

---

# BELIEVE IN SUSTAINABILITY

---

THINK AHEAD.  
ENERGY EFFICIENCY  
AND COMFORT ARE POSSIBLE  
AND NECESSARY. IT'S WORTH IT.





# BELIEVE IN SUSTAINABILITY

Ariston Thermo has placed energy efficiency and technologies using energies from renewable sources at the heart of its sustainable growth strategy. Sustainable and efficient products, solutions and processes can make a decisive contribution to reducing energy consumption and environmental impact without sacrificing comfort.

## 2019 | KEY FACTS AND FIGURES

ROAD TO  
2022

**MORE THAN 80% OF REVENUES** FROM HIGHLY EFFICIENT AND RENEWABLE SOLUTIONS

**3 MILLION TONS OF CO<sub>2</sub> EQUIVALENT AVOIDED** THANKS TO OUR MOST EVOLVED TECHNOLOGIES

**BRINGING COMFORT** WHERE IT IS HARD OR EVEN IMPOSSIBLE TO FIND

 **72%**

OF REVENUES FROM HIGHLY EFFICIENT AND RENEWABLE SOLUTIONS

**670,000**

TONS OF CO<sub>2</sub> EQUIVALENT AVOIDED THANKS TO OUR HIGH-EFFICIENCY TECHNOLOGIES

**+40%**

IN RESEARCH AND DEVELOPMENT INVESTMENTS DEDICATED TO RENEWABLE PRODUCTS



FUTURE-PROOF TECHNOLOGIES: ENERGY EFFICIENCY FROM PLANTS TO PRODUCTS

THE  
ARISTON  
COMFORT  
CHALLENGE

IN ITS FIRST YEAR, IT ALLOWED TO CONDUCT 22 NEW STUDIES ON CLIMATE CHANGE



SUPPORTING LOCAL COMMUNITIES SINCE 1963

## OUR STORIES

### COMMITTED TO ENERGY-EFFICIENT SOLUTIONS

THE GROUP HAS ESTIMATED\* THAT REPLACING LOW-EFFICIENCY PRODUCTS WITH ARISTON THERMO'S NEW HIGH-EFFICIENCY TECHNOLOGIES WILL ALLOW CURBING CARBON DIOXIDE EMISSIONS BY MORE THAN 3 MILLION TONS GLOBALLY BY 2022.



ADOPTING PRODUCTS THAT FEATURE STATE-OF-THE-ART TECHNOLOGY ALLOWS USING CLEAN ENERGY TO ITS FULLEST POTENTIAL. CONSIDERING AN AVERAGE BUILDING IN ITALY IN TERMS OF SQUARE FOOTAGE AND INSULATION, REPLACING A CONVENTIONAL GENERATOR WITH A SYSTEM MADE UP OF ARISTON THERMO'S RENEWABLE PRODUCTS ALLOWS FOR ANNUAL ENERGY SAVINGS OF UP TO 40%.

### FUTURE-PROOF, EFFICIENT AND RENEWABLE TECHNOLOGIES

**One Series** is Ariston's new generation of condensing boilers, designed to deliver maximum performance with minimum emissions thanks to advanced technologies, such as the Xtrartech™ heat exchanger. The One Series boilers achieve an **A+ energy rating** thanks to their temperature control accessories.

**Nimbus Net heat pump** represents the ultimate connected solution for heating, water heating and cooling. The innovative **Energy Manager Technology** handles the entire hardware and software system to ensure low-noise stable performance, including under challenging operating conditions. It is equipped with the **Sensys Net** system interface to control up to 6 zones of the house simultaneously. The App and Web App allow for remote temperature management and hourly programming with 24/7 remote support.



Nimbus Net

In light of the changes introduced by ErP Ecodesign NOx legislation, ELCO Heating Solutions is committed to ensuring that all gas condensing boiler models outperform the current minimum standards, as shown by the **ELCO TRIGON® XL** floor standing boiler, awarded with a **Class 6 NOx rating** due to maximum emissions as low as 34mg/kWh. Similarly, the floor-standing boiler **TRIGON XXL EVO** generates maximum emissions of up to 37 mg/kWh. The optimised combustion system and stainless-steel heat exchanger provide **reliable and robust lifetime performance** while also offering gross seasonal efficiencies of up to **97.5%**.

The energy efficiency and sustainability of Ariston's Thermo technologies is made possible also by **our installation experts**. For instance, during 2019, in countries such as China, Romania and Italy **5,500 people participated in training days** intended to provide technical staff with the expertise and updates required to optimise equipment settings during installation and maintenance, thus **minimising emissions**.

\* this data is calculated on the basis of the Group sales projections

## SUSTAINABILITY BEGINS AT PRODUCTION SITES

**Albacina** represents a world-class hub for the **manufacturing of electronic controls and renewable technologies**, including solar thermal panels. Since 2018, the site has been at the centre of a broad redevelopment investment plan to meet the highest safety, functionality and energy efficiency standards.

