

Air Conditioning

Heating

Ventilation

Controls





REDUCE THE

NEXTS



HEAT INCENTIVE.

NEXTO



NEXTS



Renewable Heating Technology





MITSUBISHI ELECTRIC'S

Ecodan is designed to deliver all the heating and hot water you need for years to come. Ecodan heat pumps are government supported for mass market uptake and are one of the most reliable and future-proof forms of heating available today.



Over 72,000 domestic Air to Water heat pumps have been installed throughout the UK up to the end of 2013.



AWARD WINNING RENEWABLE TECHNOLOGY



*BSRIA figures







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OTCHT ELECTRIC'S

MITSUSISHI EL

Ecodan is designate you need for year government support are one of the most reforms of heating avail

Over 72,000 (heat pumps heat pump

The name Mitsubishi is synonymous with excellence

Founded in 1921, Mitsubishi Electric is now a global, market leading environmental technologies manufacturer.

In the UK, the Living Environmental Systems Division provides proven solutions that heat, cool, ventilate and control our buildings in some of the most energy efficient ways possible.

Mitsubishi Electric has specifically designed the Ecodan range for UK homes.

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











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National Heat Pump Awards 2013 - Commercial Air Source Installation of the Year (Winner)

National Heat Pump Awards 2013 - Training Excellence - Ecodan Homeowner Portal (Highly Commended)

Micropower Awards 2012 - Manufacturer of the Year (Winner)

National Heat Pump Awards 2012 - Product of the Year - Ecodan CAHV (Winner)

Professional Heating and Plumbing Installer Awards 2012 - Top Product 2011 - Ecodan (Winner)

National Heat Pump Awards 2011 - Installation of the Year, Domestic Air Source Heat Pump (Winner)

Scottish VIBES Awards 2010 - M-ACE and Ecodan (Winner)

Sustain Magazine Awards 2010 - Ecodan (Finalist for Product of the Year)

European Eco-Label - November 2009

Micropower Awards 2009 - Highly Commended

Rushlight Awards 2009 - Ground & Air Source Power Award

Energy Institute Awards 2008 - Technology Award

heat pumps have been instance tinough the UK up to the end of 2013.



AWARD WINNING RENEWABLE TECHNOLOGY













ECODAN ATR SOURCE HEAT PUMPS

upgrade natural energy in the outside air to provide your home with low cost, renewable heating and hot water all year round.



BY UP TO 50%







ANI ATD COLLREF HEAT PILMPS

Our range of **Ecodan air source heat pumps** include 5, 8.5, 11.2 and 14kW sizes and offer superb benefits including:



MELCloud allows fast and easy mobile control and monitoring of the Mitsubishi Electric Ecodan system from anywhere in the world via your mobile phone, tablet or computer.

Low Noise Levels

Ecodan is one of the guietest heat pumps available and is the only one to have achieved the Noise Abatement Society's Quiet Mark.

Hybrid Control

This enables Ecodan to work seamlessly alongside existing oil or gas boiler systems to help reduce initial investment and deliver run cost savings.

MCS & the Renewable Heat Incentive (RHI) All our Ecodan products are MCS certified and qualify for the RHI.

Built in the UK

We are investing in UK manufacturing with our facilities in Livingston, Scotland becoming our Ecodan manufacturing plant for Europe.

















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ECODAN AIR SOURCE HEAT PUMPS

upgrade natural energy in the outside air to provide your home with low cost, renewable heating and hot water all year round.





The Ecodan replaced an 80% efficient gas boiler.

REDUCE YOUR HOME'S CO₂ EMISSIONS BY UP TO 50%













HOW AN ECODAN AIR SOURCE HEAT PUMP WORKS



Ecodan air source heat pumps work in a similar way to your own refrigerator - but in reverse.

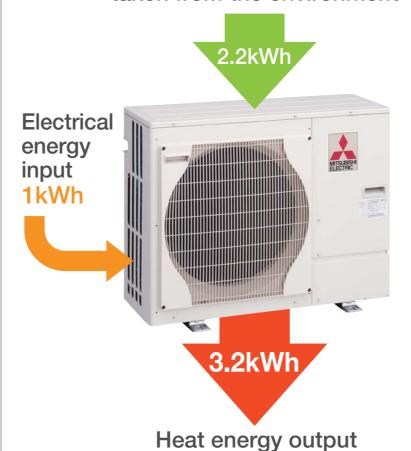
Ecodan uses advanced inverter-driven heat pump technology to harvest and upgrade the FREE natural heat energy found in the outside air to supply your home with efficient, renewable heating and hot water even in temperatures as low as -20°C.





HOW A HEAT

Low temperature renewable heat energy taken from the environment



For every 1kWh of input electrical energy, Ecodan harvests and upgrades renewable heat from the outdoor air to provide the home with an average of at least 3.2kWh of heat energy output.

mps work in a rigerator -

erter-driven harvest and heat energy found your home with and hot water

efficient, renewable h and hot water even in temperatures as low as -20°C.





