

# It's your roof... Your free solar energy

The average NZ rooftop collects 220 thousand kWh of solar energy per year - more than 20 to 30 times the home's total energy requirements. EECA, 2002

The sun's free energy heats the air circulating in your roof space - yours to harness for heating and dehumidifying.



#### **Your free heating.**

The HRV system harnesses the free heat captured by the rooftop and circulates the warm air throughout the home. With just a 5°C temperature difference between the roof and the home, HRV provides every room with the equivalent heat of a 1200W heater – all for the cost of running a lightbulb.



#### **Your free summer night cooling.**

As the sun sets and the night air cools, the roof space temperature drops more quickly than inside your home. The HRV system delivers the cooler night air into your home making it more comfortable on hot, sticky, humid nights.

- **Energy efficient whole home ventilation**
- **Reduce heating bills and GHG emissions**
- **Reduce reliance on heaters and air conditioning**
- **Improve the efficiency of your current heating**



In these days of dwindling energy resources and rising power prices, homeowners are searching for alternative energy sources to help ease the burden on the national grid, and their wallets. The answer is right above their heads.

34% of New Zealand's household energy use is consumed by space heating, yet on average our homes are still unable to meet World Health Organisation temperature standards. The average Kiwi home needs to warm up 2-6°C to meet minimum World Health Organization standards. That means using an extra 4,000 – 8,000 kWh per year per home on heating alone at a cost of up to \$1500 a year.

**Let's face it New Zealanders need as much free energy as they can get.**

The HRV Ventilation system is the ultimate in energy efficient heating and cooling - it costs around the same as a 100 watt light bulb to run.

The table opposite compares the HRV system against conventional heating and cooling appliances:

By harnessing the free solar energy from your roof space, the HRV Ventilation System can drastically reduce your power bills – by reducing your need for heaters, air conditioners and dehumidifiers. What's more, by creating a dry indoor air environment your heaters will be more efficient. Switch on to HRV.

**Serious about sustainable living and the cost of energy? We are.**  
**The HRV Whole Home Ventilation System is an innovation designed to maximise your home comfort and minimise emissions and energy cost.**



Appliance	Running Time (hours/day)	Running Costs (cents/hour)*	Cost per month
Heater – 1000W	8	19	\$45.60
Heater – 1500W	8	28	\$68.40
Heater – 2400W	8	45	\$109.44
Heatpump – small	8	14 – 19	\$35 - 45.00
Heatpump – medium	8	26 – 32	\$64 – 78.00
Heatpump – large	8	38 – 45	\$91 – 109.00
Fan – standard	8	3	\$9.12
Dehumidifier – 300W	8	5	\$13.68
HRV**	8	1	\$3.65

\* Calculated at 19 cents /kW energy  
 \*\* Per fan running at maximum speed.

Actual running costs depend on climate variable temperature differences between the home and ceiling cavity.

