

*Clear investment. Pure energy.*

# YOUR GUIDE TO ELECTRIC HEATING

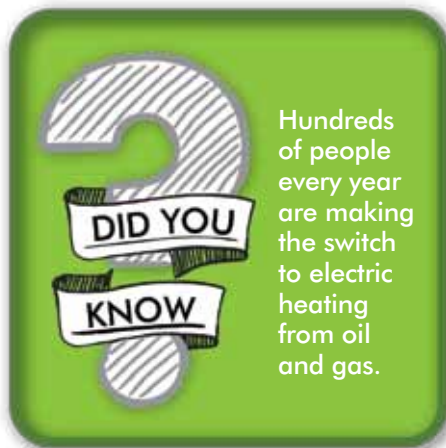


# UNDERSTANDING YOUR SYSTEM

Home heating technologies and their associated controls have improved significantly over the years. There's more choice available in the market now than ever before. We hope that this brochure provides you with an overview of electric heating systems and helps you to prepare for your survey and quotation.

Electric heating offers total flexibility to meet any life style, and we have a range of electric heating options for any budget and application. Our Energy Solutions Team has many years of design, specification and installation experience, and will be happy to discuss and advise you on the most suitable options to meet your needs.

There are two main types of heating options available to you, either a wet 'piped' or a dry 'cable' system. Generally, it is more cost effective to stay with the type of heating installation you already have in place. However, the choice is entirely yours and it is worth considering all of the options. Our surveyor can help you.



## WET 'PIPED' SYSTEMS – Central heating

A typical wet central heating system uses a boiler as the 'engine' that provides heat to your home. Your boiler will heat water that is pumped through pipes to your radiators or underfloor system. Each radiator or the underfloor pipes then release that heat into your home. Boilers also provide hot water for your general use, with most systems storing heated water in a cylinder.



If you have an existing gas or oil boiler, it is simple to replace it with a clean highly efficient electric boiler or, alternatively, an air source heat pump. A thorough survey will ensure that the boiler or heat pump is correctly sized to meet your individual heating and hot water needs.

When you change your boiler you can keep your existing central heating pipework and radiators as long as they are in good working order. Our surveyor will discuss this with you.

#### **DRY 'CABLE' SYSTEMS – Electric radiators or underfloor**

Electric panel radiators simply use electricity to create heat which is transferred into your home. Modern panel heaters, with improved controls and smart connectivity, are becoming increasingly popular. Modern storage heaters are much more efficient than older models and, operating in conjunction with our Comfort Heat or Economy 7 Tariff, are economical to run. You can also heat your home using underfloor cabling or matting systems.



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# ELECTRIC BOILERS

Replacing a gas or oil boiler with a highly efficient, economical electric boiler couldn't be easier. Electric boilers are simple to install, quiet in operation and integrate into most existing radiator or underfloor piped systems. Plus, with no flue or storage tank, an electric boiler can be installed almost anywhere in your home.

Modern domestic boilers use either electricity, oil or gas as their fuel source. How the boiler works on the inside will differ depending on which fuel is used - but from the outside most boilers look the same. An electric boiler can easily replace your existing oil or gas boiler as a like-for-like change out, usually in the same position if you prefer.

Electric boilers offer numerous benefits. You will no longer need a chimney or flue and there will be no plume of smoke. All the electrical energy you pay for is converted into the heat you need. This is far more efficient than gas or oil boilers that lose a percentage of the heat they create up the chimney or flue. You can also reclaim the space used by your oil tank and no longer worry about running out of fuel or the risk of an oil leak.

If your oil or gas boiler was installed before 2011 you will probably have a non-condensing boiler. This older boiler technology only converts around 60% - 75% of the fuel it uses into useful heat. Even modern 'condensing' gas and oil boilers lose around 10% of the heat they create up the chimney. By comparison, electric boilers are 100% efficient - every unit of energy that you put into the boiler is converted into heat for your home.

Electric boilers are economical to run, clean, quiet and easy to control, and if you're switching from an oil or gas boiler, you'll be helping the environment by significantly reducing your carbon footprint!



Oil and gas boilers can lose as much as 40% of the heat you pay for through the flue. That could amount to hundreds of pounds every year.



# STORAGE HEATING

Today's storage heaters are simple to install, easy to use and give you heat when and where you want it. By using low cost electricity to heat up overnight, or during the day as required, storage heaters can also provide extremely economical running costs. High performance insulation within modern storage heaters means that the heat stored, isn't released until you need it.