Ecodan air source heat pumps are an ideal alternative to traditional heating systems, helping to combat rising fuel bills!



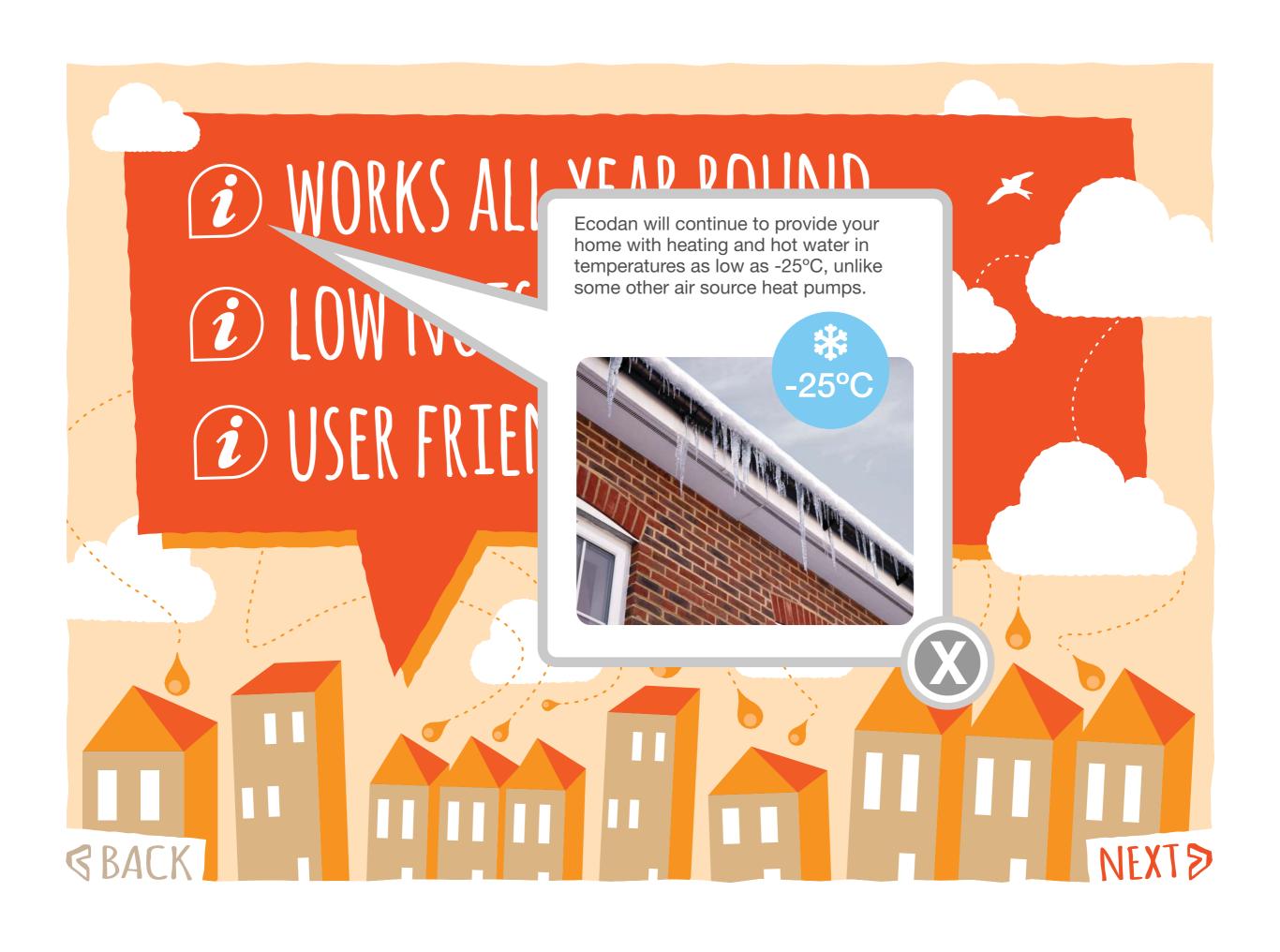


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