

Reliable renewable  
**heating & hot water**



**Trust the team behind your comfort**

# Changes for the better.

The way we heat our homes is changing - it has to, and this has already been recognised by the Government which is encouraging the installation of heat pumps through a new grant scheme as a low carbon alternative to gas and oil heating.

Mitsubishi Electric has developed the advanced range of Ecodan air source heat pumps over the past decade to deliver a variety of choice for homeowners, regardless of location or property type. And we've already seen thousands of Ecodan units installed around the country, from new-build developments, to refurbished housing; from terraced homes to country mansions.



## Specifically designed for Ireland's temperate climate

The Ecodan range has been developed at our European research and development centre based in Livingston in Scotland. It has been designed specifically to maximise efficiency for the UK and Irish climate.

It has been optimised to provide all the heating and hot water a home needs, whatever the weather.

The Ecodan air source heat pump provides renewable energy to challenge traditional heating methods, whilst meeting the energy and carbon reduction demands of today and beyond.

We at Mitsubishi Electric are constantly 'Changing for the Better' and today we offer the most advanced environmental heating system that can really make a world of difference.

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Renewable Heating Technology



# Controlled comfort and lower running costs with the Award Winning Ecodan range from Mitsubishi Electric.

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Increasing energy bills, the need to reduce carbon emissions and the raft of challenging legislation are driving the demand for alternative forms of domestic heating to improve energy efficiency.

The Ecodan system provides reliable affordable heating and hot water to help reduce your energy bills. If you're looking to replace your existing heating, our award winning Ecodan range is perfect for any property type.

Heat pump technology has been used around the world for decades and Mitsubishi Electric have developed the Ecodan range – one of the most advanced heating systems available today.

 **MITSUBISHI  
ELECTRIC**  
*Changes for the Better*



Say goodbye to  
oil and gas

Reduced running  
costs

Reduces carbon  
emissions

No risk of carbon  
monoxide poisoning

Easy to install



## Ecodan reduces the cost of your heating bills whilst caring for the environment.

The technology inside an air source heat pump is very similar to that of a domestic fridge - transferring heat from one place to another -the back of your fridge is warm because it is removing heat from the food inside the fridge out into the room.

An Ecodan air source heat pump sits outside your home and extracts warmth from the outdoor air. It upgrades this renewable heat energy and transfers it inside the home to provide hot water and heating for radiators and / or underfloor heating.

The self contained unit only requires electric and water connections. Like your fridge, it will do this quietly and reliably, all year round, even in sub-zero temperatures down to  $-20^{\circ}\text{C}$ . Furthermore, you can relax knowing that there is no carbon monoxide produced in the house from a heat pump.

For every 1kW of electrical input power Ecodan harvests renewable heat energy from the outdoor air to provide your home with an average of 4kW of heat\* – That's 3kW of FREE renewable energy!

\*The overall system efficiency and energy savings will depend on the comparison with your current heating system, satisfactory system design and installation, and operational setting i.e. how you use the heating system.

In addition to low running costs, Ecodan is classified as a renewable energy source because it captures free energy from the air.

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**Renewable Heating & Hot Water**

# Don't know what a heat pump is?

## 1 Outdoor Unit

Only requiring electricity and water connections, the ultra quiet, low maintenance Ecodan outdoor unit is easy to install and can be situated discreetly outside your home or in your garden.

Ecodan upgrades freely available heat energy from the air and transfers it to the home to provide hot water and heating for radiators and / or underfloor heating.

## 2 Hot Water Cylinder

The Ecodan outdoor unit provides your home with a continuous supply of hot water via a dedicated hot water cylinder.

These pre-plumbed cylinders are specifically designed to integrate with the outdoor unit and offer optimum performance and faster heat up times through the use of advanced plate heat exchanger technology.

## 3 Energy Efficient Control

Ecodan's easy to use wireless controller includes self-learning "Auto Adaption" to maximise system efficiency whilst maintaining comfort levels.



## 4 MELCloud Wi-Fi Control

Control your homes heating and hot water from your smart phone, tablet or computer via the internet using Mitsubishi Electric's MELCloud app.





# Frequently asked questions?

## Q. Who are Mitsubishi Electric?

The name Mitsubishi is synonymous with excellence. Founded in 1921 in Japan, we are a global market leading environmental technologies manufacturer. Our systems have been providing heating and cooling solutions for decades in the most energy efficient ways possible.

