



# Your heat pump proposal

Helen Phillips

1

The Old School  
Norfolk Street  
Cambridgeshire  
CB1 2LE

Your quote reference:  
GW1720

Your proposal was  
completed by:  
Sam Charleton  
Sales Executive

This quotation is valid for 14  
days from the date of issue.



# ● Your heat pump proposal

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## Designed around your home

Our green heating experts have worked with you to design a bespoke system based on your home and your needs.



## Reducing your environmental impact

Your air source heat pump will save you 4.45 tonnes of carbon emissions a year, making your home greener.



## Giving you ultimate peace of mind

Our support won't finish when your install does. With unique remote monitoring and 10-year warranties, we'll be on hand to keep your heat pump in top condition.

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Click on an underlined section to skip straight to that page.

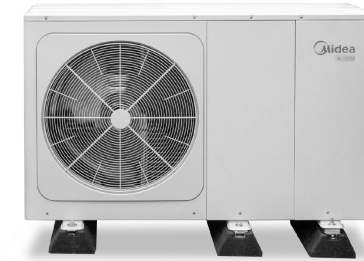


# System design

# ● Your system at a glance

## Heating: 12kw Midea

- Fully integrated and controlled using a single system.
- Renewable energy output: 16,161.27 kWhrs.



### Hot water

We will install a new cylinder that is compatible with your heat pump. Your heat pump is expected to provide 84% of your hot water. An immersion heater will heat the remainder of your hot water, this will be installed as part of your new system.



### Radiators

See your radiators for details of any recommended changes or upgrades.



### Insulation

We are pleased to confirm that you have the level of insulation required to be eligible for the Boiler Upgrade Scheme grant.

## Your fixed quotation

Total cost of goods and installation:

£19,221.32 (VAT exempt)

Boiler Upgrade Scheme:

-£7,500

Amount payable under the Boiler Upgrade Scheme:

£11,276.65 (VAT exempt)

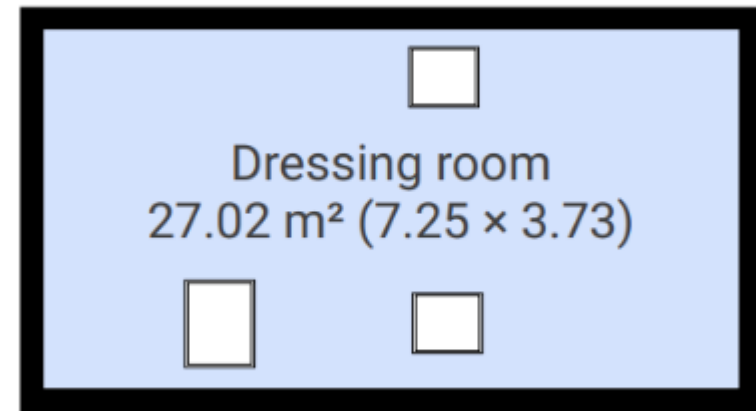
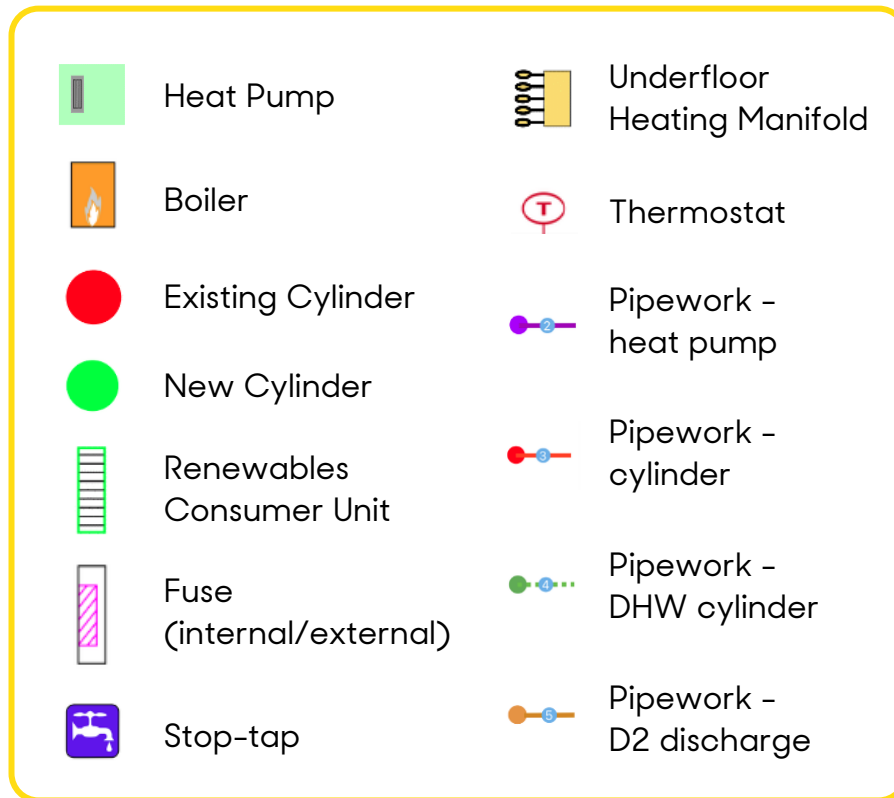