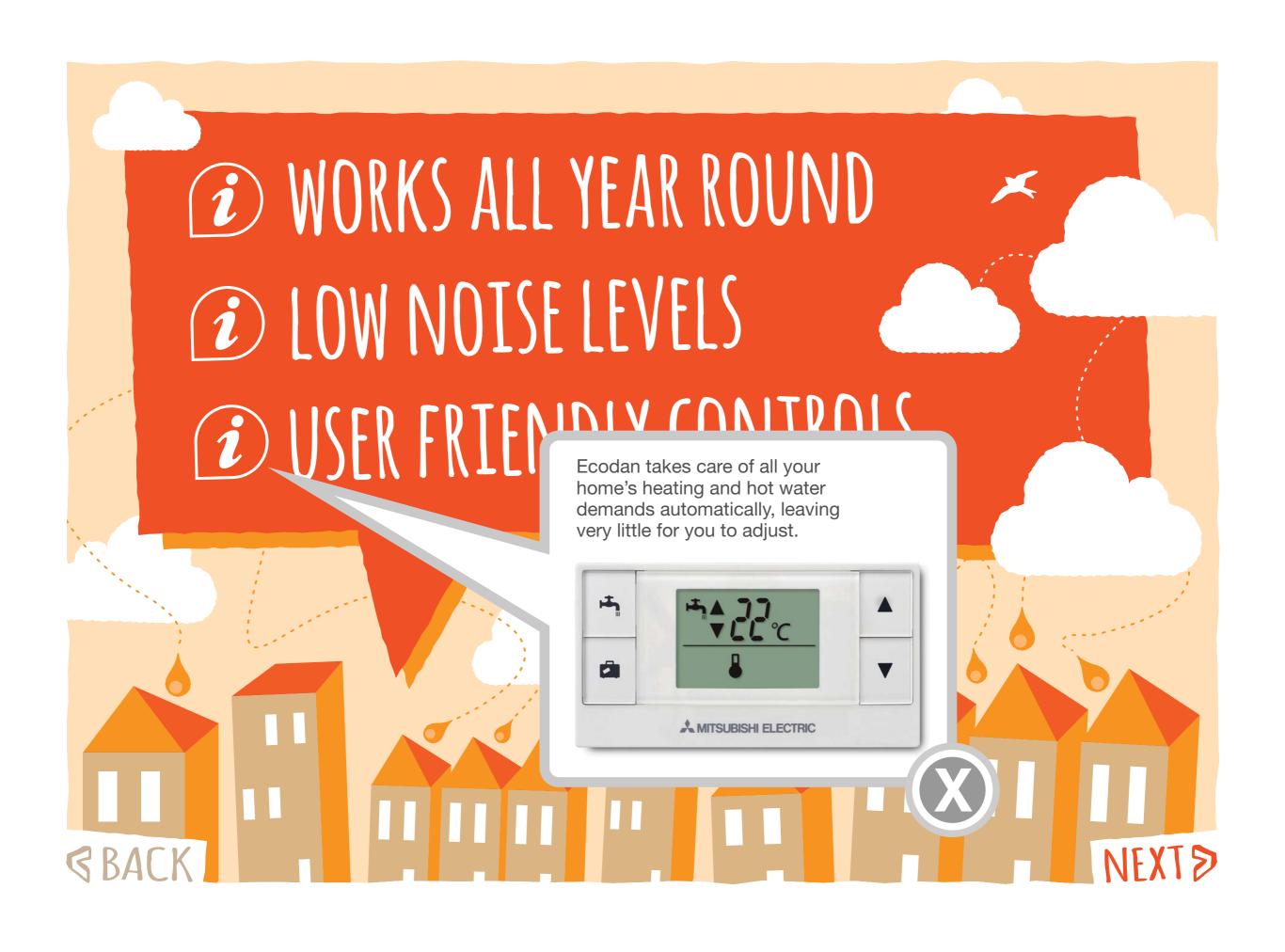
Ecodan air source heat pumps are an ideal alternative to traditional heating systems, helping to combat rising fuel bills! NNING COSTS! TAKE A LOOK AT THE BENEFITS ECODAN HAS TO OFFER >

