

Heat pumps

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ecoGEO

# Ecoforest

## Innovating from the beginning



ECOFORREST was founded in 1959 by Jose Carlos Alonso; his vision was to develop innovative products that were both economic and environmentally-friendly, with the intention of making the world a better place.

Today, more than 50 years later, ECOFOREST is the technological leader in the heating sector, with solutions based solely on clean and natural energy.

This commitment to sustainability and technology have led us to develop the most efficient solutions in the market, such as being pioneers in the use of inverter technology in geothermal heat pumps and developing the most intelligent systems for customer convenience, always insisting on respecting the environment.

1959

Foundation of the company

1968

Creation, innovation starts

1992

Pioneers in the manufacture of pellet stoves in Europe

1993

We invented the water heater fired by pellets

2012

1st Copeland modulating Heat Pump In-house Development and Design, Manufactured in Spain In-house Logic and Software

2016

The progress continues



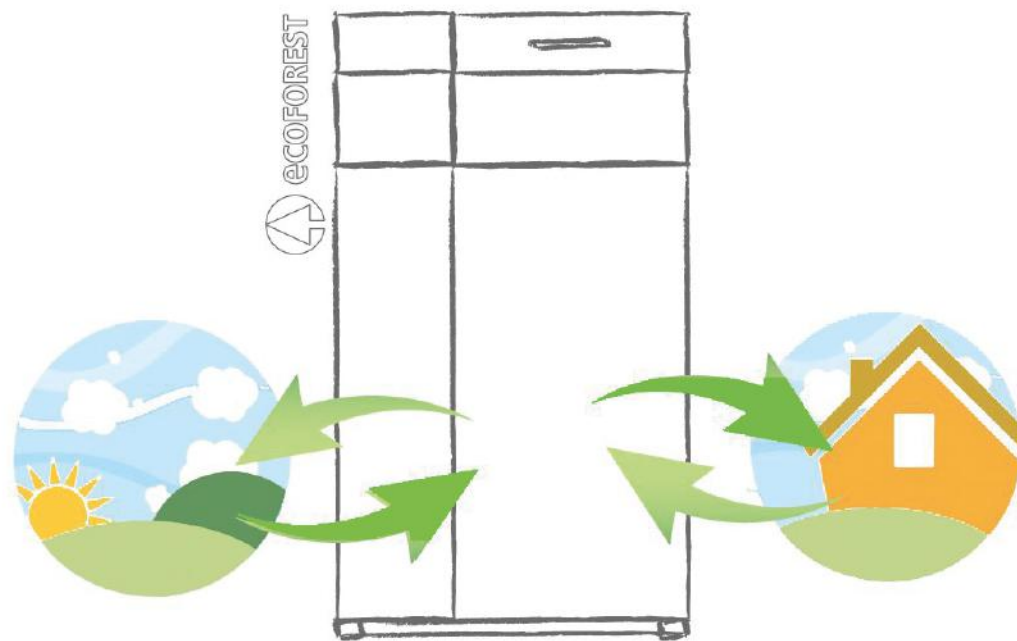
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A photograph of a forest floor with sunlight filtering through the trees, overlaid with a large, semi-transparent green leaf graphic. The scene is filled with green grass and tree trunks, with a soft, dappled light effect. A large, semi-transparent green leaf graphic is positioned in the center, partially overlapping the forest floor and the background foliage. The text "Energy that is clean, unlimited and constant" is located at the bottom of the image.

**Energy that is clean, unlimited and constant**

# Why pay for something that is a gift of **nature**?

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Although it may be hard to believe, we come across an infinite number of different forms of energy every day. Just like there is technology to take advantage of solar energy or the kinetic energy of the wind, there are also machines which can use the temperature of the earth or the air in our favour. This is where heat pumps come into play. These machines, designed to generate heat, DHW and even cooling, use a power supply that is clean, renewable and free that it is right under our feet and in the air that surrounds us.

# How does an ecoGEO heat pump work?

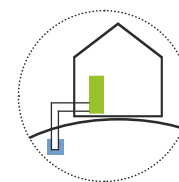
An installation with an Ecoforest heat pump always works with 3 circuits. Ecoforest technology allows the user to adjust all the heat pump components so the 3 circuits work in perfect harmony, consuming the least energy necessary to satisfy the needs of the user. A brief summary of the three circuits is presented below.

## Collection circuit.

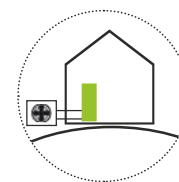
The Ecoforest heat pump circulates a mixture of water and antifreeze agent called glycol through the brine system using a highly efficient, variable speed circulator pump. The purpose is no other than to extract energy from the medium, whether it is earth or air, made possible by the difference in temperature between the medium and the surrounding environment. This is why Ecoforest heat pumps are highly efficient machines; they use the surrounding environment to heat our homes. See Page 8.



Closed-Vertical



Open



Aerothermal

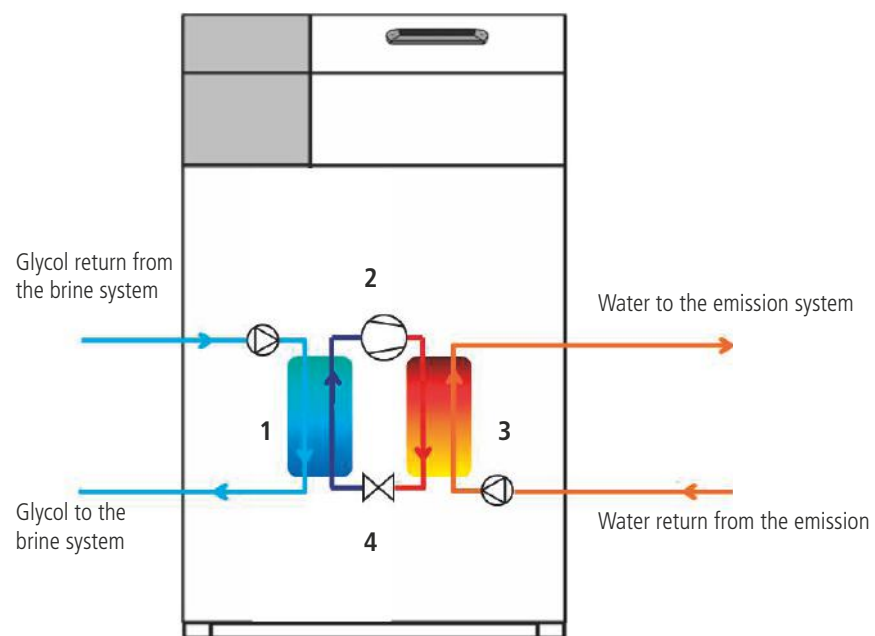
## Standard refrigeration circuit. Heating.

**1 Evaporator.** The evaporator is a heat exchanger where the glycolated mixture exchanges the energy absorbed in the collection circuit with the refrigerant contained in the refrigeration circuit. This energy is enough to heat and boil the refrigerant, since it is essential for the heat pump to work properly, that the refrigerant is completely in gas form.

**2 Compressor.** When the refrigerant in gas phase that exits the evaporator passes through the compressor, it turns into a gas at a very high temperature - which will be used in the next step.

**3 Condenser.** The condenser is another heat exchanger. The refrigerant in gas form and at high temperature that exits the compressor yields its energy to the water circulating through the condenser, increasing its temperature and allowing the generation of heat and domestic hot water.

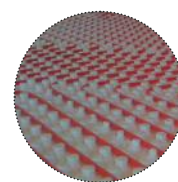
**4 Expansion valve.** The pressure and therefore the temperature of the refrigerant drop suddenly on passing through the expansion valve, thus returning to the conditions necessary to restart the cycle.



In cooling mode, the direction is the OPPOSITE.

