NIBE

NIBE EXHAUST AIR

A new generation of heat pumps

WHY THROW OUT OLD ENERGY WHEN YOU CAN RECYCLE IT INSTEAD?

An exhaust air heat pump is basically an energy recycling system. It collects energy from the warm inside air as it leaves your home via the ventilation system, and re-uses it to heat up fresh incoming air and tap water.

If you're building a new house or developing new apartments, now's the perfect time to take advantage of NIBE's energy efficient heating technology. Install an exhaust air heat pump and you can enjoy a healthy, oxygen-rich atmosphere inside your home, at the same time as reducing your electricity consumption by more than 50%.

It's amazing, but true. We know, because we've already been using heat pump technology in Sweden for over 30 years. What's more, exhaust air heat pumps have been more or less mandatory in all Swedish houses built since the 1980s, due to changes in Swedish building regulations, which is why NIBE's developers have had plenty of time to refine the technique!

WHY CHOOSE A NIBE EXHAUST AIR HEAT PUMP?

NEW BUILD OR REPLACEMENT?

For an exhaust air heat pump to work, the necessary ventilation system has to be constructed at the same time as the house itself. It is neither cost-effective nor practical to install an exhaust air system after the house has been built. This means there are two very specific situations in which you should choose a NIBE exhaust air heat pump:

1. Building a new house or developing new apartments?
Choose an exhaust air heat pump at the planning stage and the necessary ventilation ducts will be included in your home's design. When your house is ready and the exhaust air heat pump is installed, you can start to enjoy the most efficient indoor heat recycling on the market. Fresh warm air will flow into your home, hot water will run from your taps and your energy bills will be a fraction of the usual amount!

When building a new house or developing new apartments, there are numerous heating systems and different combinations of energy sources to choose from. The one you select will obviously depend on the size of the house and the household's energy demands, as well as the extent of your 'green ambitions'. However, as a rule of thumb, a NIBE exhaust air heat pump is the most cost-efficient solution for small to medium sized homes. For larger houses, we recommend NIBE's FLM exhaust air module combined with a ground source heat pump.

2. Time to replace an old exhaust air heat pump?
If your home was originally constructed to accommodate an exhaust air heat pump, and the original pump is reaching the end of its service life. This is the perfect time to switch to one of NIBE's new generation of heat pumps, and make your heating system more energy efficient than ever.

About 50% of the exhaust air heat pumps sold in Sweden by NIBE go to replace existing ones. We have both the products and specialist expertise to provide you with an exhaust air heat pump that matches your exact needs. Whatever the model and make of your old heat pump, we can offer a suitable replacement.

An exhaust air pump is an absolute must for newly built, well-insulated houses. For a very reasonable investment, it gives you correct ventilation and the lowest possible energy consumption per square metre.

HOW DO EXHAUST AIR HEAT PUMPS WORK?

An exhaust air heat pump extracts air via ventilation ducts positioned in the wet rooms of the house such as bathrooms, kitchens* and utility rooms. Ventilation can take place in two different ways: by exhaust air only or by a combination of exhaust air and heated intake air.

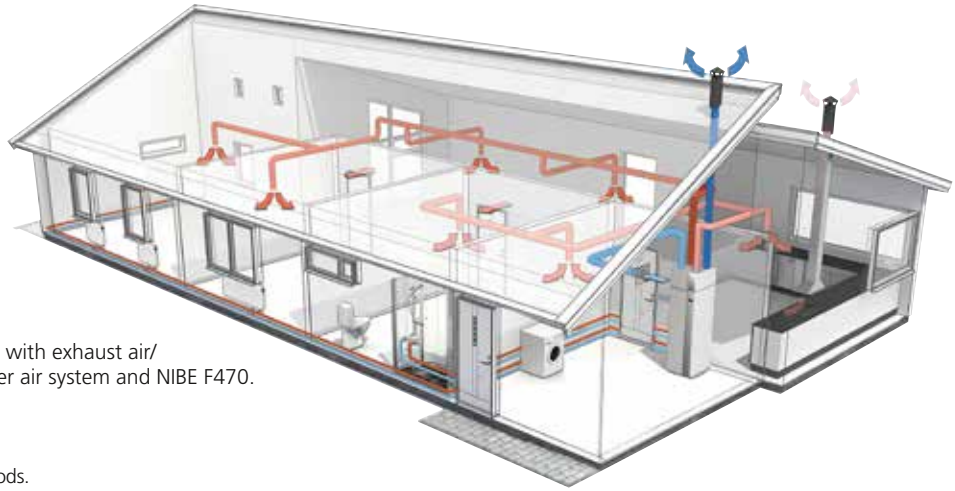
In the former, the air in the house is conveyed from rooms with outdoor air diffusers to rooms with exhaust air diffusers. The latter is designed for houses with heating systems where some of the heat supply is provided by heated supply air. The air in the house is conveyed from rooms with supply air diffusers to rooms with exhaust air diffusers.

On its way out of the house, heat is extracted from the old air and transferred into the heat pump's refrigerant circuit. The cooled air is then discharged. Meanwhile, the vapour compression cycle of the heat pump raises the temperature of the refrigerant and transfers the extracted heat into a water-based system that can either warm the domestic hot water or heat the building, or both.

An exhaust air heat pump can cover the heating requirements of a well-insulated house in all but the coldest conditions. When working efficiently, it can reduce your home's energy consumption for heating by up to 50% when compared to conventional heating systems.

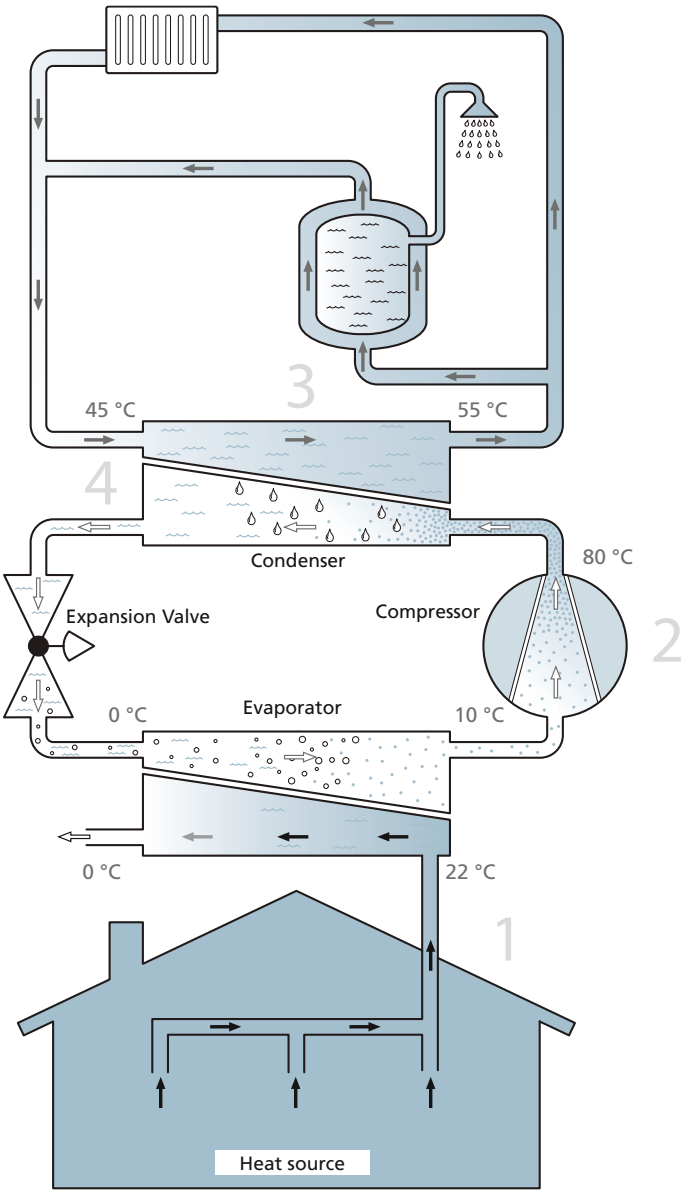
The exhaust air heat pump also works well in conjunction with an underfloor heating system to give you a comfortable indoor temperature, low running costs, a long service life and minimal maintenance.

