



GROUND SOURCE  
HEAT PUMPS



AIR SOURCE  
HEAT PUMPS



UNDERFLOOR  
HEATING



MCS DESIGN &  
UMBRELLA SCHEME

# ALTO ENERGY



# Welcome to Alto Energy

## SPECIALIST HEAT PUMP SUPPLIER & UK DISTRIBUTOR FOR IVT HEAT PUMPS

Alto Energy is the exclusive UK distributor and support agent for IVT Heat Pumps. IVT is a Swedish manufacturer of Heat Pumps, and is a Bosch-owned company. When you choose IVT, you choose decades of Swedish engineering experience combined with the global presence and reputation of the Bosch brand, a combination which has made the IVT Heat Pump the most popular and widely installed Ground Source Heat Pump in the UK.

As well as being the UK distributor for IVT Heat Pumps, Alto Energy is also an approved supplier and service provider for Mitsubishi and Samsung Air Source Heat Pumps, as well as an approved system house and supplier for iDro Underfloor Heating.

## Accreditations

We take the quality of our products and services very seriously. This is reflected in the accreditations we have obtained in order to ensure that we are 100% compliant with all of the relevant industry standards.



### MCS

The Microgeneration Certification Scheme (MCS) demonstrates the quality of products and competence of installers in the renewable technology sector. Alto Energy provides MCS registration on all heat pump products we specify and supply, enabling access to Government grants and incentives, including the Renewable Heat Incentive.



### HIES

The Home Insulation & Energy Systems Contractors Scheme (HIES) is a Consumer Protection organisation. Any products installed by HIES Members must be fit for purpose, installed professionally and come with comprehensive guarantees which are underwritten with specialist insurance providing consumers with a high level of protection and peace of mind.



### EPVS

The Energy Performance Validation Scheme (EPVS) is a certification standard that certifies the processes used by installers to ensure energy saving estimates for home energy products are accurate and valid.



### REFCOM

As a company that installs, maintains or services heat pump equipment, Alto Energy holds an F-Gas certificate with Refcom.



### GSHPA

The Ground Source Heat Pump Association (GSHPA) encourages the growth and development of the Ground Source Heat Pump industry in the UK. Alto Energy sits on the Association's Technical Panel.

# Contents

Page 4	IVT Ground Source Heat Pumps
Page 5	Bosch Air Source Heat Pumps & IVT Cylinders
Page 6	Air Source Heat Pumps
Page 7	Underfloor Heating
Page 8-9	Heating Installers
Page 10-11	Developers & Specifiers
Page 12-13	Follow Us On Instagram
Page 14-15	Self Builders
Page 16-17	Homeowners
Page 18	The Benefits of Heat Pumps
Page 19	Alto Energy Service & Maintenance
Page 20-22	Heat Pump Case Studies
Page 23	Customer Satisfaction

## OUR STORY

Alto Energy was formed by a group of industry experts with extensive experience in specifying and supplying Heat Pumps for the UK domestic housing sector. Our clear vision was to use this experience to mould a company that meets the specific demands and needs of our customers.

Operating from our headquarters in Oxfordshire, the company boasts an elite team of highly-skilled professionals with huge experience working with Heat Pumps and Underfloor Heating products.

Alto Energy are determined to use their experience to make it as easy as possible for installers, developers and homeowners to access the many benefits of heat pump technology. Our technical department strives to lead the industry by example on compliance with the complex industry standards, in order to ensure that all the installations we commission are of the highest quality and efficiency, and crucially gain access to the Government grants and incentives available on these technologies.

A defining principle of our business is the investment in our staff. We only use our own employed engineers, all of whom hold the full range of qualifications required to commission, maintain and service heat pump systems. Our skilled staff are our strongest asset, enabling us to provide our customers with the peace of mind that their Heat pump system is expertly designed to meet the demands of their specific property, and continue to operate as efficiently as possible for years to come.

With our knowledge of the industry and its standards, our product expertise in the Heat Pumps we supply, and the unrivalled skill of our design and engineering staff, Alto Energy is the perfect partner for your Heat Pump and Underfloor Heating projects.



# IVT Bosch Ground Source Heat Pumps

## IVT GREENLINE

IVT Greenline HE is the latest generation of the famous Greenline product family. With a large range of outputs, both single phase and three phase, between 6 - 17kW, there is sure to be one suitable for your project.

Continuing the theme of flexibility, the Greenline HE range is available in 2 models: the C-model which comes with a 185 litre built-in hot water store; and the E-model installed alongside a separate IVT hot water tank, better suited for larger domestic hot water requirements.

The IVT Greenline HE range is capable of delivering high flow temperatures of up to 65°C, which means that you can completely replace your existing boiler, even in older properties with a higher heat demand.

We stock the full IVT Greenline range in our UK warehouse, meaning that all heat pumps and spare parts are available on next day delivery.

### IVT Greenline HE Technical Data

Model	C6	C/E7	C/E9	C/E11	E14	E17
Electrical Supply	Single	Single	Single	Single	Three	Three
Energy Class – Heating	A+	A+	A+	A++	A+	A+
Energy Class – Hot Water	B	B	B	B	-	-
Heating Output (Bo/W35) [kW]	5.0	6.6	8.7	10.2	14.8	16.4
SCOP @ W35	4.08	3.70	3.87	4.34	3.77	4.12



## IVT GEO

IVT GEO is a Ground Source Heat Pump with ground-breaking technology that reduces your heating costs.

The key feature of the IVT GEO range is its scalability. The IVT GEO range has been manufactured in eight different output sizes, with the capability of cascading up to six units together. This allows Alto Energy to put together a solution that fits the exact needs of any commercial or large domestic project.

Within the IVT GEO range, four units are manufactured with an upright chassis, and four with a horizontal chassis. Furthermore, connections into the unit are available from several directions, enabling a cleaner, easier installation.