## Heating/Cooling circuit.

This part is similar to any other heating system. Ecoforest heat pumps impel the hot water through the emission system (underfloor heating, fan coils ,etc.) using a highly efficient, variable speed circulator pump to heat the home and guarantee the comfort you want - ecologically, automatically and very efficiently.



Underfloor heating



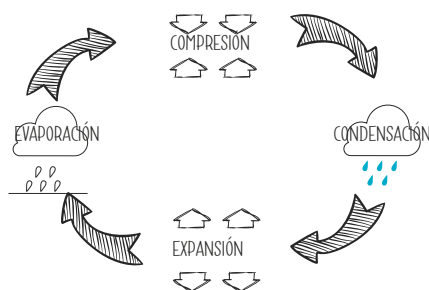
Low temperature radiators



Fan coils

# Applying Thermodynamics

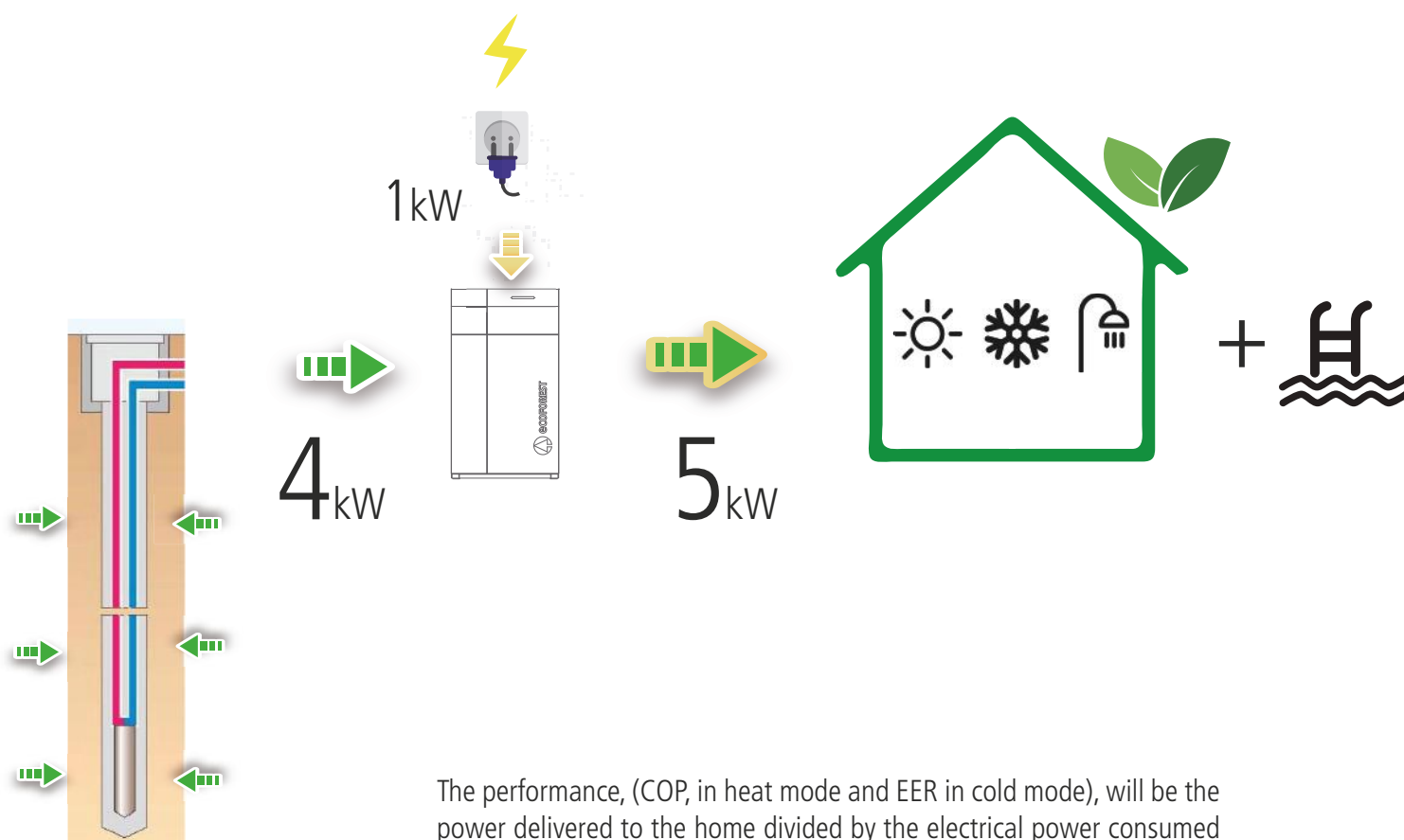
The system is based on the simple cycle described below,



but, **why is it so efficient?**

The reason is because a high percentage of the energy delivered to the home, between 70% and 80% approximately, comes from the collection circuit.

The rest of the required energy comes from the compressor. On this component, Ecoforest applies a series of control strategies that adapt the consumption to the user's needs.



The performance, (COP, in heat mode and EER in cold mode), will be the power delivered to the home divided by the electrical power consumed by the heat pump.

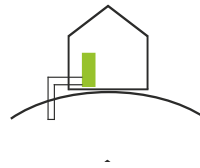
$$\text{COP}_{\text{ecoGEO}} = \frac{\text{POWER DELIVERED}}{\text{POWER CONSUMED}} = \frac{5 \text{ kW}}{1 \text{ kW}} = 5$$

# Types of ecoGEO collection circuits

## vertical

This consists of one or more vertical boreholes of depths between 80 and 150 metres where the collectors are placed.

This is a simple, economic installation; it is widely used because it requires very little surface area and is very efficient.



## aerothermal

This type of collection is most appropriate in areas where the climate is mild or because the ground system is not viable (due to cost, available space or legislation).



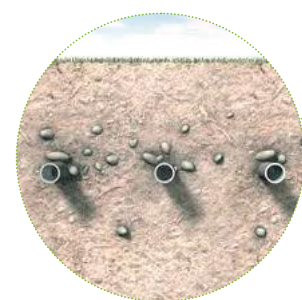
## hybrid collection

This type of collection system is an attractive option if the installation of a ground system at the site is too expensive. In this case, an AU12 aerothermal installation can be combined with a ground; it can also be used to increase the overall performance of an installation, since the software always searches for the most efficient energy source.



## horizontal

The collector is placed horizontally and buried at a depth that can range between 1.2 and 2 metres. This is also a simple installation, although it requires a larger surface area of land than the vertical brine system. Another version are geothermal baskets, which require less space, since they can be placed at a depth of up to 6 metres.



