Leading the way with ‘Green & Sustainable’ products: AIS

In an exclusive interaction with Realty Plus, Vikram Khanna, COO of Asahi India Glass Ltd. (AIS), talks about the journey of the brand, which spans over 3 decades - the triumph and turbulences they faced and how on the sheer dint of product innovation they emerged out to be the leading glass manufacturing company in the country. Excerpts...

The Company’s origin can be traced to the JV agreement between the Labroo family, Asahi Glass Co. Ltd. (AGC), Japan and Maruti Suzuki India Ltd. in 1984. AIS has always been driven by market-leading innovations that provide the right blend of energy saving and daylight, technology and sensitivity, visual and thermal comfort, along with the state-of-art-glass manufacturing facilities. AIS products support sustainable future and also facilitate the age of green buildings.

AIS has 4 Strategic Business Units (SBU's) – Automotive Glass, Architectural Glass, Consumer Glass and Solar Glass.

The glass product portfolio of AIS offers customized solutions to meet the functional needs. With products that provide the right blend of daylight, visual comfort and thermal control, energy saving, Eco-sensitivity, and technology AIS brings new ideas to life – enabling an age of a truly sustainable future with green infrastructure. AIS has unique glass processing capability, which include processing of value-added glass products.

Products and Services:

Different applications call for different glass products, because each form of application has its own unique demands. Even when it comes to external glazing – or internal glazing – there are different needs even though the area where the glass product is being used is the same.

AIS has a wide range of products to suit every need that glass finds application in. The range of internal glazing solutions from AIS includes a variety of specialised and value-added products that not only make your space look beautiful, but also keep you in comfort. Glass can be used for a variety of applications such as in the design of separators and mirrors, table-tops, interior doors, customised furniture, stairways, floors, etc.

Structurally sound and pleasing to the eye, external glazing solutions from AIS combine superior thermal properties with enhanced strength. Ideal for use in door and windows, skylights and facades, these products are technically better and provide greater value when compared to traditional materials.

Wave Group, Tanglin, K Raheja Corp, RNA Corp, DLF are few of our architectural glass clients.

AIS Products for Realty sector –

AIS Clear – Clear Float Glass
AIS Tinted – Heat Absorbing Glass
AIS Mirror – Distortion-Free Mirrors
AIS Décor – Lacquered Glass in Vibrant Colours for Interiors
AIS Krystal – Frosted Glass
AIS Ecosense (IGBC Certified) – High-Performance Energy-Efficient Reflective Glass (Soft Coat)
AIS Sunshield – Heat Reflective Glass
AIS Opal – Heat Reflective Glass (Hard Coat)
AIS Opal Trendz – Patterned Heat Reflective Glass (Hard Coat)
AIS Stronglas – Tempered Glass
AIS Securityglas – Intrusion-resistant laminated glass with 1.52 mm PVB interlayer
AIS Securityplus – DuPont Sentry Glass interlayer makes it 5 times stronger and 100 times stiffer than conventional laminating materials
AIS Valuglas – heat-strengthened laminated glass with 1.14mm PVB interlayer
AIS Acousticglas – Sound Resistant Glass
AIS Swytchglas – Smart glass which turns transparent to opaque and vice versa with a touch of a button.
AIS Pyrobel – Fire-resistant Glass Range
AIS Renew – Retrofitting Solutions

At a time when architects, builders and customers are all looking for ways to reduce energy consumption, improve safety parameters and enhance the aesthetics of commercial and residential spaces, glass presents itself as a viable, attractive and economical option. And as India’s largest integrated glass company, AIS is pioneering the development of newer, more advanced products to help realise new possibilities in glass.

AIS contributing to the green building mission:
In the modern architecture, glass as a sustainable material has a huge demand as it is an indispensable part of green buildings. With the right glass selection, a huge amount of energy saving can be achieved. As glass allows ample daylight inside the space it reduces the need for artificial lighting which in turn reduces the energy load drastically. As glass is a recyclable product, it can be reused which lowers the need for virgin materials.