### IVT GEO Technical Data

Model	G222	G228	G238	G248	G254	G264	G272	G280
Electrical Supply	Three	Three	Three	Three	Three	Three	Three	Three
Energy Class	A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++
Heating Output (Bo/W35) [kW]	23.0	29.0	39.0	47.0	55.0	64.0	73.0	81.0
SCOP @ W35	5.62	5.61	5.48	5.27	5.54	5.39	5.33	5.30



# Bosch Air Source Heat Pumps

## BOSCH COMPRESS 700iAW

The Bosch 700iAW is a whole new generation of Air Source Heat Pump which sets new standards in terms of efficiency levels. Behind the impressive performance, there are several clever innovations along with five new registered patents.

The Bosch unit is one of the first Air Source Heat Pumps with speed control, which means the low-power compressor automatically adjusts heat production for your home's heating demand.

In fact, the Bosch air source heat pump is so efficient that the saving in many cases can be compared to that of ground source heating.



### Bosch Compress 700iAW Technical Data

Model	5OR-S	7OR-S	9OR-S	13OR-S	13OR-T	17OR-T
Electrical Supply	Single	Single	Single	Single	Three	Three
Energy Class – Heating	A++	A++	A++	A++	A++	A++
Heating Output (Bo/W35) [kW]	5.0	7.0	9.0	13.0	13.0	17.0
SCOP @ W35	4.40	4.37	4.58	4.68	4.68	4.54



## IVT Bosch Cylinders

IVT buffer cylinders and domestic hot water cylinders are designed specifically to work alongside IVT Heat Pumps, and are available in a range of sizes to suit your project.

Heating buffer cylinders are available in 42, 100, 300 and 500 litre capacity. Domestic hot water cylinders are available in 300 and 500 litre models, which compliments the 185 litre integrated-tank options available across the IVT Heat Pump range.

The DS300 – the most popular IVT cylinder – is a high-efficiency double mantle cylinder capable of delivering 280 litres of hot water. The FW504 is a 500 litre thermal store with high efficiency coils through which mains cold water is instantaneously heated.

All IVT Cylinders are available on next day delivery from stock in our UK warehouse.



### IVT Cylinders Technical Data

Model	BC042	BC100	BC300	BC500	DS300	FW504
Type	Buffer	Buffer	Buffer	Buffer	DHW	DHW
Volume	42	100	300	500	286	500
Width / Diameter [mm]	400	400	600	695	695	695
Height [mm]	700	1540	1535	1710	1710	1710





# Air Source Heat Pumps

## MITSUBISHI ECODAN

The Mitsubishi Ecodan has been long-established as one of the most reliable and consistently high-performing Air Source Heat Pumps in the UK market.

From small flats to large detached houses; from an office block to a school, the range of Ecodan Air Source Heat Pumps offer an alternative choice to traditional heating systems.

Using proven inverter driven heat pump technology to deliver effective, low carbon heating and hot water, Mitsubishi Electric's award winning Ecodan systems provide a simple, renewable solution that deliver significant efficiency savings against fossil fuels.

The Mitsubishi Ecodan can provide a full space heating and hot water solution by being paired with a heat pump cylinder. You have the option of one of Mitsubishi's pre-plumbed cylinders, or alternatively we also stock a full range of heat pump cylinders available on next day delivery.

### Mitsubishi Ecodan Technical Data

Model	WM50	WM60	WM85	WM112	WM140V	WM140Y
Electrical Supply	Single	Single	Single	Single	Single	Three
Energy Class	A++	A++	A++	A++	A++	A++
Heating Output (nominal) [kW]	5.0	6.0	8.5	11.2	14.0	14.0
SCOP @ W35	4.57	4.76	4.79	4.78	4.48	4.48



Business Solutions Partner



## SAMSUNG EHS

The Samsung EHS Gen6 is the latest generation in Samsung's successful range of MCS accredited Air Source Heat Pumps. Quickly becoming the go-to Air Source Heat Pump, when ordered through Alto Energy, the Samsung EHS Gen6 comes with excellent technical support combined with a competitive price. The sophisticated Samsung control system provides the flexibility for this heat pump to be used on both small and large scale installations.

Samsung, as one of the most recognised brands in the world, have a deserved reputation for innovation and quality. Innovations such as commissioning information designed around a specific type of installation and an extremely lightweight chassis mean that installation and commissioning is amongst the easiest ever seen from an Air Source Heat Pump.

