

How Lossnay Cuts Energy Costs vs. Traditional Ventilation – Heat Pump Comparison

Maximise Energy Savings with Lossnay Heat Recovery 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 highlight the cost savings on heating and cooling when using Mitsubishi Electric's Lossnay Fresh Air Heat Recovery Ventilation in conjunction with a heat pump compared to using conventional ventilation with a heat pump. This is based on real-world operation delivering practical benefits for homes throughout New Zealand.



North Island Potential Cost Savings

Compared to Traditional Ventilation – Heat Pump Comparison



Whole Home Systems for Homes with an Attic

Mitsubishi Electric Whole Home Lossnay Ventilation Systems are available with both energy recovery or heat recovery options to give whole home ventilation suitable for both smaller and larger homes with sufficient attic space.

- Balanced Pressure System
- ERV Permeable Core



LGH-35RVX3-E

Lossnay ERV (Energy Recovery Ventilation)

The below power savings are based on comparing a conventional, continuously run ventilation system using a heat pump to a Lossnay LGH-35RVX3-E Energy Recovery System.

Region	1 Year	3 Year	5 Year	Power Savings of up to
Whangārei	\$154	\$462	\$770	47%
Auckland	\$182	\$546	\$910	50%
Hamilton	\$272	\$816	\$1,360	57%
Tauranga	\$256	\$768	\$1,280	56%
Rotorua	\$372	\$1,116	\$1,860	62%
Taupō	\$433	\$1,299	\$2,165	63%
Gisborne	\$282	\$846	\$1,410	57%
Napier	\$292	\$876	\$1,460	58%
New Plymouth	\$301	\$903	\$1,505	59%
Palmerston North	\$330	\$990	\$1,650	59%
Whanganui	\$281	\$843	\$1,405	57%
Wellington	\$359	\$1,077	\$1,795	60%

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

South Island Potential Cost Savings

Compared to Traditional Ventilation – Heat Pump Comparison



Whole Home Systems for Homes with an Attic

Mitsubishi Electric Whole Home Lossnay Ventilation Systems are available with both energy recovery or heat recovery options to give whole home ventilation suitable for both smaller and larger homes with sufficient attic space.

-  Balanced Pressure System
-  ERV Permeable Core



LGH-35RVX3-E



Lossnay ERV (Energy Recovery Ventilation)

The below power savings are based on comparing a conventional, continuously run ventilation system using a heat pump to a Lossnay LGH-35RVX3-E Energy Recovery System.

Region	1 Year	3 Year	5 Year	Power Savings of up to
Nelson	\$373	\$1,119	\$1,865	61%
Blenheim	\$413	\$1,239	\$2,065	62%
Westport	\$343	\$1,029	\$1,715	60%
Christchurch	\$468	\$1,404	\$2,340	63%
Hokitika	\$402	\$ 1,206	\$2,010	62%
Kaikōura	\$442	\$1,326	\$2,210	63%
Lake Tekapo	\$712	\$2,136	\$3,560	67%
Alexandra	\$507	\$1,521	\$2,535	64%
Timaru	\$516	\$1,548	\$2,580	65%
Dunedin	\$523	\$1,569	\$2,615	65%
Queenstown	\$633	\$1,899	\$3,165	66%
Invercargill	\$558	\$1,674	\$2,790	65%

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

North Island Potential Cost Savings

Compared to Traditional Ventilation – Heat Pump Comparison



Whole Home Systems for Homes with or without an Attic

Vertical Lossnay provides heat recovery ventilation that does not require installation in the roof space.

- Balanced Pressure System
- HRV Non-Permeable Core
- Suitable for wet areas



VL-350CZPVU-E



Lossnay HRV (Heat Recovery Ventilation)

The below power savings are based on comparing a conventional, continuously run ventilation system using a heat pump to a Lossnay VL-350CZPVU-E Heat Recovery System.

Region	1 Year	3 Year	5 Year	Power Savings of up to
Whangārei	\$175	\$525	\$875	47%
Auckland	\$191	\$573	\$955	47%
Hamilton	\$268	\$804	\$1,340	52%
Tauranga	\$246	\$738	\$1,230	50%
Rotorua	\$335	\$1,005	\$1,675	52%
Taupō	\$368	\$1,104	\$1,840	51%
Gisborne	\$251	\$753	\$1,255	47%
Napier	\$249	\$747	\$1,245	46%
New Plymouth	\$293	\$879	\$1,465	54%
Palmerston North	\$304	\$912	\$1,520	51%
Whanganui	\$260	\$780	\$1,300	49%
Wellington	\$315	\$945	\$1,575	50%

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

South Island Potential Cost Savings

Compared to Traditional Ventilation – Heat Pump Comparison



Whole Home Systems for Homes with or without an Attic

Vertical Lossnay provides heat recovery ventilation that does not require installation in the roof space.