## Other types of collection

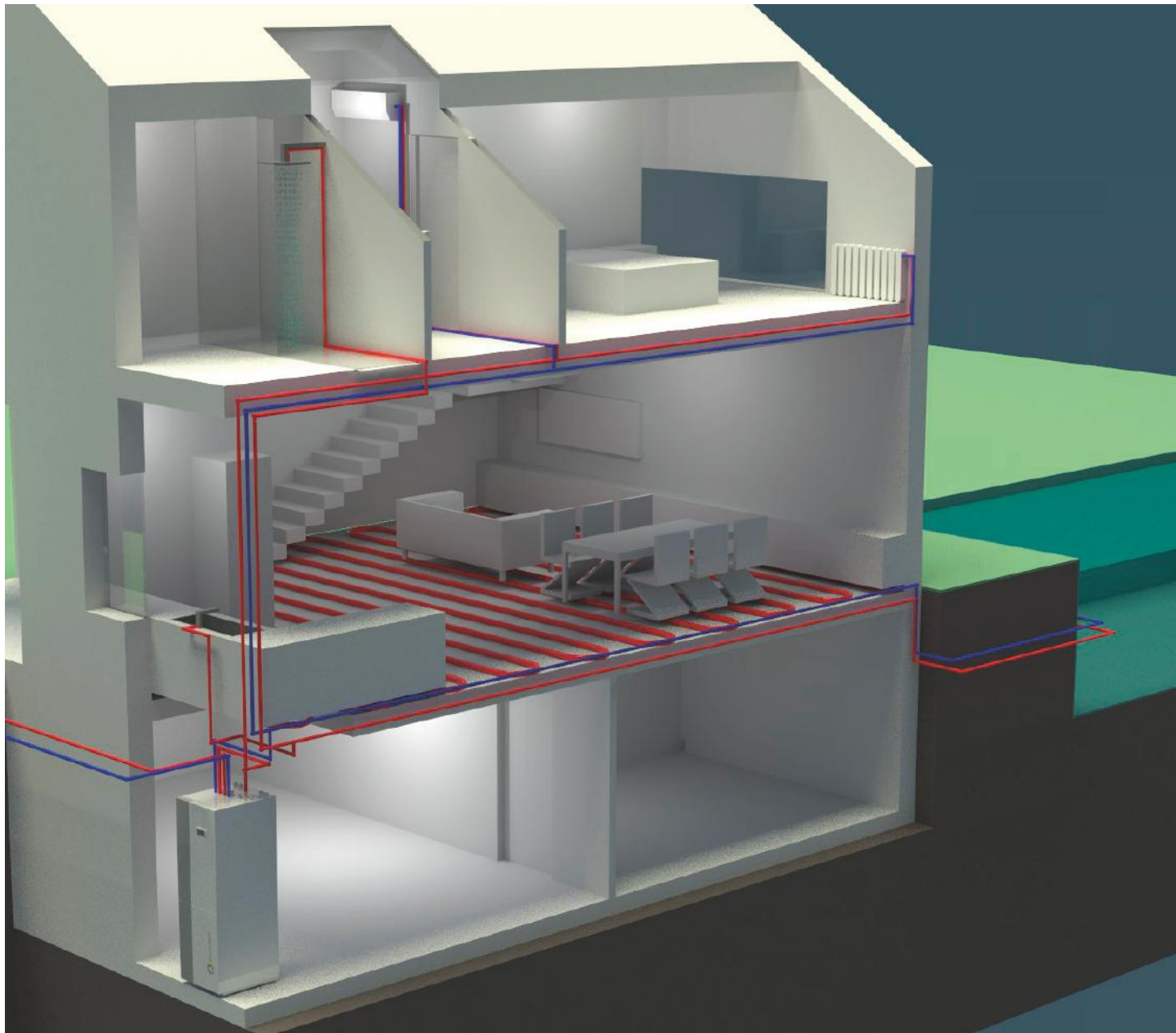
### ground water

This type of collection system can be an option to consider if there is a well, a spring or some kind of underground water source.

In this case, the water is pumped to the heat pump, where it yields its energy and is then returned to the earth through another injection well that is downstream.







## Uses

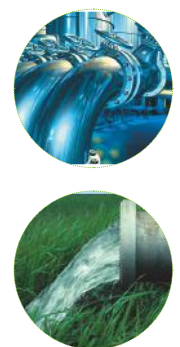
geothermal piles  
geothermal walls

This type of collection circuit is a very attractive option in large buildings since the structure itself acts as a collection. The heat exchanger is embedded in the piles or walls, which reduces the need for additional space dedicated to the collection.



fluids  
grey / waste water

This type of collection circuit can be an option when there is a flow of liquid that has acquired a certain amount of energy. This is the case of grey waters, waste waters, industrial or agriculture process fluids, etc.





**We care about your comfort**

# Why choose **ecoGEO** heat pump?



**SAVINGS.** Ecoforest heat pumps substantially increase savings, not only because they are highly efficient day after day and reduce CO2 emissions, but because of ecoGEO technology and control strategies. Ecoforest heat pump installation is simple, compact and economic, an improvement over other heat pumps on the market because the user can forego certain components that would be essential in the installation of a traditional heat pump.

**LOCAL RESOURCE.** Heat pumps take most of the energy they need from their surrounding environment. Although they still have to be connected to the mains, they do not need to be supplied with any type of fuel, increasing user convenience and comfort. Likewise, they do not generate flames or smoke and provide a comprehensive heating system with little or no visual impact.

**MINIMAL MAINTENANCE.** The technology used by Ecoforest heat pumps is the same as a normal refrigerator, providing them with long lifespan and minimal maintenance requirements.

**MINIMAL NOISE.** Heat pump technology and insulation reduce noise levels to those of a common household appliance. Between 35 and 46 dB.

**SAFETY.** No combustion means no flames or smoke. In addition, the ecoGEO heat pump is totally monitored by the software, security shutdowns take place in the event of machine or external anomalies.

**MINIMAL VISUAL IMPACT.** None of the components in the geothermal configuration are visible. In the aérothermal or hybrid configuration, the air unit can be hidden appropriately to reduce the impact.

**HOLISTIC SYSTEM.** Ecoforest programming allows an integral management of the entire installation from the control screen. Ecoforest control allows user-friendly configuration of the entire system.

**Simple, compact installations**

# Holistic ecoGEO control system. Ecoforest technology

Ecoforest heat pumps stand out from the competition due to their holistic control management system and physical characteristics that provide performance levels acknowledged by several laboratories throughout Europe.

## outdoor temperature control

Possibility to operate according to the outdoor temperature. The possibility to switch between WINTER/SUMMER modes manually or automatically. The option of switching between the HEAT/COLD operating modes automatically by reading the accumulated outdoor temperature (this setting can be changed). The option of generating HEAT and/or COLD in both summer and winter, thanks to the

## control

The operating ranges have been optimised (operation map) to reach more operating conditions in different installations.

## metering

The heat pumps are equipped with energy and performance meters for: instantaneous, daily, monthly and annual periods

## simplicity

The wide modulation range makes possible to avoid having to install the typical buffer storage tanks in most facilities.

## defrost

Our defrost technology makes us unique, since it does not need electrical heaters. An additional exchanger is enough to carry out heat exchange with the circuit of choice -the heating circuit, swimming pool circuit or DHW. This operating mode carries out defrost with a minimal effect on the comfort temperature of the service used to contribute the energy.

## adaptation

The ecoGEO control adapts to the ideal conditions of the comfort zone, thereby enabling a rational use of the energy consumed. It provides the building with what it needs at all times. SEE CHART 1.

## modulation

Ecoforest can provide a wide range of products to cover from 3 kW to 600 kW. In each model, the range of modulation can reach up to 25%, a differential fact. SEE CHART 2.

## software

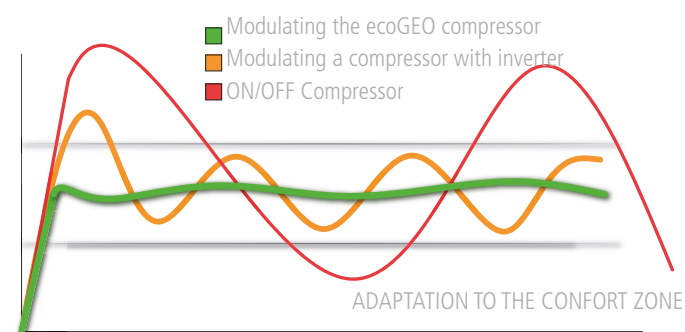
Another significant advantage of the ecoGEO heat pumps by Ecoforest is that their software is designed to be user-friendly. This enables quick and easy start-ups since the customer does not need tedious technical explanations.

## information

The possibility of viewing all the operation and performance information is an important advantage. All the data of the refrigeration circuit, hydraulics or component status, etc. can be viewed on the screen.