House with exhaust air system and NIBE F370.



House with exhaust air/ supplier air system and NIBE F470.

*Ventilation ducts must not be linked with cooker hoods.



1. Warm exhaust air is blown across the heat exchanger and heat is transferred into the refrigerant circuit. The cold exhaust air passes to the outside of the house.
2. The compressor raises the pressure of the refrigerant, resulting in an increase in temperature in the heat pump.
3. Energy extracted from the exhaust air is transferred into a water-based heating system to heat your home and hot water.
4. In the condenser, the refrigerant reverts to liquid form, ready to turn into gas once more and to collect new heat energy.

WHY CHOOSE A NIBE EXHAUST AIR HEAT PUMP? HERE ARE THREE GOOD REASONS!

Cut your electricity bills dramatically
Instead of letting the energy you've already paid for escape via ventilation ducts along with used inside air, it makes perfect sense to recapture that energy and use it again.

Depending on the model you choose and the size of your home, savings achieved from installing an exhaust air heat pump can be as high as 50%. So you only pay half or even less of the cost of heating and hot water compared with a conventional electric boiler with mechanical exhaust air ventilation.

Reduce environmental impact
By extracting existing energy from your home and reusing it to heat up the tap water and the radiators, an exhaust air heat pump leads to much lower CO_2 emissions. What's more, NIBE's exhaust air heat pump can be connected to a solar energy system such as solar panels on the roof of your home. This means you can take advantage of completely free energy from the sun, without being fully dependent upon it.

Meet new building regulations
Install a NIBE exhaust air heat pump in your home and it will be well equipped to meet current and future building regulations. In some parts of Europe, stringent rules concerning domestic energy efficiency and ventilation in newly built homes already apply. These are likely to get stricter and eventually become standardised across the continent.

MORE GOOD REASONS TO INSTALL A NIBE EXHAUST AIR HEAT PUMP

– Get a complete all-in-one system that provides heating, ventilation and hot water
– A complete exhaust air 'package' which includes every single component, down to the last screw or valve. It's convenient for the installer and cost-effective for you.
– The whole system has been designed to work and look good together.
– You don't need a large utility room to install a NIBE exhaust air heat pump. A NIBE exhaust air heat pump has normal dimensions (approximate: 60cm x 62.5cm x 210cm).
– Your home is continually, automatically ventilated without becoming cold. There's no need to 'air' the rooms.
– You avoid all the problems associated with damp. Houses that have an exhaust air heat pump, and hence a good ventilation system, stay dry and healthy.

NIBE EXHAUST AIR HEAT PUMPS & ACCESSORIES

A NEW GENERATION OF EXHAUST AIR HEAT PUMPS

NIBE has been steadily developing heat pump technology over many years, leading to increasingly sophisticated, energy-efficient products. However, we understand that our customers want neat, efficient solutions that are practically 'plug & play'. So while our products have become more sophisticated, we've also made them simpler to install and use.

Efficiency gains
Designed for connection to a heat distribution system such as radiators, convectors and/or underfloor heating, our new generation of exhaust air heat pumps offer astonishing savings and big environmental benefits.

They reduce your energy consumption even more than earlier models. Further reducing CO_2 emissions as well as energy costs, this efficiency gain is good news for home-owners and the environment.

Colour display
A large, easy-to-read multicolour display features clear information about status, operation time and all temperatures in the heat pump; an easily navigated control unit enables users to get the best performance out of the heat pump and maintain a comfortable indoor temperature at all times.

User convenience
Any heat pump model which features an integrated water heater gives you efficient water heating and plentiful hot water, and has a thick a layer of Neopore insulation to prevent heat loss.

You can save even more energy by scheduling your heat pump to provide for the varying energy needs of your household, on a daily, weekly or longer term basis.

User-friendliness
Our new generation of heat pumps has an intuitive interface, which benefits both the end user and the installer. For example, an automatically activated guide leads you through the set-up process quickly and correctly. There is a help function for more information about each function, and an alarm which highlights problems and suggests how to solve them. The inclusion of USB ports make software updates and operating data downloads quick and simple to perform.

NIBE heat pumps feature large, easy-to-read multicolour displays.

FREEDOM – ANYWHERE, ANY TIME

NIBE UPLINK™

Using the Internet and NIBE Uplink you can get a quick overview and the present status of your heat pump and the heating in your property. You get a good overall view where you can follow and control your heating and hot water production. If your system is affected by an operational disturbance you receive an alert via e-mail that allows you to react quickly.

NIBE Uplink also gives you the opportunity to control comfort in your property no matter where you are. **We call it NIBE freedom.**

- NIBE introducing a new, efficient tool that gives you quick and easy control over your property's heat pump - wherever you are.
- A web interface over the Internet offers you an instant view of e.g the temperature and current status of the heat pump in your property.
- Provides the benefit of external monitoring for several properties at the same time.
- Clear, easy way of monitoring and controlling heating and water temperatures for maximum comfort.
- In the unlikely event of a system malfunction you receive an alarm directly in your mail, allowing you to respond in the fastest possible time.
- Simple installation with a "click" of an ethernet cable.
- Provides logging of heat pump parametres presented in a user-friendly history chart.

New

- **API functionality for external integration of e.g home management systems and BMS**
- **NIBE Uplink app for compatible smart phones**

NIBE EXHAUST AIR HEAT PUMP INSTALLED IN YOUR HOME

The illustration on this page shows some of the many advantages you get from installing an exhaust air heat pump in your home. However, the different heat pump models do vary, so for specific functions and features of all NIBE exhaust air heat pumps, please refer to the product pages 18 – 21.

Three functions in one:
HEATING, DOMESTIC HOT WATER AND VENTILATION

All these functions are provided by your NIBE exhaust air heat pump. Water-borne distribution of heating takes place via radiators and/or an underfloor heating system.

Zero visual impact:
TECHNICAL INSTALLATION ALL INDOORS

Since 100% of the technical installation is inside the actual house, there is no visible evidence in your garden.

