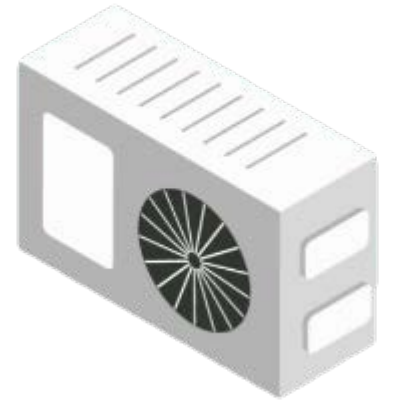




# INTRODUCING THE NEW BOLTERO HYBRID SYSTEMS



Pellet Unit



Heatpump Unit

**Your Friendly Heating Companion Explains**

**20**

**powerful reasons to choose**

**BOLTERO HYBRID SYSTEMS  
as your new heating system.**



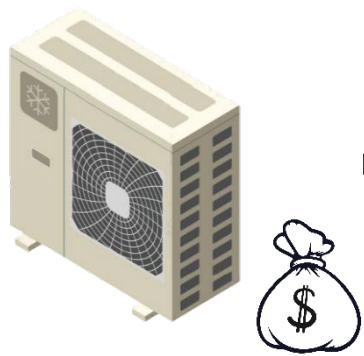
# Price.

+ Double the Capacity!

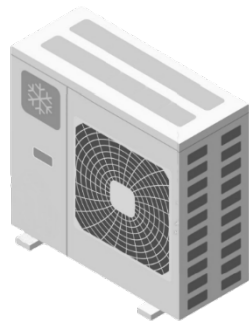
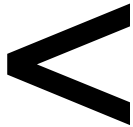
1. TWO UNITS IN A PRICE OF ONE !

A standard house is often offered to connect a 16kW capacity heat pump. If the volume of the house to be heated is larger, even higher capacities are required. Naturally investment costs skyrocket.

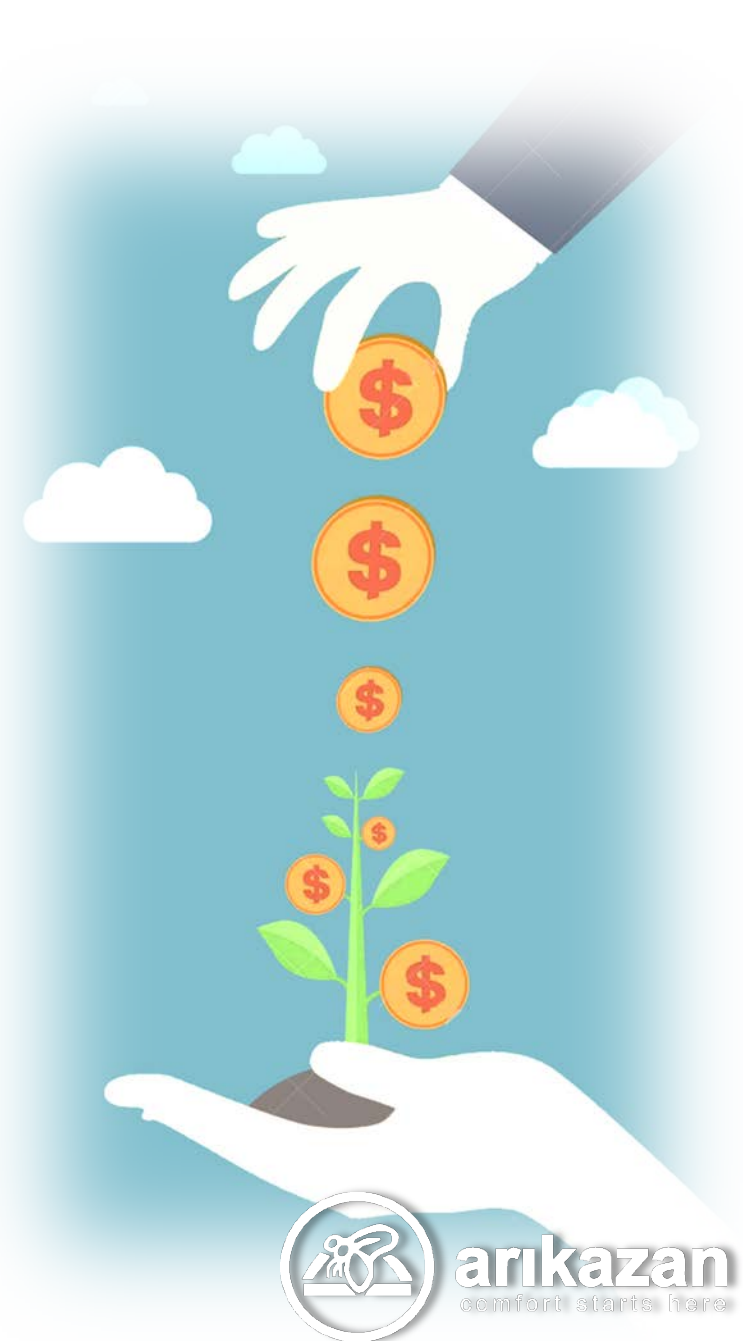
Boltero Hybrid systems offer 2 units in one: **Pellet + Heat pump system for the price of one\***.



