

PRESS RELEASE

Turboden Starts Up Fifth ORC Waste-Heat-to-Power System for AGC Group at Thailand Flat Glass Plant

The 1.8 MWe installation strengthens a long-standing partnership and confirms ORC technology as a best practice for the glass industry.

Brescia, Italy – 16 April 2026 – Turboden S.p.A., a Mitsubishi Heavy Industries Group company, announces the successful start-up of a 1.8 MWe waste heat to power ORC system at the AGC Flat Glass Thailand plant, part of the AGC Group—one of the world’s leading glass manufacturers.

The new installation marks the **fifth ORC system delivered by Turboden to the AGC Group**.

Previous projects include the first system in Italy followed by installations in Thailand and France (both in operation), and two additional plants currently under construction in India, all ranging between 1.3 and 2 MWe. With this project, Turboden further consolidates its long-standing collaboration with AGC and its leadership in waste-heat-to-power solutions for the glass industry.

“Turboden is proud of this new successful waste-to-heat project in the glass industry. Our first experience in this sector dates back to our collaboration with AGC Italy on their plant in Cuneo, Italy, in 2012. Since then, we have delivered four additional projects within the AGC Group, reaching a total of thirteen ORC plants in the glass industry, including flat glass and container glass,” said **Paolo Bertuzzi, CEO and Managing Director of Turboden**.

“Today, we consider waste-heat-to-power based on ORC technology a best practice for the glass industry—not only from an environmental standpoint, but also from a technical and economic feasibility perspective. Depending on the configuration, ORC systems can typically generate up to 40% of the total electricity consumed by a glass manufacturing plant, working automatically and without adding water consumption.”

A JCM-Recognized Decarbonization Project

The initiative represents a historic milestone: it is the first application of an ORC waste heat recovery project in the glass manufacturing sector selected under Subsidy Program for the Joint Crediting Mechanism (JCM) Facility Introduction* by Ministry of the Environment, Japan (“MOEJ”).

Technological Solution and Environmental Benefits

At AGC Flat Glass Thailand, the **1.8 MWe ORC waste heat recovery system** captures high-temperature waste heat from the float glass production process and converts it into electricity for on-site self-consumption. By transforming an otherwise unused energy stream into **CO₂-neutral electricity**, the system significantly improves overall energy efficiency and plant resilience.

The ORC system reduces GHG emissions by displacing a portion of grid electricity consumption. The **expected CO₂ emission reduction is approximately 7,845 tons per year**, equivalent to:

- the annual CO₂ emissions associated with supplying electricity to around **1,500 households**, or
- the CO₂ absorption capacity of approximately **40 km² of forest in one year**.

Customer and Project Rationale

AGC Flat Glass Thailand, part of the AGC Group, produces flat glass for construction and automotive applications. Facing high energy demand and substantial waste heat generation inherent to flat glass manufacturing, AGC sought to:

- increase energy efficiency,
- reduce operational costs, and
- cut CO₂ emissions in line with its sustainability strategy.

Turboden's Solution

Turboden delivered an **ORC system** tailored to AGC's process conditions, enabling efficient recovery of industrial waste heat and conversion into reliable on-site electricity. The solution reduces dependence on external power sources and supports AGC's long-term decarbonization goals.

With this latest project, Turboden reaffirms its commitment to supporting energy-intensive industries worldwide in their transition toward more sustainable, efficient, and low-carbon production.

() Ministry of the Environment, Japan has been implementing the "Subsidy Program for the JCM Facility Introduction," which provides financial support of up to half of the initial investment cost for projects. Representative participants in the Projects shall conduct measurement, reporting, and verification (MRV) of GHG emission reductions. In addition, this financing support program is expected to contribute to global decarbonization by disseminating and deploying advanced decarbonizing technologies while ascertaining in detail the needs of partner countries. This project is being implemented with the cooperation of the governments of Thailand and Japan.*

Media Contact:

Alessandra Costa

Senior Marketing & Communication Manager

alessandra.costa@turboden.it

About Turboden:

Founded in 1980, Turboden S.p.A. is an Italian firm and Mitsubishi Heavy Industries group company, providing global technological solutions for energy efficiency and the decarbonization of industries and utilities. It is a leader in the design, manufacture, and maintenance of Organic Rankine Cycle (ORC) systems, which are highly suitable for distributed generation. These systems generate electric and thermal power by harnessing multiple sources, including renewables such as biomass and geothermal energy, as well as waste heat from industrial processes, waste incinerators, engines, or gas turbines. Today, Turboden is expanding its technological solutions to include gas expanders and large heat pumps, enabling it to play a broader role in decarbonizing the district heating sector and energy-intensive industrial processes.

About AGC Flat Glass (Thailand)

AGC Flat Glass (Thailand) is a leading manufacturer of high-quality float glass products in Southeast Asia and an integral part of the AGC Group. The company is committed to innovation, operational excellence, and sustainability, driving continuous improvements in environmental performance and energy efficiency.