The Jersey Electricity Comfort Heat and Economy 7 tariffs offer low cost electricity during certain periods of the day and night. By taking advantage of these tariffs, you can use discounted electricity to heat your home with storage heaters cost effectively.

Storage heater controls regulate how much heat the radiators store, as well as when and how much heat is released. Modern heaters automatically adjust how much heat is required, and therefore stored, to maximise

energy efficiency. Digital controls allow you to set a desired room temperature as well as programme seven-day time patterns to suit your lifestyle. The addition of fans in the radiators ensures that your rooms heat up quickly and efficiently.

The Dimplex Quantum is the most advanced and economical storage heater on the market. UK Government assessments have shown that the Quantum is 27% cheaper to run than a standard storage heater, helping to reduce your running costs. The heater's intuitive digital controls and self-learning capability provide heat on demand, to ensure your home is warm and comfortable when you want it to be.

With few moving parts, storage heater systems are also very reliable and virtually maintenance free. New heaters can often replace older heaters as like-for-like without any major redecoration or upheaval.



The top of the range Quantum storage heater is up to 27% cheaper to run in comparison with a standard manually controlled storage heater.



FRIDAY  
**HARMONY**  
NURSERY  
SOMETHING TO LOVE & SOMETHING TO LOVE YOU  
GIVE  
LET THE BOY BRIDGE TO  
BE MAGNIFICENT  
CO-OPERATE & COLLABORATE

KEEP CALM  
AND  
CARRY ON

OH! I DO  
LIKE TO BE  
RESIDE THE  
SIDE

FACE

# HEAT PUMPS

A heat pump can provide heat for your piped central heating and hot water much like a traditional boiler system. Heat pump systems operate most effectively in well insulated properties and are particularly suited to those with wet underfloor heating.

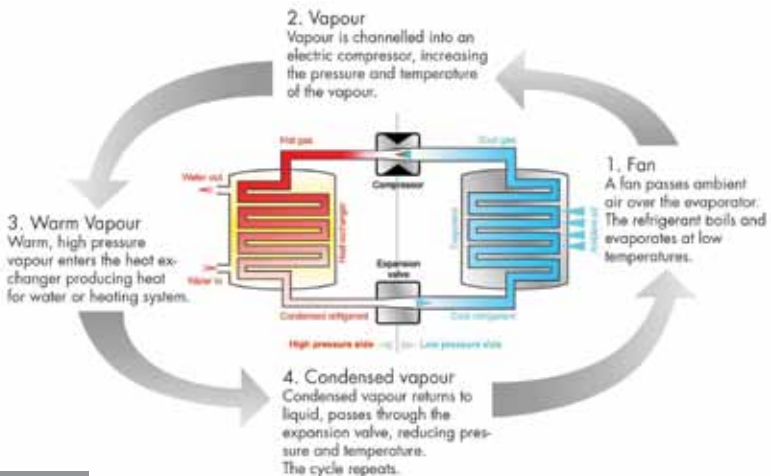
The key benefit of heat pump technology is its efficiency. Air source heat pumps are the most commonly installed systems in the Island, as the ground-works required for ground source systems generally make them more expensive to install.

By extracting the natural heat from the air, an air source heat pump operates at up to 300% efficiency. For every unit of electricity used to power the heat pump you can therefore receive up to three units of useful heat. This clever technology delivers the cheapest running costs of all our heating options and is best suited to the Economy 20+ tariff. The combination of a highly efficient system and our low carbon electricity delivers the added benefit of an extremely low carbon footprint.

So how does a heat pump work? The technology is extremely efficient, clean, convenient and environmentally friendly. It absorbs the natural heat from either the air or ground. This heat is then boosted by means of the heat pump itself, and this boosted heat, in turn, heats the water which is circulated around your home for heating or hot water.

- An air source heat pump uses an outdoor unit to draw in the heat from the air around it.
- A ground source heat pump absorbs heat from the ground through pipes filled with either a water/brine solution or refrigerant.

Air source heat pumps are easier to install than ground source systems. As they draw heat from the air, they simply need an outside location with a good air flow. Heat pumps can still operate effectively at air temperatures below freezing and are perfectly suitable for our local climate. Ground source heat pumps extract heat from the ground via specific types of pipes laid in a horizontal trench or vertical borehole.







