

A holistic sustainability strategy at **EDGE TECH EUROPE**

Driven by increasingly stringent environmental regulations, rising energy costs and a growing demand for sustainable buildings, the construction industry is set to undergo significant changes in the coming years. Here's why component suppliers such as Edgetech Europe, the manufacturer of the flexible spacer system Super Spacer®, must consider ways to go beyond

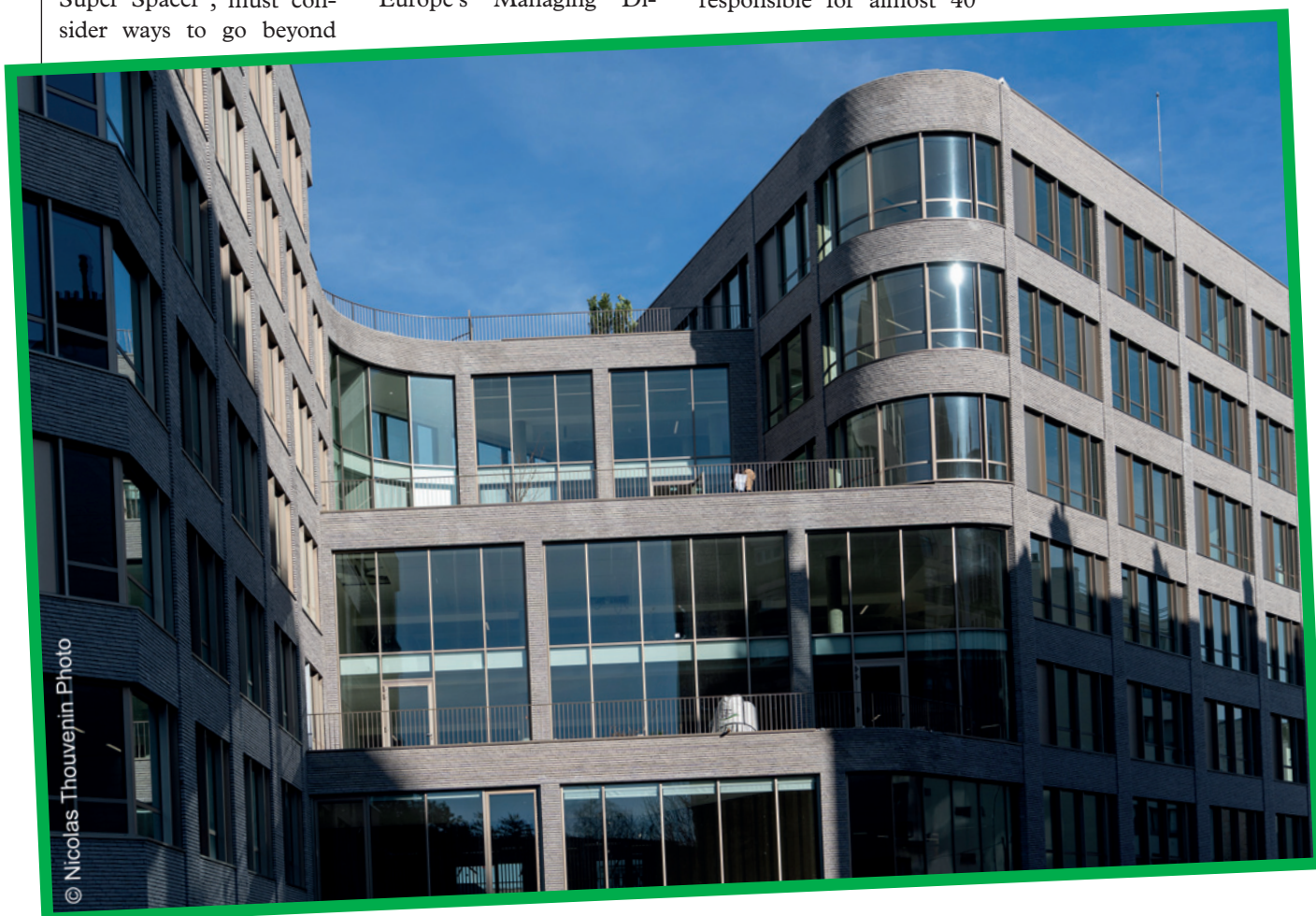
merely developing and marketing 'green' products in this environment. A comprehensive sustainability strategy is becoming essential for achieving long-term success. This strategy must encompass the entire value chain - from resource-saving production and energy-efficient solutions to solutions for the circular economy. Edgetech Europe's Managing Di-

rector, Johann Artamonov and Benjamin Karabulut, the company's European Technical Manager, provide insights into the key milestones for sustainable development.

LEVERAGING ESG CRITERIA TO DRIVE SUSTAINABILITY IN CONSTRUCTION

Given that buildings are responsible for almost 40

percent of global greenhouse gas emissions, the alignment of real estate investments with environmental, social and governance (ESG) standards is becoming increasingly important. The EU Disclosure Regulation and the amended EU Taxonomy have established concrete sustainability standards for the financial and property sectors. These



Pursuing a holistic sustainability strategy across its operations, EDGETECH EUROPE aligns with ESG standards, reduces emissions and promotes circular economy practices. Going further still with low-emission construction, the company supports both energy-efficient and transparent environmental accountability through innovations like the Super Spacer® system as well as collaboration in green projects like Kalifornia.

underscored by various initiatives and certifications,” says Benjamin Karabulut. By providing EPDs and aiming for EcoVadis certification, the company offers its customers with important information that helps them to fulfil ESG requirements and transparently document their sustainability performance. EPDs (Environmental Product Declarations) are standardised documents that supply detailed information about

regulations oblige investors to evaluate and classify their investments according to ESG criteria. This has a direct impact on the demand for sustainable buildings and therefore also on the requirements for construction projects and the materials and technologies used.