Discreet design:
NEUTRAL APPEARANCE, ADAPTED TO ANY INTERIOR

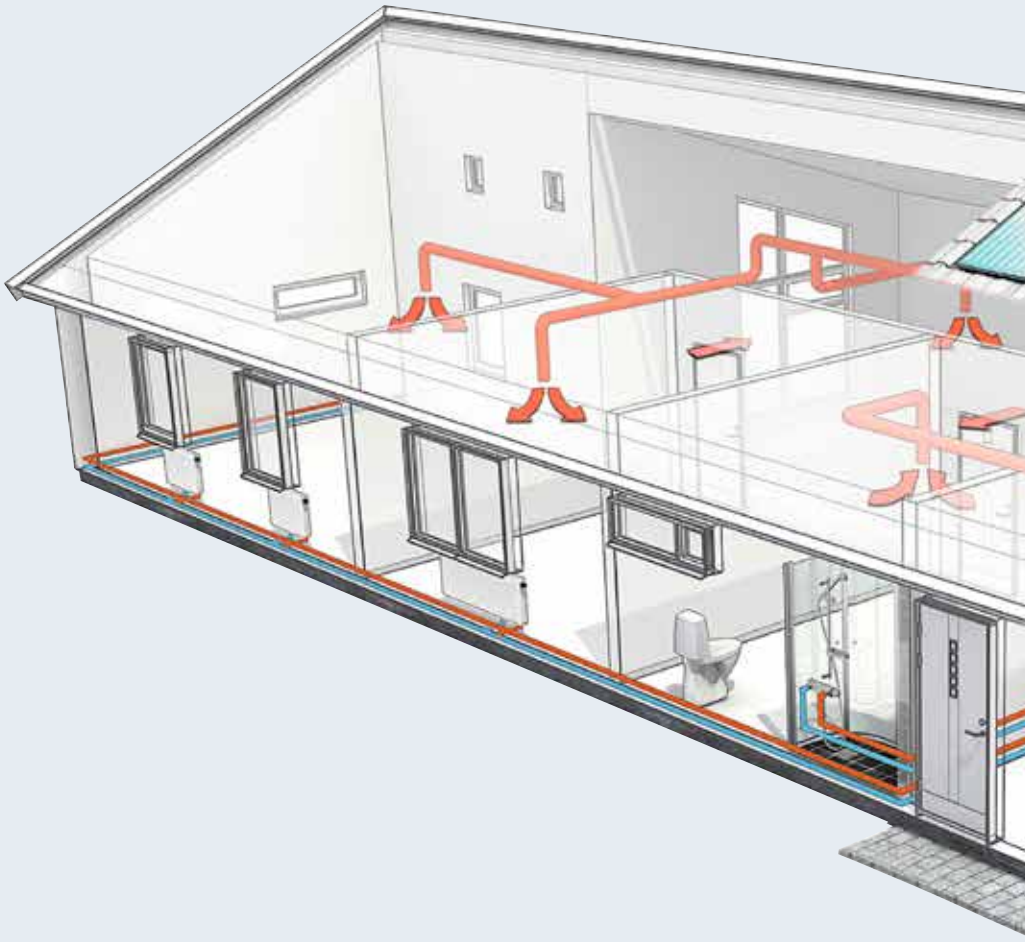
An attractive but discreet design makes our exhaust air heat pumps easy to place in your home. Since the design is pleasing to the eye, it can even be positioned in a more visible area.

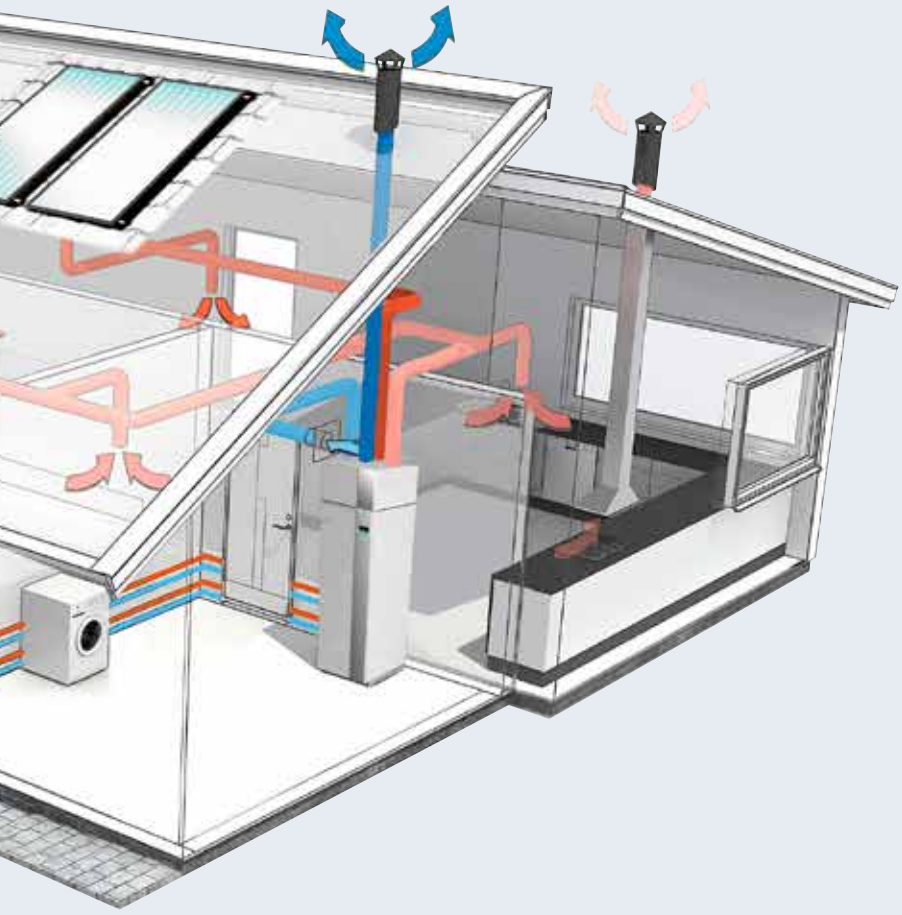
Outdoor sensor:
MINIMISES WASTE AND ENSURES ECONOMICAL OPERATION OF THE HEAT PUMP

A sensor placed on an exterior house wall reports the outdoor temperature to your heat pump so that it can vary output in relation to need.

Compatibility:
CONNECTS EASILY WITH OTHER ENERGY SOURCES

When you need an additional energy source, your NIBE exhaust air heat pump can be hooked up to. district heating, gas boiler or a wood fired boiler.





Ventilation:

TWO WAYS OF VENTILATING YOUR HOME

In some cases, fresh air is supplied directly from wall vents, which is both energy-efficient and quiet. Alternatively fresh air can first be directed into the heat pump to be heated up before distribution. This ensures an even temperature.

Two air sources:

FOR EVEN GREATER SAVINGS

Some heat pump models (such as the NIBE F730/F750) can combine exhaust air and outdoor air. With this volume of air in the heat pump it's possible to have a larger, more powerful compressor, and deliver even greater savings.

Solar energy:

ALMOST EMISSION FREE

Your exhaust air heat pump can be complemented with a green energy source such as solar or wind power.

NIBE™ SMS 40

REMOTE CONTROL

With SMS 40 you can control your heat pump remotely via your mobile phone to do things like increasing the temperature at home on the way back from your holiday. Works with exhaust air heat pumps NIBE F370, NIBE F470, NIBE F750, NIBE FLM + NIBE F1245.

NIBE™ ECS 40

DISTRIBUTE HEAT TO MORE THAN ONE SYSTEM

Using the ECS 40 accessory, you can choose to share the heat from your heat pump with up to four different heating systems. This is the ideal solution if you have underfloor heating on the ground floor and radiators upstairs. Works with exhaust air heat pumps NIBE F370, NIBE F470, NIBE F750, NIBE FLM + NIBE F1245.