16kW



32kW



\* Considering added cost of ancillaries and heat exchanger cylinders.

# Performance.

## 2. HEAT MUCH FASTER !

Heat pumps due to their nature, start heating the house in roughly 90 min. time. Thanks to the 80°C heating capability of the Boltero Hybrid systems, this **time is shortened to 30 mins\***.



## 3. WEAR & TEAR IS MINIMIZED

Any heating appliance can lower it's capacity to about 1/3 rd of it's total capacity for modulation. What happens when your heating requirement is lower than that? The system goes into a «**start-stop**» cycle to meet your heating demand.

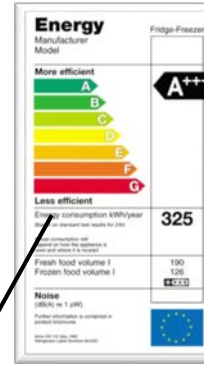
Boltero Hybrid system, thanks to the two units combined, operates in a wider range, **greatly reducing the stop-start ratio** hence the wear on the system.



\* A Times can vary depending on the volume of the house, average climate and insulation degrees.

# Performance:

## 4. SEASONAL EFFICIENCY MATTERS !



As per new EU regulations, heating/cooling appliances are required to be measured all year long instead of snapshot measurements. This matters a lot because seasonal efficiency reflects more accurate info on how much you will spend on your heating.

Thrifty Boltero Hybrid systems, maximize this rating by utilizing both units with great dexterity at best times. The **Heat pump unit switches on the Pellet boiler in the coldest times and the Pellet boiler hands over control in mild seasons to the heat pump.**

They all work in harmony thanks to the advanced controls we employed in the system.



# Upgrades.



## 5. READY FOR SOLAR POWER.

With a solar panel to be added to the system, it is possible to increase the heating performance and efficiency even more, especially in mild seasons.

**Boltero Hybrid systems come;**

**SG-Ready** (Smart Grid Ready)

and

**PV-Ready** (Photovoltaic ready)

Technologies which has the ancillaries and inlets ready to connect with PV panels.



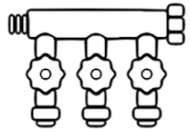
# Convenient

## 6. ALL-IN-ONE PACKAGE.



**Boltero Hybrid systems come with an all-inclusive Plug & Play package.**

That being said, all plumbing elements, valves and fittings come **pre-installed & ready to install.** DHW tank /Instant water heater already installed. In other words, installing a Boltero system is as easy as installing an A/C unit in your house.