-  Balanced Pressure System
-  HRV Non-Permeable Core
-  Suitable for wet areas



VL-350CZPVU-E



Lossnay HRV (Heat Recovery Ventilation)

The below power savings are based on comparing a conventional, continuously run ventilation system using a heat pump to a Lossnay VL-350CZPVU-E Heat Recovery System.

Region	1 Year	3 Year	5 Year	Power Savings of up to
Nelson	\$334	\$1,002	\$1,670	52%
Blenheim	\$341	\$1,023	\$1,705	49%
Westport	\$320	\$960	\$1,600	52%
Christchurch	\$384	\$1,152	\$1,920	50%
Hokitika	\$361	\$1,083	\$1,805	52%
Kaikōura	\$355	\$1,065	\$1,775	48%
Lake Tekapo	\$530	\$1,590	\$2,650	49%
Alexandra	\$408	\$1,224	\$2,040	50%
Timaru	\$429	\$1,287	\$2,145	51%
Dunedin	\$426	\$1,278	\$2,130	50%
Queenstown	\$487	\$1,461	\$2,435	50%
Invercargill	\$475	\$1,425	\$2,375	54%

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 with a heat pump, 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.

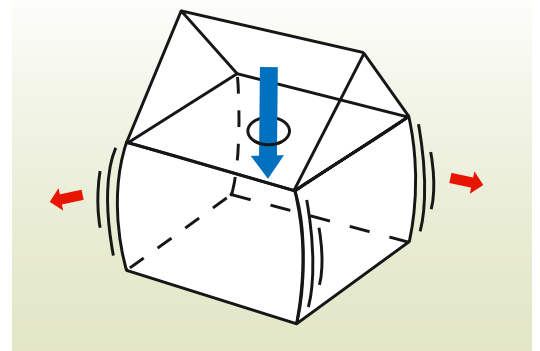
Models selected:

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



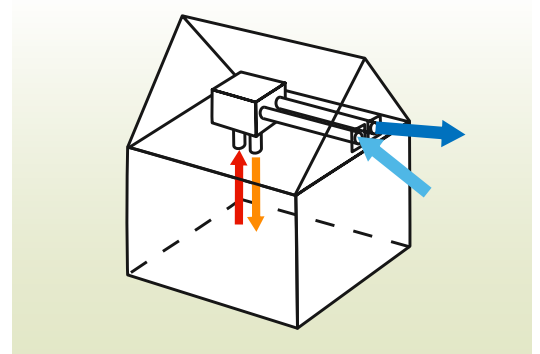
Old 'Positive' Pressure Forced Roof Cavity Ventilation

These traditional systems push air from the attic into your home, relying on gaps in older buildings for air displacement. However, without heat recovery, they introduce cold air, increasing your heating costs.