CHART 1



## management

Control of 4 outlet groups (3 shunts groups and 1 direct) in domestic ecoGEO installations and up to 30 groups in high-power units.  
Control over the pool.  
Control over zone and modulating valves.  
Control of heaters.  
*Depending on the installation.*

## hybridisation

The use of this technique for collection and thermal production becomes more and more interesting every day.  
ecoGEO software can be used to manage both.  
See Page 28.

## simultaneity

Some installations require simultaneous production of COLD+HEAT. The high power ecoGEO range can provide this thanks to probe, valve and circulator pump control that can be used to generate the specific energy at any time and distribute excess energy to the collection circuit.

## design

The option of placing intakes at the top or rear of the equipment (domestic product range).  
Condensate drain pans.  
A hydraulic system that is easy to access (domestic and HP product range).  
The option of using the desuperheater in the domestic product range. **HTR** system.  
Improved acoustic insulation.  
Large pipe diameter, lower load losses.  
Electrical cards that are easy to connect.  
The domestic product range is completely equipped with circulator pumps, expansion vessels, etc.

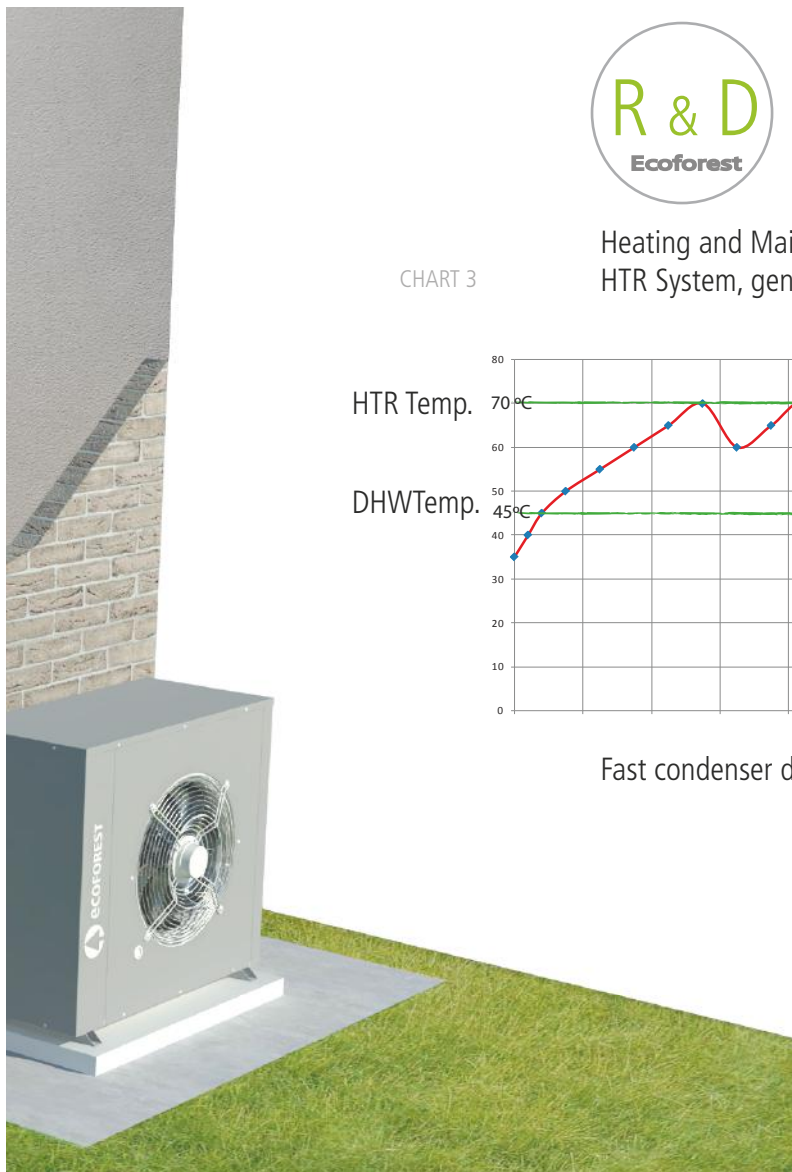
## DHW

### management

Control of DHW recirculation.  
Simultaneous production of: COLD and HEAT.  
The compact model includes a 3/4" intake for recirculation.  
Generation of up to 70°C with the heat pump, without electrical heaters and with **HTR** technology. SEE CHART 3.  
**HTR**: High Temperature Recovery. Increase in overall performance of the system by using more thermal energy with the same compressor consumption.

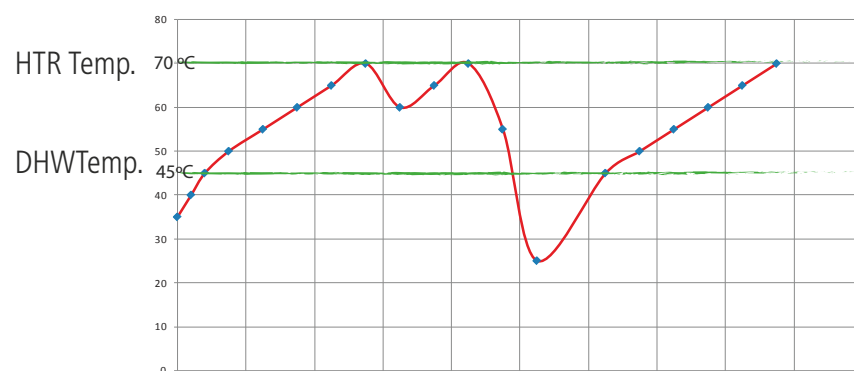
## cascade

In HP range, several heat pumps placed in "parallel" can be managed by the Supervisor; contrary to other cascade controls, the Supervisor distributes the number of hours of operation and the point of maximum efficiency. In other words, a given amount of power is provided by several pumps running at their highest COP point, instead of a single heat pump. The domestic product range can use 3 heat pumps in cascade without a supervisor.



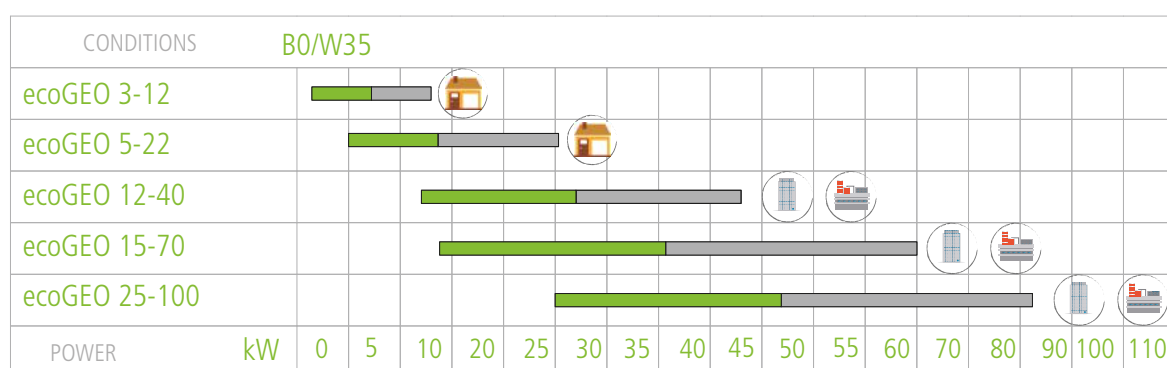
Heating and Maintenance with the Ecoforest HTR System, generating heat or cold