COLLECTORS INCLUDED



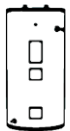
CLOSED EXPANSION TANK INCLUDED



MOTORIZED VALVES



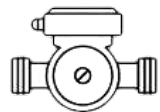
SAFETY VALVE INCLUDED



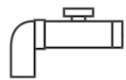
DHW TANK INCLUDED



3 WAY VALVES INCLUDED



PUMP INCLUDED



DRAINAGE VALVE INCLUDED



**Easy Install  
Plug & Play!**

# Installation.

## 7. NO NEED A CHANGE IN THE SYSTEM!

Heat pump models generally require more radiator sizes (or underfloor heating tubes) as they operate at low temperatures. Therefore, it is necessary to add an extra of these elements in the house if HP is to be used as the only heating appliance.

Thanks to our hybrid model, the product can be **installed exactly on the existing system** not only eliminating this requirement, but also simplifying installation.

*Connect it as it is!*



## 8. NO NEED TO ADD A BUFFER TANK!

Heat pumps require buffer tanks to operate. Hybrid models with a pellet boiler, eliminates this need by **acting like an buffer tank with the water volume it provides.**

This not only saves initial investment cost, but also simplifies installation.





# Installation.

## 9. IMMERSION HEATER IS NOT MANDATORY

As per regulations, Hot water must be heated over 65°C to eliminate the risk of Legionnaire bacteria in the water.

Unlike immersion heaters using Heat pump models, Boltero Hybrid systems with the pellet boiler integrated, can **keep the DHW at 65°C at all times and eliminate the use of such an external heater.** \*



## 10. NO NEED THE 380V UPGRADE!

In the higher capacity heat pump models, the resistance heater could be as high as 6kW which typically requires a 3-phase electrical connection. This is a problem especially on old houses.

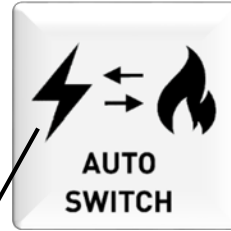
**This need is also effectively eliminated with the use of a pellet boiler.**



\* A user can easily set the system to raise the temperature level to 70 degrees once a week, if desired.

# Comfort.

## 11. EASY CONTROL !



Control all your heating and cooling needs from one central interface.\*

Handle all the automation via smartphone app in the convenience of your living room. You just lean back and relax.



\* A central room thermostat is optional and is available through dealers.

# Comfort.

## 12. MINIMUM MAINTENANCE!

Pellet boilers are powerful and capable biofuel burners but they are, after all, solid fuel products, which require regular fuel supply and maintenance.

In Hybrid products, this need is minimized as the intense use of pellet boiler will only be in the coldest months.

In other words, since the heat pump will be in charge during the temperate seasons, **user intervention will be minimal** and the comfort level is carried to the maximum levels.



# Comfort.

## 13. DOWN TIME FOR DEFROST CYCLE IS MINIMIZED !

Heat pumps must regularly enter defrost cycle to remove icing on the outdoor unit. This means that the device needs to stop heating the house at certain periods and Works to heat the outdoor unit.

In the Hybrid system, there will be **no interruption in heating as the pellet boiler will be heating the house when the Heat pump goes into the Defrost cycle.** This also means less strain on the Heat Pump unit leading to the defrost cycle taking place less frequently.