Estimated carbon saving of 4.45 tonnes of CO<sub>2</sub> per year with your air source heat pump

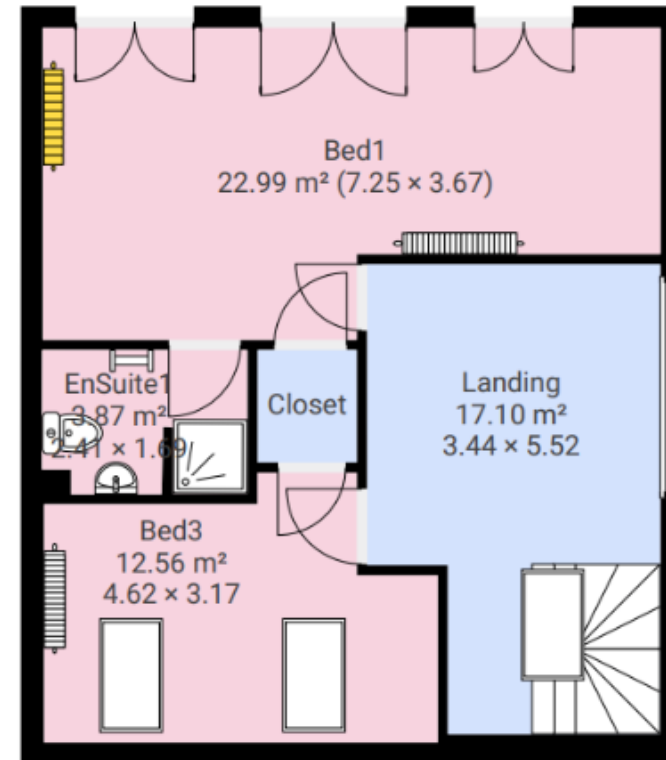
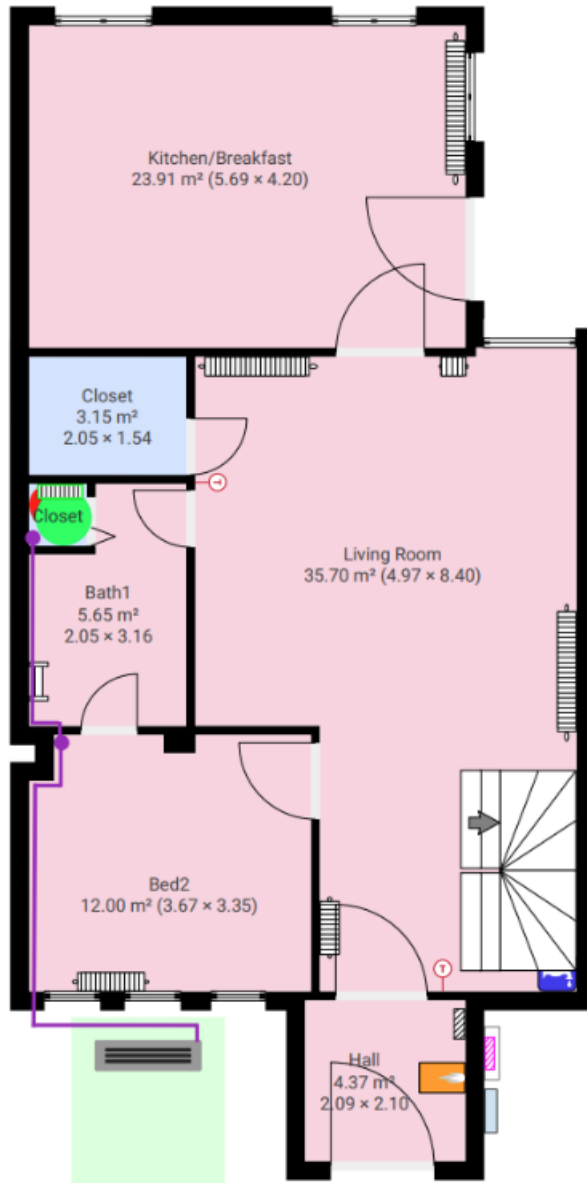
# Proposed system layout