EFFICIENT AND USER-FRIENDLY EXHAUST AIR HEAT PUMPS

We've highlighted some of the key features of our new generation exhaust air heat pumps below. Thanks to a combination of advanced engineering and numerous efficiency enhancing features, NIBE F750 gives you unrivalled annual average energy savings and maintains a comfortable indoor climate all year round, regardless of the weather.

You don't need to be a technical genius to make these heat pumps work for you. A large, easy-to-read multi-colour display gives everyone the chance to maximise the energy saving potential of this green technology.

Modular design

FOR EASY ADDITION OF ACCESSORIES

This heat pump and its accessories are designed to be placed together and create a streamlined appearance. Whether you choose a cabinet to hide the ventilation pipes or a separate VPB storage tank to supply more hot water, the overall effect is that of a single, neat system.

Insulation of the hot water tank

MINIMISES HEAT LOSS AND SAVES MONEY

An extra thick and efficient layer of insulating material made of Neopore retains the heat inside the tank, which in turn saves you money.

Low energy circulation pump

REDUCES ENERGY CONSUMPTION AND COSTS

Steered by software in the heat pump, the speed of the circulation pumps changes in accordance with the building's energy requirements and the outdoor temperature.This is highly economical as it means only the correct amount of energy is produced.

Well-structured interior

REDUCING THE NEED FOR A USER MANUAL

Our heat pumps come with a user manual handily positioned in a special pocket inside the aluminium door. However, installers will find that the inside of the heat pump is so neatly and clearly organised that they hardly ever need to refer to the manual.

USB ports

FOR UPLOADING AND DOWNLOADING DATA

Having USB ports gives several advantages. For example, home-owners can download historic operating data onto a memory stick and give it to their local NIBE specialist, eliminating the need for a home visit.

Exterior design

AN ATTRACTIVE PIECE OF EQUIPMENT IN YOUR HOME

The main body of the heat pump is plain white, which means it fits into your utility room without any problem. There are also attractive design details such as brushed aluminium flap door with a window through which the digital display is visible.

Low energy fan

FURTHER REDUCES POWER CONSUMPTION

At NIBE we design and build heat pumps with the aim of maximising energy savings. The choice of a low energy fan in the ventilation unit is one more example of this principle at work.

Powerful, inverter controlled compressor

LARGER CAPACITY AND GREATER EFFICIENCY

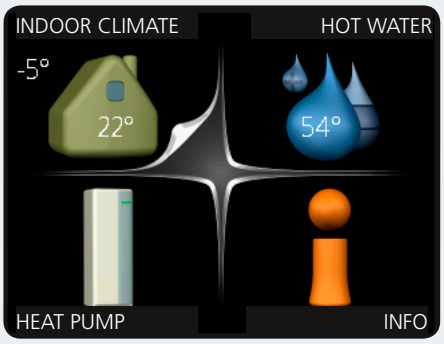
An inverter controlled compressor increases heat pump capacity at the same time as the efficiency level is improved, because it only generates energy when it is required. The heat pump can cool ventilation air to very low temperatures, reclaiming the maximum amount of energy from exhaust air.

The design of the hot water tank

FOR ECONOMIC HOT WATER PRODUCTION WITH HIGH EFFICIENCY

The hot water is heated by a heating coil, which gives fast and efficient hot water charging.

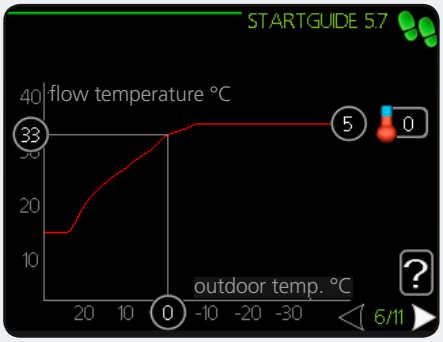
THE DISPLAY



Colour display

FOR A QUICK OVERVIEW OF OPERATION

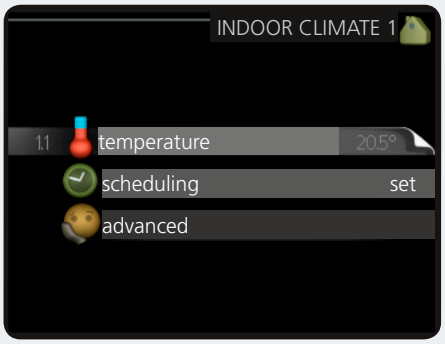
The unique colour display shows four icons representing the house temperature, the heat pump, hot water and "information". You can choose to see selected icons when the aluminium door of the heat pump is closed.



Start-up guide

FOR EASY COMMISSIONING

The start-up guide on the display is automatically activated during installation. It poses a series of questions such as which language should be used and which, if any, accessories will be hooked up to the heat pump. In this way, the installer is guided quickly and correctly through the set-up process.



User interface

MAKING IT EASY TO GET THE MOST OUT OF YOUR HEAT PUMP

Open the aluminium door and select which one of the four areas you want to view in more depth. With just three commands to choose from – select, return and scroll – navigation could not be more straight forward.
Behind this simple exterior lies a sophisticated control system, enabling you to adjust the climate in your home, boost hot water capacity, switch to economy mode before a weekend away, and much more.

NIBE EXHAUST AIR HEAT PUMPS PRODUCT RANGE

NIBE™ F110

A

Energy efficiency class product label for NIBE F110

NIBE F110 is a heat pump that works with exhaust air, outdoor air or the surrounding air. The integrated water heater is insulated with environmentally friendly, recyclable cellular plastic for minimal heat loss. Energy is recovered from the air using the heat pump and is supplied to the water heater, where the domestic hot water is heated. With exhaust air installation the unit also ventilates the house. Scheduling of hot water, and ventilation if applicable, as well as holiday mode.

	NIBE F110
Volume hot water heater	265 litres
Capacity hot water heating at 40° normal comfort EN16147*	365 litres
Shower minutes (10 litres/min)	approx. 36 min
Energy efficiency class/Load profile for water heating	A/XL
Height/Width/Depth	2030-2060/600/605 mm
Weight	144 kg

NIBE™ F370/F470

A+

Energy efficiency class package label for NIBE F370/F470

NIBE F370/F470 provides you with cost-effective and environmentally friendly domestic heating. It features an integrated water heater, immersion heater, low energy circulation pump and control system to ensure reliable and economical operation. The built-in water heater is insulated with environmentally friendly thermal insulating material which minimises heat loss.

NIBE F370, equipped with a low energy ventilation fan, ventilates your home by the exhaust air method. Air is conveyed from rooms with outdoor air diffusers to rooms with exhaust air diffusers - ventilating the whole building.

NIBE F470, equipped with two low energy fans, ventilates your home with a combination of exhaust air extraction and heated supply air. Exhaust air is drawn out from the house and supply air is drawn in through a duct in the exterior wall. When supply air passes through the heat pump, it is heated up and diffused to the chosen rooms as needed.

NIBE F370/F470 can be connected to any low temperature distribution system such as water-based radiators or underfloor heating. It is also prepared for connection to several external products and accessories such as an extra water heater.