CHART 3



Fast condenser driven heating

CHART 2



# Our products



DOMESTIC  
PRODUCT RANGE



HIGH POWER  
PRODUCT RANGE



HEAT PUMP  
ACCESSORIES

## Module 1

DHW  
Heating

## Module 2

DHW  
Heating  
Passive Cooling<sup>\*1</sup>

## Module 3

DHW  
Heating  
Active Cooling<sup>\*2</sup>

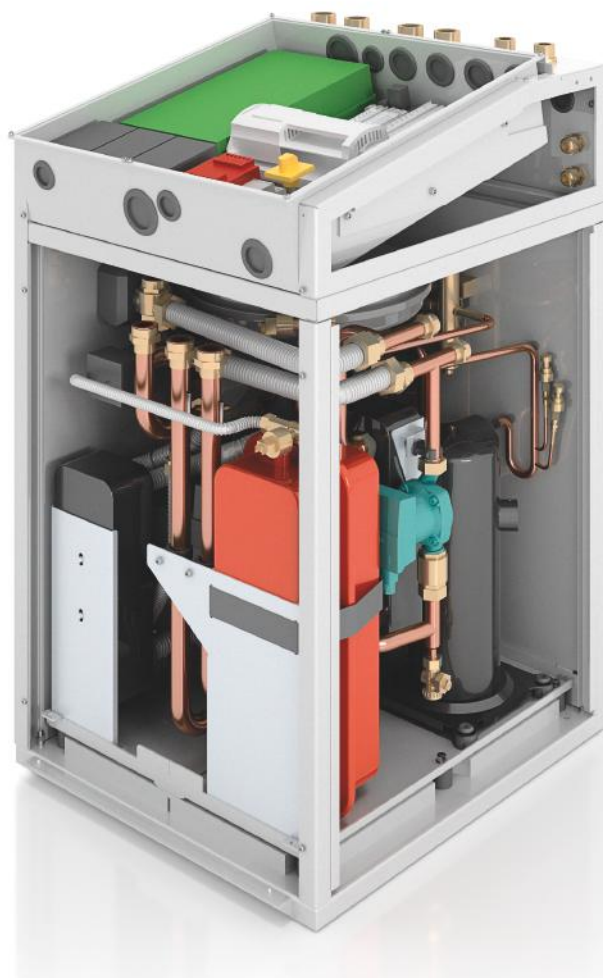
## Module 4

DHW  
Heating  
Passive Cooling<sup>\*1</sup>  
Active Cooling<sup>\*2</sup>

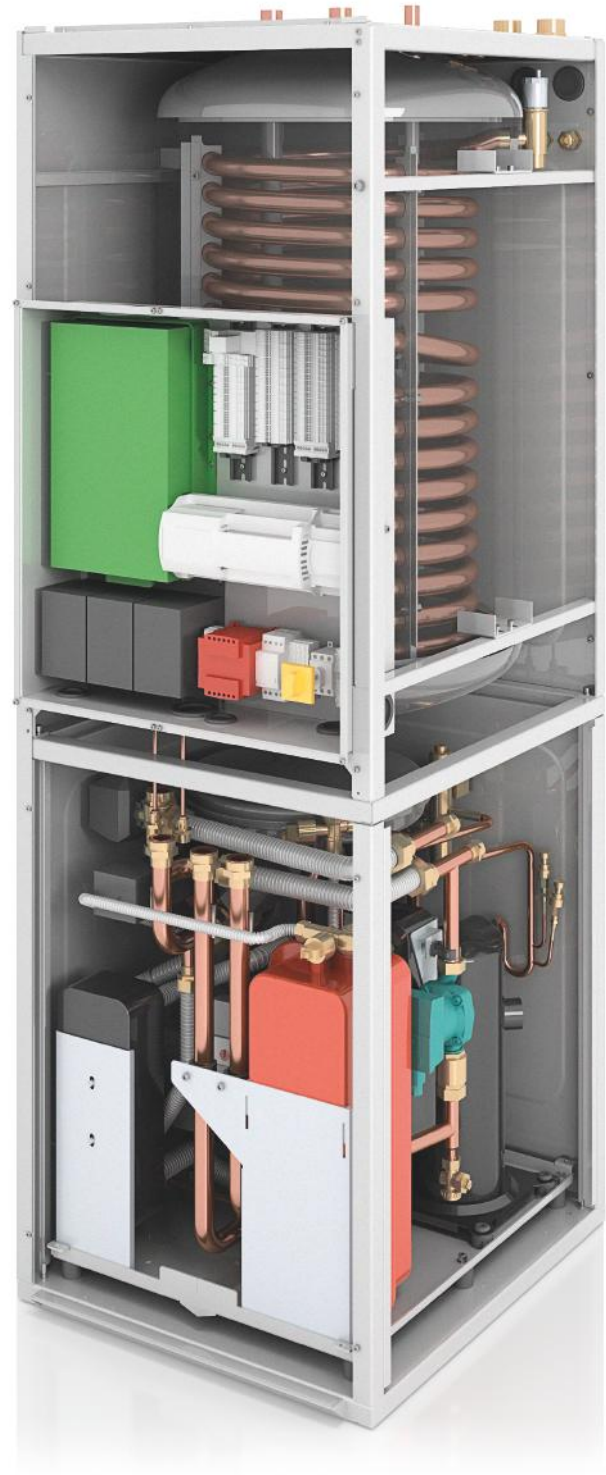
<sup>\*1</sup> The primary and secondary circuits can be managed without inverting the cycle to cover cooling and/or heating requirements.  
Only the circulator pumps run, without operation of the compressor.

<sup>\*2</sup> Reverse cycle colling using a 4-way valve.

## Domestic Range



**ecoGEO Basic**



**ecoGEO Compact**

# ecoGEO BASIC



## Technical characteristics

**Power:** 3- 12/5- 22 kW

**COP:** 4.6 / 4.9

**Refrigerant:** R410A

**Power supply:** 230V and 400V (only 5-22 kW)- 50Hz- 60 Hz

**Weight:** 185-193 Kg

**Noise level:** 35 to 46 dB

**Applications:** Heating, DHW, Active and passive cooling

**Energy labelling with Control:** A+++

## Features

First European manufacturer with Copeland Inverter technology.

Copeland Scroll Compressor.

Electronic expansion valve

Variable speed, high-efficiency circulator pumps.

Alfal Laval asymmetrical plate heat exchangers.

pCOOEM+ Carel Control.

Active cooling by reverse cycle.

Passive cooling completely integrated.

3-way valve for heat/DHW generation.

DHW production via a closed circuit (Patented HTR technology).

Self developed software and control strategies.

Built-in compressor noise insulation kit.

Built-in electric, thermal, COP/EER and SPF energy meters.

Integrated pressure sensors in the brine and heating circuits.

Soft start.





# ecoGEO COMPACT



## Technical characteristics

**Power:** 3- 12/5- 22 kW

**COP:** 4,6 / 4,9

**Refrigerant:** R410A

**Power supply:** 230V and 400V (only 5-22 kW)-  
50Hz- 60 Hz

**Weight:** 247-255 Kg

**Noise level:** 35 to 46 dB

**Applications:** Heating, DHW, Active and passive cooling

**Energy labelling with Control:** A+++

## Features

First European manufacturer with Copeland Inverter technology.

Copeland Scroll Compressor.

Electronic expansion valve

Variable speed, high-efficiency circulator pumps.

Alfal Laval asymmetrical plate heat exchangers.

pCOEM+ Carel Control.

Active cooling by reverse cycle.

Passive cooling completely integrated.

Built-in 165-litre DHW stainless steel tank.

Corrugated and flexible stainless steel helical coil.

DHW production via closed circuit (Patented HTR technology).

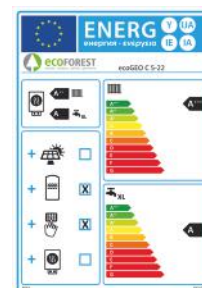
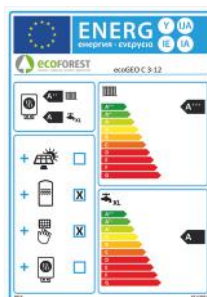
Self developed software and control strategies.

Built-in compressor noise insulation kit.