Over the next few pages, you will find a proposed layout for where your heat pump, the renewables consumer unit, pipe runs and wiring runs (if necessary) will be located.

## Key:



# Proposed system layout





# Heat loss assessment

As part of your survey, we analysed how much heat each of your rooms loses, to work out the heat pump size and flow temperature required to comfortably heat your home.

Rooms	Total Heat Loss (kW)	Heat Loss per metre (W/m <sup>2</sup> )	Emitter Type
Living Room	3123.52	87.49	Radiators
Bed2	854.05	71.17	Radiators
Bath1	123.74	21.9	Radiators
Kitchen/Breakfast	1839.54	76.94	Radiators
Landing	1360.69	79.57	0
Bed3	555.65	44.24	Radiators
Bed1	1444.21	62.82	Radiators
EnSuite1	34.14	8.82	Radiators
Closet	36.66	23.94	0
Dressing room	378.83	14.02	0

# Recommended configurations for your heat pump

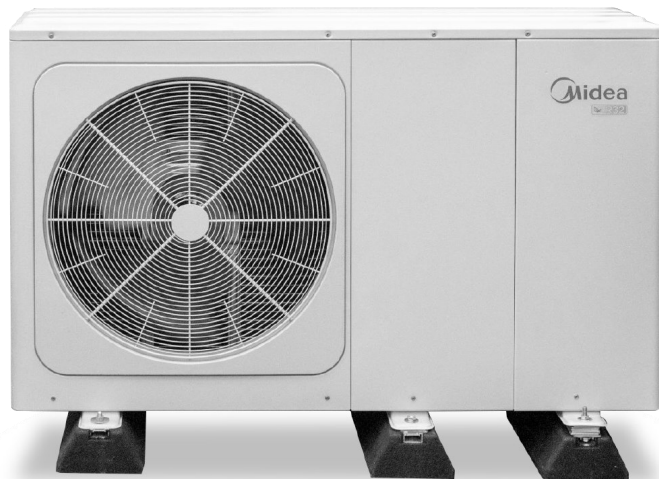
**Heat pump size:**

12kw Midea Air Source Heat Pump

**Flow temperature:**

50°C.

This is calculated based on heating the room with the most significant heat loss to a comfortable temperature.



# Heat pump Seasonal Coefficient of Performance (SCOP)



SCOP is a measure of how much useful energy the heat pump produces compared to the electricity the system uses to run.

**At a flow temperature of 50°C, the SCOP is 3.68.**

For every 1kWh of electricity used to power your heat pump, 3.68kWh of heat will be transferred into your home .

This is an annual average – at some times of the year the SCOP will be higher, and at other times it will be lower.

## Will you need supplementary heating?

Your system is designed to provide **99–100%** of your heating over the year. You may need to use an additional heating source at limited times, such as heating the building from a cold state if your heat pump has been off for days or weeks at a time.

# ● Your radiators

The table below lists the combined heat output of the radiators in each room, based on their type, width and height. Red indicates radiators that are too small for the design temperature.

We recommend replacing or installing additional radiators in these rooms to increase the heat output.