Heat pump technology is exactly the same as used in reverse to extract warm air out of your kitchen fridge and freezer.

# SMART PANEL HEATERS

A panel heater provides instant heat whenever and wherever you need it. All panel heaters are 100% efficient as they directly convert electricity into heat at the point of use. Panel heaters are also easy and affordable to install.

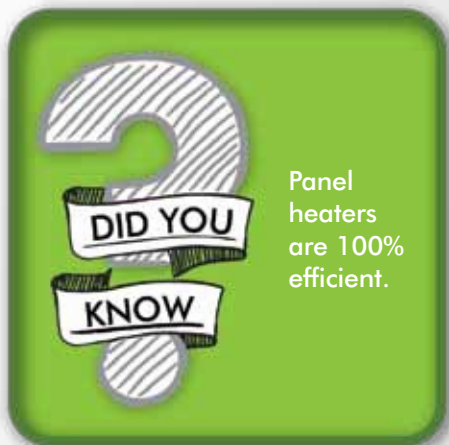
Panel heaters can provide heat for a whole home, or be used to supplement a central heating or storage heater system. Panel heaters come in a wide range of styles and finishes. You can choose from simple white panels or styled heaters that look similar to conventional central heating radiators.

Panel heaters are easy and simple to control and provide total flexibility; especially the latest smart heaters that can be controlled individually via your mobile or tablet. You can switch on manually or use each heater's inbuilt timer to set a weekly programme. Smart panels also offer the convenience of setting up each heater's programme via an app on your mobile phone or tablet.

By programming your heaters to suit your lifestyle you can save energy and ensure you always have your home at your preferred temperature at the time that suits you. For example, if you only use the bedroom, bathroom and kitchen before work in the morning, simply set these three radiators to heat up at the times you require. In the evening, you may want to have your lounge and kitchen warm for when you return from work, so again simply programme each radiator to come on at the right time.

But remember, you also have total control of your system from your phone. So if you're going to be late home from work it's simple to override your programme from your smart phone to save energy. This can be ideal for working professionals with flexible working hours who may choose to simply turn their system on and off from their phone as they need it.





Panel  
heaters  
are 100%  
efficient.



# UNDERFLOOR HEATING

Underfloor heating is a flexible system that offers a space-saving alternative to radiators. It can sit beneath virtually any type of floor finish, including stone, tile, wood and carpet. Underfloor heating is especially popular for hard cold surfaces such as tiled floors, particularly in bathrooms.

There are two main types of underfloor heating. Electric cable underfloor heating (dry system) and underfloor heating pipes (wet system) served by either an electric boiler or heat pump. Both systems can be fitted with controls to set the required timings and room temperatures.

## HOW ELECTRIC CABLE UNDERFLOOR HEATING WORKS

Electric cables or matting are installed either beneath floor finishes or within a solid floor as a space heating system. When the system is switched on, electricity passes through the heating wire elements or sheets which heat up. This heat then transfers into the floor mass and in turn into the living space. There's an electric underfloor heating system for nearly every flooring type and room.



You can mix and match your underfloor heating with panel heaters and electric towel rails.



### HOW WET UNDERFLOOR HEATING WORKS

Pipes laid under the floor circulate hot water provided by a heat source such as an electric boiler or air source heat pump.

For wet underfloor to work efficiently your floor will need to be prepared and insulated. It is easy to accommodate these requirements in a new build but may not be practical for a retrofit.

# HEATING CONTROLS

Correct heating controls - and knowing how to use them - will enable you to keep your home at a comfortable temperature without wasting heat or money.

Typically a modern heating system will incorporate a timer or programmer, and temperature controls such as a room thermostat or thermostatic radiator valves. You also need heating controls for your hot water cylinder. A cylinder thermostat controls the temperature of the water. A time control switch will allow you to heat your cylinder, when you want to and for as long as you need it to.

## THE NEWEST TECHNOLOGY: SMART HEATING CONTROLS

Smart heating controls offer more advanced control systems for domestic central heating. They allow you to manage your heating remotely from a computer, tablet or smart phone. Some systems 'learn' from your historic usage patterns and make adjustments for you.