	NIBE F370	NIBE F470
Capacity hot water heating at 40° normal comfort EN16147*	217 litres	
Shower minutes (10 litres/min)	approx. 22 min	
Specified heating output	2,18 kW	
COP**	3,93	
Output immersion heater	9 kW	
Corrosion protection	Stainless steel/Copper /Enamel	Stainless steel/Copper
Energy efficiency class 35/55 °C product label	A+/A+	
Energy efficiency class 35/55 °C package label	A+/A+	
Energy efficiency class/Load profile for water heating	A/L	
Savings/year***	6 500 – 9 300 kWh	
Height/Width/Depth	2100/600/615 mm	
Weight	203 kg	218 kg

**A20(12) exhaust air flow 150 m³/h (42 l/s) **EN14511, A20(12)W35 at 252 m³/h,min. compressor speed. ***Value varies, as it is dependent on the energy demand and exhaust air volume flow.*

NIBE™ F730/F750

NIBE F730/F750 have been introduced to supply your home with inexpensive and environmentally friendly heating. Heat production is safe and economical with integrated hot water heater, immersion heater, circulation pump and control system. The heat pump can be connected to an optional low temperature heat distribution system. e.g. radiators, convectors or underfloor heating. It is also prepared for connection to several different accessories, for example climate systems with different temperatures.

NIBE F730/F750 has a large, powerful compressor that can meet the energy needs of a property of up to 200 m². As the compressor is inverter-controlled, operation is very economical and the heat output is two or even three times higher than for conventional exhaust air models.

NIBE F730/F750 has an innovative colour display with simple menus and clear symbols that make it easy for you to control consumption and monitor run time, or create your own personal settings. The heat pump is equipped with an attractive, stylish aluminium cover. It also has a USB port that makes it easy to update software and download operating data.

A+++

Energy efficiency class package label for NIBE F730/F750, +35°C

	NIBE F730	NIBE F750
Capacity hot water heating at 40° normal comfort EN16147*	206 litre	206 litre
Shower minutes (10 litres/min)	18 – 22 min	
Specified heating output	1,0 - 6,0 kW	
COP**	5,7	4,72
Output immersion heater	0,5 – 6,5 kW	
Corrosion protection	Copper/Enamel	Stainless steel/Copper/ Enamel
Energy efficiency class 35/55 °C product label	A++/A++	
Energy efficiency class 35/55 °C package label*	A+++/A++	
Energy efficiency class/Load profile for water heating	A/L	
Savings/year***	8 900 – 16 600 kWh	8 900 – 16 200 kWh
Height/Width/Depth	2000-2025/600/610 mm	2100-2125/600/610 mm
Weight	207 kg	235 kg

**20(12) exhaust air flow F750: 150 m³/h, F730: 180 m³/h **EN14511, A20(12)W35 at 252 m³/h,min. compressor speed.*
****Value varies, as it is dependent on the energy demand and exhaust air volume flow.*

NIBE™ FLM-modul + NIBE™ F1255

Enjoy extra savings when you combine an advanced ground source heat pump with an exhaust air module. Developed to work with NIBE ground source heat pumps, the NIBE FLM exhaust air module recycles mechanical exhaust air, improving your indoor air quality at the same time as reducing your heating costs. Developed to work with NIBE ground source heat pumps, the NIBE FLM exhaust air module recycles mechanical exhaust air, improving indoor air quality while reducing heating costs. It has an integrated adjustable low energy fan to give you the amount of ventilation you need. Everything is displayed on the heat pump display and can be centrally controlled, helping you optimise energy savings. The module can be fitted directly to the heat pump or hung on the wall.

Combine with a NIBE F1255, a highly advanced ground source heat pump which includes an integrated hot water heater, immersion heater, low energy circulation pumps and a control system. Suitable for connection to a heat distribution system such as radiators, convectors or underfloor heating, the F1255 produces heat safely and economically. NIBE F1255 is equipped with a control unit to ensure you always have a comfortable temperature in your home. Clear information about status, operation time and all temperatures in the heat pump are shown on the large and easy-to-read display, eliminating the need for external unit thermometers.

NIBE™ ERS 10-500/ ERS 20-250 + NIBE™ F1255

NIBE ERS is a heat recovery ventilation unit equipped with a counter flow heat exchanger with highest temperature efficiency. The ventilation unit is equipped with supply and extract fans with energy saving EC motors.

NIBE ERS is delivered with the following:

- Counter flow heat exchanger
- Energy saving fans
- EC motors
- F7 filter on supply air side and G4 filter on exhaust air side

NIBE™ F1255

	NIBE F1255
Capacity hot water heating at 40° normal comfort EN16147	240 litre
Shower minutes (10 litres/min)	approx. 24 min
Compressor	Inverter controlled
$SCOP_{EN14825}$ cold climate, 35 °C, F1255-6/12/16	5,5/5,4/5,5
Output immersion heater	6,5 – 9 kW
Corrosion protection	Copper
Energy efficiency class 35/55 °C product label	A++/A++
Energy efficiency class 35/55 °C package label	A+++/A+++
Energy efficiency class/Load profile for water heating	A/XL
Savings/year*	9 500 – 30 000 kWh
Height/Width/Depth	2100/600/625 mm
Weight	245 kg

** Value varies, as it is dependent on the energy demand and exhaust air volume flow.*

ACCESSORIES

For a neater installation

NIBE™ Cabinet

Hide unsightly ventilation pipes inside this specially designed cabinet.
Upper cabinets for room heights up to 2400 mm, 2500 mm and from 2550 - 2800 mm.

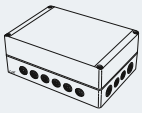
Distribute heat to more than one system

NIBE™ ECS 40/ECS 41

ECS is used when a heat pump (NIBE F370/F470/F750) is installed in houses with up to four different climate systems that require different flow line temperatures. For example, in cases where the house has both a radiator system and an underfloor heating system.
ECS 40 is used for floor heating < 80 m².
ECS 41 is used for floor heating > 80 m².

Connect the heat pump to other heat sources

NIBE™ DEH 40/41 - Docking kit



There are separate docking kits available for connecting other heat sources to the heat pump (NIBE F370/F470).
DEH 40 /Docking kit wood/oil/pellets.
DEH 41 /Docking kit gas

Complement with solar energy

NIBE™ Solar 41

NIBE SOLAR 41 offers solar heating when connected to NIBE F370/F470. Enjoy a complete solar heating system with additional solar panels and UKVS 230.

NIBE™ MCU 10 - Multi charging unit
This accessory is used in NIBE Solar package with NIBE F370/F470/F730/F750.

NIBE™ SPS 10 - Solar pump station
NIBE SPS 10 is a complete solar pump station for installation together with solar panels. Used in NIBE Solar package with NIBE F370/F470/F730/F750.

NIBE™ SCA 40/43 - Solar accessory
For solar connection and large hot water demand.
SCA 40 together with NIBE F750 and VPBS 300.
SCA 43 together with NIBE F730 and VPBS 300.

Accumulator tank

NIBE™ UKVS 230

NIBE UKVS 230 is an accumulator tank with coil for solar panels. NIBE UKVS 230 is intended to be used for heat storage when a smaller heat pump is docked with solar panels. It is also possible to dock another heat source.

Measurement kit for solar generated electricity

NIBE™ EME 10

EME 10 is used to optimise the use of solar generated electricity. Depending on the menu selection, the user can select whether the room temperature and / or hot water are to be affected by the function.

