

# Title of the project



## Short description of the project



- Where is it located? *Aries heat pump was designed by Gebwell Ltd. and is manufactured at our factory in Leppävirta, Eastern Finland*
- What is its purpose? *Aries heat pump is designed to heat and produce domestic hot water in as energy efficient way as possible*
- How was it funded?
- Does it have an environmental relevance? *Yes, thanks to inverter control, the heat pump always operates at the correct power, optimizing heating output. Furthermore IoT is extensively utilized in technology of Aries heat pumps. All Aries heat pumps are linked to Gebwell Smart cloud service as standard when delivered. Thus our Gebwell Smart experts can see the system status of any Aries heat pump delivered if needed. Moreover the heat pump's user interface is a Gebwell Smart mobile application. If so desired the user can upgrade his application to a premium version that gives access to weather forecast optimization service which means that the heating can be adjusted based to weather forecast. The elite version of the application includes full service, where deviations in heating systems are reported to and checked by Gebwell Smart control and also pre-emptive maintenance is a possibility.*  
→ *Inverter control and weather forecast optimization both contribute to heating optimization and thus electricity usage and environmental impact*



Technical details – (you can use 2 slides for this part)



The Gebwell Aries is the first inverter ground source heat pump on the market that is always connected to the factory as standard.

As it leaves the factory, Aries is linked to the Gebwell Smart center, which makes it a particularly stress-free heating system.

The heat pump's inverter controlled compressor is adjusted based on the heating power required. Thanks to the inverter control, the heat pump always operates at the correct power, optimizing the heating output.

The heat pump is pre-linked to a cloud service at the factory, which means that our technical support team can check the system status whenever, if necessary. The cloud service enables user to remotely control the device at any time and from any place.

The Aries user interface is a downloadable mobile application, Gebwell Smart. With the downloadable Gebwell Smart application, the user can monitor and control the heat pump from sofa, for example. The application can be downloaded to smart devices, smartphones and tablets with an iOS or Android operating system.

The Aries heat pump is a constantly developing heat pump. In the future, Gebwell Smart will offer many kinds of additional services to its users, including automations taking into account changes in local weather forecast, for example.

#### Gebwell Aries inverter pump

- The inverter-controlled compressor optimizes the system's heating output.
- A non-stop connection to the Gebwell Smart center
- Mobile application as user interface
- Exceptionally energy efficient
- 5 year guarantee
- Designed and manufactured in Finland





The user interface of Gebwell Aries heat pump is a Gebwell Smart mobile application

## Multiplication potential

- Why is it a best practice example?  
*IoT technology enables vast possibilities to further develop the heat pump in order to enhance comfort of living, increase energy efficiency of heating and cut down heating costs and impact on environment.*
- What would it need to be replicated in other cities (e.g. particular legislation, financial support)? *None*