Built-in electric, thermal, COP/EER and SPF energy meters.

Integrated pressure sensors in the brine and heating circuits.

Soft start.



# Applications of the **ecoGEO Domestic product range**

## Single Zone Scheme



The scheme that is most frequently implemented because of its simplicity and the little space it requires. Depending on the module, this configuration can supply heating, passive cooling, active cooling and domestic hot water. This only requires the following probes: external probe, DHW probe and an activation signal.

In BASIC models, the domestic hot water storage tank has to be installed separately. The DHW probe is already wired in COMPACT models.

### Variant Scheme

#### Single Zone

An attractive scheme for installations that work at the same outlet temperature. Valves are installed per zone to distribute the installation in as many zones as necessary.



## Dual Zone Scheme



This scheme is ideal for installations that require two different outlet temperatures, either because there are 2 different types of emission systems or 2 areas with different uses. Depending on the module, this configuration can supply heating, passive cooling, active cooling and domestic hot water. This only requires the following probes: external probe, DHW probe and an activation signal to manage each zone.

In BASIC models, the domestic hot water storage tank has to be installed separately. This scheme can be expanded to a version with up to 4 zones, 3 shunt groups and 1 direct (See the scheme). The DHW probe is already wired in COMPACT models.

## 4 Temperatures and Pool Heating



A very compact scheme that uses only a few square metres of technical room to cover a very complete and simple installation, avoiding the need to install valves, buffer storage tanks, etc. Depending on the module, this configuration can supply heating, passive cooling, active cooling and domestic hot water. This only requires the following probes: external probe, DHW probe, pool activation signal and an activation signal to manage each zone.

In BASIC models, the domestic hot water storage tank has to be installed separately. The DHW probe is already wired in COMPACT models.

This scheme enables management of the installation from a buffer storage tank. In some installations, energy accumulation can be a needed option due to regulations or individual criteria. Depending on the module, this configuration can supply heating, passive cooling, active cooling and domestic water. This only requires the following probes: external probe, DHW probe, buffer probe and an activation signal. In BASIC models, the domestic hot water storage tank has to be installed separately. The DHW probe is already wired in COMPACT models.

## Buffer





DOMESTIC  
PRODUCT RANGE



HIGH POWER  
PRODUCT RANGE



HEAT PUMP  
ACCESSORIES

**HP 1**

DHW  
Heating  
Active Cooling<sup>\*1</sup>  
Passive Cooling<sup>\*2</sup>

**HP 3**

DHW  
Heating  
Active Cooling  
Passive Cooling<sup>\*2</sup>

<sup>\*1</sup> The primary and secondary circuits can be managed without reversing the cycle to cover COOLING + HEATING requirements.

<sup>\*2</sup> The option of managing external passive cooling modules to cover cooling needs.

## High Power Range



**ecoGEO HP**

# ecoGEO High Power

## Technical characteristics

**Power:** 12- 40 / 15- 70 / 25- 100 kW

**COP:** 4.76 / 4.6 / 4.5

**Refrigerant:** R410A

**Power supply:** 400V - 50Hz - 3/N/PE

**Weight:** 280- 320- 350 Kg

**Noise level:** 46 dB

**Applications:** Heating, DHW, Active cooling



## Features:

Inverter Technology with Scroll Compressor.

Electronic expansion valve

Alfal Laval plate heat exchangers.

Reverse cycle active cooling.

Control PC05+.

Self developed software and control strategies.

Possibility to manage up to 5 outlet units.

Built-in electric, thermal, COP/EER and SPF energy meters.

The option of connecting up to 6 units in cascade.

Soft start.

## Supervisor

### Technical characteristics

External control for the most efficient management on the market of 2 or more HP heat pumps connected in parallel.



# Applications of the ecoGEO High Power Range

## Basic



This scheme covers high thermal demands, while simplifying both the hydraulic part and management. Module 1 covers the heating, pool heating and domestic hot water demand. This only requires the following probes: external probe, DHW probe and a heat activation signal.

It should be noted that a proper external hydraulic design will enable the system to generate active cooling (see the diagram below) and passive cooling, which would be external but managed from the ecoGEO control. Control of up to 5 different outlet temperatures.

## Simultaneous



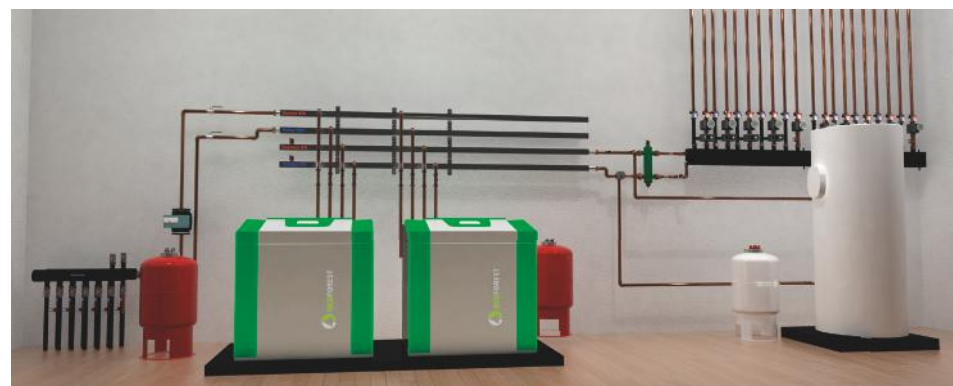
A high energy performance scheme that produces cooling and heating (without REVERSE cycle) simultaneously with the same consumption required to generate heating, which can reach a SPF of 7 or 8, depending on the design specifications. This only requires the following probes: external probe, DHW probe (if required by the installation) and one or more heating activation signals.

It should be noted that a proper hydraulic design can cover passive cooling requirements; this would be external but managed from the ecoGEO control. Control of up to 5 different outlet temperatures.

## Cascade

A typical scheme that requires power over 100 kW. Up to 6 ecoGEO HP units can be managed with the Supervisor (external control) in parallel. The Supervisor is in charge of optimising the operation of the block so it always runs at the maximum point of efficiency and distributes the work load among the ecoGEOs of the block.

Note that a DHW tank can also be managed from the heat pump. -Control of up to 5 outlet units for each ecoGEO HP (4 mixed units and 1 direct unit).





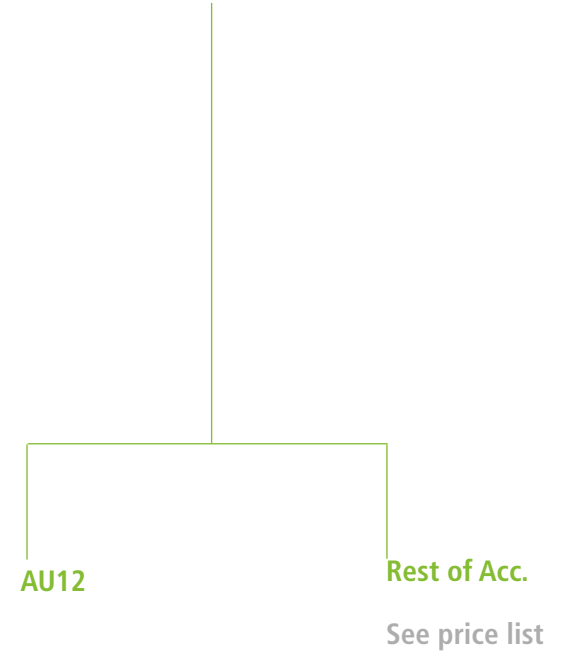
DOMESTIC  
PRODUCT RANGE



HIGH POWER  
PRODUCT RANGE



HEAT PUMP  
ACCESSORIES





## Accessories and additional applications



**Air Unit AU12**

# Aerothermal\_AU12



## Technical characteristics

**Maximum consumption:** 180 W

**Power supply:** 230V- 50Hz-60 Hz

**Weight:** 85 kg

**Noise level:** 42 to -65 dB

**Applications:** Aerothermal or Hybrid Brine

## Features

Compatible with domestic ecoGEO heat pumps.