Accumulator tank with water heater

NIBE AHPS 300 (for NIBE F730/F750)

NIBE AHPS is a new series of accumulator tank. AHPS is a "technology tank", a tank with a little more flexibility. NIBE AHPS has a solar coil and a combined preand post-heating coil for hot water production. NIBE AHPS have the same type of exterior which gives a modern-looking installation.
Docking kit SCA 41/42 is required for F750.
Docking kit SCA 43 is required for F730.

NIBE™ VPB 200

A separate storage tank that you can connect to your system. It provides the hot water you need, or boosts the capacity of an existing system.
NIBE VPB is the new generation of accumulator tank. Dock the accumulator with other systems, such as the NIBE F730/F750 heat pump.
Docking kit DEW 40 is required for F750.
Docking kit DEW 41 is required for F730.

NIBE™ VPBS 300

NIBE VPBS is a new type of water heater for connecting to and combining with heat pumps and solar panels. Best combined with NIBE F730/F750.

Control the heat pump from your mobile phone

NIBE™ SMS 40 and Mobile App

Control your NIBE Heat pump from your pocket. Turn on the heat on your way home or check your indoor climate from anywhere in the world..

NIBE Mobile App Requirements
NIBE F1145, F1245, F370, F730, F470 or F750 (firmware version 1177 or higher) together with NIBE SMS 40 (version 33 or higher recommended) and an Android mobile phone.

The convenient way to read your heat pump

NIBE™ RMU 40

With this handy remote control unit positioned in your hallway, kitchen or wherever you want to put it, you can keep in touch with what's happening at the heat pump and change the most common settings remotely. Works with exhaust air heat pumps NIBE F370, NIBE F470, NIBE F750, NIBE FLM + NIBE F1245.

Control the heat pump externally

NIBE™ Modbus 40 - Communication module

Control and monitor heat pumps (NIBE F370/F470/F750).

Supply air module

NIBE™ SAM 40/41

NIBE SAM 40/41 is a supply air module specially developed for houses with supply and exhaust air systems. Works with NIBE F750.

OVERVIEW ENERGY EFFICIENCY CLASS

FROM 26TH SEPTEMBER 2015, all heat pumps designed for installations up to 70 kW must display an energy label of the type that we are used to seeing on TVs, refrigerators, etc. The purpose is to enable the consumer to compare the energy efficiency of products. G indicates the least efficient performance and A+++ the most efficient. This is all part of EU Directive 2010/30/EU that sets higher demands on drastically lowering the emission levels and energy consumption.

NIBE™ F110

Efficiency class hot water - NIBE F110

Type of installation		Exhaust air	Outdoor air	Surrounding air
Specified output according to EN16147	(kW)	1,32[1)]	1,08[2)]	1,32[1)]
COP $_{EN\ 16147}$		2,89	2,36	3,27
Energy efficiency class / Load profile for water heating			A/XL	

[1)] at 180 m³/h and 20 °C air temperature
[2)] at 250 m³/h and 7 °C air temperature

NIBE™ F370

Energy efficiency class package label (35 °C) - NIBE F370 with radiator or underfloor heating system

Nominal heating output ($P_{designh}$)	(kW)	3
SCOP $_{EN14825}$ cold climate/average climate, 35 °C		3,6/3,4
Energy efficiency class 35/55 °C product label		A+/A+
Energy efficiency class 35/55 °C package label		A+/A+
Energy efficiency class / Load profile for water heating		A/L

NIBE™ F470

Energy efficiency class package label (35 °C) - NIBE F470 with radiator or underfloor heating system

Nominal heating output ($P_{designh}$)	(kW)	3
SCOP $_{EN14825}$ cold climate/average climate, 35 °C		3,7/3,6
Energy efficiency class 35/55 °C product label		A+/A+
Energy efficiency class 35/55 °C package label		A+/A+
Energy efficiency class / Load profile for water heating		A/L

NIBE™ F730

Energy efficiency class package label (35 °C) - NIBE F730 with underfloor heating system

Nominal heating output ($P_{designh}$)	(kW)	5
SCOP $_{EN14825}$ cold climate/average climate, 35 °C		4,7/4,5
Energy efficiency class 35/55 °C product label		A++/A++
Energy efficiency class 35/55 °C package label		A+++/A++
Energy efficiency class / Load profile for water heating		A/L

NIBE™ F750

Energy efficiency class package label (35 °C) - NIBE F750 with underfloor heating system

Nominal heating output ($P_{designh}$)	(kW)	5
SCOP $_{EN14825}$ cold climate/average climate, 35 °C		4,7/4,5
Energy efficiency class 35/55 °C product label		A++/A++
Energy efficiency class 35/55 °C package label		A+++/A++
Energy efficiency class / Load profile for water heating		A/L

NIBE™ F1255

Energy efficiency class package label (35 °C)

Type		1,5–6 kW	3–12 kW	4–16 kW
Nominal heating output ($P_{designh}$) 35 °C/55 °C	(kW)	6/6	12/12	16/16
SCOP $_{EN14825}$ cold climate/average climate, 35 °C		5.5/5.2	5,4/5,2	5.5/5.2
Energy efficiency class 35/55 °C product label		A++/A++	A++/A++	A++/A++
Energy efficiency class 35/55 °C package label		A+++/A+++	A+++/A+++	A+++/A+++
Energy efficiency class / Load profile for water heating		A/XL	A/XL	A/XL

AN INVESTMENT IN THE FUTURE

When you install a NIBE exhaust air heat pump you can reduce your energy costs by up to two thirds.

NIBE exhaust air heat pumps are ideal for houses of most sizes. Their control system is designed to work perfectly and provide heat for both water-based traditional radiators or underfloor heating systems. See what kind of savings you can achieve below.

Detached house heated by NIBE exhaust air heat pumps, savings (kWh)/year*

Size of house	NIBE FIGHTER 200P	NIBE F370/470	NIBE F730/F750	NIBE F1255/FLM
100 m²	4000 - 6700 *	6500 - 7300	8900 - 10000	9600 - 11600
150 m²	4000 - 8000 *	8100 - 8800	11400 - 13200	11400 - 14000
200 m²	4000 - 8400 *	8700 - 9300	13900 - 16200	14400 - 17700

** This value varies, depending on energy used and exhaust air flow*

CASE

A USER FRIENDLY HEAT PUMP THAT LIVES UP TO ITS NAME!

"We are completely comfortable changing the controls ourselves." / Anna Niklasson

Background

The Niklasson family, two adults and three teenagers, live in a house in the Swedish countryside. Their house was built in 1980, has a total living area of 165 m2 and is equipped with water-based central heating. Originally, energy was provided by a NIBE domestic boiler and mechanical ventilation system. Using this system, the family's annual energy consumption was approximately 27000 kWh. In 1990, the owners installed a NIBE exhaust air heat pump. This reduced their energy consumption to 20,000 kWh and gave loyal service for nearly 20 years. Eventually, they decided to replace their old NIBE heat pump with a newer model.

Solution

They chose the NIBE F370 exhaust air heat pump, which has an integrated water heater, immersion heater, circulation pump and control system. Being designed to work with water-based radiators or underfloor heating, it suited the Niklasson's home perfectly. NIBE F370 also includes a ventilation fan, which ventilates the whole building by the exhaust air method. The house also has a Contura 660T wood burning stove, which the family decided to keep for extra comfort heating.

