

Maximise Energy Savings with Lossnay Heat Recovery Ventilation

How Lossnay Saves on Energy Costs Compared to Traditional Ventilation

Mitsubishi Electric's Lossnay Fresh Air Heat Recovery Ventilation Systems do more than just improve air quality – they help create a healthier, drier, and more comfortable home while reducing energy costs of heating and cooling. Ideal for homes across New Zealand's diverse climates, these systems offer significant energy cost savings when compared to traditional ventilation.

By recovering heat energy from outgoing air, the Lossnay system pre-warms or pre-cools incoming fresh air, reducing the workload on your heating or cooling system. This means less power is required to maintain your desired indoor temperature, leading to noticeable reductions in your energy bills year-round.

Discover Lossnay Energy Cost Savings in Your Region

The following tables are based on real-world operation and highlight the potential savings when choosing Mitsubishi Electric's Lossnay Fresh Air Heat Recovery Ventilation compared to a conventional ventilation system with an electric heating/cooling device (COP of 1), delivering practical benefits for homes throughout New Zealand.



North Island Potential Cost Savings

Lossnay ERV (Energy Recovery Ventilation)

The below power savings are based on comparing a conventional, continuously run ventilation system using an electric heating/cooling device (COP of 1) to a Lossnay LGH-35RVX3-E Energy Recovery System.



LGH-35RVX3-E



ERV Permeable Core

Region	1 Year	3 Year	5 Year	Power Savings of up to
Whangārei	\$494	\$1,482	\$2,470	65%
Auckland	\$583	\$1,749	\$2,915	66%
Hamilton	\$870	\$2,610	\$4,350	70%
Tauranga	\$820	\$2,460	\$4,100	70%
Rotorua	\$1,190	\$3,570	\$5,950	72%
Taupō	\$1,386	\$4,158	\$6,930	72%
Gisborne	\$901	\$2,703	\$4,505	70%
Napier	\$934	\$2,802	\$4,670	70%
New Plymouth	\$964	\$2,892	\$4,820	71%
Palmerston North	\$1,057	\$3,171	\$5,285	70%
Whanganui	\$897	\$2,691	\$4,485	69%
Wellington	\$1,148	\$3,444	\$5,740	71%

To find out how these savings were calculated, visit page 6.

South Island Potential Cost Savings

Lossnay ERV (Energy Recovery Ventilation)

The below power savings are based on comparing a conventional, continuously run ventilation system using an electric heating/cooling device (COP of 1) to a Lossnay LGH-35RVX3-E Energy Recovery System.



LGH-35RVX3-E



ERV Permeable Core

Region	1 Year	3 Year	5 Year	Power Savings of up to
Nelson	\$1,193	\$3,579	\$5,965	72%
Blenheim	\$1,320	\$3,960	\$6,600	72%
Westport	\$1,096	\$3,288	\$5,480	71%
Christchurch	\$1,497	\$4,491	\$7,485	72%
Hokititka	\$1,286	\$ 3,853	\$6,430	71%
Kaikōura	\$1,415	\$4,245	\$7,075	72%
Lake Tekapo	\$2,277	\$6,831	\$11,385	74%
Alexandra	\$1,621	\$4,863	\$8,105	73%
Timaru	\$1,650	\$4,950	\$8,250	72%
Dunedin	\$1,674	\$5,022	\$8,370	72%
Queenstown	\$2,025	\$6,075	\$10,125	73%
Invercargill	\$1,786	\$5,358	\$8,930	73%

To find out how these savings were calculated, visit page 6.



North Island Potential Cost Savings

Lossnay HRV (Heat Recovery Ventilation)

The below power savings are based on comparing a conventional, continuously run ventilation system using an electric heating/cooling device (COP of 1) to a Lossnay VL-350CZPVU-E Heat Recovery System.

VL-350CZPVU-E



HRV Non-Permeable Core

Region	1 Year	3 Year	5 Year	Power Savings of up to
Whangārei	\$558	\$1,674	\$2,790	70%
Auckland	\$611	\$1,833	\$3,055	67%
Hamilton	\$858	\$2,574	\$4,290	67%
Tauranga	\$788	\$2,364	\$3,940	66%
Rotorua	\$1,072	\$3,216	\$5,360	64%
Taupō	\$1,178	\$3,534	\$5,890	61%
Gisborne	\$804	\$2,412	\$4,020	61%
Napier	\$797	\$2,391	\$3,985	58%
New Plymouth	\$939	\$2,817	\$4,695	69%
Palmerston North	\$972	\$2,916	\$4,860	64%
Whanganui	\$835	\$2,505	\$4,175	63%
Wellington	\$1,010	\$3,030	\$5,050	62%

To find out how these savings were calculated, visit page 6.