Built-in hybrid operation, optional combination with ground source boreholes.

Patented defrost system that reduces the number and time needed for defrost.

Axial Ziehl-Abbeg fan with the highest efficiency and most silent operation in the market.

Fan speed control.

Exclusively hydraulic installation.

Main installation components in the internal unit, thereby longer lifespan.

Special protections for operation in the most extreme conditions.

Flexible placement of the aerothermal unit.

Operation up to -15°C.

## ecoGEO defrost

ONLY IN MODULES 2 AND 4



# Applications with Aerothermal Unit

## 1 Aerothermal Unit



Scheme with a heat pump that has an aerothermal configuration, an attractive option for locations with fair weather, where it is not possible to use boreholes due to prohibitive cost or type of terrain or because the area is protected by legislation, etc. This configuration avoids the need to install refrigerant connections between the aerothermal installation and the heat pump, which simplifies the necessary testing in installations with refrigerant (direct expansion).



This scheme reduces the number and/or depth of the boreholes (town/city centers) and is useful if the available surface is not enough for horizontal collection circuits.

## Hybrid



## 2 Aerothermal

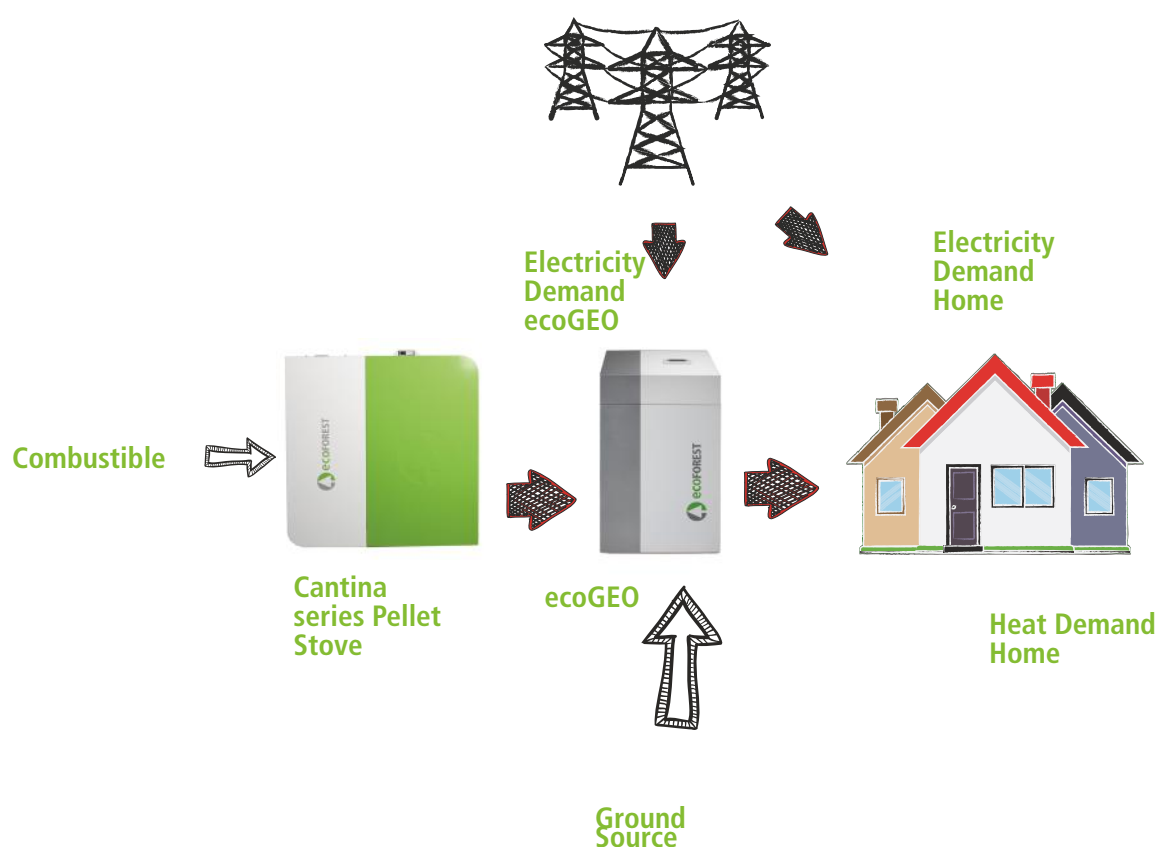
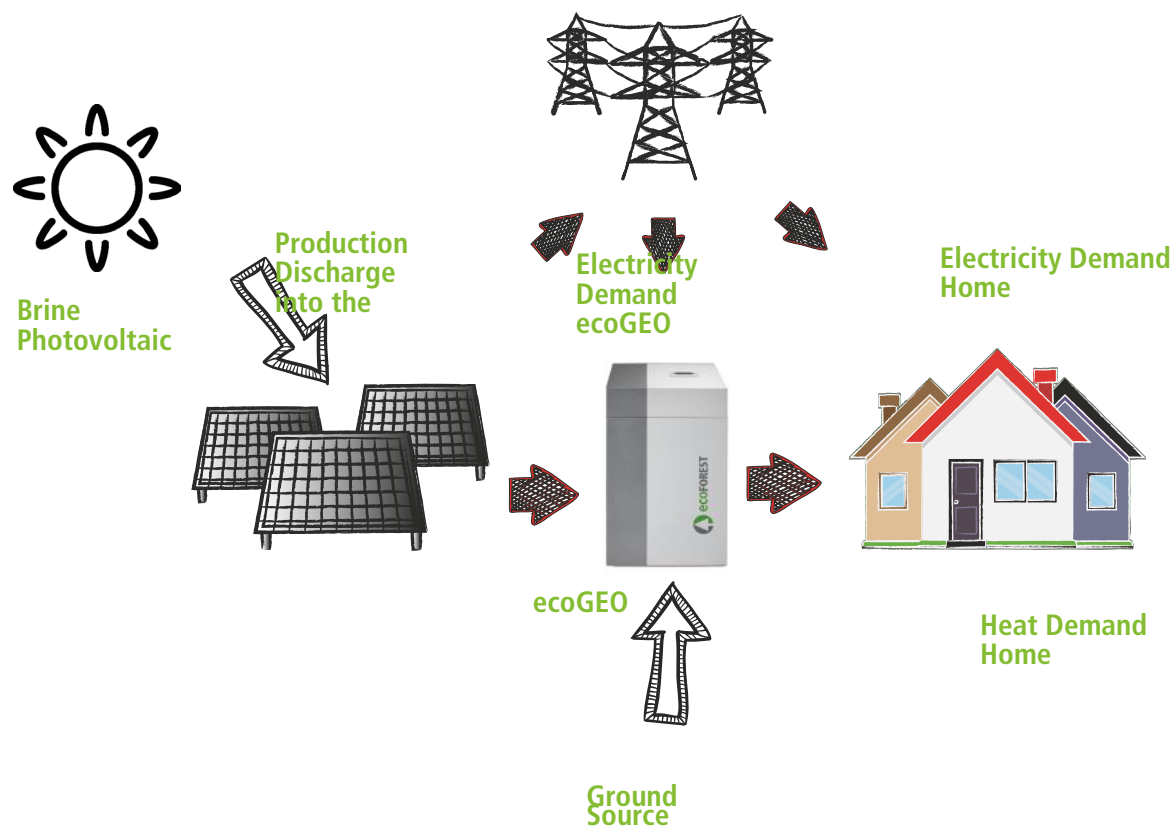


This scheme provides higher collection circuits to combine with ecoGEO 5-22 models in situations where the weather conditions require it. Check price list.

