

# cleaning up our act

Home heating has become a primary source of air pollution in many urban areas. One of the new national environmental standards that came into force last October looks set to change all that.



Despite a low population density and close proximity to the sea, there are more than 28 urban centres across New Zealand that show unacceptable levels of air pollution. Due to growing concerns regarding poor air quality in a number of these regions, last October saw the implementation of a government-approved environmental standard designed to address the problem. Basically, there are now parts of the country where it is illegal to install open fires or non-compliant woodburners in order to heat your home.

Based on comprehensive consultation, research and scientific evidence, the standards require councils and communities to work together to help reduce fireplace

emissions. They are the result of studies into the effects of dioxins and other toxins, investigations of outdoor air quality in urban areas, and the design of woodburners. Local councils are now obliged to monitor and publicly report on air quality if pre-set levels are exceeded.

One key area to be targeted in rectifying the issue is the use of open fires and woodburners. The government aims instead to encourage homeowners to consider more environmentally sound heating options.

From September this year, a revised design standard for new woodburners will come into effect, the timing of which should allow an adequate transition period for those

Volatile organic compounds (VOCs) in paint can affect your indoor air quality. Look for low VOC emission paints from the Resene Environmental Choice range.

individuals and businesses affected. Previously, there has been no mandatory emission level for woodburners installed in most regions of New Zealand, although a large proportion of such appliances have been tested to New Zealand Standard 4013 and comply with the 4.0g/kg emission limit specified in that rating.

Implementing a national standard for woodburners will entail appliance testing and approving, and will incur administration and compliance monitoring costs. The standard will also result in a reduced choice of burners available on the market for householders, and manufacturers being unable to sell appliances not meeting the required emission limit.

New Zealand homes have not traditionally been designed for warmth or energy efficiency. As a result, many of them take a fair amount of energy to heat. To coincide with the introduction of the new standard, the Ministry for the Environment is working with Energy Efficiency and the Conservation Authority on an initiative named the Warm Homes Project.

This scheme, based on a national survey last year, initially looked into how families heated and insulated their homes, and what influenced consumer choices in this regard. It also looked at how households could be encouraged to make their homes more energy efficient by such means as upgrading insulation and considering switching to greener energy sources, such as gas. The data is still being processed, but results are expected to be made public later this year. **H**

## burn smart

- Always use well-seasoned wood.
- Create small, fast-burning fires.
- Never leave your fire to smoulder overnight.
- Never burn rubbish materials, plastic or painted wood.

## tips to keep your home warm this winter

- > Installing or upgrading insulation in ceilings and under floor areas will not only keep your house warm but reduce your energy bill.
- > If you are installing new heaters consider some of these options: Low emission woodburner, heat pump, pelletburner or flued gas heating can all cut costs and heat your home more effectively.
- > Remember, thermal-backed curtains are a great way to retain heat in the home.

## WHO indoor air pollution study

According to The World Health Organisation (WHO) report 2002, indoor air pollution is responsible for 2.7% of the global burden of disease.

More than two billion people worldwide continue to depend on solid fuels, including biomass fuels (wood, dung, agricultural residues) and coal, for their energy needs.

Cooking and heating with solid fuels on open fires or traditional stoves results in high levels of indoor air pollution.

Indoor smoke contains a range of health-damaging pollutants, such as small particles and carbon monoxide. Particulate pollution levels may be 20 times higher than accepted guideline values.

To combat this substantial and growing burden of disease, WHO has developed a comprehensive programme focusing on a thorough evaluation of the various health and broader impacts of interventions to reduce indoor air pollution; and encouraging and supporting the assessment of the national burden of disease due to indoor air pollution, and the cost-effectiveness or cost-benefit analyses of interventions.

WHO recommends your home is kept warm. A warmer home reduces the risk of many respiratory and cardiovascular diseases.

## then there's gas...

- > Natural gas currently provides 30% of the country's total primary energy.
- > Gas-fired electricity generation is likely to be the most cost-effective large-scale energy source for medium-term generation capacity requirements in the North Island.
- > The most common gas used domestically is natural gas, which is distributed around the North Island to some 200,000 residential, commercial and industrial customers. Bottled gas is a highly practical heating, water-heating and cooking option for households not on a gas line.
- > Gas accounts for 16 percent of the total North Island energy market – including the LPG used in vehicles.
- > Most of our gas comes from two large Taranaki fields – the onshore Kapuni field and the offshore Maui field.
- > On geological grounds, scientific opinion indicates there is every reason to believe New Zealand has not yet discovered all its gas resources.