South Island Potential Cost Savings

Lossnay HRV (Heat Recovery Ventilation)

The below power savings are based on comparing a conventional, continuously run ventilation system using an electric heating/cooling device (COP of 1) to a Lossnay VL-350CZPVU-E Heat Recovery System.



VL-350CZPVU-E



HRV Non-Permeable Core

Region	1 Year	3 Year	5 Year	Power Savings of up to
Nelson	\$1,068	\$3,204	\$5,340	64%
Blenheim	\$1,090	\$3,270	\$5,450	59%
Westport	\$1,023	\$3,069	\$5,115	65%
Christchurch	\$1,227	\$3,681	\$6,135	59%
Hokititka	\$1,154	\$ 3,462	\$5,770	64%
Kaikōura	\$1,137	\$3,411	\$5,685	57%
Lake Tekapo	\$1,696	\$5,088	\$8,480	55%
Alexandra	\$1,305	\$3,915	\$6,525	58%
Timaru	\$1,373	\$4,119	\$6,865	60%
Dunedin	\$1,361	\$4,083	\$6,805	59%
Queenstown	\$1,558	\$4,674	\$7,790	56%
Invercargill	\$1,521	\$4,563	\$7,605	62%

To find out how these savings were calculated, visit page 6.

How Lossnay Cost Savings are Calculated

Cost savings are calculated based on a comparison between a conventional ventilation system using an electrical heating/cooling device with a COP of 1, using thermistor-controlled operation to achieve desired set temperatures operating continuously (24/7) for 30 days a month versus a Lossnay Heat Recovery System.

The comparison assumes a standard 150m² home with an average ceiling height of 2.4m, maintaining indoor temperatures of 21°C in winter and 20°C in summer, while achieving an air change rate of 0.5 ACH (Air Changes Per Hour).

Actual savings may vary depending on factors such as insulation, occupancy patterns, outdoor climate conditions, and energy tariffs.

Models selected:

- ERV Application: LGH-35RVX3-E
- HRV Application: VL-350CZPVU-E



Energy Recovery (ERV) vs. Heat Recovery (HRV) – What’s the Difference?