## Q. Are Mitsubishi Electric based in Ireland?

Mitsubishi Electric have been based in Ireland for over 40 years. We are firmly set on strengthening, consolidating and growing our reputation as market leaders in the heating and cooling industry in Ireland.

## Q. How do Heat Pumps work?

They use the same principle as your fridge, compressing gas and then allowing it to expand, extracting heat as it does so. Even if the air outside is freezing, heat pumps can extract heat energy and transfer it inside to keep you warm.

## Q. Are Mitsubishi Electric Heat Pumps suitable for the Irish climate?

Yes, the Ecodaan range has been specifically designed for Irish conditions. Research conducted in Ireland has shown that Ecodaan is ideal for our relatively mild winter climate.

## Q. Why are Heat Pumps better than other forms of heating?

Firstly, they are much more efficient than regular heating systems which means they cost less to run. They are also very safe as they don't have any dangerous flue gases unlike gas or oil. Heat pumps produce a more even temperature profile in your home avoiding the highs and lows of conventional heating systems meaning a higher level of comfort for the home owners.

## Q. What sort of properties are suitable for Ecodaan?

Ecodaan heating systems are suitable for all homes. The site should be surveyed and sized by a trained Ecodaan installer.

## Q. What factors will affect the size of Heat Pump I need?

The size of the heat pump will depend on the heat loss of your home. Your Ecodaan installer can advise on this.

## Q. Do Heat Pumps take up a lot of room?

No, heat pumps are designed to be unobtrusive as the heating unit is located outside the house. The indoor unit can be positioned in the space where your hot press is located.

## Q. How much does an air source heat pump cost?

A typical system can be installed from €8,000 to €11,000 depending on the size and heat loss of your home. The costs can vary and would be subject to a site survey by your Ecodaan installer. A grant is also available from SEAI for Heat pumps.

## Q. How easy is it to install Ecodaan?

The Ecodaan system is easy to install and usually takes about two days depending on the installation. This can be done with minimum disruption to the occupants of the home.

## Q. Will Ecodaan work with my existing radiators?

Yes, in many cases the existing radiators can be used. Your Ecodaan installer will survey the radiators to ensure they are suitable for the system to operate efficiently.

## Q. How much does it cost to run a Heat Pump?

This depends on the amount of heating required. The efficiency of Ecodaan in Ireland is usually between 300% and 400% as opposed to conventional heating systems which operate at 75% to 92% efficiency. This means significant savings can be made on fuel bills.

## Q. Is there a grant available?

Yes – a new grant is being offered by SEAI. Visit their website for more information at <https://www.seai.ie>

## Homeowners' Information Videos



SCAN or CLICK  
QR CODE





# What makes Ecodan unique?

Mitsubishi Electric have been working with heat pump technology since the 1970's to create efficient heating solutions for homes and businesses. While we continue to improve and innovate to provide sustainable solutions we have also learnt that having a good heat pump isn't enough – the service, support and add-on features are equally important in delivering the solution.

**Built in SD Card and data logging** - The SD card logs the performance data of the heat pump and can be used to verify system efficiency and help with fault finding.

**MELCloud Wi-Fi control** - MELCloud allows us to offer homeowners fast and easy mobile control and monitoring of the Ecodan system from anywhere in the world.

**Built-in energy monitoring** - Energy monitoring built in as standard allowing homeowners to view energy consumed and energy delivered.

**Wireless controllers** - Easy to install and simple to use wireless controllers ensure comfort levels are always met while maintaining maximum system efficiency.

**Auto adaptive control** – The Mitsubishi Electric FTC6 control not only operates on weather compensation but also monitors room temperature and constantly compares both, automatically adjusting the weather compensation curve to maintain the maximum system efficiency. Its self-learning ability recognises the heat loss of the building at various ambient temperatures and adapts to respond in the most efficient manner.

**Higher outputs & Higher efficiencies** – No need to oversize as the Ecodan system maintains high heat outputs at lower ambient temperatures when many others start to fall away - heat when you need it.

**Higher flow temperatures** – The Mitsubishi Electric Ecodan unit can achieve 75°C flow temperatures as opposed to many other heat pumps temperatures of 50°C - 55°C.

**Two different temperature zones** – Can operate two different temperature zones – for example underfloor at 35°C and radiators at 45°C.