The main advantage of a smart heating control system is that you can make changes remotely or automatically if your plans change. For example, you can change the time that your heating comes on if it turns out you will be home sooner or later than you thought. Alternatively, you might have set the heating to come on but there's no-one home - some controllers will detect that your house is empty and turn the heating off to save energy.

Is a smart controller right for you? Will a smart controller save you money? It will depend on your lifestyle, how you currently control your heating and whether you prefer using an app or traditional controls.





**DID YOU  
KNOW**

Some smart controls can detect if anyone is in the home to turn the heating on or off as needed.



# Big savings on summer water heating

## HOT WATER

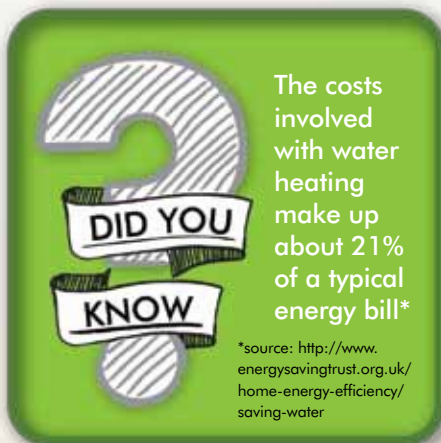
Those customers who do not have an electric boiler or heat pump, usually heat water using the immersion element in the hot water cylinder. The heater contains an insulated electric resistance heating element and a temperature sensor.

### ADVANTAGES OF WATER HEATED BY IMMERSION

- Heat delivered directly into the hot water cylinder
- Ideal for low cost heating tariffs

### LOW COST SUMMER HOT WATER

Make the switch to our low cost heating tariffs for summer hot water, by turning off your gas or oil fired boiler and using your immersion heater instead. It's easy to switch as most heating systems have an immersion heater element in the hot water cylinder as a back up.



The costs involved with water heating make up about 21% of a typical energy bill\*

\*source: <http://www.energysavingtrust.org.uk/home-energy-efficiency/saving-water>



# RENEWABLE ENERGY

Renewable energy is generated from natural resources such as the sun, wind, and water.

Solar Photo Voltaic (PV) cells are made from layers of semi-conducting material, usually silicon. When light shines on the cell it creates an electric field across the layers. The stronger the sunshine, the more electricity is produced. Groups of cells are mounted together in panels or modules that can be mounted on your roof.

Solar thermal water heating systems use solar panels, called collectors, fitted to your roof. These collect heat from the sun and use it to directly heat the water in a hot water cylinder or swimming pool. A boiler or immersion heater can be used as a backup or to supplement the heat stored in the cylinder as and when required.

Wind turbines harness the power of the wind and converts that power into electricity.



If you already heat your home by low carbon electricity, installing Solar PV will not significantly reduce your carbon emissions.

# NEXT STEPS

## SURVEY AND QUOTATION

Call our Customer Care Team on 505460 to book an appointment. They will ask you a few questions to help our surveyor understand what you are thinking of and make sure we make best use of your time.

We normally ask you to allow between 60 - 90 minutes for a full survey.

Once our surveyor has established your exact requirements, and you've decided on your preferred system, we will aim to send you a design specification and detailed quotation within three working days.



Our quote will explain all you need to know in terms of the recommended work, acceptance and installation process.

# FAQ

## CAN I GET A QUOTE FROM SOMEONE ELSE?

If you have your own preferred installer in mind, please feel free to get an alternative quotation. Jersey Electricity works closely with and supports the local trade, so we will still help you with your electric heating choice either way. You can even use our interest free or low interest finance packages with your own installer.

## WHAT ARE THE BEST TARIFFS?

We have a range of tariffs to suit both your lifestyle and the different types of systems currently available. Our Customer Care Team or our surveyor will be happy to help and advise you further.

## WHO CARRIES OUT THE INSTALLATION?

All of our installations are carried out by a number of highly experienced installer teams, from our installation business JEBS.

A JEBS Installation Supervisor will contact you prior to installation, to arrange for a site visit to discuss any specific requirement you may have.

## WHAT ABOUT AFTER CARE?

Once your installation is complete, one of our Home Heating Advisers will contact you and offer a home visit to explain about your system, tariff and answer any questions you may have.

And that's about it; you will be the owner of a low carbon, low cost, high efficiency electric heating system, guaranteed to keep you warm on those cold winter nights.