Room Name	Room Design Temperature (°C)	Total Room Heat Loss	Total Output at Flow °C	% Oversize	Height	Width	Replacement/Additional	Qty	Radiator Cost	
Living Room	21	3123.5	3403.81 W	9%	<input type="checkbox"/>					
Bed2	18	854.1	935.33 W	10%	<input type="checkbox"/>					
Bath1	22	123.7	195.19 W	58%	<input type="checkbox"/>					
Kitchen/Breakfast	18	1839.5	1870.66 W	2%	<input type="checkbox"/>					
Landing	18	1360.7	0.00 W	Unheated/UFH	<input type="checkbox"/>					
Bed3	18	555.6	602.55 W	8%	<input type="checkbox"/>					
Bed1	18	1444.2	1330.25 W	-8%	<input checked="" type="checkbox"/>	450	1400	Replacement plus pipework	1	£ 195.52
EnSuite1	22	34.1	195.19 W	472%	<input type="checkbox"/>					
Closet	18	36.7	0.00 W	Unheated/UFH	<input type="checkbox"/>					
Dressing room	18	378.8	0.00 W	Unheated/UFH	<input type="checkbox"/>					

## ● Your insulation

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We are pleased to confirm that you have the level of insulation required to be eligible for the Boiler Upgrade Scheme grant.

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## ● Sound test

As part of your survey, we discussed the best location for your air source heat pump in relation to other properties. For an air source heat pump to be allowed under permitted development, the unit cannot exceed a sound pressure of 42dBa.

From the information provided, we estimate your unit would reach a sound pressure of 41.2dBa. This means that planning permission will not be required.

# Quote and contractual information

# Your quote

## Your details

**Name:**

Helen Phillips

**Project reference:**

GW1720

**Quote issued by:**

Sam Charleton

**Date issued:**

18/01/2024

**Installation address:**

1

The Old School

Norfolk Street

Cambridgeshire

CB1 2LE

## Cost totals

Description	Total Price
Total cost of goods & services	£19,221.32
VAT	£0.00
Total Price of the system	£19,026.65
Boiler Upgrade Scheme grant	-£7,500.00
Survey Payment	-£250.00

**Total to pay** **£11,276.65**

\*Please note the quote is valid for 14 days from date of issue.

# Your quote

## € Cost breakdown

Description	Quantity	Unit Price	Total Price
Supply and installation of 12kw Midea Air Source Heat Pump	1	£16,757.45	£16,757.45
Supply and installation of 250Ltr Cylinder with HP & Solar Coil (510x1800mm)	1	£1,553.94	£1,553.94
Supply and install of Monitoring & Tado heating & hot water 1 zone	1	£151.00	£151.00
450mm x 1400mm K2 Radiator - Stelrad	1	£340.40	£340.40



# ● Your quote

## 📅 Labour time

Based on the above listed works, we estimate that the installation will take place over 6 days.



## 📄 Your warranty

We offer the following hardware and workmanship warranties on our goods and installation:

**Your heat pump:**  
10-year Midea  
product warranty

**Your installation**  
2-year heat pump  
workmanship warranty

### **If you move home**

The workmanship warranty will be transferable to the new legal owner of the property if it is sold during the warranty period.



The list below details the steps involved in your

- System boiler to be removed
- Flue to be removed hole made good by Good Energy
- Installation of Midea 12kW Heat Pump
- To be floor mounted on a base
- To drain into nearby down pipe
- Removal of existing cylinder and Installation of Heat Pump cylinder in cupboard
- Installation of Tado smart thermostat
- Heat Pump Pipework - From heat pump, across Bed2 wall at low level, entering into Bed 2 at a low level, wall mounted at a low level to Bath1, raise into crawl space above Bath1.



# ● Important information about your quote

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## £ Costs

This quotation is based on Good Energy Works being able to install your system as described without interruption. Should circumstances beyond our control disrupt this process, we will discuss with you the implications of any delay. Should you decide to change the agreed installation within your cancellation period, we will produce another full quotation based on these changes. You will be given a further cancellation period to consider your new quotation.

Should you wish to make any changes to the agreed installation after your cancellation period has expired, we will prepare a new quotation for you, but we reserve the right to charge for any reasonable costs we have incurred in working towards the original installation details.

If, during the installation process, we come across any situation that we could not have reasonably foreseen, for example remedial electrical or

building work, we will discuss the implications and costs of such works with you.

Should you request any changes after the installation process has begun that involve additional cost, we will provide you with a quotation based on the daily or hourly rate of our installers.

# Important information about your quote

## 📄 Planning permission

If your property is a listed building or you are in a conservation area, you may need planning permission. By signing the contract, you are confirming that you have received Planning Permission or a building warrant, or confirmed with your local authority that these are not required.

Air source heat pumps usually come under 'permitted development' in England. If the property is in Wales, you must have planning permission.