G BACK

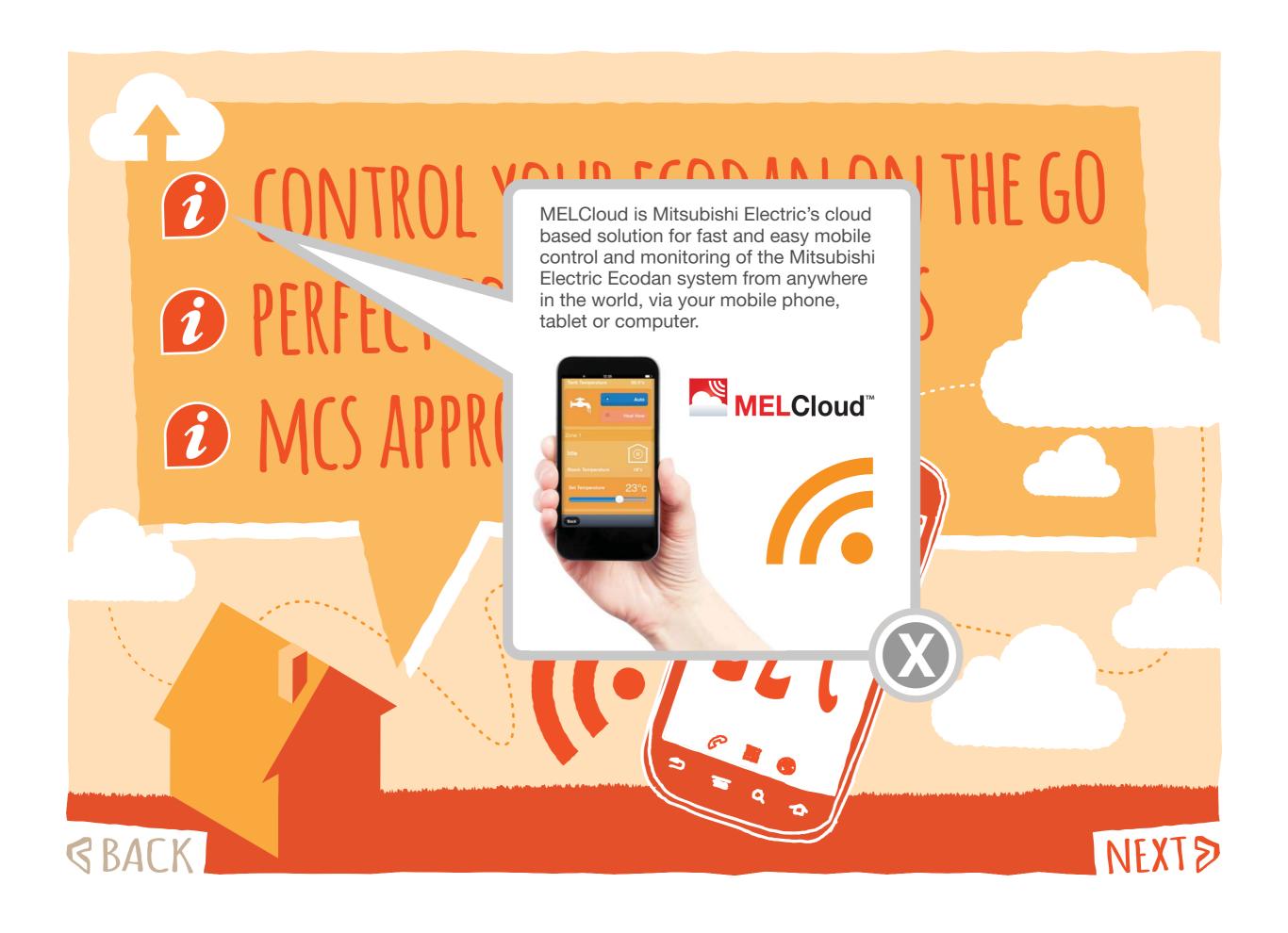




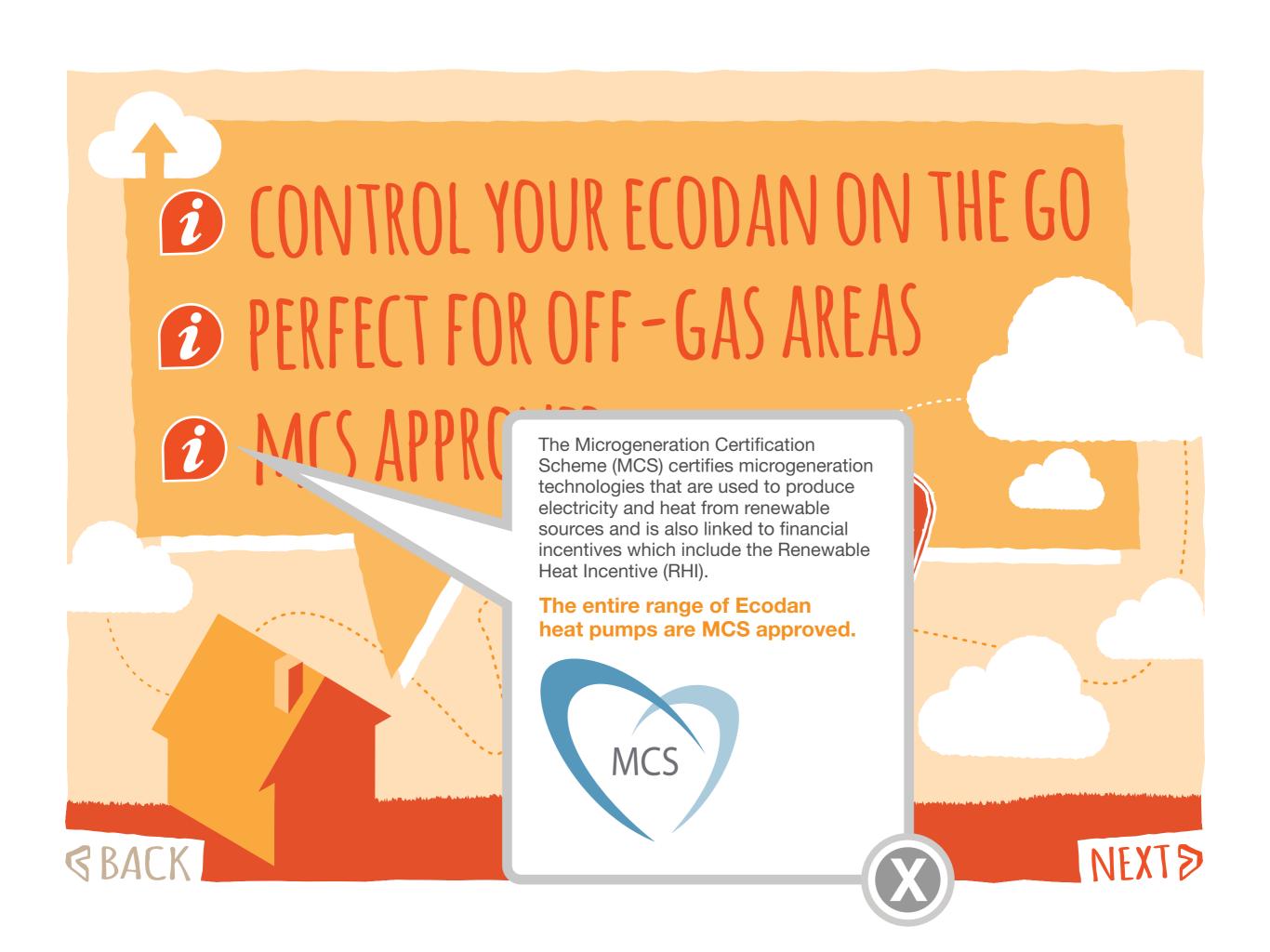












Homeowners who choose to install Ecodan could receive further financial benefits through the government's RENEWABLE HEAT INCENTIVE SCHEME (RHI)

- i WHAT IS RHI?
- DO I QUALIFY?
- i HOW DO I APPLY?

ofgem.gov.uk





NEXTS

Homeowners who choose to install Ecodan could receive further financial henefits through the government's

RENEWABI

The RHI is the world's first long term financial support for the generation of renewable heat.

The Government incentive aims to encourage the uptake of renewable technologies such as Ecodan and offset the cost between renewable and traditional fossil fuel systems.

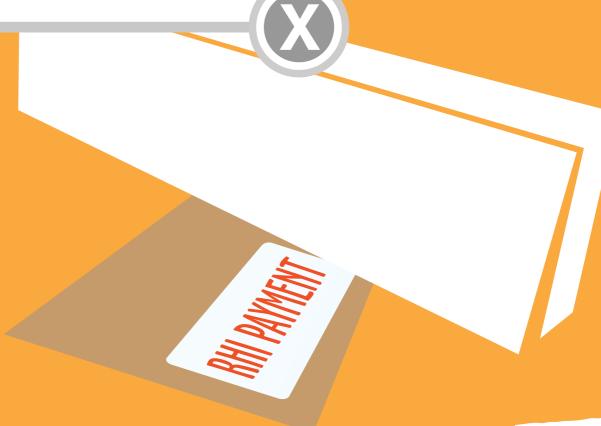
You can apply for the RHI through the Ofgem website: **ofgem.gov.uk**

i WHAT IS KHI!

DO I QUALIFY?

i HOW DO I APPLY?

ofgem.gov.uk







RENEWABLE HEAT TRICFRITTYE SCHEME (RHI)

- i WHAT IS
- Retrofit installations or self build
- Ecodan heat pump installed
- Valid EPC
- Green Deal Assessment
- MCS installer

Once all the above is in place you can make the application for RHI.

i HOW DO I APPLY?

ofgem.gov.uk





Homeowners v further finan RENEWABLI

- i WHAT IS
- i 00101
- i HUW DO

- Check product and installer are both MCS accredited
- Make sure you have a valid Energy Performance Certificate (EPC)
- Complete a Green Deal Assessment
- Install mandatory energy saving measures if required
- Apply for RHI

Save money and get paid thanks to Mitsubishi Electric's Ecodan

Time period - Claimable for 7 years

Tariff - 7.42p/kWh

Heat claimable - Renewable heat only

Installations from - 15th July 2009

Claim from - 9th April 2014

Flow temperatures - Lower flow temperatures optimise the performance of the heat pump, which will mean higher heat emitter guide star ratings and in turn higher RHI payments

Accreditation - Both the product and installer must be Microgeneration Certification Scheme (MCS) approved

dan could receive re government's SCHEME (RHI)







HOW MUCH WILL RHI PAY?