Results

Thanks to the powerful compressor, better insulated tank and intelligent control system of the NIBE F370, the household's electricity consumption is reduced by a further 1000 kWh/year. The family's total energy consumption is now around 19,000 kWh per year (of which household electricity use accounts for approximately 8,000 kWh). They find it very easy to use too. "All we have to do is clean the filter a couple of times a year and pay the electricity bills," says Gunnar Nicklasson.

The NIBE F370 manages the family's fluctuating energy consumption very efficiently. The simple display screen gives them all the information they need and makes it easy to schedule in advance. Heating, hot water and even ventilation can all be planned day by day or for longer periods such as during holidays. "We are completely comfortable changing the controls ourselves," says Anna Niklasson.

NEW TIMES CALL FOR A NEW APPROACH

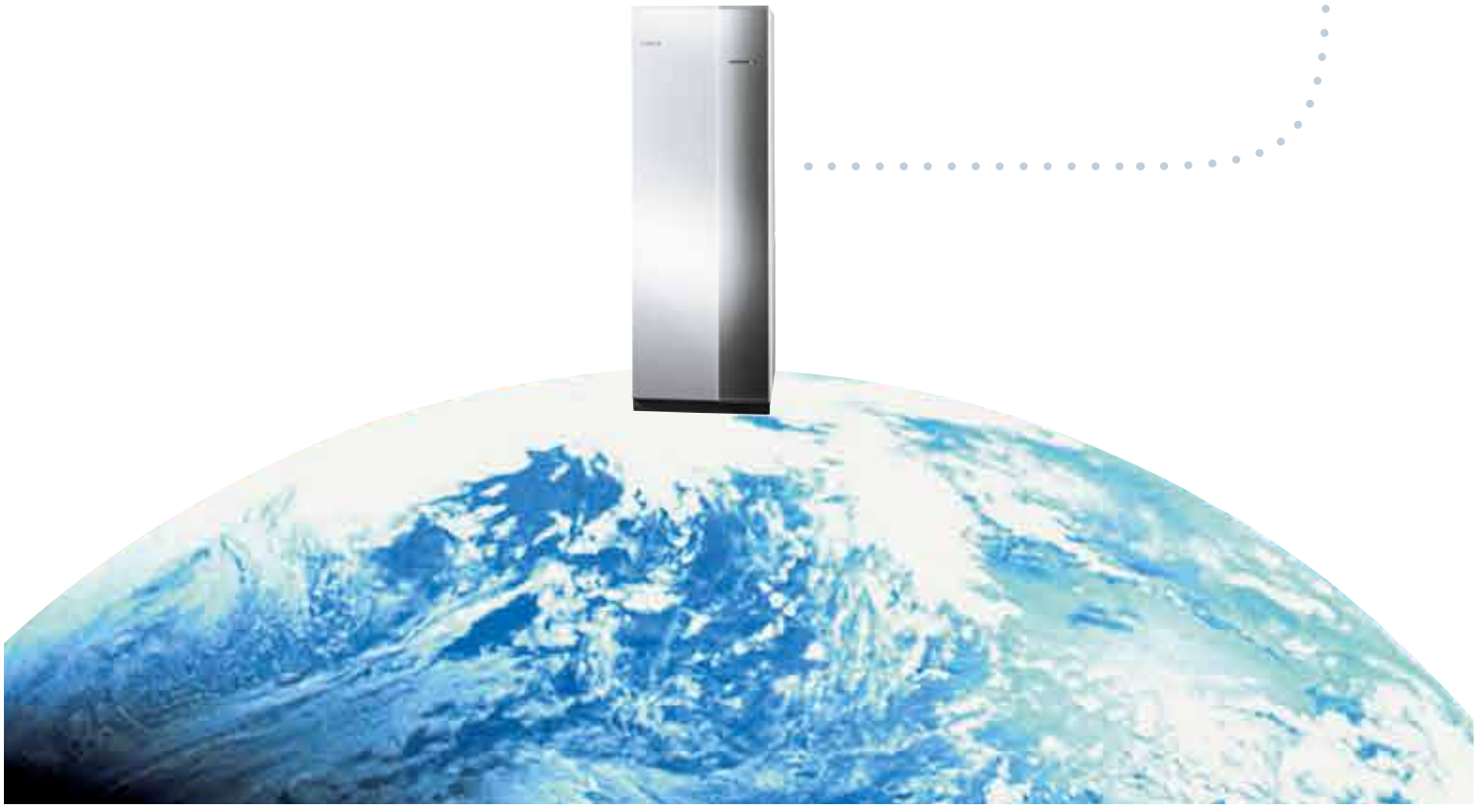
We all know we've got to reduce emissions. The question is how.

'Green' thinking might once have been a luxury but nowadays it is a necessity that none of us can afford to ignore. Increasingly, the reduction of CO_2 emissions is becoming a legal obligation and environmental requirement.

Over 70% of the CO_2 emissions from an average home are caused by its heating and hot water systems. If we are to reduce this figure, we need to start implementing greener, more sustainable technologies across the board. Only then, will we see a significant reduction in CO_2 emissions.

Meanwhile the prices of traditional energy sources are rising steadily, with the result that more and more people are considering alternative, more efficient power sources.

Now that customers have started demanding a solution, builders, architects and property developers can no longer ignore the need to employ alternative technologies that make better use of our planet's energy resources.



START WITH A HEAT PUMP!

It is a proven fact that heating your house with a heat pump is the best environmental option.

One obvious reason is that a heat pump does not use a combustion process to generate heat. It simply extracts the heat that already exists in the outside air and puts it to use to heat your home. This greatly reduces emissions in comparison to traditional fossil fuel-based systems.

Secondly, the amount of electricity needed is relatively low. That's because electricity is not the main energy source. It is only needed to drive the pump and enable the heat extraction process.

Actual energy savings vary depending on the benchmark, but generally measure between 60% and 75%.

A third point to consider is that heat pumps, like every manufactured item, contain what we call 'embedded energy'. That's the energy required to make and transport the product from the factory to where it will be used. NIBE is continually improving its processes to minimise the amount of embedded energy in its products and seeking more environmentally-friendly ways to build and transport them.

Once installed in your home, a NIBE heat pump immediately starts to deliver an environmental payback in the form of reduced energy consumption and emissions.

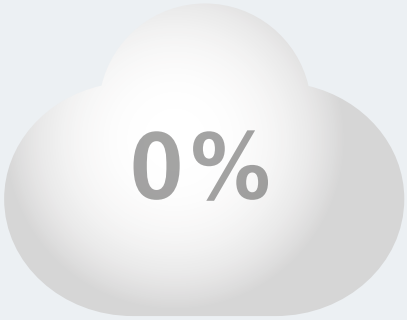
Towards a zero carbon future

The drive to reduce the consumption of energy and its impact on the environment is crucial and increasingly important to us all. If you switched to a renewable energy source, such as wind, solar or tidal, you would be taking a step closer towards a zero carbon future.

Classified as renewable energy

Some governments and regional authorities offer subsidies to home owners to switch from fossil fuel-based heating to renewable sources of energy. Since heat pumps are now officially classified as renewable energy, there couldn't be a better time to change!

For more information, please visit the NIBE website in your country.



‘Do what you can with what you’ve got’.

Recycling heat from used air leaving your home, our exhaust air heat pumps are an ingenious invention which clearly shows how this philosophy translates into reality.

NIBE OF SWEDEN

Living in harmony with nature

The Swedes have a long and impressive track record of clever, money-saving innovations that use resources sparingly. The simple reason for this is that Sweden was historically a poor agrarian country. A harsh winter climate made food scarce for many months, necessitating careful, forward planning.