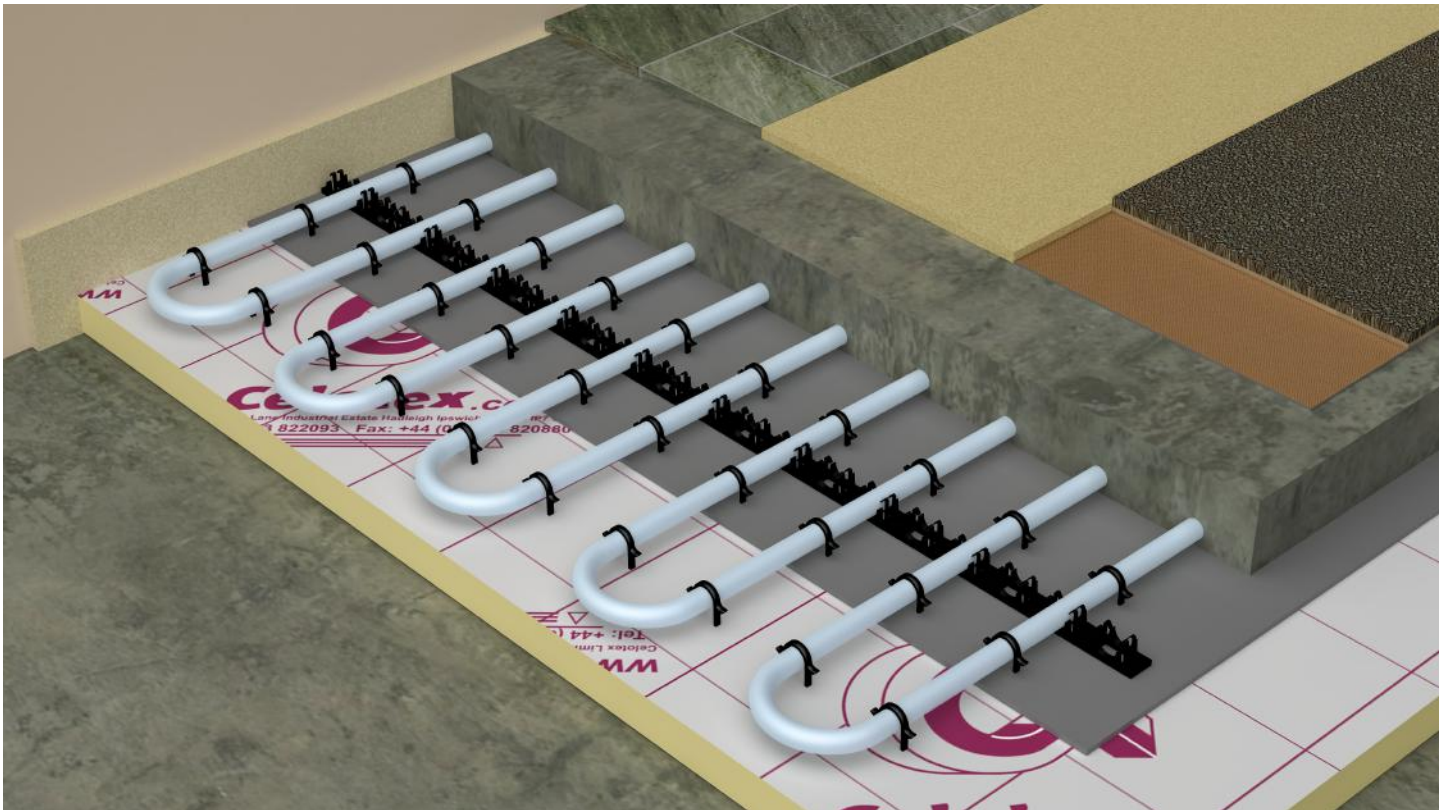
The Samsung EHS can provide a full space heating and hot water solution by being paired with one of our heat pump cylinders. We stock a full range in our UK warehouse all of which are available on next day delivery.

### Samsung EHS Gen6 Technical Data

Model	AE050	AE080	AE120	AE160
Electrical Supply	Single	Single	Single	Single
Heating Output (Bo/W35) [kW]	5.0	8.0	12.0	16.0
COP @ W35	4.85	4.52	4.53	4.42



# Underfloor Heating



## BESPOKE UNDERFLOOR HEATING SYSTEMS

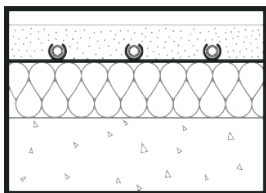
Alto Energy offer a comprehensive range of underfloor heating systems which are compatible with heat pumps and traditional boiler systems. Every underfloor heating system that we supply is designed by our in-house underfloor heating experts, with a focus on delivering the most efficient distribution system.

Alto Energy is an approved system-house designer for iDRO Hydronic Solutions. iDRO Hydronic Solutions works in partnership with the leading European manufacturers to provide high quality products, designed with the installer in mind, for ease of installation.

Our in-house designers can design the right underfloor heating system for your project from our range of different system types:

## RANGE OF SYSTEM OPTIONS

We can provide a comprehensive range of underfloor heating solutions, depending on the project requirements.



RAIL FLOOR

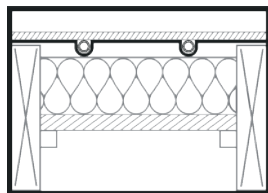
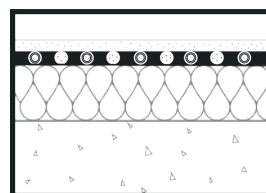
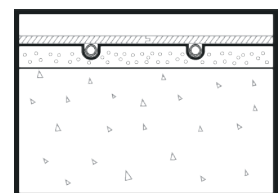


PLATE FLOOR



LATEX FLOOR



FOIL FLOOR

Even more system options are available, all of which can be discussed with our in-house experts.



# HEATING INSTALLERS



## Incorporate Heat Pumps Into Your Product Portfolio

Alto Energy's business model has been tailored around working with trade partners. We offer a complete design, specification, technical support and commissioning service to all of our trade install partners. This enables you to confidently deliver Ground Source Heat Pumps, Air Source Heat Pumps and Underfloor Heating systems to your customers, knowing that all the designs, equipment and aftercare support services are taken care of.

### HEAT PUMP TRAINING

Alto Energy offer FREE Heat Pump training courses to plumbing and heating installers in order to become approved Alto Energy Installation Partners. The training courses are available on our premises and online. For more information see our website: [www.altoenergy.co.uk/heat-pump-training](http://www.altoenergy.co.uk/heat-pump-training)





# Working With Alto Energy

## Key Services Provided

- ✓ We handle all the design work and MCS accreditation paperwork, so you don't have too
- ✓ Full schematics and unlimited telephone support to enable you to complete the installation
- ✓ Fixed, package price for design, supply and commissioning of a heat pump system
- ✓ Handover pack with the necessary certificates for your customer to claim Government grants

## Our MCS Umbrella Scheme

Alto Energy's MCS umbrella scheme is designed to enable you to provide your customers with a fully MCS accredited installation, without all the hassle of maintaining the accreditation and compiling all of the paperwork yourself. We carry out all of the MCS design work, we specify and supply the heat pump equipment that you need, and one of our regionally-based engineers will inspect and commission the installation once you've completed it. We then issue a suite of certificates for the end user, which they will need to claim any Government grants that they might be eligible for.

