

PRESS RELEASE

AGC FLAT GLASS (THAILAND), TURBODEN and GREENTECH SOLUTION (GTS) adhere to Carbon Footprint Initiatives for Decarbonization

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1.8 MWe Organic Rankine Cycle (ORC) waste heat recovery system inaugurates in AGC showcasing the Financing Programme for the Joint Crediting Mechanism (JCM) Model Projects selected by the Ministry of Environment, Japan.

AGC Flat Glass (Thailand), Turboden (Mitsubishi Heavy Industries group company) and GreenTech Solution (GTS) have reached the joint partnership to display carbon credentials for waste heat recovery and production of green power at AGC's Float Glass Plant in Samut Prakan, Thailand. The ambitious targets to centralize their sustainability strategy with measurable parameters and demonstrate integrative framework to accelerate decarbonization.

Powering unused energy source to produce Carbon Neutral Electricity

At AGC Flat Glass Samut Prakan plant, AGC have proactive measures to access carbon footprint, tracking and monitoring the output in effort to reduce or balance it. The important part of float glass process is the furnace which operates at high temperatures above 1000 degree Celsius, 30% of the heat is lost and unused. Conceptually, recovering waste heat for self-consumption is a resilient efficient use of resources. This heat will generate CO₂-Neutral Electricity by implementing an innovative Organic Rankine Cycle (ORC) plant.

The system reduces greenhouse gas (GHG) emissions by substituting part of grid power consumption for energy saving and reduction of CO₂ emissions. The expected CO₂ emission reduction is 7,845 tons a year, equal to the CO₂ produced to deliver electricity to 1,500 houses in one year and corresponding to the CO₂ absorbed by 40 km² of forest in one year.

Additionally, this joint partnership is the first case adopted to glass manufacturing process as a JCM Model Project* selected by the Ministry of Environment, Japan.

Taku Ohashi, President of AGC Flat Glass (Thailand) PLC. says: *"We are proud that our products are one of the best solutions to build energy efficient building. While we are constantly working to improve the environmental performance of our float glass production, targeting 30% reduction of GHG emission by Y2030. ORC project is one of the great steps towards our decarbonization targets by the alliance with Turboden and GreenTech solution as a JCM model project and we will go further to contribute our social responsibility and Thai industries."*

Paolo Bertuzzi, CEO of Turboden SpA says: *"This is the third ORC system provided by Turboden to AGC Group, one of the main worldwide flat glass manufacturing company. Moreover, this is the third Turboden project awarded with the Joint Crediting Mechanism. Turboden solutions, in fact, fit this type of financing mechanism and similar ones."*

(*) Ministry of the Environment, Japan has been implementing the "JCM Model Projects," which provides financial supports covering up to half of the initial investment costs. The purpose of this model projects is to financially support the implementation of projects which reduce GHG emissions by utilizing leading decarbonizing technologies in developing countries, and in return, to acquire JCM credits for achievement of Japan's GHG emission reduction and the partner countries' emission reduction target.

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