven tonnes of carbon annually to the atmosphere. If everyone in the world contributed as much as the average New Zealander, around four Earths would be required to accommodate the world's population in a sustainable way. The figure is about the same for the average Australian. But advertisers are still promoting goods and services as if the more we have the happier we will be. That's not what the surveys say – in the West we have not been getting happier even though we have on average been getting richer over the last few decades. Economic growth is not good for the environment (see Peter North's article in *Pacific Ecologist* issue 9, p.17–22). It makes much more sense now to aim to live sustainably on the only earth we have.

15. Reduce consumption levels by buying only what you need, and buying items that last. When you want to dispose clothes or appliances, recycle. Use TradeMe, Trade and Exchange or other second-hand goods markets, or give to local charity shops or fairs.
16. When shopping, take your own reusable bags, refuse to use plastic bags, handed out in millions every day to shoppers. Keep your reusable shopping bags in a handy place in your briefcase, by the door or in the car, so you don't forget them. Forgive yourself if you occasionally forget, buy very cheap reusable bags supermarkets often have for sale. Encourage government to place a levy on plastic bags, to discourage their use. The revenue can be used for environmental projects, as in Ireland, where plastic bag use has decreased by over 90%.
17. Avoid excessively packaged items and give preference to products that come in reusable packaging. Buying larger quantities, and getting refills lessens container



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### Using the Internet

With search engines like Google, a few key words will list for you the most likely websites for finding what you want to know, how to play your part in getting us back to a low carbon society. Some good ones to start with are listed below:

[www.cana.org.au](http://www.cana.org.au)

Climate Action Network Australia

[www.climatedefence.org.nz](http://www.climatedefence.org.nz)

Climate Defence Network New Zealand

[www.climatechange.govt.nz](http://www.climatechange.govt.nz)

New Zealand's whole-of-government portal for climate change information run by Ministry for the Environment.

[www.pce.govt.nz](http://www.pce.govt.nz)

New Zealand's Parliamentary Commissioner for the Environment.

[www.greenhouse.gov.au](http://www.greenhouse.gov.au)

Australia's whole-of-government portal for climate change by the Ministry for the Environment and Heritage.

[www.acfonline.org.au](http://www.acfonline.org.au)

Australia Conservation Foundation.

[www.climateark.org](http://www.climateark.org)

Clips and archives news items on climate change from world's leading media.

[www.wilderness.org.au](http://www.wilderness.org.au)

The Wilderness Society

use. When possible, take items out of plastic bags and boxes and leave the packaging in the shop.

18. Buy locally produced organic food as much as possible – good for the environment, with less transport emissions, and good for the local economy. Organic food is also healthiest nutritionally.
19. Buy environmentally sound products – look for an environmental label. Some house cleaning examples are Eco Store, ECOVER and Next Generation. With climate change we need a healthy environment, harsh chemicals disrupt the environment.
20. Tell government you want compulsory Country of Origin Labelling (CoOL) on all food products. This will empower you to make informed choices when buying a product. Currently the government has resisted the wishes of over 80% of New Zealanders who want CoOL to be compulsory.

### Post-carbon, low-energy lifestyle

21. If you can survive well with less money, a way to decrease emissions is to take more time off work – enjoy relaxing, walking, gardening, community work, swimming, painting, arts and crafts, community gardening, join a choir, or your local orchestra – learn to play a musical instrument. For low energy simpler lifestyles, see Ted Trainer's site [socialwork.arts.unsw.edu.au/tsw/](http://socialwork.arts.unsw.edu.au/tsw/)

22. Walk or ride a bicycle. Zero emissions will keep you fit without having to pay to go to the gym.
23. Use public transport. Take the bus or train instead of the car. Many public transport services are far from ideal, so let your local council and MP know the deficiencies, and be clear and specific about what you want changed.
24. Reduce unnecessary car travel. Car pool or reduce the number of journeys each week.
25. If you have to have a car, choose a fuel-efficient one (and keep it tuned and serviced). Hybrids, bio-diesels, and even small modern conventional petrol-driven cars are far more fuel efficient and less polluting than the older big cars and SUVs. See [www.fuelsaver.govt.nz](http://www.fuelsaver.govt.nz) for fuel efficiency information about many new and used vehicles available in New Zealand.
26. Only travel by air when you need to. Air travel causes even more emissions than driving a car, and much more than travel by bus and train.
27. Think about your leisure time and holidays and what they might be contributing to climate change. Could you do something to reduce this? – e.g. instead of quad-biking, try mountain biking; instead of motor-boating, try sailing; instead of jet skiing, try wind surfing, etc. Instead of driving for hours to get to your holiday location, could you travel by train or bus, or have an enjoyable time locally, or not so far away? On trains and buses, you can relax, enjoy the view, contemplate life, or read a book, which you can't do while driving a car.

### Help others and reduce more emissions

28. Help others get started by sharing your knowledge with friends, family, neighbours and colleagues.
29. Check out where your workplace stands on recycling and energy use and encourage them to consider reducing their environmental footprint. It saves money as well.
30. Join an environmental group and link up with like-minded people. Australian Conservation Foundation, Friends of the Earth, Greenpeace, ECO, New Zealand Forest & Bird Society, Pacific Institute of Resource Management and the World Wildlife Fund are just a few. Nuclear concerns are high now, so your local peace group or NCCD, the National Consultative Committee for Disarmament, would be grateful for support. If you are short on time then how about helping fund a group and set-up an automatic payment – even \$10 a month would help. Most will be registered as a charity, so by getting tax back at the end of the year, your donation of \$120 for the year will only cost you \$80. By supporting an environmental group you can help do your bit for global success.