## Become a Partner Installer

Become an Alto Energy Partner Installer and you will receive referrals for projects with end users in your area. Becoming a Partner Installer is simple: you need to attend one of our free heating installer training courses, and then complete your first project with a customer of your own. Once this is done, you'll be added to our Partner Installer map, and you will receive referrals from end user customers who enquire with us directly about installing a heat pump system in their home. We'll also share your installation photos to our Instagram account, for our thousands of followers to see!



## Heat Pumps Made Easy

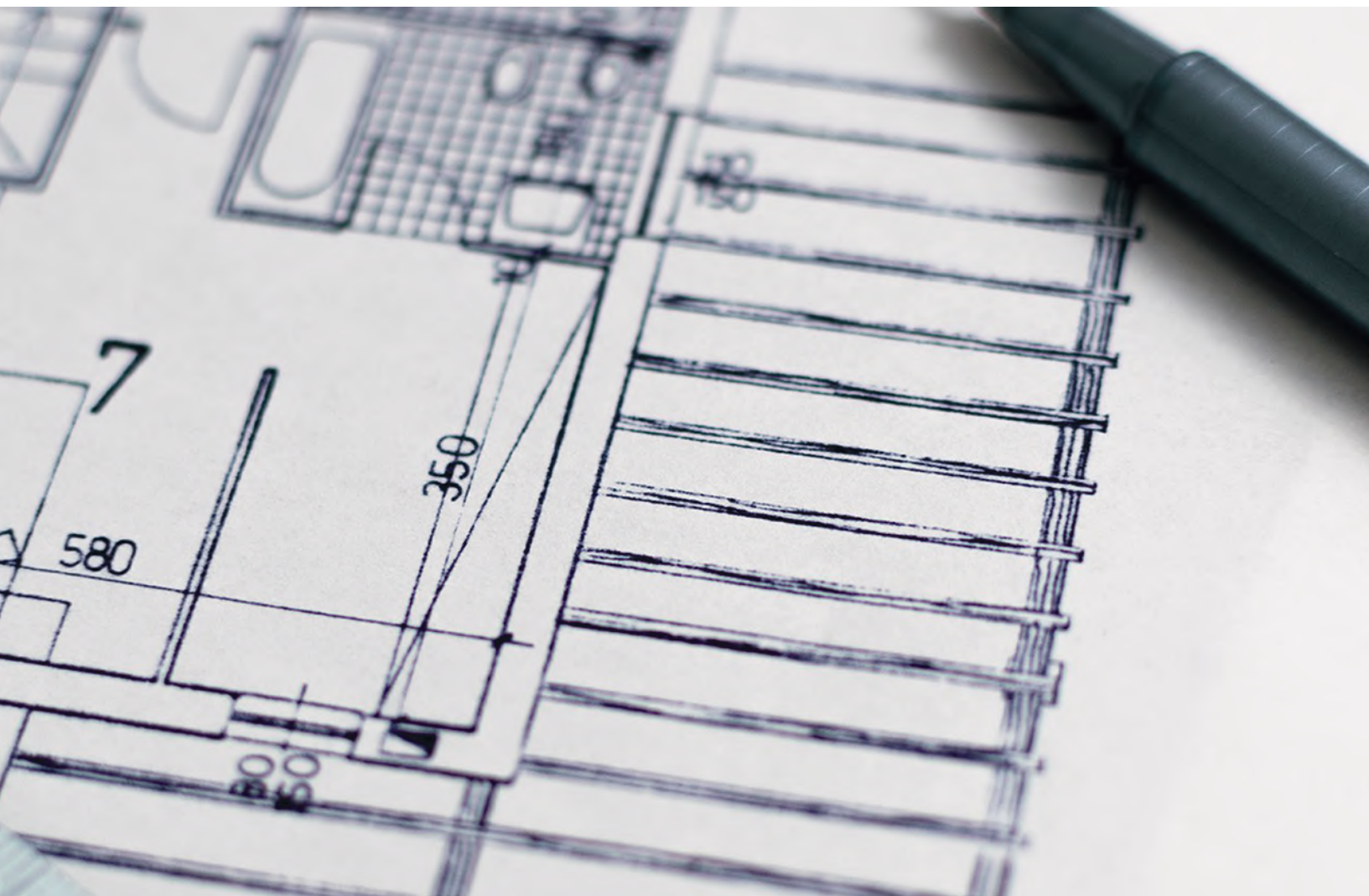
Our aim is to make installing heat pumps as simple and straightforward as possible for heating installers. We know that you just want to be able to deliver a high quality installation to your customer.

**All we need from you to get the ball rolling with a project is a set of plans if it's a new build, barn conversion or refurbishment project; or a simple enquiry form if it's a retrofit project. And we'll do the rest!**

### WHAT WE PROVIDE

- A package price for design, supply, commissioning and MCS certification
- 
- An optional quotation for a bespoke underfloor heating solution, should you require it
- 
- Heat loss calculations in accordance with MIS-3005
- 
- End user performance estimate
- 
- Radiator / UFH schedule
- 
- Ground loop sizing (if applicable)
- 
- Plant schematic
- 
- Unlimited telephone technical support for the product life, for you and for the end user
- 
- Free heat pump installation training
- 
- Inspection and commissioning by a regional, in-house engineer
- 
- Full end user handover pack including MCS certificate, Building Regulations certificate, insurance-backed guarantee, user manual and technical documentation.
- 
- Government Grant application support for the end user
- 
- Minimum 5 year parts and labour warranty
- 
- Full design liability and professional indemnity

# DEVELOPERS & SPECIFIERS



## Achieve Building Regulations With Ease

Ground Source Heat Pumps, Air Source Heat Pumps and Underfloor Heating deliver significant carbon savings, making compliance with Building Regulations more straightforward. Not only that, but these technologies have a proven record of improving the desirability of a new home by delivering low running costs and a beautiful living environment for your customers.