We cannot be held responsible for installations carried out where planning permission was required but not obtained. No refunds will be given in such cases.

## 🔒 Data protection

Our privacy policy sets out how we collect and use personal information about you, it can be found on our website at:

[www.goodenergy.co.uk/privacy-policy](https://www.goodenergy.co.uk/privacy-policy)





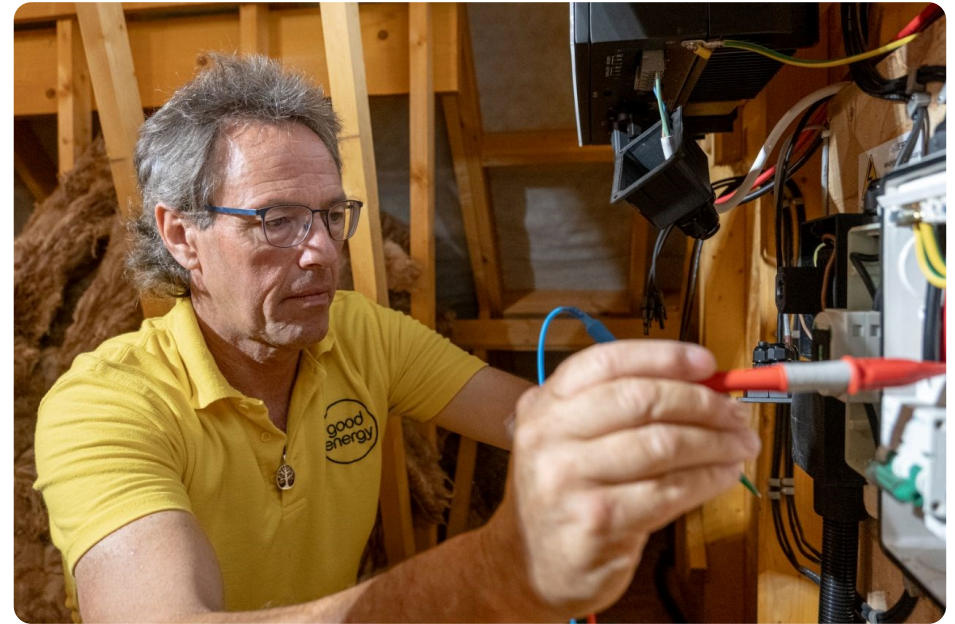
# ● Important information about your quote

## 🏠 Boiler Upgrade Scheme

If our application for the Boiler Upgrade Scheme grant is rejected, you are liable for the full balance.

We require a valid EPC to redeem the Boiler Upgrade Scheme Grant from OFGEM. If you accept our quotation, you agree to pay the Total Price of the System if a valid EPC is not made available at the point Good Energy Works Limited looks to redeem the Boiler Upgrade Scheme voucher with OFGEM.

A valid EPC is one which has been issued within 10 years of the Installation Commissioning date and states that no loft and/or cavity wall insulation measures are required. Where measures are required appropriate paperwork from the local authority will need to be provided to give approval of the installation.



# Important information about your quote

## ✓ The HIES consumer code: registering your deposit

We are a signatory to the HIES Consumer Code and this document is prepared in accordance with this Code, a copy of which is available on request

As members of the HIES Consumer Code we are required to ensure that should we cease trading, due to receivership, administration or bankruptcy, that the workmanship warranty that we have in place for your installation will still be honoured.

When you confirm the order and we have received your deposit, we will register your name, address and the total value of the contract on to the HIES Job Registration System within two working days.



→ Read more about the HIES consumer code



# Important information about your quote

## Deposit

A deposit of £5,000 or 25% of the total contract price set out in the quotation, whichever is lesser, including VAT, is due on signing of the contract. A booking stage payment will be required to book your installation date.

In accordance with MCS guidelines, these two payments will not exceed 60% of the total installation price. Where these 2 payments exceed 60% of the total installation price there will be a final balance to pay, this is due upon final commissioning of the system.

Your deposit will be insured with HIES under their Deposit Protection Scheme so that you can get the work completed or your money back if we cannot deliver your equipment because we have gone out of business.

**Note: HIES will not cover deposits or advance payments in excess of 25% of the contract value or more than £5,000.**

## Contract terms

Please make sure you have read our contract terms carefully. As always, please contact us if you have any questions.