### Local councils can make a difference

31. Check out the strategic plan for your local city or regional council to see what they are planning to do about the environment and climate change. You can do this at [www.govt.nz/record?recordid=3279](http://www.govt.nz/record?recordid=3279) for each council in New Zealand, and in Australia make a start at [www.alga.asn.au/about/strategicPlan2003.php](http://www.alga.asn.au/about/strategicPlan2003.php).
32. Ask your council whether it is part of the climate protection campaign by ICLEI, the International Council for Local Environmental Initiatives. In Australia there are 218 cities participating, representing over 82% of the population in Cities for Climate Protection Australia (CCP-AU); in New Zealand there are currently 21 councils taking part in Communities for Climate Protection (CCP-NZ), covering 63% of the population. Visit the website for more information about the program – [www.iclei.org/ccp-au/](http://www.iclei.org/ccp-au/) or [www.iclei.org/ccp-nz/](http://www.iclei.org/ccp-nz/).
33. If you feel your council could do more, e.g. to improve public transport, a much neglected issue worldwide, phone/write/meet with a councillor that you think might take up the cause. In Wellington,

New Zealand, the authorities proposed removing seating in trains to cope with a big passenger increase following petrol price rises in 2006, but there was a public outcry and the plan has gone on hold.

Councils and transport services do need feedback. If your bus is often more than 2 or 3 minutes late, or you get left because the bus is full and goes straight by, write and let them know this is not OK. At the same time ask them to install a monitor at each bus stop that will tell you when the next bus will arrive! It is becoming common in Europe and has been installed in Christchurch, New Zealand.

### Last word

Knowledge and action empowers decisions and can change the course of events. Maybe the future of climate change does not have to be beyond our collective influence. Don't worry about it, find out what you can do, and start taking action! There's much to do! ■PE

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## Governments could make a big difference – editorial comment

Climate change has recently become a major political issue around the world, with broad consensus it's happening and is caused by us. The big issue now is what to do and how fast. New Zealand's Prime Minister in November 2006, set the target. Helen Clark aspires to New Zealand being carbon-neutral, but gives no pathway or time frame for this to be achieved. Australia's Prime Minister John Howard does practical things like committing \$262 million to drought relief in October 2006, and in November 2006 \$60 million to projects aimed at reducing greenhouse gas emissions. Neither leader seems to have grasped the seriousness of the situation, and the urgent need to stop our emissions rising to a dangerous level by 2035.

Becoming carbon neutral means putting no more carbon into the atmosphere through our everyday lives than is being taken up by the world around us. At the moment we put much more carbon into the atmosphere than the earth can take up by burning fossil fuels and maintaining large numbers of livestock. We can reduce greenhouse gas emissions by reducing our energy needs, improving efficiencies at home and work, investing in solar and wind energy, expanding public transport and its use and minimizing car use. This needs government intervention to change the paradigm (*see Sharon Beder's article pp. 38–43*). But being carbon neutral is not enough. Efforts need to be made at every level in global societies to get excess carbon from decades past out of the atmosphere. It can be done by targeting personal and institutional emissions to be less than carbon neutral, but help may be needed beyond improving energy efficiency. This can be done naturally by individuals and companies supporting afforestation programmes (e.g. [www.carbonzero.co.nz](http://www.carbonzero.co.nz) or [shop.easybeinggreen.com.au](http://shop.easybeinggreen.com.au)).

Above all, it's very important that governments understand the urgent need to implement a globally equitable, transparent strategy for reducing and allocating emissions (*see Aubrey Meyer's article pp. 18–20*). Also, Australian and New Zealand governments could support policy changes and financial assistance so developing countries with mature forests, e.g. PNG, The Solomon Islands, Malaysia, Indonesia, the Amazon, etc., are not pressured by logging interests to log their mature old forests which are carbon reservoirs, in order to pay interest on foreign debt (*see Sean Weaver's article pp. 21–26*). Supporting renewable energy projects in developing countries is another way to help sustainable development, and also for rich countries, such as New Zealand and Australia, to fulfill their pledge and achieve the Millennium Development Goal of halving world poverty by 2015 (*see Allison Woodruff's article pp. 32–36*).

New Zealand and Australia are well behind Europe on the road to becoming carbon neutral, let alone in cutting emissions 80% by 2050. This is the target necessary to avoid levels from rising above the "dangerous" 450 ppm CO<sub>2</sub>e level identified by the Exeter group in 2005 ([www.defra.gov.uk/environment/climatechange/internat/dangerous-cc.htm](http://www.defra.gov.uk/environment/climatechange/internat/dangerous-cc.htm)). In contrast, all UK central government departments and their agencies will be carbon neutral within six years. Once carbon neutrality is reached, the UK government has set an additional target to reduce carbon emissions from government offices by 30 percent by the year 2020. With current levels at 430 ppm and rising at 2 ppm/year, this sort of pro-active approach is needed, so to help save the planet for future generations, phone, write or talk with your MP today!