## HOW DO I MAINTAIN MY HEATING?

Electric heating has few moving parts so is relatively low maintenance, however most manufacturers recommend an annual check. JEBS offer monthly maintenance packages for all domestic heating solutions. For further information see [www.jebs.je](http://www.jebs.je) or contact 505460.

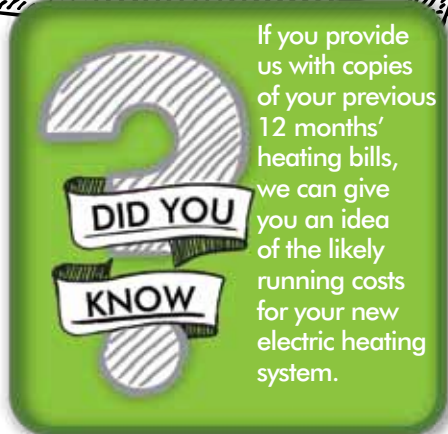
# WHAT WE WILL DO WHEN WE SURVEY YOUR PROPERTY

Now that you know the basics of electric heating you're all set for an Energy Solutions property survey.

The main reason for a home survey is enable us to determine your exacts needs and meet them. Things that need to be considered include:

- Property type, size, construction method and levels of insulation
- Your current heating system, including radiators, heat emitters, controls, hot water
- How you use your system, including any specific personal requirements
- Your current electricity supply
- Would you be interested in our interest 0% or low interest finance packages to help you with the switch to electric heating, if so, ask our surveyor for more details.

Normally, as part of our assessment process, we will need to survey every room and sometimes look in your loft or attic too. As you can appreciate, it would not be possible to obtain all of the information we need over the phone.



If you provide us with copies of your previous 12 months' heating bills, we can give you an idea of the likely running costs for your new electric heating system.

# NOTE PAPER

*Feel free to make notes here of anything you would like to ask us,  
or to supply measurements or costs and calculations.*

# LOW COST FINANCE

If you're looking to switch from a gas or oil fired boiler to a new electric system we'd like to offer support with finance. Jersey Electricity has teamed up with a local finance company to offer two types of loans.

## Option 1

Our Interest Free Credit scheme provides up to five years' interest free credit up to a maximum loan of £6,000.

## Option 2

Alternatively, you can borrow a maximum of £25,000 for up to five years on our Low Interest Credit scheme.

Interest Free and Low Interest Loans cannot be combined and both are for the sole purpose of installing a new electric heating system or replacing an existing gas or oil-fired system with electric.

**We'd like to help you finance your new electric heating system. It's simple.**

## What you need to do

Whichever finance option you choose, you first need to obtain a quotation for your new electric heating system.

Jersey Electricity offers a full plumbing and electrical installation package and provides free surveys and quotations. Call our Customer Care Team on 505460, 8am to 6pm, Monday for Friday, to arrange an appointment.

Once you have received your quotation and are happy with it, bring it to our Customer Care Centre at the Powerhouse (8am to 6pm, Monday to Friday) to sign your acceptance and complete your loan application. You will also need proof of identity, such as your passport or driving license and your last three months bank statements. Once approved and you have signed the loan agreement, our installation team will arrange a time to begin work.

If you prefer to use your own contractor, obtain a quotation, complete a loan application and bring them to our Customer Care Centre at The Powerhouse, 8am to 6pm Monday to Friday. Once your application has been approved and you have signed the agreement, you can start work on your installation.

A Customer Care Adviser will visit the completed installation and when we have received your final invoice, which must match your loan amount, we will transfer the funds to your bank account for you to pay your contractor.

*\*Terms and conditions apply*

## WHAT CUSTOMERS THINK OF ELECTRIC HEATING:

“ I trust putting my heating in their hands for the next 10 years ”  
**Geoff St Helier**

“ I definitely wouldn't go back [to oil] ”  
**Simon. St Clement**

“ The technical support was very good ”  
**Alison. St Helier**

# “HAVING BEEN ON OIL, DONE GAS... I'M SUPER-IMPRESSED WITH ELECTRIC”

**Mrs L. St Helier**

“ There's stability of supply with the new cable from France ”  
**Mr B. Grouville**

“ From a sustainable point of view, electricity is the future ”  
**Mr P. St Helier**

For more information, our Customer Care Team is available to help you 8am to 6pm Monday-Friday.  
Please call 505460 or visit [www.jec.co.uk](http://www.jec.co.uk)



## Jersey Electricity

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