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comfort starts here

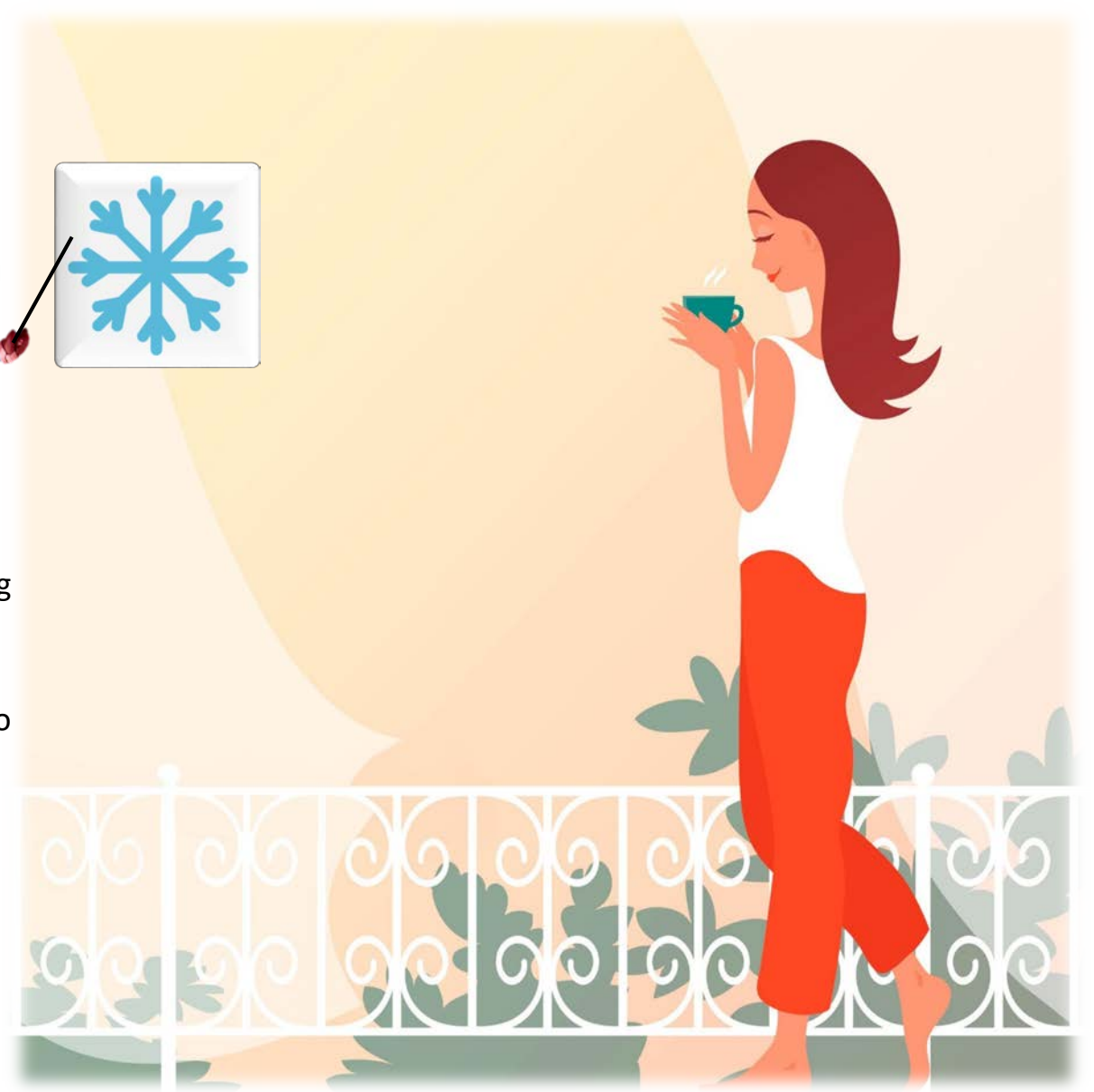
# Comfort.

## 14. COOLING IS ALSO POSSIBLE!



During summertime, the Heat pump can reverse its cycle and deliver **7°C of cold water to the radiators** and is capable of providing passive cooling in the home, if desired.

Boltero Hybrid systems provide cold water on a separate outlet so users can also utilize a fan coil system to increase the cooling effect to a greater effect. \*



# Hot Water.

## 15. LIGHTNING FAST HOT WATER!

Heatpumps need a DHW tank to provide Hot water and this process take a long time to provide hot water due to their low  $\Delta T$  (temperature difference) working nature.

