



For Immediate Release

Contact: Marta Bissoli
+39 0442 630399
marta.bissoli@carrier.com

Riello Developing Burners and Thermal Units Designed to Operate Entirely on Hydrogen

LEGNAGO (VR), xx Dec. 2020 – As part of its commitment to expanding its technology portfolio, Riello is developing the first floor-standing boiler in the TAU N condensing range with 100% hydrogen combustion. Riello is committed to providing thermal energy in the high-power industrial and commercial sector where the technological path for decarbonization does not yet seem clearly identified. [Riello](#) is a leading brand in heating, air conditioning and energy efficiency products and services, and is part of Carrier Global Corporation (NYSE: CARR), a leading global provider of healthy, safe and sustainable building and cold chain solutions.

According to the European Commission¹, "Hydrogen can be used as a raw material, fuel or carrier for energy and storage and has many possible applications in the industrial, transport, energy and construction sectors. Most importantly, it emits no CO2 and almost no air pollution when used. It therefore offers a solution to decarbonize industrial processes and economic sectors where reducing carbon emissions is urgent and difficult to achieve."

Riello shares the vision of the European Commission and, based on its long history of innovation in the industrial thermal generation sector, firmly believes that the energy needs of the sector can be provided through the development of equipment powered by hydrogen. In 2019, Riello launched an ambitious project aimed at the development of a

range of jet burners and boilers specifically designed to operate in full efficiency and safety with this new fuel.

The project is achieving its objectives; in fact, two important milestones have been obtained in recent months:

- Development of two dual stage low NOx burners operating on 100% hydrogen with which RIELLO joined the “Hy4Heat” program sponsored by the British government. The Hy4Heat program aims to establish whether it is technically possible, safe and cost-effective to replace natural gas (methane) with hydrogen in residential and commercial buildings and gas appliances, and to provide the UK government with the guidelines for green policies of the next decade. Riello, thanks to the two burners specially developed for hydrogen operation at 75kW and 33kW, is now an active part in “Work Package 5”, dedicated specifically to “Commercial Appliances.” The burners are currently undergoing laboratory tests.
- Completion of tests at the Riello Combustion Research Center (VR) of a series of condensing thermal units combined with burners with power of 115kW to 210kW operating with 100% hydrogen. The tests confirmed the selection of the materials on the boilers and burners, and on the control and safety systems of the appliances. The tests demonstrated excellent performance in terms of emissions, with the complete disappearance of the presence of carbon oxides in the exhaust (CO-CO₂).

The TAU N boilers series are ready to face the next phase, installation in experimental applications running on 100% hydrogen with commercial and industrial collaborators. The project continues with the aim of reaching the development of the entire range of full hydrogen condensing unit boilers up to 1MW by mid-2021.

For further information visit www.riello.com

¹ [8.7.2020 COM\(2020\) 301](#) *A hydrogen strategy for a climate-neutral Europe*

About Riello

Founded in 1922, Riello is a leader in products and services for heating, air conditioning and energy efficiency. Riello, headquartered in Legnago (Verona), Italy, operates in over 120 countries. Riello is part of Carrier Global Corporation, a leading global provider of healthy, safe and sustainable building and cold chain solutions. For more information visit riello.com