 **Read contract terms**

Anything unclear? Get in touch before proceeding to sign the contract:

 **0333 016 4500**

 **works@goodenergy.co.uk**

# Contract of sale – your signature required

Please make sure you have read and understand our contract of sale , before signing.

This contract is agreed between

Good Energy Works Limited

of

Good Energy  
Monkton Park Offices  
Monkton Park  
Chippenham  
SN15 1GH

And

Helen Phillips

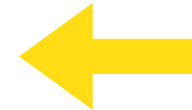
of

1  
The Old School  
Norfolk Street  
Cambridgeshire  
CB1 2LE

Signed on behalf of the company:

Signature of the Customer:

Date of contract agreement:





# Order form - cost breakdown

## Your details

Name:

Helen Phillips

Project reference:

GW1720

Quote issued by:

Sam Charleton

Date issued:

18/01/2024

By signing and returning the Order Form, you are confirming that we will order the products and installation services specified in this quotation. This order becomes binding when we notify you that we have accepted it, according to the terms of our contract of sale.

## Cost breakdown

Description	Quantity	Unit Price	Total Price
Supply and installation of 12kw Midea Air Source Heat Pump	1	£16,757.45	£16,757.45
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450mm x 1400mm K2 Radiator - Stelrad	1	£340.40	£340.40

# Order form - your payment terms

## Cost totals

Description	Total Price
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VAT	£0.00
Total Price of the system	£19,026.65
Boiler Upgrade Scheme grant	-£7,500.00
Survey Payment	-£250.00
<b>Total to pay</b>	<b>£11,276.65</b>

\*Please note the quote is valid for 14 days from date of issue.

## Your payment terms

Description	Total Price
Total amount payable	£11,276.65
Deposit (payable on confirmation of your order)	£4,756.66
Booking stage payment (payable to book installation date)	£6,659.33
Final balance (payable on install completion)	£110.66
Survey payment (this will be deducted from your final payment)	-£250.00

# ● Order form – your signature required

## By signing this Order form:

- We/I confirm we are happy with the proposed siting of the heat pump, pipe runs and associated wiring as outlined in the floor plan.
- We/I agree to the Quotation and confirm the order for the products and installation services specified.
- We/I agree to the total cost and payment terms set out above.
- We/I have read and agree to abide by the Terms and Conditions of the Contract provided with the Quotation.
- We/I confirm that we/I have received Planning Permission or a Building Warrant for the proposed installation or ascertained that these are not required. Good Energy Works Limited cannot be held responsible for any installations where Planning Permission or a Building Warrant was required but not obtained, and no refunds will be offered.
- We/I agree that a contract is not in place between us for the products and installation services until I receive your Acknowledgement of Order.
- We/I agree to pay the total price of the system if a valid EPC is not made available at the point Good Energy Works Limited looks to redeem the voucher from OFGEM. A valid EPC is one which has been issued within 10 years of the Installation Commissioning date and states that no loft and/or cavity wall insulation measures are required.

Where measures are required appropriate paperwork from the local authority will need to be provided to give approval of the installation.

- If for any reason your Boiler Upgrade Scheme application is unsuccessful, then you will be responsible for paying the "Boiler Upgrade Scheme grant" amount shown in your Order Form. In this event we will issue a revised invoice showing the new "Total amount payable" to include this amount. You may terminate the contract within 14 days of this revised invoice, and we will refund any deposits or advance payments made after deducting any costs we have already incurred.

### Customer confirmation:

**Name:** Helen Phillips

**Signature:**

**Date:**



## ● What happens after your contract is agreed?

After Good Energy has received your signed contract, order form and deposit, we will discuss booking in your installation with you.

Please go to our website for more information about our responsibilities at this stage of your heat pump installation, including:

- Timetable for works
- Our insurance
- Our safety at home during installation policy
- How we commission your heat pump
- Aftersales support and maintenance



➔ Read important information about your installation

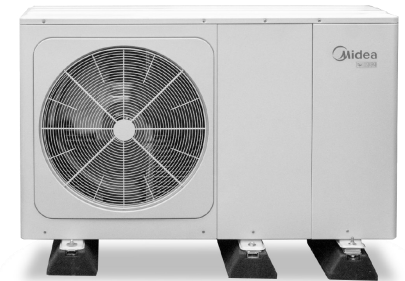
# Supplementary information

## ● Manufacturer factsheets

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→ View the Midea heat pump factsheet

→ View the Gledhill cylinder factsheet



# MCS system performance estimate

MCS defines, maintains and improves quality by certifying low-carbon technologies. The performance estimate below indicates that your heat pump installation meets MCS standards.