Our Hybrid models on the other hand, can quickly utilize the pellet boiler to produce Hot water at a way better performance with 80°C outlet temperature.

As a result of this, **45°C hot water is ready in just 20 mins!**

\* with the products featuring DHW tanks.

Similarly, continuous hot water can be supplied **12 Lt/min @40°C**

\* With the products featuring instant water heaters.

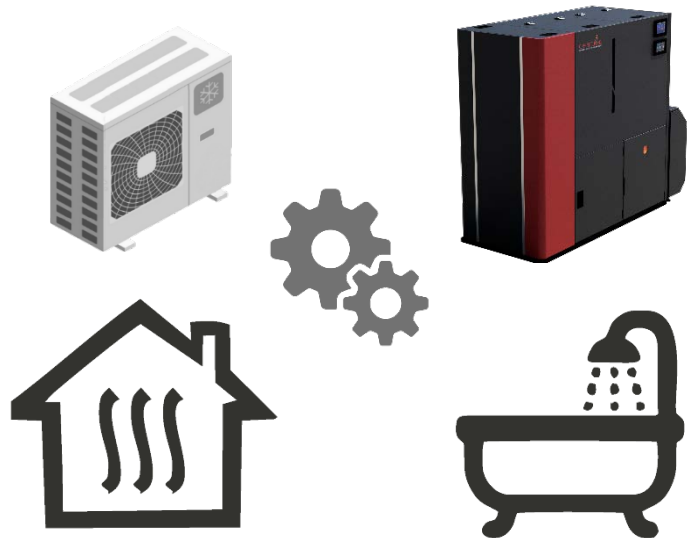


\* A hot start and cold start times can vary.

# Hot Water.

## 16. UNINTERRUPTED HEATING!

Heat pump models have to stop heating the house when they work for the hot water tank. In Hybrid systems, home heating is never interrupted as **the Hybrid system can heat the house and hot water simultaneously.**

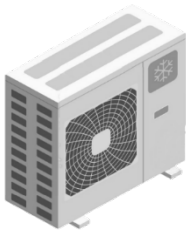


# Reliability.

## 17. YOUR HEATING IS SECURED!

One of the advantages of hybrid models is that two units back up each other. When one runs out of fuel, or stops for maintenance or in the case of a malfunction, the other can continue to function successfully.

**In other words, no bad surprises during cold winter days.**



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# Reliability.

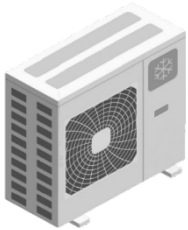
## 18. FUEL OPTIONS !



Since two units working at different fuels in the Hybrid system, the user can choose which fuel to operate.

You can manually select the fuel you want to use, pellet, electric or both.

**So users can effectively react to the changing prices of fuels.**



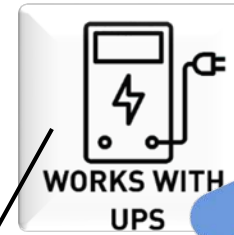
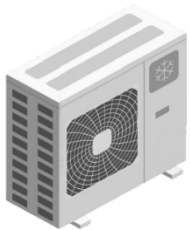
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# Reliability.

## 19. POWER OF AUXILIARY POWER!

Power outages are always hard and frustrating during Winter.

Heat pumps are difficult to operate with an external power unit in these situations as a UPS of at least 3kW/h is required, which is quite big . However, thanks to the pellet boiler's thrifty consumption, **with a 1kW UPS system, you can run your system for 5 hours without electricity.**



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# Environment.

## 20. YOU WILL BE AN ENVIRONMENTALIST!



Think about this: Your Hybrid system consists of 2 environment-friendly units. No fossil fuels are used.

**You will be contributing to the reducing carbon footprint of the World!**