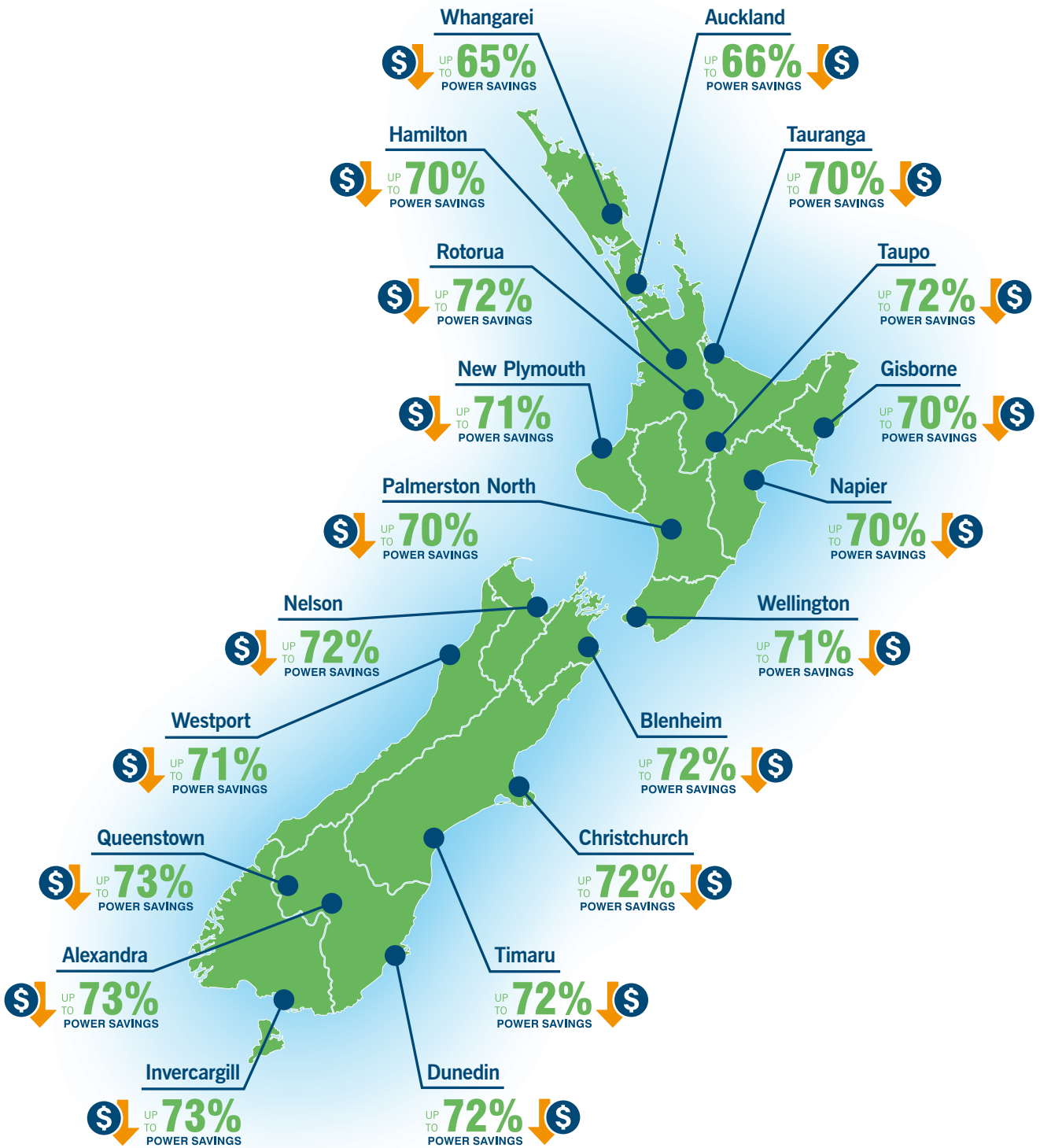
Lossnay ERV systems feature a Permeable Core (Diamond Core Classic) allowing for both sensible heat energy (temperature only) and latent heat energy (moisture content) to be recovered.

Lossnay HRV systems on the other hand feature a treated Non-Permeable Resin Core (Diamond Core Plus) making them capable of recovering sensible heat energy only. Lossnay HRV systems are therefore ideal for applications where air is being extracted from wet areas* including laundries or bathrooms.



* Lossnay systems are not designed for specific bathroom/wet area extraction as a singular use. When extracting from wet areas, other rooms must be connected to the return air ducting network.

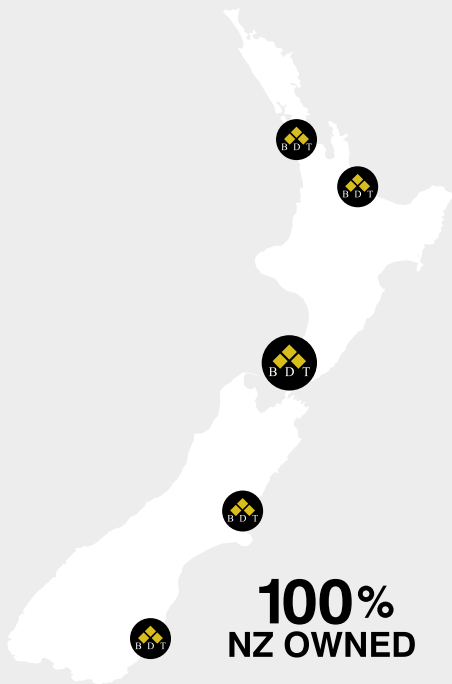
How Lossnay Energy Cost Savings Compare Across New Zealand



• Cost savings are calculated based on a comparison between a conventional ventilation system using an electrical heating/cooling device with a COP of 1 using thermostat-controlled operation to achieve desired set temperatures operating continuously (24/7) for 30 days a month versus a Lossnay LGH-35RVX3-E Heat Recovery System.

• The comparison assumes a standard 150m² home with an average ceiling height of 2.4m, maintaining indoor temperatures of 21°C in winter and 20°C in summer, while achieving an air change rate of 0.5 ACH.

• Actual savings may vary depending on factors such as insulation, occupancy patterns, outdoor climate conditions, and energy tariffs.



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