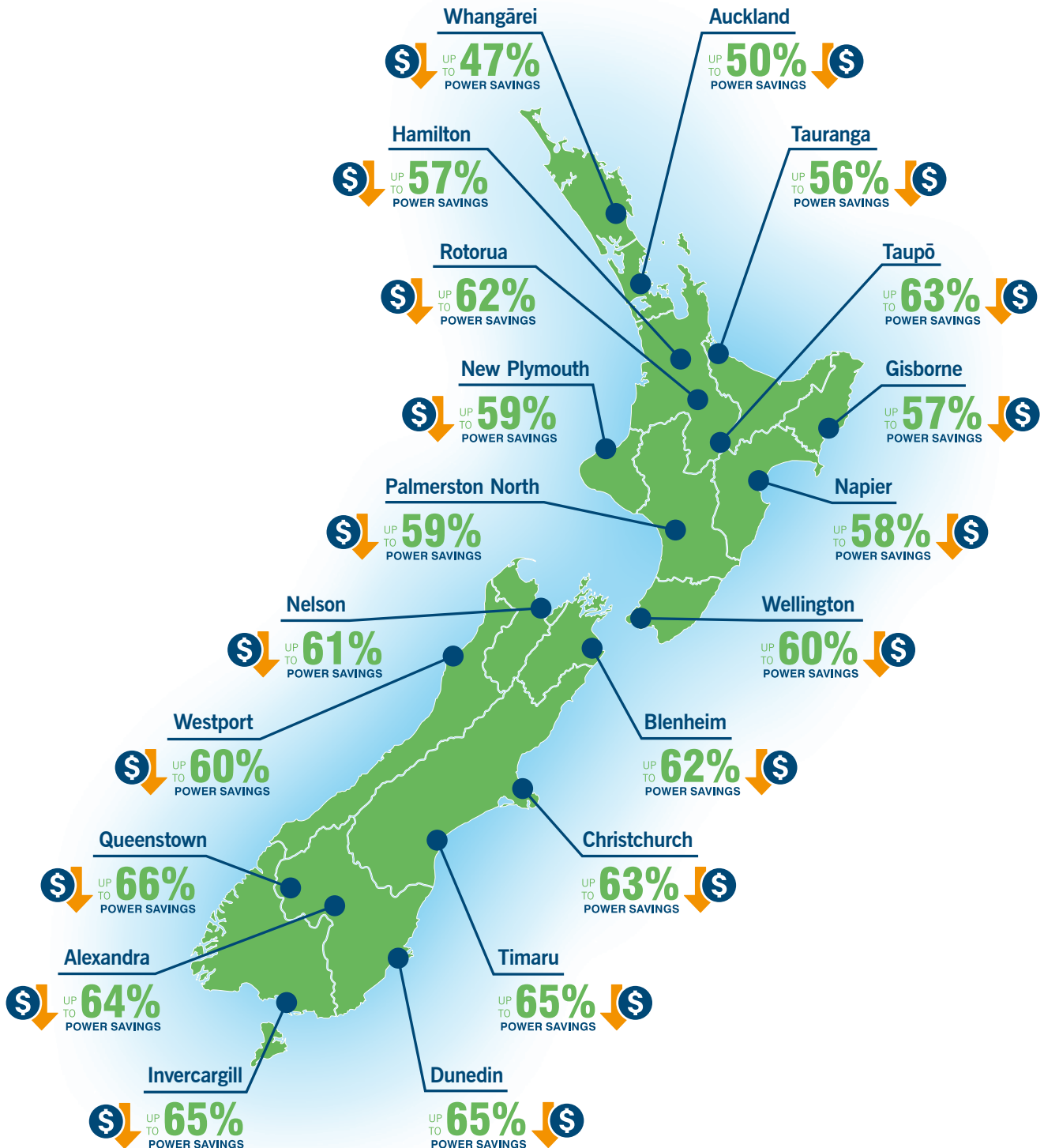


New Lossnay 'Balanced' Pressure Fresh Air Heat Recovery Ventilation

This system replaces stale indoor air with fresh outdoor air at the same rate while **recovering heat energy** to pre-warm incoming air. Designed for modern, airtight homes, it reduces the need for extra heating, keeping energy costs down.



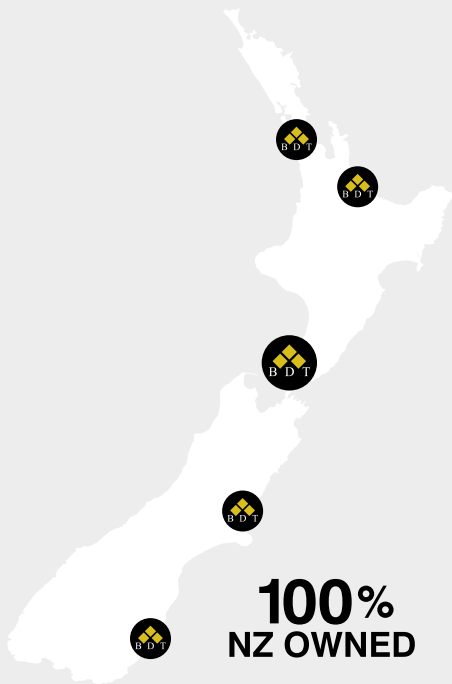
How Lossnay Energy Cost Savings Compare Across New Zealand



• Cost savings are calculated based on a comparison between a conventional ventilation system using a heat pump, thermistor-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 using a heat pump.

• 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.



Black Diamond Technologies and Mitsubishi Electric – an Exclusive Partnership Since 1981

The Mitsubishi Electric Product Range has been exclusively distributed by 100% locally owned and operated Black Diamond Technologies Limited for over 40 years in New Zealand.

The combination of an internationally trusted brand with the comfort of a locally owned and operated company means that you will always get the best products, the best local service and the best local support.

Based in Wellington with a further 4 support offices throughout New Zealand, Black Diamond Technologies Limited is here to help.

Our Vision – Creating New Zealand’s Sustainable Future

Black Diamond Technologies Limited in partnership with Mitsubishi Electric, strives to develop and introduce new technologies for New Zealanders that will make our lives more comfortable while also creating a greener tomorrow.

Our Nationwide Trained Specialist Installation Network

Mitsubishi Electric Ventilation products are installed through an extensive network of trained specialist dealers. This ensures you are supported with a superior level of product and installation quality.

Our Comprehensive 5 Year Warranty

Peace of mind is assured with your choice of Mitsubishi Electric Lossnay Energy Recovery Ventilation – supported by a comprehensive 5 year parts and labour warranty.



For more information please visit our website
or call our Customer Service Team.

www.mitsubishi-electric.co.nz | 0800 784 382

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 PLEASE LOOK AFTER THE ENVIRONMENT AND RECYCLE