AIS has pioneered innovation in glass processing technology & has developed both single-glazed and double-glazed products with the best ‘green’ parameters. This gives architects and developers greater ability and choice to explore possibilities. These solutions enhance the efficiency, economics of residential and commercial spaces and aesthetics as compared to the traditional building materials.

To match the material requirements for a tropical countries like India, AIS has range of green products to offer under 5 distinct categories within the Ecosense brand, viz: Ecosense Enhance (Solar Control), Ecosense Exceed (Solar Control Low-E), Ecosense Essence (Low-E), Ecosense Edge (Solar Control & Thermal Insulation which can be used in SGU) and Ecosense Excel (Double Low-E).

Role of Glass Sector in Smart Cities:
Smart cities initiative of the government is a huge opportunity for glass industry, especially for those who have the range of high performance value added glass products and integrated solutions. High performance glass is an integral part of any building in a “smart city”. These glass products are capable of huge energy savings, acoustic solutions, safe and serene building spaces as well as fire protections. Plus, glass is a “green” material and is 100% recyclable.

AIS is fully positioned to cater to this opportunity and is already working closely with various government and other agencies towards this mission.

Tech innovation in glass sector:
Innovation is the key to success. Due to the state-of-the-art technologies for lamination and processing, it is now possible to create new varieties of glass. These innovative glass products and solutions enable perfect blending of function and aesthetics – for both exterior and interior applications.

New glazing technologies and trends have been listed below:-
Improved thermal insulation glazing
Double-layer façades
Façade Retrofitting for better energy performance
Smart Glazing
Light Shelves
Integration of photo-voltaic
Innovative structural use of glass
heat-reflective glass

Trends in Glass Segment:
As glass has now become the choice of modern architects and interior designers all over the globe, there has been a lot of innovation in glass technology that enables designs to be more integrated with light. This allows the designers the demonstration of design inclinations and also provides a chance to interact with the outside world. Glass not only provides a see-through property but is also the only building material which provides structural safety.

Glass has a numerical application from large media facades to small tables, to lit-up glass shelves. The trends that the glass industry will see in the near future could be a combination of integrated blinds and innovative light source which can be used to produce alluring and impressive 3D glass effects.

Rapidly advancing technology enables solar protection glass and modern heat insulation with switchable glazing to be installed in residential and commercial shells efficiently. It also meets highest aesthetic standards. The innovation of hybrid components such as advanced laminating and adhesive technology, hot and cold-bent glass combined with new technologies has drastically improved the efficiency of glass applications.
Double Low-E glass
Fire-resistant Glasses
Facade Retrofitting for better energy performance
Reflective Glass (High-Performance Glasses)
Heat absorbing glass

Business Prospects:

Last year remained yet another subdued year for the real estate industry. Affected by demonetization, RERA and run up to the GST, the construction sector remained muted with 1.7% growth. Our sales were flat in the institutional segment as very few large projects came up for bidding and closure. However, our sales in the distributed market remained strong with the introduction of a range of new value added products which were well received by the market.

Our outlook for real estate industry remains very positive and we are very bullish with our range of high performance value added products and integrated solutions. Further new regulations like Energy Conservation Building Code (ECBC) and National Building Code (NBC) recently released by government are very positive for AIS. Both these regulations are forward looking and very positive for the industry and consumers. Energy, safety, acoustics, day-lighting and fire protection in a building, some of which are key ingredients of “Green Building” and which are all possible through correct use of value added glass, are very well addressed in these Regulations. We are very confident of strong demand for glass solutions in the near future.

All the government aided schemes are a huge boost to the glass industry. Glass is a very friendly construction material with almost ZERO maintenance costs. AIS has a range of products for every segment of the market and we are very happy with the government’s boost for affordable housing. This will only increase use and penetration of glass in India.