1. How much energy does your house need for heating and hot water?

2. How efficient is your heat pump installation?



EXAMPLE ONE >

HOW MUCH WILL KHIR

Energy

This is measured in kWh and is calculated in your EPC.

Efficient

Heat pumps provide the most energy efficient form of heating available.

The efficiency of a heat pump is often referred to as the co-efficient of performance (COP). The better your COP, the more RHI funding you will be eligible to receive.

Ecodan is proven to deliver market leading real world COP's, which means you can maximise your RHI benefit.

2. How efficient is you. heat pump installation?





REPLACING THE EXISTING BOILER WITH ECODAN

IN A TERRACED HOUSE:

Built in 1996

Cavity wall and loft insulation

3 bedrooms

Modern oil boiler fitted

Ost to fit a new boiler would be £1,800

Current oil cost £601 per year



The proposed new system:

5kW Ecodan air source heat pump

i High pressure cylinder

Control your Ecodan on the go

New radiators

Installation and commissioning

Total cost £6,397





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5kW Ecodan air source heat pump

Total cost £6,397

WITH ECODAN



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- 3 bedrooms
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- Cost to fit a new boil

The proposed

- 1 5kW F air source
- i high pressure cylinder
- Control your Ecodan on the go
- New radiators
- Installation and commissioning



A high pressure cylinder is optimised for use with Ecodan and ensures quick heat up times, with all taps and showers having the same high pressure performance.

> Iotal cost £6,397







REPLACING THE FXISTING BOILER WITH ECODAN

IN A TERRACE

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- 3 bedrooms
- Modern oil boiler fitted
- Cost to fit a new boiler

The proposed new sys

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- i High procylinder
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- New radiators
- 1 Installation and commissioning

MELCloud is Mitsubishi Electric's cloud based solution for fast and easy mobile control and monitoring of the Mitsubishi Electric Ecodan system from anywhere in the world, via your mobile phone, tablet or computer.











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- i Installation and commissioning

Ecodan produces water at a lower temperature than a traditional gas or oil fired boiler, it is therefore important to check if your existing radiators are large enough to get the optimum performance.







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- Built in 1996
- Cavity wall and loft ins
- 3 bedrooms
- Modern oil boiler fitted
- Cost to fit a new boiler

The proposed new system

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- High pressure cyling
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Your installer will take care of installation and set up so you don't have to worry.

In order to claim RHI the installer you choose needs to be MCS approved.









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Control your Ecodan on the go

New radiators

Installation and commissioning

This was derived from the following assumptions:

Oil = 0.06 pence per kWh

Boiler efficiency = 95%

EPC heating and hot water requirement = 9,525kWh per year

CODAN











EXAMPLE ONE >

HOW MUCH WILL I EARN OVER 7 YEARS:

Annual RHI payments = £471 per year

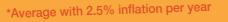
Running cost savings with Ecodan = £220 per year

TOTAL EARNINGS OVER 7 YEARS = £4,837

Payback period 6.8 years*

*Taking into account the potential cost of replacing the existing boiler with a new boiler.





(i)

SAVINGS WILL INCREASE AS FOSSIL FUEL PRICES RISE!





EXAMPLE ON This was derived

This was derived from the following assumptions:

Ecodan COP = 3

EPC = 9,525kWh per year

Renewable heat = 6,350kWh per year

RHI tariff = 7.42 pence per kWh of renewable heat

ZYEARS:





Annua HI payments = £471 per year*

*Average with 2.5% inflation per year

i

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EXAMPLE ONE >

HOW MUCH WILL I EARN OVER 7 YEARS:



Running cost savings with Ecodan = £220 per year

TOTAL EARNINGS OVER 7 YEARS = £4,8

Payback period 6.8 years*

the existing boiler with a new boiler.

*Taking into account the potential cost of replacing







This was derived from the following assumptions:

Electricity price = 0.12 pence/kWh

Ecodan COP = 3

Energy consumption = 9,525kWh / 3 = 3,175kWh

Energy price = £381 per year (heating and hot water)

Previous energy cost (£601) - Ecodan energy cost (£381) = £220





EXAMPLE ONE >

HOW MUCH WILL I EARN OVER 7 YEARS:

Annual RHI payments = £471 per year

*Average with 2.5% inflation per year

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The payback period takes into account that RHI payments will stop after 7 years and only savings in fuel costs apply after this point. This does not account for changes in fuel prices.

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ECODAN CAN WORK
IN TANDEM WITH
YOUR BOILER

PLUS YOU WILL STILL RECEIVE BENEFIT FROM THE RHI

AND YOUR
INSTALLATION COSTS
WILL BE KEPT TO
A MINIMUM



EXAMPLE TWO >



ECODAN CAN WORK
IN TANDEM WITH
YOUR BOILER

PLUS YOU WILL STILL RECEIVE BENEFIT FROM THE RHI



Mitsubishi Electric's latest control system will decide when your existing boiler is used, to ensure the lowest possible running costs.