**Energy Management:** In 2019, the Group updated the **energy management systems of 5 plants located between Italy and China** (Genga, Cerreto, Arcevia Thermowatt, Wuxi Thermowatt, Wuxi Ariston). This allowed to take targeted measures to reduce losses, laying the groundwork for a long-term energy efficiency strategy **in accordance with SMART goals**. The system includes the installation of electric and gas meters connected to an energy intelligence software that allow to constantly monitor the performance of production sites.

In 2020, the installation of a **tri-generation plant** at the **Cerreto d'Es**i site will significantly curb electricity and gas consumption, resulting in a **26% decline in the tons of CO<sub>2</sub> equivalent generated**—absorbing such an amount of emissions would require planting over 76,000 trees. The new system allows to internally generate the required electricity, recover thermal energy for heating purposes and transform cooling energy to cool processes.

**Free cooling system:** the cooling system implemented by Ariston in Russia, which was successfully launched in

2018, has been extended also to the welding and pre-assembly lines. The system leverages the cold climate of the city of Saint Petersburg, where the temperature averages about 5.8°C, to **cool production lines by using air drawn in from outside for more than 75% of the time**.

**OVER 10,000 TONS OF CO<sub>2</sub> EQUIVALENT AVOIDED THANKS TO THE ENERGY EFFICIENCY OF OUR PRODUCTION PROCESSES**



## NO CHALLENGE IS TOO BIG TO MAKE THE WORLD A MORE COMFORTABLE PLACE

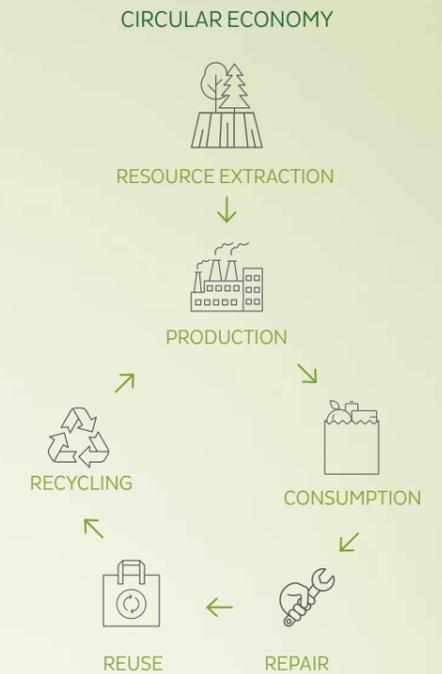
During 2019 the **Ariston Comfort Zone**, a modular house equipped with Ariston's most advanced and efficient technology, enabled a group of researchers from the University of Copenhagen tasked with studying how climate change is affecting the Arctic ecosystem **to conduct 22 new studies**. It is usually impossible to spend more than a few days in a place such as Greenland, where temperatures can drop to -40° and nights can last up to 24 hours—especially during the winter, which is the most critical time for collecting data.

**The Ariston Comfort Challenge**, whose purpose is to provide scientists with thermal comfort during the winter, involved building a modular house equipped with efficient technologies, such as the Alteas One Net condensing boiler, which make it sustainable and capable of withstanding the most extreme weather conditions.

## CLOSING THE LOOP

The **"circular economy"** is a development paradigm that seeks to disrupt the mechanisms of the conventional, i.e. linear, economy and restore the balance between production systems and the environment. Under this mechanism, virgin raw materials are to be brought back into the biosphere cycle. Meanwhile, man-made materials are designed to maximise their useful lives and, once obsolete, become the basic components of a new product, minimising waste and the generation of garbage.

The definition of the circular economy is based on the implementation of **production and consumption strategies that encompass the entire lifecycle of products** and seek to create virtuous cycles centred around ideas such as "zero waste", "value regeneration" and "closed loop". The concept of the circular economy lies therefore at **the centre of topics associated with sustainable development**.



### Greener and greener packaging

The **Imballo** (Packaging) project has allowed to study and develop **more streamlined and recyclable mono-material packaging** for the components shipped to our factories, eliminating the pre-existing plastic wrapping. This commitment concerns the Group, which is exploring how to best extend the shift to mono-material packaging to all other product categories. In addition, studying packaging sizes based on the design of the products allows to optimise their transport, **thus reducing pollution**.



### Curbing polluting emissions

Ariston Thermo's commitment to reducing polluting emissions has led to the introduction of **new models such as the Elco EKL LOW NOx**, which is compliant with the ErP directive. The launch of this burner for the Irish and UK domestic market was followed by a series of **training sessions** both inside the company as well as at local installers and support centres to ensure they are **set properly** and **optimise emissions**. The continuous improvement process concerns existing models, as in the case of the Ultra LOW NOx range: in 2019 the Group was able to **make their performance more stable and reliable**, including in the toughest installation conditions.