**Hybrid options available** – Our Ecodan heat pump can operate and control a third-party fossil fuel system such as a gas or oil boiler

**Service & Maintenance package** - As a manufacturer we offer a Service & Maintenance package to ensure your heating system is operating smoothly and efficiently

Households all over Ireland are already saving and benefiting from reliable, renewable heating with Ecodan air source heat pumps.



The SD card records 6 months of usage and performance history meaning that troubleshooting can be done quickly and effectively.



# Take control of your home heating with MELCloud

## Effortless control

MELCloud is the new generation of Cloud based control for Mitsubishi Electric Ecodan Heating Systems. MELCloud provides users with effortless control of your devices whether you are out or are just lying on your sofa at home. MELCloud provides real-time monitoring of the system's energy usage as well as remote operation of the heat pump system.

Accessing and controlling your Mitsubishi Electric products has never been simpler and is now possible via a wide range of PC, tablets and smartphones.

## Solve your heating issues with just one phone call

MELConsole provides remote maintenance & technical support, via the MELCloud app, allowing Mitsubishi Electric to investigate and often fix any heating issues without the need for a visit from an engineer.







## Introducing our Ecodan Heat Pump Service and Maintenance for Homeowners

Mitsubishi Electric are proud to launch our nationwide annual maintenance package for Ecodan Air to Water heat pumps. A member of our Ecodan After Sales Team will visit homeowners or businesses to complete a comprehensive 30 point check on their heating system, which ensures it is running optimally. By servicing the heating system annually it will ensure that the system runs efficiently, and that the warranty conditions are met, as well as reducing any potential costly issues in the future.

Our engineers will leave the system running at its optimum efficiency as well as answer any questions homeowners may have regarding their heat pump providing peace of mind.



Book your service today by visiting:



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## Case Study

### Brookfield Park, Co. Wicklow

#### The Background

Broomhall Estates, a family-run business with over 40 years of experience in construction, has successfully completed more than 1,500 homes. Renowned for their commitment to quality, they use only the finest materials available to build top-tier homes. Broomhall Estates have been using Mitsubishi Electric heat pumps for a long number of years. As the market leader in heating and cooling in Ireland, Mitsubishi Electric's products have allowed Broomhall Estates to construct exceptionally energy efficient homes.

#### The Challenge

So, when the owners of a three bedroom, terraced home in Brookfield Park, Wicklow tasked Broomhall Estates with finding them a heating solution for cold months and also a cooling option for warm summer days and nights, Broomhall Estates looked to Mitsubishi Electric's extensive product range.

**“ We have been working with Mitsubishi Electric for a number of years on our various developments. The Mitsubishi Electric products are top quality and allow us to offer our customers' peace of mind. We have found dealing with Mitsubishi Electric Ireland very straightforward and we are delighted to have such a strong working relationship with the market leader. ”**