# What is Hybridation?

Hybridation is the combination of sources, different energy technologies (sequential or simultaneous, as preferred) to reach the highest level of efficiency and comfort.

The idea in some cases is to cover the points of consumption, cover DHW, prolong the life of an existing boiler or get the most overall performance from the system (See synoptic).



## Solar Photovoltaic

The ecoGEO SOLAR geothermal heat pump is manufactured with state-of-the-art heating technology. This pump is equipped with advanced power electronics that allow direct coupling to photovoltaic panels that supply the necessary energy for its operation.

A PLC manages the electrical energy produced by the solar panels, thereby providing the heat pump with the energy necessary for its operation and using the surplus to cover the demands of the home. charge storage batteries, charge electric car batteries or inject part of it into the mains.

On the contrary, during the periods when the heat pump consumes more electrical energy than the amount generated by the panels, the deficit will be absorbed automatically from the mains or from the charged storage batteries.

All these procedures are completely autonomous.

The future belongs to sustainable energy: earth, sun, air and water, resources that are practically inexhaustible and that are at our disposal. Using these nature-given resources efficiently and making them accessible to the whole world is our responsibility today for a better world.

The increase in electricity rates and fuel availability will no longer be a worry; energy self-sufficiency is already here, thanks to ECOFOREST.

The market already offers photovoltaic collectors that can use their own thermal energy. This increases the performance of the unit because the panel is refrigerated and the energy is dissipated in the earth, stored or collected directly to evaporate the refrigerant.

AVAILABLE SOON

## NEW Pellet boiler

### GEOHERMAL AND BIOMASS HYBRID INSTALLATION

These systems consist of a Geothermal Heat Pump and a Pellet Boiler used to collect energy from the earth and from biomass to generate hot water or heating as efficiently as possible at any time.

The geothermal heat pump collects energy from the earth and directs it to the heating circuit or to the domestic hot water tank in a very efficient procedure: the lower the desired temperature, the more efficient it is.

The pellet boiler burns wood pellets and delivers the generated heat to the heating or domestic hot water circuit with less efficiency than the geothermal heat pump, except in installations that require temperatures over 60°C. In these, the heat pump is less efficient than the pellet boiler; therefore, applying a hybrid unit of geothermal heat pump and pellet stove avoids the need for electrical heaters.

In this type of hybrid unit, the pellet boiler is managed by the heat pump. Both parts of the equipment should be connected in series so, if the temperature required is lower than 60°C, the heat pump will operate exclusively and if the temperature required is over 60°C, the pellet boiler will start up to raise the temperature from 60°C to the required temperature. All of this is performed with accurate control of the outlet temperature of each unit (Ecoforest technology).

This hybrid operation is highly useful in applications that require high levels of hot water production at temperatures over 60°C. Another case to take into consideration is when the yearly average is generated by the heat pump and the small peaks (a few months out of the year) are covered by a low-energy pellet stove, thereby saving on the investment required for a ground borehole for example.

### AEROTHERMAL AND BIOMASS HYBRID UNIT

In this case, ground boreholes are replaced with aerothermal collection by using an aerothermal unit; a heat pump collecting energy from the air and delivering it to the heating or domestic hot water circuit. The rest of the installation would be similar to the one described above.

This hybrid unit is useful in geographical areas with an average annual temperature of approximately 15°C, since the savings in ground boreholes would be considerable while maintaining efficiency. It can also be applied in cases where there is not enough space for ground circuits (Town/City centres, etc).

This type of hybrid unit can be managed alongside other types of fuels, such as fuel oil, gas, etc.

THIS CONFIGURATION IS ALREADY AVAILABLE.

## Engineering/Assessment:



### Engineering

All Ecoforest heat pumps undergo in-depth quality controls that start at the development/design stage and end at completion of the assembly chain.

### Assessment

The Ecoforest team of engineers is always available to assist our customers in projects that may require special or complex solutions.

## Training Service:



### Tailor-made training

While the quality of our products is our hallmark, so is our training and the knowledge of our professionals. We organise periodic seminars and courses so knowledge about our products translates into efficient installations and satisfied customers.

## Prescription Channel:



### Prescription

Our heat pumps and biomass products have been entered in the CYPE Ingenieros price generator as well as in the Construnario database in order to facilitate the selection of the ideal Ecoforest solution. They will also be entered in CYPE MEP in the near future.

## Technical Promotion:



### Promotion

In line with our notable technical and academic traits, Ecoforest makes it a point to promote our experience and display the progress we make in R&D laboratories and in collaborations with foundations like Energylab.

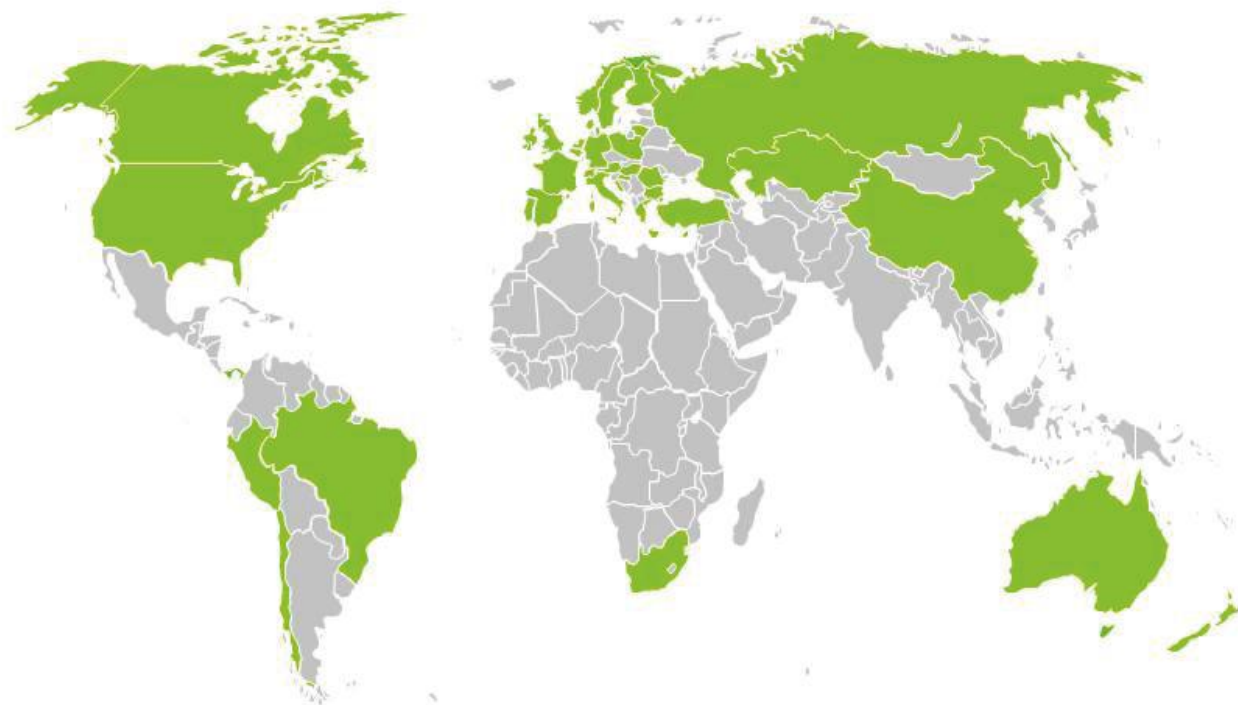
## Trade Shows:



## Installations in 32 countries:

The expansion of Ecoforest heat pumps is a reality; each year more and more countries choose this efficient technology, capable of adapting to any market and any situation.

## GLOBAL PRESENCE, LOCAL SERVICE





More information available at:  
[www.ecoforest.es](http://www.ecoforest.es)