### High-efficiency technologies

In line with the gradual evolution of regulations governing ecodesign (ErP) and energy labelling (ELD), all Ariston Thermo's products meet the most stringent energy efficiency standards currently applicable. Since 2015, all equipment sold in Europe with the CE mark must meet a series of **environmental requirements** to deliver greater **energy savings** and **reduce pollutant emissions**.



### Device recycling

The Group is implementing several projects aimed at recycling electric and electronic equipment more efficiently, providing the installers and distributors of its electric products with a completely **free recycling service**. The Group is supported in Italy by the ECODOM consortium, whereas in Spain this service is offered in partnership with ECOLEC—a foundation that provides waste collection services to customers.

<sup>1</sup> "Circularity Gap"; Circle economy; 2019

## BRINGING COMFORT EVERYWHERE, EVEN WHERE IT SEEMS HARD OR IMPOSSIBLE TO FIND

In a fast-changing world, at some point in life, everybody longs for a quiet and comfortable place where they can always feel at home. **Everyone has their own idea of comfort. Although this might come in different forms, it is what everybody yearns for, no matter how you think of it. Ariston Thermos's challenge is to give everyone the comfort they need and where they need it.**

In **Romania**, over 4 million people do not have access to hot water and suffer from the lack of a basic comfort. This is why in 2018 the Group entered into a partnership with the **Red Cross**, taking on the challenge of **bringing comfort across the entire country with its electric water heaters** in order to allow those living even in the most remote parts of Romania, and especially the elderly and children, to use hot water.



**+80,000**  
BENEFICIARIES  
IN 2019 ALONE

**+600**  
WATER HEATERS  
DONATED IN 27  
CITIES

The **Salvamont** project was launched to support the National Mountain Rescue Association—an organisation that is active all year round, 24/7, and consists of 300 professional alpine rescuers as well as 400 volunteers: over the last 10 years, this team has saved more than 55,000 people on the Romanian mountains. **The installation of 24 electric water heaters and 10 boilers** allowed to bring heating and hot water to 30 rescue centres, enhancing the comfort of the rescued as well as their tireless rescuers.

Ariston Thermo has taken on a challenge also in **Italy**, with the goal of delivering comfort to those who need it most, even when it seems impossible to find. As part of The **Ariston Comfort Challenge 2.0** project, launched in March 2019, the Group's sales agencies have identified a series of facilities strongly committed to charitable or social purposes (such as the offices of cultural or volunteer associations) that **lacked an effective heating system**. In the 7 selected facilities, the support and expertise of Ariston's installers and Technical Support Centres allowed to install Alteas One NET—the Group's most advanced condensing boiler.



## ARISTIDE MERLONI FOUNDATION: SUPPORTING LOCAL COMMUNITIES SINCE 1963

The Aristide Merloni Foundation was set up in 1963 at the behest of the eponymous founder with the goal of supporting the creation of new businesses in the area surrounding Fabriano, where the production site is located. The Foundation has gradually turned into a cultural institution analysing local economic and social development processes.

Since 1986, the Aristide Merloni Foundation has been collecting and processing the financial statements of over 200 firms based in the Marche region, placing them in a digital archive accessible to local entrepreneurs. Every year, it prepares the **Marche Company Ranking System** based on the data from the Business Observatory.

The Foundation, in partnership with the Marche Polytechnic University, also participates in the Global Entrepreneurship Monitor—the global report on entrepreneurial activity.

### SAVE THE APPS

The initiatives carried out with local communities are part of a broader project promoted by **Unesco** to support the revival of the Marche Apennines following

the earthquake that struck Central Italy in 2016 by developing digital skills and technologies. The **"RINASCO - Salvare l'Appennino"** (I AM REBORN - Saving the Apennines) project was presented at Unesco's XIII Annual Conference in June 2019.

The Foundation has partnered with the **Vodafone Italia Foundation** to launch a series of Apps with the goal of promoting the local community and its world-class products. **Apennines Discovery** provides users with a series of GPS maps to guide them through the most important landmarks of the Apennines. **Best of the Apps - Local Food** allows to learn about and purchase traditional local products online, promoting food and wine tours while supporting small producers. The **Best of the Apps - Fruits of Apennines** promotes local traditions by taking an innovative approach, leveraging new digital technologies, sensor engineering, and the IoT (Internet of Things) to implement precision farming methods.

Meanwhile, **Health point** is a **digital healthcare centre** located in the city of San Ginesio—a telemedicine project allowing to perform clinical tests remotely and monitor their results that currently represents a point of reference for the entire community struck by the earthquake.



### CREATIVE FABRIANO

The partnership with Unesco has allowed to accomplish an important goal in 2017: **Fabriano was selected to host the XIII Conference of Unesco Creative Cities.**

The annual event allows the 180 cities included in this network, which Fabriano joined in 2013 thanks to its tradition of crafts and folk arts, to exchange best practices. Held in Fabriano from June 10th through the 15th 2019, the event focused on the topic of the "Ideal City" based on the principles of sustainability, resilience, innovation, culture, participation and anti-fragility, with an impressive series of events held before, after and during the week of the Conference.