Read the [MCS key facts](#) for full information about your estimate.

### Heat Pump System Performance Estimate

MCS

Installer Project Reference:

Client Name:

Installation Address Line 1:

Installation Address Line 2:

Installation Address Line 3:

Installation Postcode:

**Energy Performance Certificate (EPC) Information**  
 Does this estimate relate to a new build or proposal for extension or reduction in size of an existing building?  No

EPC No. for building:

Energy required to heat property:  kWh

Energy required for hot water:  kWh

**New Renewable System Information**

Type of System\*:

Manufacturer Name:

Manufacturer Model:

MCS Certification Number\*:

Flow Temperature\*:  °C \* Determined by the temp. of the water leaving the HP when supplying space heating at the external design temp.

MCS SCOP Heating\*:  \* SCOP - Seasonal Coefficient of Performance. This value is based on the MCS HP SCoP Table below

MCS SCOP Hot Water\*:  \* If providing space heating and DHW then default value from SAP2012. If DHW only see methodology in MIS3005

Renewable System Provides:

Hot Water Immersion Use\*:  \* based on 50C up to 60C, 3kW

Size of Hot Water Cylinder:  ltr

**Existing Heating System**

Existing heating system fuel\*:  \* If new build model the most likely alternative fuel

Hot Water heated by\*:  \* If new build model the most likely alternative fuel

Age of existing system:

Efficiency of existing system:  %

**Estimated System Performance / Comparison**

Energy Requirement for the building	Heating	Hot water	Total	Unit
Net Energy required to heat property	18,247	2,887	21,034	kWh
Existing System Consumption	20,859	3,687	24,546	kWh

**New HP System Estimated Consumption**

Full Heat Pump System (if selected above)	HP System Electricity Consumption	Hot Water	Total	Unit
	4,931	1,801	6,733	kWh

Note: There are different types of hybrid system. This calculation presumes a hybrid where both sources of heat supply the same hydraulic circuits (heating and hot water) according to the proportion selected above.

Electricity Consumption of Proposed Heat Pump for Space Heating versus Flow Temperature

Flow temperature	SCoP
35°C	4.87
36°C	4.81
37°C	4.54
38°C	4.47
39°C	4.41
40°C	4.34
41°C	4.27
42°C	4.21
43°C	4.14
44°C	4.08
45°C	4.01
46°C	3.94
47°C	3.88
48°C	3.81
49°C	3.74
50°C	3.68
51°C	3.61
52°C	3.54
53°C	3.48
54°C	3.41
55°C	3.34
56°C	0
57°C	0
58°C	0
59°C	0
60°C	0
61°C	0
62°C	0
63°C	0
64°C	0
65°C	0

Cut and paste the heat pump's SCOP values for the relevant product from the MCS Product Directory ([here](#)) into the table to the left. Include SCOP data for the entire temperature range (35 °C - 65 °C) even if the SCOP is listed as '0'.

**SCoP Definition**  
 SCoP = Seasonal Coefficient of Performance:  
 MCS SCoP is a theoretical indication of the anticipated efficiency of a heat pump aggregated over a year using standard climate data across Europe. It indicates the units of total heat energy generated (output) for each unit of energy (electricity) consumed (input). It is slightly different to EPC SCOP as it contains efficiency losses due to controls and brine pumps (for a GSHP). As a guide a heat pump with a MCS SCoP of 3 generates 3 kWh of heat energy for every 1 kWh of electrical energy it consumes.

This also means that 2/3rds of the heat output could be eligible for RHI payments. MCS SCoP is based on stringent factory based tests for equipment but does not specifically include the energy consumption of heating circulating pump(s) nor does it model the transient conditions typically experienced in practice in the consumers home and hence the overall final system efficiency is likely to be different from the MCS SCoP.

**Important Information:**  
 This performance estimate should be accompanied by the Key Facts which explain the factors that can affect the performance of a heat pump.

Any technical variation to the specification could affect the performance of the Heat Pump System in which case the MCS Contractor MUST update and re-issue this document and advise the customer of their Consumer Rights.

MCS 031 - v3.0