**All we need from you to get the ball rolling with a project is a set of plans. From there we'll be able to provide you with an equipment specification right away.**



# Working With Alto Energy

## Key Services Provided

- ✓ Bespoke heat pump design specifically for each property type
- ✓ Design, supply and commissioning service with full MCS accreditation
- ✓ Training for your heating contractor, or access to our nationwide installer network
- ✓ Handover pack with the necessary certificates and instructions for the end user
- ✓ Lifetime technical support and ongoing service & maintenance contracts for the end user

## Bespoke Heat Pump Design

We understand that switching from traditional heating to heat pumps represents a big change for housebuilders. We also understand that when you make that switch, you want to be confident that the system will perform for the homeowner. For every heat pump that we design and supply, we complete a thorough room-by-room heat loss assessment. This design enables us to specify the required heat pump for each property, as well as designing the distribution system and producing detailed installation schematics, all of which are essential for the efficient operation of the heat pump.

## Lifetime Support

As part of our heat pump package, the homeowner will benefit from lifetime technical support, a minimum 5 year parts and labour warranty on all the heat pumps we supply, and of course we take full design liability. Furthermore, we offer ongoing service and maintenance contracts, fulfilled through our own employed engineers, enabling us to continue to maintain the heat pump into the future.

## Our MCS Package

Alto Energy's MCS umbrella scheme is designed to enable you to carry on using your preferred plumbing and heating contractor and still receive our full suite of certificates. There are many benefits of our certification package including; an uplift in your SAP calculations; formal recognition from NHBC and LABC; Building Control certificate provide specifically for the heat pump installation.

## Heat Pumps Made Easy

Our aim is to make installing heat pumps the obvious choice for your project.

### WHAT WE PROVIDE

A package price for design, supply, commissioning and MCS certification

-

An optional quotation for a bespoke underfloor heating solution, should you require it

-

Heat loss calculations in accordance with MIS-3005

-

Detailed performance estimate

-

Room-by-Room Radiator / UFH schedule

-

Ground loop sizing (if applicable)

-

Plant schematic

-

Lifetime telephone technical support for the homeowner

-

Free heat pump installation training for your preferred contractor

-

Access to our nationwide network of partner installers

-

Inspection and commissioning by a local, in-house engineer

-

Full handover pack including MCS certificate, Building Regulations certificate, user manual and technical documentation.

-

Minimum 5 year parts and labour warranty

-

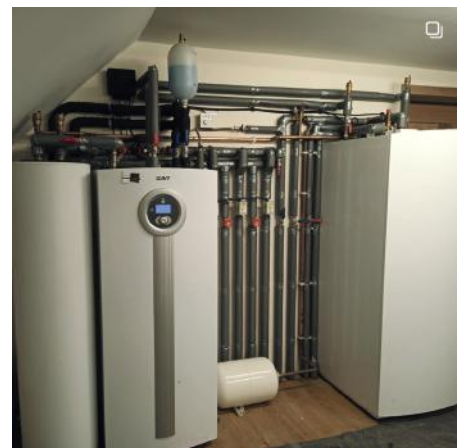
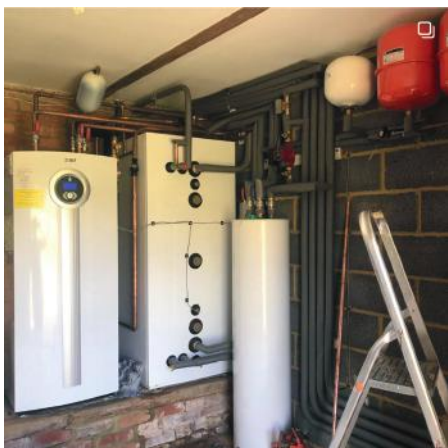
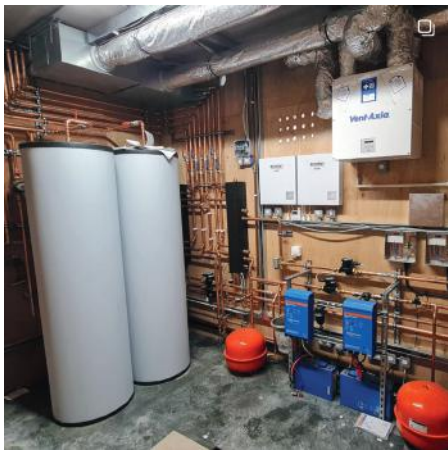
Full design liability and professional indemnity

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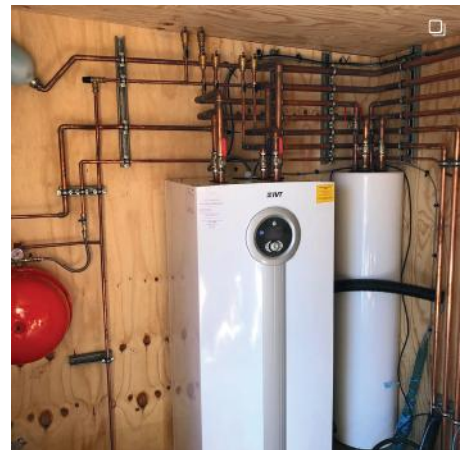
Ongoing technical support, service & maintenance for the end user



# FOLLOW US ON INSTAGRAM









# SELF-BUILDERS



## The Perfect Heating System For Your Dream Home

When designing your dream home, it is important to incorporate a heating system that fits the lifestyle you want. Choose Ground Source Heat Pump or Air Source Heat Pump technology alongside an Underfloor Heating system in order to achieve luxurious and environmentally-friendly warmth all year round to keep your dream home heated just the way you want it.