Today, Sweden is a technologically advanced country with a successful economy, so this is no longer necessary. However, the mindset continues to be manifested in the form of fabulous, cost-saving innovations.

NIBE is a perfect example of the economical Swedish mind at work!

The company was founded by Nils Bernerup in 1952, after a particularly cold winter. Over the past 60 years, it has become Sweden's leading supplier of domestic heating products, continually driving the development of ever-more efficient heating methods.

Early products included water heaters and pressure vessels. Electric boilers joined the range in the 1970s. Heat pumps and a wide selection of other heating products that meet the needs of European markets have been added successively to the company's portfolio.

Nowadays, NIBE has a leading position in the market for heating and cooling solutions around Europe. We are committed to offering innovative solutions that not only save energy but which also reduce CO_2 emissions.

Together with our customers, we're working towards a more sustainable future, one home at a time.

SMART, ECONOMICAL ENERGY SOLUTIONS FROM NIBE

Complete range of products and systems

NIBE Energy Systems offers a complete range of energy-efficient solutions for heating, ventilation, cooling and heat recovery that reflect today's demand for sustainable construction. Our products and services make it easy for private and commercial property owners to choose a system that best suits their needs for indoor climate comfort and hot water. Visit www.nibe.eu for more information.

Exhaust air heat pumps

Ideal for heating domestic premises and tap water, an exhaust air heat pump ventilates your building and recovers energy in warm air, reusing it to heat your household water or fuel your central heating system.

Ground source heat pumps

Drawing heat from surface soil, bedrock or the water in a nearby lake, ground source heat pumps are a great option for heating houses, multiple-unit properties and other larger buildings. Available with or without an integrated water heater.

Air/water heat pumps

These pumps extract heat from the ambient outside air. Connected to your building's heating system they produce both heating and hot water, a big improvement on simpler types of air-to-air heat pumps.

Air/air heat pumps

In many homes that are still heated with direct electrical heating, it is not an alternative to install waterborne heat. In these cases, an air source heat pump is the only option if you want to lower your energy consumption.

Water heaters

For over fifty years, NIBE has been manufacturing products to supply hot water. During that time, we've kept pace with advances in heating efficiency and continually developed new models. We're pursuing the same mission today - to develop even better, even more efficient water heaters, for those chilly mornings in millions of bathrooms all over the world.

Domestic boilers

With a NIBE domestic boiler you have the flexibility to use almost any other kind of additional energy source as and when it's needed. Examples of docking options include air/water heat pumps, solar panels and, of course, electricity.

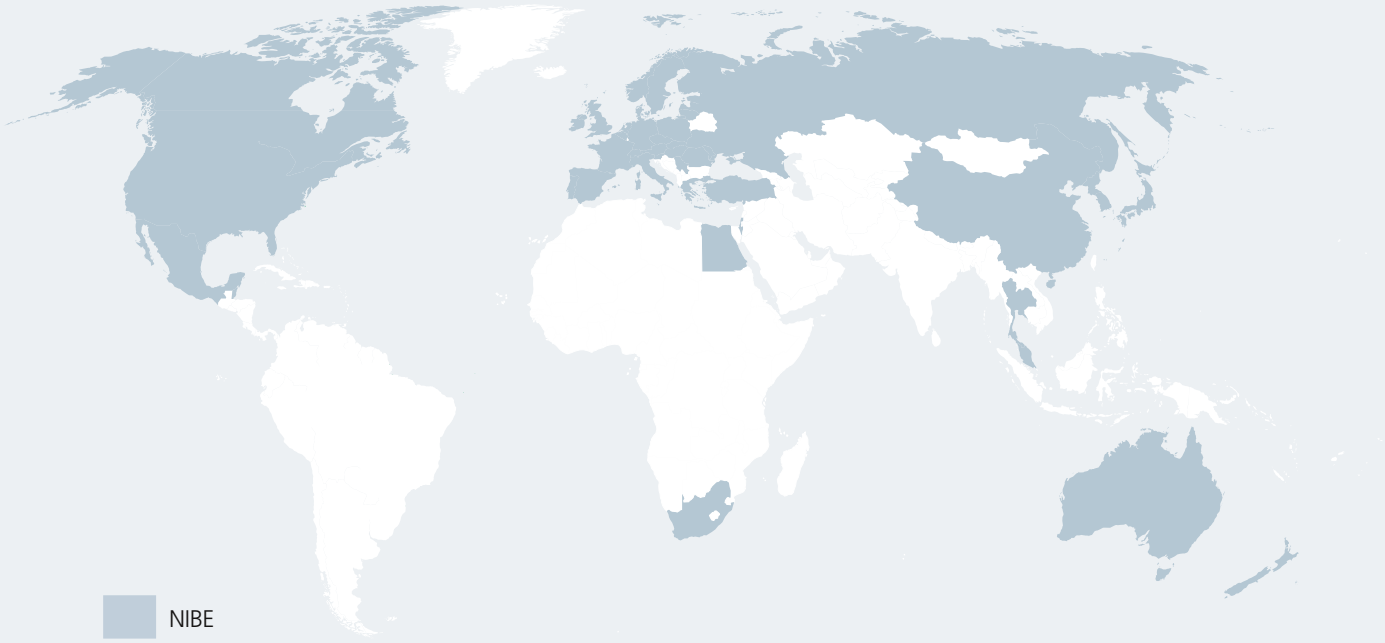
Solar panels

Our solar thermal collectors absorb the sun's rays, delivering free, clean energy to your heating system. They become an integral part of your total energy supply supported by our heat pumps which supply this extra free energy in a smart, controlled way. You can also use our solar collectors in combination with a NIBE bio mass boiler (logs or pellets) or a NIBE water heater powered by electricity or gas.

EXHAUST AIR HEAT PUMPS | GROUND SOURCE HEAT PUMPS | WATER HEATERS | SOLAR PANELS | AIR/AIR HEAT PUMPS | DOMESTIC BOILERS | AIR/WATER HEAT PUMPS

YOUR NEXT STEP?

Find your local NIBE office at www.nibe.eu. They'll help you locate your nearest NIBE installer and select the best kind of heat pump for your needs.



20/20/20

European Directive 20/20/20

The 20/20/20 European directive imposes compulsory targets on the EU's 27 member states, specifying that 20% of energy consumption must be met by renewable sources by 2020. Since NIBEs heat pumps are now classified as a renewable energy source, their installation will help member states reach this ambitious target. And in many cases, local or regional authorities are offering home owners subsidies to switch their existing heating systems to a renewable source such as a heat pump.

439028 GKB GB NIBE Exhaust Air Heat Pumps 1644-13

ENERGY FOR LIFE

We've been designed and developed for you and your home. No matter what type of house you have or what your energy requirements are, we'll give you the perfect indoor climate. Year in and year out. We're a smart family, packed with technical innovations that you can easily control as and when you want. Keep tabs on us or tell us what to do through your mobile phone or tablet. From your office or hammock. Our long experience and thousands of hours spent on development are reflected in our extensive range of products.

You can find out more about the NIBE family and other innovations at nibe.eu

NIBE

NIBE ENERGY SYSTEMS
BOX 14
285 21 MARKARYD
SWEDEN
Tel. +46 433-73 000
www.nibe.eu