EXAMPLE TWO >



ECODAN CAN WORK
IN TANDEM WITH
YOUR BOILER

PLUS YOU WILL STILL RECEIVE BENEFIT FROM THE RHI

AND YOUR
INSTALLATION COST
WILL BE KEPT TO
A MINIMUM

You will still receive RHI payments for the heat provided by Ecodan.







ECODAN CAN WORK
IN TANDEM WITH
YOUR BOILER

PLUS RECEI FROM

In many cases the existing radiators may be retained and if your existing boiler is still to provide hot water, then there may be no need for a new cylinder.



AND YOUR
INSTALLATION COSTS
WILL BE KEPT TO
A MINIMUM



EXAMPLE TWO >

KEEPING THE EXISTING BOILER IN A DETACHED HOUSE:

- Built in 1985
- 4 bedrooms
- 8 year old oil boiler

Current oil cost £1,500 per year



- 8.5kW Ecodan air source heat pump
- Control your Ecodan on the go
- Existing radiators and hot water cylinder
- Installation and commissioning





KEEPING THE I A DETACHED H

- Built in 1985
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The promuew sys

8.5kW Ecodan air sour

- Control your Ecodan on the go
- Existing radiators and hot water cylinder
- Installation and commissioning



8.5kW Ecodan air source heat pump





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The proposed new

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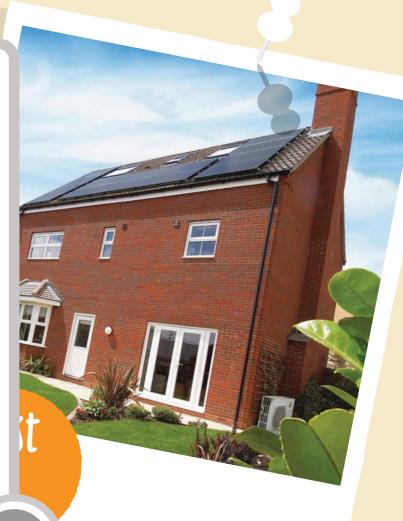
- 8.5kW Ecodan air so
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Your installer will take care of installation and set up so you don't have to worry.

In order to claim RHI the installer you choose needs to be MCS approved.









KEEPING THE EXISTING A DETACHED HOUSE:

- Built in 1985
- 4 bedrooms
- 8 year old oil boiler

This was derived from the following assumptions:

Oil = 0.06 pence per kWh

Boiler efficiency = 85%

EPC heating and hot water requirement = 21,225kWh per year





- 8.5kW Ecodan air source heat pump
- Control your Ecodan on the go
- Existing radiators and hot water cylinder
- Installation and commissioning



HOW MUCH WILL I EARN OVER 7 YEARS:

Annual RHI payments = £991 per year

Running cost savings with Ecodan = £317 per year

TOTAL EARNINGS OVER 7 YEARS = £9,156

Payback period 6.3 years





SAVINGS WILL INCREASE AS FOSSIL FUEL PRICES RISE!





EXAMPL This was o

This was derived from the following assumptions:

Ecodan COP = 2.7

EPC = 21,225kWh per year

Renewable heat = 13,364kWh per year

RHI tariff = 7.42 pence per kWh of renewable heat

YEARS:





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TOTAL EARNINGS

This was derived from the following assumptions:

Electricity price = 0.12 pence per kWh

Ecodan COP = 2.7

Energy consumption = 21,225kWh / 2.7 = 7,861kWh

Energy price Ecodan and fossil fuel = £1,183 per year (heating and hot water)

Previous energy cost (£1,500) - Ecodan and fossil fuel energy cost (£1,183) = £317

OVER 7 YE

Payback period 6.3

BACK

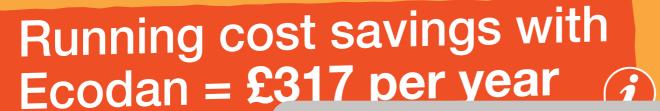




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Payback period 6.3 years









THOUGHT ABOUT COMBINING YOUR ECODAN WITH SOLAR THERMAL?

- Solar thermal systems produce hot water virtually free
- i Solar thermal attracts an RHI tariff of 19.3 pence per kWh
- (i) Solar thermal usually requires a special type of cylinder to be fitted
- (i) Why not fit a solar thermal ready cylinder now and save £1,000s in the long run



THOUGHT ABOUT COMBINING YOUR FRODAN WITH

A small amount of electricity is used to drive a pump and controls.



- i Solar thermal attracts an RHI tariff of 19.3 pence per kWh
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- (i) Why not fit a solar thermal ready cylinder now and save £1,000s in the long run



THOUGHT ABOUT COMBINING YOUR ECODAN WITH

Solar thermal attracts an RHI tariff of 19.3 pence per kWh for the hot water it produces. This is in addition to the payments received for the Ecodan heat pump.