**All we need from you to get the ball rolling with a project is a set of plans. We'll be able to provide you with an equipment specification right away.**





# Working With Alto Energy

## Key Services Provided

- ✓ Bespoke heat pump design specifically for your custom built property
- ✓ Design, supply and commissioning service with full MCS accreditation
- ✓ Training for your local heating installer, or access to our nationwide installer network
- ✓ Handover pack with the necessary certificates and instructions for you to claim Government grants
- ✓ Lifetime technical support and ongoing service & maintenance contracts

## Bespoke Heat Pump Design

We understand that when designing your own home, it will be a property that is unique. This means that the heat pump design will need to be unique too. For every heat pump that we design and supply, we complete a bespoke room-by-room heat loss assessment and produce a suite of bespoke schematics for the heat pump installation. This design enables us to specify the ideal heat pump for your property, which we supply as part of a package including an appropriate cylinder and relevant ancillary components.

## Lifetime Support

As part of our heat pump package, we provide lifetime technical support, a minimum 5 year parts and labour warranty on all the heat pumps we supply, and of course we take full design and performance liability. Furthermore, we offer ongoing service and maintenance contracts, fulfilled through our own employed engineers, enabling us to continue to maintain your heat pump into the future.

## Our MCS Umbrella Scheme

Alto Energy's MCS umbrella scheme is designed to enable you to carry on using your local plumbing and heating installer and still achieve a fully MCS accredited installation. Alternatively, if you do not have a local installer that you want to use, we have a national network of partner installers, all approved under our MCS umbrella scheme.

## Heat Pumps Made Easy

Our aim is to make installing heat pumps the obvious choice for your project. We know that you want high-quality, bespoke heat pump for your project that is commissioned correctly, and maintained for optimum performance through its life.

### WHAT WE PROVIDE

- A package price for design, supply, commissioning and MCS certification
- 
- An optional quotation for a bespoke underfloor heating solution, should you require it
- 
- Heat loss calculations in accordance with MIS-3005
- 
- Detailed performance estimate
- 
- Room-by-Room Radiator / UFH schedule
- 
- Ground loop sizing (if applicable)
- 
- Plant schematic
- 
- Lifetime telephone technical support
- 
- Free heat pump installation training for your local installer, or
- 
- Access to our nationwide network of partner installers
- 
- Inspection and commissioning by a local, in-house engineer
- 
- Full end user handover pack including MCS certificate, Building Regulations certificate, insurance-backed guarantee, user manual and technical documentation.
- 
- Government Grant application support
- 
- Minimum 5 year parts and labour warranty
- 
- Full design liability and professional indemnity
- 
- Ongoing service & maintenance

# HOMEOWNERS



## Providing The Highest Level of Service

Are you looking to install a highly efficient Heat Pump or Underfloor Heating system into your home? Or have you already got a Heat Pump, and are looking for a partner to maintain your equipment and provide you with a range a warranty options? Look no further than Alto Energy.

**Get in touch with a member of our sales team today. From there we'll be able to let you know what information we need in order to provide you with an equipment specification right away.**



# Working With Alto Energy

## Key Services Provided

- ✓ Bespoke heat pump design specifically for your property
- ✓ Design, supply and commissioning service with full MCS accreditation
- ✓ Training for your local heating installer, or access to our nationwide installer network
- ✓ Handover pack with the necessary certificates and instructions for you to claim Government grants
- ✓ Lifetime technical support and ongoing service & maintenance contracts

## Bespoke Heat Pump Design

We understand that when designing a heat pump for your home, every property is unique. This means that the heat pump design will need to be unique too. For every heat pump that we design and supply, we complete a bespoke room-by-room heat loss assessment and produce a suite of bespoke schematics for the heat pump installation. This design enables us to specify the ideal heat pump for your property, which we supply as part of a package including an appropriate cylinder and relevant ancillary components.

## Lifetime Support

As part of our heat pump package, we provide lifetime technical support, a minimum 5 year parts and labour warranty on all the heat pumps we supply, and of course we take full design and performance liability. Furthermore, we offer ongoing service and maintenance contracts, fulfilled through our own employed engineers, enabling us to continue to maintain your heat pump into the future.

## Our MCS Umbrella Scheme

Alto Energy's MCS umbrella scheme is designed to enable you to use your local plumbing and heating engineer and still achieve a fully MCS accredited, grant-eligible installation. Alternatively, if you do not have a local plumber that you wish to use, we have a national network of partner installers, all approved under our MCS umbrella scheme.

## Best of Both

Heat pumps are all we do, and whenever you speak to anybody at Alto Energy, they'll be a heat pump expert. Our business model enables you to get the benefit of an industry-leading, nationwide supplier of heat pumps, alongside all the benefits of using a local partner installer.

### WHAT WE PROVIDE

- A package price for design, supply, commissioning and MCS certification
- 
- An optional quotation for a bespoke underfloor heating solution, should you require it
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- Heat loss calculations in accordance with MIS-3005
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- Full design liability and professional indemnity
- 
- Ongoing service & maintenance



# The Benefits of Heat Pumps & Underfloor Heating

## SAVE ON YOUR HEATING BILLS

Heat Pumps operate using electricity, however for each unit of electricity consumed, over 3 units of heat are delivered. This is possible due to the fact that heat energy is simply being moved from one place (the ground or air) to another (the home). This is far more efficient than creating heat energy, which is typically what happens in a traditional combustion boiler. In this case, only 0.75 units of heat are delivered for each unit of fuel consumed.



