

AGC and TRE Conduct Demonstration of Horizontal Recycling of Window Glass in Suwa City, Nagano Prefecture

Tokyo, January 15, 2026—AGC Inc. (President: Yoshinori Hirai, hereinafter “AGC”) and TRE HOLDINGS CORPORATION (President and COO: Mitsuo Abe, hereinafter “TRE”) have conducted a demonstration in Suwa City, Nagano Prefecture, where Shinshu Takeei Co., Ltd. (a member of the TRE Group, hereinafter “Shinshu Takeei”) is based. The demonstration involved horizontal recycling of window glass attached to aluminum sashes (hereinafter “window glass waste”). The purpose of this demonstration was to regenerate window glass waste into glass of an equivalent quality to the original product, thereby promoting resource circulation and contributing to the reduction of industrial waste that would otherwise be sent to landfill.

Overview of the Demonstration

In Suwa City and its surrounding areas, Shinshu Takeei collected and disassembled window glass waste generated at demolition sites. Subsequently, TRE GLASS CORPORATION (hereinafter “TRE GLASS”), also part of the TRE Group, processed the glass portion into cullet (recycled glass scraps) and conducted quality checks. AGC then verified the process of manufacturing new flat glass using this cullet.



Roles of Each Company

Shinshu Takeei: Collection and disassembly of window glass waste; cost analysis and logistics network study

TRE GLASS: Production of glass cullet and quality inspection

AGC: Process verification for manufacturing flat glass using cullet at the AGC Yokohama Technical Center (YTC)

Environmental and Social Background

In Japan, window glass waste generated from buildings is estimated to amount to at least 500,000 tons annually, and most of it is currently disposed of in landfills or reused for lower-quality applications through downcycling. This demonstration horizontally recycles window glass waste back into the same application of equivalent quality, aiming to reduce industrial waste. In addition, by increasing the ratio of cullet used in glass manufacturing, the initiative seeks to lower greenhouse gas (GHG) emissions and conserve natural capital by reducing consumption of virgin raw materials such as silica sand and soda ash.



Your Dreams, Our Challenge



TRE HOLDINGS

toward a WX environmental company

Verification of Economic Feasibility

While metal frames from discarded windows have typically been bought as valuable scrap, there has been little development of a reliable mechanism for purchasing the glass itself as a valuable resource, posing challenges to economic sustainability. In this demonstration, AGC and TRE calculated the costs of each step in the horizontal recycling process for window glass waste and verified the overall economics across the supply chain. Going forward, the two companies will evaluate the economic feasibility of glass recycling and aim to build a nationwide framework to promote resource circulation of window glass.

Alignment with Corporate Plans

Under the AGC Group's medium-term management plan, [**AGC plus-2026**](#), the AGC Group has defined "three social values" to be created through its products and technologies. In the "Blue planet" value, AGC views effective resource utilization as a key opportunity and contributes to a sustainable global environment through the expansion of horizontal glass recycling.

TRE's Second Medium-Term Business Plan (FY2024–FY2028) sets out a long-term vision of "becoming a WX environmental company." The company promotes Waste Transformation (WX) to overcome the technological and economic challenges associated with waste treatment by transforming difficult-to-recycle waste and end-of-life products into resources and energy. Through this initiative, the company fosters co-creation that transcends the traditional boundaries between the waste management and other industries, as it contributes to the circular economy by realizing an efficient-recycling, carbon-neutral society.

<Reference Information>

AGC initiatives on window glass recycling

- [ORIX Group and AGC Develop Japan's First Window Glass Horizontal Recycling Business Scheme](#)
- [Exhibiting Flat Glass Horizontal Recycling Efforts at Expo 2025 Osaka-Kansai](#)

Media Inquiries

- AGC Inc., Corporate Communications & Investor Relations Division —[Contact Form](#)
- TRE HOLDINGS CORPORATION, Investor and Public Relations Department —e-mail: contact@tre-hd.co.jp