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- (i) Solar thermal usually requires a special type of cylinder to be fitted
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THOUGHT ABOUT COMBINING YOUR ECODAN WITH COLAR THERMAL?

i Solar

This is known as a twin coil cylinder, it needs to have a coil for the solar thermal and a coil for the Ecodan, standard cylinders only have one coil fitted. The coil exchanges the heat from the solar thermal or Ecodan into the hot water that you use around the home.





- i Solar therm
- all Kill Ldi iji Vi 17.2
- i Souar thermal usually requires a special type of cylinder to be fitted
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THOUGHT ABOUT COMBINING YOUR FCODAN WITH

Solar

Solar

The special twin coil cylinder does not cost

much more than a standard one, so if you want to use solar thermal at a later date then consider fitting one when you have your Ecodan fitted - this will be a lot cheaper than

having to replace the cylinder at a later date. Solar therm

equites a special cype

per kWh



to be fitted

i) Why not fit a solar thermal ready cylinder now and save £1,000s in the long run



WANT EVEN MORE RHI PAYMENTS?

Did you know that there is an extra £230 a year available if your Ecodan is metered *i*

- This pays you an extra £1,610 over 7 years
- Submit your online reading every quarter
- Upfront costs are only £674 including 12 months rolling data subscription plus fitting





WANT EVEL MORE REPRESENTED TO SET THE CONTROL OF SEMENTAL SET TO SERVICE OF SEMENTAL SET THE CONTROL OF SEMENTAL SEMENTAL SET THE CONTROL OF SEMENTAL SEMENTAL SET THE CONTROL OF SEMENTAL SEME

Did you know that there is an extra £23 a year available if your Ecodan is metered i

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WHAT DOES ECODAN AND THE RHI MEAN TO MY HOUSE?

The new Ecodan Selection Tool allows you to get an insight into what this technology could deliver to your home and the RHI calculation tool section will help to work out your approximate RHI payments.

Selection Tool will produce a financial report detailing the benefits that Ecodan users can expect to receive. These include tailored information on the overall cost saving benefits; including total running costs, carbon emissions as well as the all-important RHI payment figure.

Visit the Ecodan Selection Tool website.

Adjustable flow temperature to see how it affects RHI payments Approximate Renewable Heat Incentive payment



Financial analysis summary



for more information





ECODAN SERVICE & MAINTENANCE PACKAGES

In order to enable you to get the maximum performance throughout your Ecodan's working life, you need to ensure that the system is serviced and maintained annually.

This is important not only to comply with the warranty conditions, but also to meet the demands of the Renewable Heat Incentive (RHI) scheme, with the minimum requirement of an annual service.

Mitsubishi Electric offers a range of service and maintenance plans to support Ecodan heating systems and give our customers affordable peace of mind.

BENEFITS INCLUDE i







ECODAN SERVICE R- MAINTENIANCE PACKAGES

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Premium service levels

Complements and maintains warranty

Prolongs the life of your Ecodan

 Ensures that your Ecodan is operating at maximum efficiency

Offers complete reassurance

Ensures your system complies with RHI

Offers remote control and monitoring

aintenance , ve our

BENEFITS INCLUDE i







Mr Maddison, Northumberland *i*

Mr Gray, Northumberland 2

The Knight Family, Bedfordshire 1





Mr Maddison, Northumberland *i*

Mr Gray, Northumberland 10

ecodon

The Knight Family, Bedfordshire 10



Ecodan is the ideal solution for us: no fuss, no mess, and very economical, I am really pleased with its performance.





Mr Maddison, Northumberland *i*



The Knight Family, Bedfordshire 1





My company has a wealth of experience in renewables so I know a thing or two about them and how they perform. I didn't want to compromise on efficiency and performance, or pay a prohibitive price to run it, and it would have to fit with my existing water cylinder.

I am also very aware of environmental issues so I wanted a system that would reduce my carbon output too. So with all these things in mind, I chose an 8.5kW Ecodan to do the job. ",





Mr Maddison, Northumberland *i*

Mr Gray, Northumberland 12

ecodan

The Knight Family, Bedfordshire 1



The system has also quickly adapted to suit our lifestyle and controls both the heat pump and the gas boiler, so we really don't need to worry about anything.





FURTHER INFORMATION?

Click on the links below to watch the Ecodan videos



Ecodan for homeowners video

CLICK HERE D



Ecodan customer testimonial videos

CLICK HERE D



Ecodan homeowner portal videos

CLICK HERE D







Renewable Heating Technology

FOR FURTHER INFORMATION ABOUT MITSUBISHI ELECTRIC'S ECODAN HEATING SYSTEMS AND THE RHI PLEASE VISIT:

heating.mitsubishielectric.co.uk