This means that the cost per unit of heat delivered is significantly lower for Heat Pumps compared to fossil fuels. In fact, Heat Pumps typically deliver savings in excess of 40% versus traditional oil, LPG and direct electric heating.

## REDUCE CARBON EMISSIONS & BENEFIT FROM GOVERNMENT GRANTS

Heat pumps help the UK to reduce its carbon emissions. They do this in two ways. Firstly, by utilising free, renewable energy stored in the ground or the air, heat pumps create over 3 units of heat for each unit of electricity consumed. Secondly, electricity as a fuel source is becoming increasingly low carbon, as more solar and wind production comes online.

The UK Government has made a number of commitments towards reducing carbon emissions. Heating is responsible for around one third of the UK's total emissions, so it is a national priority. To this end, there are Government grants available for the benefit of UK homeowners (subject to eligibility criteria). Government grants are always linked to the Microgeneration Certification Scheme (MCS). Alto Energy is MCS registered, alongside all of the other industry registrations required to ensure grant eligibility. Our skilled experts can give you a detailed insight into how you might benefit from the Government grants available.

## RELIABLE HEATING & HOT WATER, ALL YEAR ROUND

Heat Pumps provide a consistent and reliable form of heating and hot water. By utilising well-understood refrigeration technology, Heat Pumps have a proven track record of delivering heat reliably over a long period of time, throughout the year. Many early adopters of heat pumps, whose installations were carried out in the early 2000's, continue to benefit from continuous, reliable heating from their Heat Pumps. alongside all of the other industry registrations required to ensure grant eligibility. Our skilled experts can give you a detailed insight into how you might benefit from the Government grants available.



# Alto Energy Maintenance & Service Plans

Alto Energy has a nationwide team of world-class Heat Pump engineers. All of our engineers are multi-trade, and can boast years of experience with a whole range of heat pump systems.

Heat pumps are inherently reliable, however as ever with mechanical equipment things can go wrong. At Alto Energy we have the skills and expertise required to get your heat pump up and running again.

## TECHNICAL SUPPORT

Alto Energy provides technical support to all of our partners throughout the installation process, as well as free lifetime telephone support to homeowners. Furthermore, customers have the option to extend their parts and labour cover with one of our heat pump service plans.

## SERVICE

To keep your Heat Pump operating efficiently it's important to regularly service it. We provide nationwide coverage and offer service and maintenance on all of the Heat Pump brands that we supply:



## HEAT PUMP SERVICE PLANS

Alto Energy offer a range of heat pump service plans for our customers. Either a service only option to ensure the annual maintenance of your heat pump, or for added piece of mind an additional parts and labour cover for your heat pump. All Service Plans are paid for on a monthly basis via direct debit to split the cost evenly over the course of the year.



For more information and our Terms and Conditions about our Service Plans please visit our website: [www.altoenergy.co.uk/heat-pump-service-plans](http://www.altoenergy.co.uk/heat-pump-service-plans)

# Case Study - Mitsubishi Air Source Heat Pump

## Key Project Details

### Installation Date:

December 2019

### Property Type:

Barn Conversion

### Product Installed:

11kW Mitsubishi Ecodan

### Distribution System:

Underfloor Heating

### RHI Returns:

Lifetime RHI - £6,704



## Converting a barn into a domestic property complete with a heating & hot water solution from a Mitsubishi Ecodan Air Source Heat Pump.

John and Anya from Suffolk decided to invest in the Mitsubishi Ultra Quiet Ecodan Air Source Heat pump for their Barn Conversion project. At first, they were slightly sceptical of the technology, however with a little helping hand from Alto Energy their minds changed and they will now benefit from a renewable heating source. Not only will this help the environment, they will also be eligible to claim just over £6,700 from the Renewable Heat Incentive (RHI).

The RHI is a Government incentive for people to switch to renewable technology, such as air source heat pumps, instead of continuing to use harmful fossil fuels. It is calculated from the amount of renewable heat your heat pump produces and you will get paid for 7 years. In this example John and Anya will receive roughly £950 per annum. The scheme itself has been extended to March 2022 and the payment tariffs were increased in April 2020.

Alto Energy helped with various queries along the way - "Alto Energy were efficient and nothing was too much trouble. Dave, the technical consultant has also been very helpful, responding to our many technical questions very quickly providing easily understood answers. One of our main concerns was noise levels and again I can recommend the Mitsubishi Ecodan model as it has surpassed our expectations."

The Mitsubishi Ultra Quiet Ecodan boasts sound levels which are 3 times quieter than previous models, making it one of the quietest air source heat pumps on the market. All Ecodans supplied through Alto Energy come with a 5 year warranty as standard due to our status as a Business Solutions Partner with Mitsubishi.

## Customer Q & A

### What benefits do you feel your renewable energy system has afforded you?

"To my amazement (I never really believed it would work) it heated up 250L of cold water in 50 minutes with an outside temperature of two degrees!"

### What has the service been like from Alto Energy?

"Initially we contacted Rich, from Alto who explained how it worked and how much it would cost and then left us to make up our minds, no hard sell, whereas I'm still receiving phone calls from other companies I made contact with two years ago!"

### Would you recommend Alto Energy to others?

"Can't recommend highly enough!"



# Case Study - IVT Ground Source Heat Pump

## Key Project Details

### Installation Date:

September 2017

### Property Type:

Barn Conversion

### Product Installed:

IVT Greenline C6

### Distribution System:

Underfloor Heating

### RHI Returns:

Lifetime RHI - £12,591



## Barn conversion project with an IVT Greenline HE Ground Source Heat Pump providing a complete heating and hot water solution.

Herefordshire resident Mr Day called upon the experience and expertise of Alto Energy to design, supply and commission a 6kW IVT Greenline HE Ground Source Heat Pump for his barn conversion project. Good insulation levels; underfloor heating throughout; and plenty of land in which to dig trenches were all significant factors in his decision to choose Ground Source Heat Pump technology.

