AGC to Double Its Production Capacity of Energy-Saving Low-E Glass

AGC Asahi Glass Co., Ltd.

AGC (Asahi Glass Co., Ltd.; Head Office: Tokyo; President and CEO: Kazuhiko Ishimura) will introduce cutting-edge coating facilities at the Kashima plant (Kamisu-city, Ibaraki prefecture), in addition to the Low-E glass production facilities which are currently in operation, in order to double its Low-E glass production capacity. The Company will make an investment of approximately three billion yen in the new facilities, and aim at launching their operation in April 2012 with the purpose of actively responding to a surge in demand for Ecoglass (Low-E double-glazing glass) and the need for an increase in product performance/diversification.

Recently, high energy-saving glass is drawing attention as a result of the increasing public awareness towards energy conservation, the introduction of the housing eco-point system and the revision of the Energy Conservation Law. While transparent, double-glazing glass was mainly used in newly-constructed single-family houses, multi-family dwellings and commercial buildings in the past, the demand for Ecoglass with higher energy-saving performance has been rising sharply since the beginning of this year and is expected to expand further in the future. In the meantime, we expect Ecoglass products will undergo performance improvements and there will be an expansion of the product lineup in order to meet the diverse needs of customers, such as the pursuit of higher heat insulation and heat-shielding performance, ensuring increased visibility and rich color variation that suits various settings.

For over a period of ten years, AGC has been manufacturing and selling Low-E glass, a component of Ecoglass, using the high performance inducing sputtering method and currently has the largest share of the domestic market. AGC looked upon the surging demand and diversifying needs with regards to Ecoglass and decided to establish state-of-the-art coating facilities. The features of the facilities that will be newly introduced are as follows.

(1) The largest coating capacity in Japan:

Delivers a coating capacity of 6.8 million m² per year initially in new facilities alone and of 13 million m² per year when combined with existing facilities.

(2) The largest number of coating layers in Japan:

High-performance Ecoglass and a wide range of color variations can be achieved with more advanced multilayer coating, which is created using one of AGC's specialty area: the sputtering method.

AGC is committed to contribute to solving the global warming issue. Leveraging the expertise in glass and chemicals which has been cultivated over the years, we will provide products and processes that are conducive to energy conservation.

End

⊚Inquiries: Toshihiro Ueda, General Manager, Corporate Communications & Investor Relations, Asahi Glass Co., Ltd. **AGC**

(Contact: Kenichi Oda; Tel: +81-3-3218-5260; E-mail: info-pr@agc.com)

<Glossary>

Ecoglass

Ecoglass is the general term for Low-E double-glazing glass manufactured by Asahi Glass Co., Ltd., Nippon Sheet Glass Co., Ltd and Central Glass Co., Ltd. which are members of Flat Glass Manufacturing Association of Japan. In order to be designated as an Ecoglass product, Low-E double-glazing glass must exhibit the following heat insulation and heat shielding performance properties.

- (1) Heat insulation performance: $\star\star\star\star$ (top rank) or $\star\star\star$ (second rank) in the "Energy-saving architectural material ranking".
- (2) Heat shielding performance: Satisfies the next-generation energy saving standard with a layer of lace curtains or no attached component placed over the window.

Sputtering method

A method of forming films by creating a vacuum in a large container referred to as a "chamber", injecting an infinitesimal amount of specialty gas and applying a voltage amount to the inside of the container. Glass with different energy saving performance and color tones can be produced using this method by changing the combination of metals and thickness configuration.

Comparison of energy saving performance of major glass products

	Float glass 3mm	Transparent double-glazing glass	Ecoglass Low-E3mm + A12mm + 3mm
		3mm + A12mm + 3mm	
Heat transmission coefficient (U-value)	5.1	2.5	1.5
Solar heat gain coefficient (η-value)	0.89	0.80	0.42
Shading coefficient(SC-value)	1.01	0.91	0.48

^{*}A: air layer

Heat transmission coefficient (U-value)

Indicates the amount of heat that passes through an area of 1m² in watts when the difference in temperature inside and outside glass is one degree. The smaller U-values of glass are, the higher their heat insulation performance is and the lower their heating loads will be.

Solar heat gain coefficient (n-value)

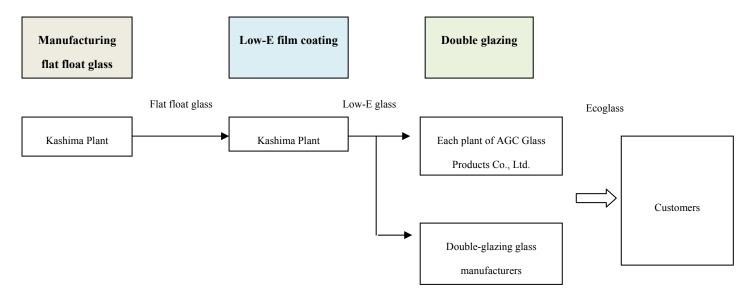
Indicates the ratio of amount of heat that flows in a room assuming that η -value of light incident on glass surfaces is 1. The smaller the η -value of glass is, the higher its heat shielding performance is and the lower cooling load will be.

Shading coefficient (SC-value)

This indicates the ratio of shading coefficient of glass when η -value is 0.88. The smaller the SC-value of glass is, the higher its heat shielding performance is and the lower its cooling load is.

<Reference>

AGC's shipment process for Low-E glass



Structure of Ecoglass product (Low-E double-glazing glass)

