

Reliable renewable  
**heating & hot water**

**ecodan**<sup>®</sup>  
Renewable Heating Technology

## Heating



# The Natural Evolution of Home Heating



**ecodan** | Renewable Heating Systems

Air Conditioning

Chillers

IT Cooling

Heating

Ventilation

Controls

Services



## 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.



ErP **A++**

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°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 2kW-3kW 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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# 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 the UK and Irish markets. 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 €7,000 to €10,000 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.

## 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



[CLICK HERE](#)



# What makes Ecodan unique?

Ecodan is now in its 6th generation, having been continually developed and improved upon to ensure the best experience for the end user and the installer. We have learnt that having a good heat pump isn't enough – the service, support and add-on features are equally important in delivering the solution.

**SD Card commissioning and data logging** - All settings can be pre-logged on the SD card and simply inserted on site during commissioning. The SD card then 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 is a major investment for Mitsubishi Electric and allows us offer 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 home owner 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 FTC6 control not only operates on weather compensation (like our competitors) 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 can achieve 60°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 – say underfloor at 35°C and radiators at 45°C.

**Hybrid options available** – Heat pump can operate and control a third party fossil fuel system.

**Highest cylinder efficiencies** – Our highly insulated hot water tank combined with our patented scale trap allows for the use of an external plate heat exchange greatly improving efficiency. This provides the highest hot water efficiencies on the Irish market.

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

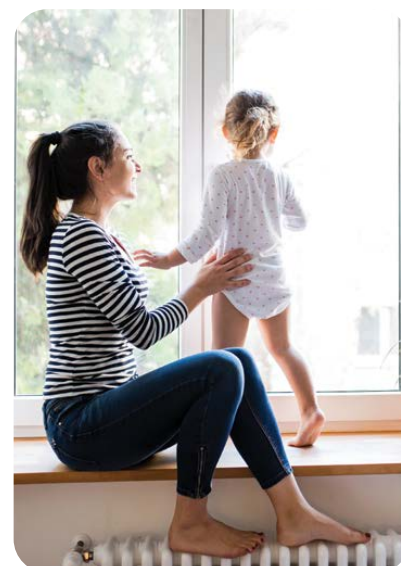
## Effortless control

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 for 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 interrogate and often fix any heating issues without the need for a visit from an engineer.



# 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, oil and LPG 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 R&D 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 have evolved and today we offer the most advanced environmental heating system that can really make a world of difference.



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