IVT is a Swedish manufacturer owned by the Bosch Group, with decades of experience manufacturing the very highest quality heat pumps throughout Europe. Their Greenline range is the most widely installed range of Ground Source Heat Pumps in the UK.

The IVT Ground Source Heat Pump supplies all of the heating and domestic hot water required in the property, all year around, meaning there is no need for any kind of fossil fuel boiler. This was a crucial factor in Mr Day's decision to install a Ground Source Heat Pump. He also cited the elimination of any carbon monoxide risk, no requirement for flues, and the general low maintenance afforded by heat pumps as further reasons behind his decision.

In addition to the very low running costs of the Ground Source Heat Pump, Mr Day will also receive approximately £13,000 in grant payments over the next seven years from the Renewable Heat Incentive. This Government incentive scheme rewards homeowners and self-builders for reducing their carbon dioxide emissions by investing in renewable heating technology.



## Customer Q & A

### What benefits do you feel your renewable energy system has afforded you?

"No buying of fossil fuels  
No carbon monoxide risks  
No drafts in building for flues  
Easy monitoring with smart meter"

### How have you found living with your system?

"Extremely easy to operate, fully automatic"

### What has the service been like from Alto Energy?

"Very good service"

### Would you recommend Alto Energy to others?

"Yes"

# Commercial Case Study - Student Accommodation

## Key Project Details

### Installation Date:

January 2019

### Property Type:

Student Accommodation

### Product Installed:

2x IVT Greenline HE E14

### Design Scope:

Space Heating Only



Commercial Ground Source Heat Pump system, with two units operating in cascade to provide space heating to a student accommodation block in Poole.

## MODERN STUDENT LIVING

This new student accommodation block in Poole is no ordinary student accommodation. Comprising 14 apartments in total, at an early stage our clients enquired about the suitability to ground source heat pumps on the project.

The total space heating load for the project totaled just under 25kW. The developers wanted a stand-alone heat pump solution without any input from traditional fossil fuel back-ups. This would then enable all of the space heating for the entire complex to be powered by low-carbon ground source heating. Alto Energy were asked to design, supply and commission a solution which would operate as a central plant, feeding common underfloor heating loops throughout the property.

## THE TECHNICAL SOLUTION

Alto Energy specified 2x IVT Greenline HE E14 ground source heat pumps operating in cascade, feeding into a 300L buffer tank. The heat pump was fed by a ground loop array designed by Alto Energy and comprising 8x 70m 32mm HDPE borehole loops drilled into sandstone. This ground source heat pump system has sufficient capacity to provide all of the space heating for the complex.

The IVT Bosch controller is ready out-of-the-box to operate in cascade – all that is required is a cambus cable between the two heat pumps, and the controls do the rest! Furthermore, the controller automatically load-shares between the two heat pumps, making sure that the run hours between the two are shared equally. This plug-and-play cascade ability is an excellent feature of the IVT Greenline range, enabling the product group to cover heat loads up to 34kW on the same mechanical system. The heat pumps come fitted with in-built electric back-up, so in the rare event that there is a problem with the heat pumps, there is capacity available to provide back-up heating whilst a repair is completed.



# Customer Satisfaction - As Shown From Google

## LEE, INSTALLER FROM NORTH WALES

*"Fantastic company to deal with. Very responsive, competitive & excellent well mannered staff that can never do enough to help you with any job/situation that comes up. We have been using Alto energy for all our past and current projects and they have never failed to deliver over the years."*



**4.9 STAR**  
CUSTOMER RATING\*

\*based on 76 Google reviews from customers as of 10/09/2021

## GUY, HOMEOWNER FROM OXFORDSHIRE

*"A very helpful, responsive and technically competent company. We are extremely pleased with the Mitsubishi EcoDan air source heat pump they supplied and commissioned for us. It is very quiet and efficient."*

## GAIL, HOMEOWNER FROM CHESHIRE

*"Alto Energy are a very efficient company, who cannot help you enough. They designed, supplied and commissioned our Heating System (Air Source Heat Pump) and Underfloor Heating. Would highly recommend."*

## ARTHUR, HOMEOWNER FROM SHROPSHIRE

*"Very happy with the service we received, the salesperson Matt was very helpful and informative, giving us all the information we needed to make a decision. Installation went smoothly. Engineer explained everything & gave us advice regarding settings etc. Had an issue with an error code, this was sorted by a visit from another engineer & problem solved. Couldn't be happier & would recommend this company with no hesitation. It was an air source heat pump we purchased on the government scheme, to replace an oil fired boiler."*

## STUART, HOMEOWNER FROM DERBYSHIRE

*"I have had my heat pump for over 11 years and have used Alto Energy ltd since they started. They have regularly serviced my heat pump. They are efficient, easy to deal with and honest. The engineer explained in detail what they need to do any the need for any parts. I have one of there service plans which seems good value. I highly recommend them."*

## LEE, ATTENDED HEAT PUMP TRAINING AND INSTALLER FROM ESSEX

*"Great morning, really informative. I'd just like to let people know that Dave [Technical Director] was a great trainer. I really enjoyed it this morning, I got a lot of information out of it as well. It was good to get there and see your products and be able to ask questions there and then. Really enjoyed it as I've said, great setup you've got there guys. I know it was a really long journey for me to travel up and see you, but it was well worth it."*

*Thanks very much for your hospitality today, if you can let everyone know how informative it's been. I'm looking forward to working with you guys on future projects and hopefully building a good working relationship."*

## JOHN, HOMEOWNER FROM OXFORDSHIRE

*"Everything - organisation, communication and service -was excellent. Highly recommended."*

## ALAN, HOMEOWNER FROM SOUTH WALES

*"Excellent technical support and service. Highly recommended."*



## Contact Us

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