- Michael Sullivan, Director, Broomhall Estates

#### The Requirements

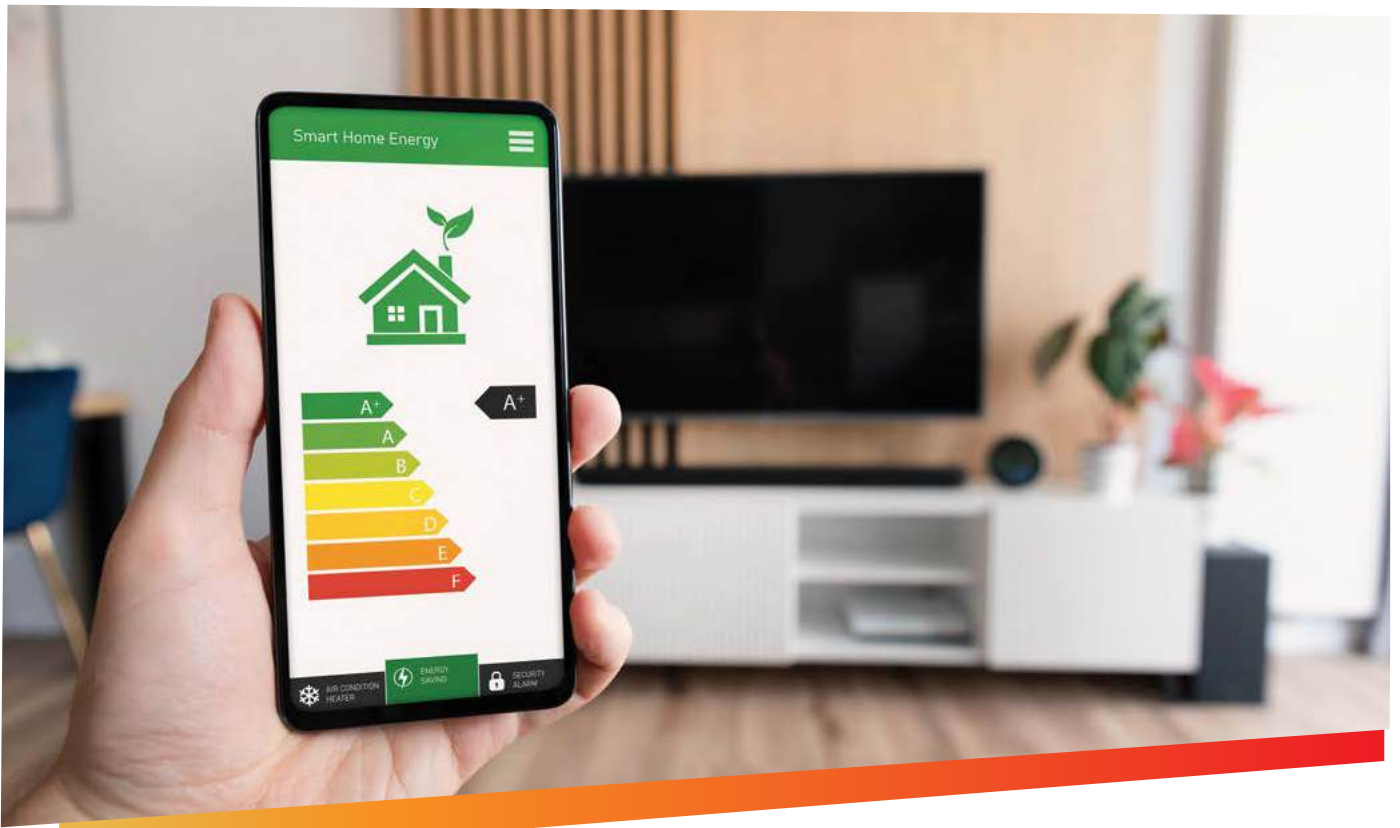
Historically, achieving both heating and cooling required two separate outdoor units. However, the arrival of Mitsubishi Electric's new PXZ unit provides an innovative solution, that combines heating and cooling demands into one highly efficient, compact outdoor unit. The PXZ unit is managing the space heating via the underfloor heating system downstairs and the radiators that are upstairs.

#### The Solution

After a property survey, Mitsubishi Electric's design team paired the PXZ unit with a 300-liter Mitsubishi Electric Packaged Cylinder to meet the large domestic hot water (DHW) demand. It also supports the three separate MSZ air conditioning units for cooling, with the ability to add a fourth. The homeowner requested the AC units to be wall mounted, due to their stylish and compact design.

The Ecodan Multi Series PXZ ensures top tier performance across various functions. Upon finishing the installation, the Wicklow home was left with a remarkable cooling energy efficiency rating of A+++, heating efficiency rating of A++, and DHW production efficiency rating of A+.

In conclusion, along with providing fantastic energy efficiency ratings, we provided the owners of this Wicklow home with the heating and cooling solution that they desired!



## Scan the QR code to learn more about SEAI grants

The SEAI grant covers a range of heat pump systems and, where applicable, a grant towards your technical assessment. Heat pump grants are paid for first time systems. To learn more scan the QR code or visit [www.seai.ie/grants/home-energy-grants/](http://www.seai.ie/grants/home-energy-grants/)

In addition, Budget 2025 will see VAT reduced to 9% (from 13.5%) on heat pumps, making it more affordable for home-owners to switch to efficient electric heating. This is the lowest VAT rate that is allowable under the VAT Directive. This is in addition to the grants that are available from SEAI.

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Renewable Heating Technology



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Living Environmental Systems



Mitsubishi Electric Ireland Heating

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**Note:** Mitsubishi Electric's air conditioning equipment and heat pump systems contain a fluorinated greenhouse gas, R32 (GWP:675) \*These GWP values are based on Regulation (EU) No 517/2014 from IPCC 4th edition. In case of Regulation (EU) No.626/2011 from IPCC 3rd edition, these are as follows. R32 (GWP:550).



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