THE INCREASING IMPORTANCE OF GREEN BUILDINGS

For over three decades, green building certification and rating schemes have sought to minimise the environmental impact of buildings - particularly in terms of greenhouse gas emissions through the adoption of more sustainable design principles. Certifications are increasing year-to-year at global level. In 2023, the World Green Building Council network alone, which includes the DGNB and the US Green Building Council with the LEED certification system,

will have certified more than 5.4 billion square metres of green building space worldwide. Investment in sustainably certified buildings is also significant. According to BNP Paribas, EUR 11.2 billion was generated in individual transactions in Germany in 2022 - corresponding to a relative share of 30.6 percent of the investment market.

A COMPREHENSIVE APPROACH TO SUSTAINABILITY

Edgetech Europe has aligned the further development of products and processes accordingly. “We do not perceive sustainability as an isolated measure, but rather as an integral component of a comprehensive, strategic concept that permeates all company divisions. From product development and production to the supply chain, ecological aspects are consistently taken into account. This commitment is further



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the environmental impact of a product over its entire life cycle. Key factors such as resource consumption, emissions and waste production all get systematically assessed. Here the EcoVadis certification goes one step further by evaluating not only the environmental performance of a company, but also its social and ethical aspects. EcoVadis is a globally recognised platform for sustainability assessments that assists companies in enhancing their performance in areas such as environmental protection - working conditions, fair business practices and sustainable purchasing. Edgetech Vice President OPS Johann Artamonov emphasises the company's commitment to continuous improvement and transpar-

ency in the area of sustainability by participating in EcoVadis.

Another key element of the company's sustainability strategy is the systematic monitoring and reduction of greenhouse gas emissions. Edgetech Europe has already recognised its direct (Scope 1) and indirect (Scope 2) emissions, as well as all other emissions caused in the value chain (Scope 3), in accordance with the Greenhouse Gas Protocol. The company is also certified in accordance with ISO 14001 for its environmental management system and ISO 50001 for its energy management system. The ISO 9001 certification for the quality management system ensures that Edgetech maintains the highest standards in terms of product quality

and customer satisfaction. "Our sustainability initiatives offer numerous benefits for our customers and partners in the construction sector. We can help them make more sustainable decisions, minimise risks and optimise the environmental impact of their projects. Utilising tools such as EcoVadis and EPD fosters transparency, comparability and continuous improvement in the construction industry, a crucial aspect given the mounting significance of sustainability and increasingly stringent environmental regulations," adds Benjamin Karabulut.

INNOVATIVE PRODUCTS FOR SUSTAINABLE BUILDINGS

In the field of minimising energy consumption

in buildings, the Super Spacer® system plays a pivotal role for customers in the window and facade construction and architecture sectors. The flexible Super Spacer® system is a highly effective solution for optimising thermal separation between glass panes - thereby significantly reducing heat loss and enhancing energy efficiency. This contributes to enhanced overall energy efficiency and directly reduces CO₂ emissions. The development and production of Super Spacer® is subject to rigorous sustainability criteria. Here Edgetech Europe prioritises the use of environmentally-friendly materials and a minimisation of resource consumption during the manufacturing process. The durability and ease of maintenance of the product

also contributes to reducing waste and extending the life of buildings.

“We are continually developing our products to meet the evolving demands of the market and rising environmental standards. We value our close collaboration with partners in the construction industry,” continues Benjamin Karabulut.

AN EXEMPLARY PROJECT IN SUSTAINABILITY: KALIFORNIA MALAKOFF OFFICE IN PARIS

A current example of such a long-standing partnership is the ‘Kalifornia’ office complex in the municipality of Malakoff, south of Paris. The complex’s name symbolises the Californian spirit that the design is intended to create. The complex is connected by a 4,500 square metre green lung. Spacious work platforms and terraces encourage a blend of indoor and outdoor work environments.

COOL-LITE® ORAÉ® low-CO₂ Saint-Gobain glass was used for the first time in a new commercial construction project in France. Compared to conventional float glass, greenhouse gas emissions are an impressive 40 per cent lower.

The flat and curved facade elements combine Oraé® as the base glass with a Cool-Lite Xtreme 70/33 II coating, achieving an optimum

balance between energy efficiency and aesthetic appeal. The flat glass was produced by Sivaq in France, while DOERING GLASS Berlin supplied the curved insulating glass elements with Super Spacer® as a spacer.

By optimising the float process, including the use of green energy and an increased proportion of cullet, it has been possible to significantly reduce the energy required for production, explains DÖRING GLASS Sales Manager Martin Lenz, continuing: “Prior to delivery, we conducted comprehensive bending tests with this new type of glass.”

Malakoff represents a significant milestone for the Berlin-based company in that it is the first project for which the greenhouse gas emissions of the curved DoeringGreen glass have been analysed. “We receive the data for the produc-

tion of the glass from Saint Gobain. As we are energy-certified, we can determine how much additional energy was consumed by our production process and our supply chain. We were able to verify 100 per cent of Scope 1 and 2, and around 90 per cent of Scope 3,” continues Lenz.

On average, the curved glass for Malakoff produces greenhouse gas emissions of 23.50 kg CO₂e/m² for the base glass and 78.50 kg CO₂e/m² for the end product (including Scope 1 and Scope 2). The specialist for curved glass compensated for the remaining, unavoidable carbon footprint of 11 tonnes of CO₂ equivalents by supporting a climate forest project. This contributes to the project’s overall zero-carbon footprint. The curved glazing therefore makes a significant contribution to the project’s zero carbon footprint.

ABOUT EDGETECH EUROPE GMBH, A PART OF SOMETHING BIGGER

Located in Heinsberg, Germany, Edgetech Europe GmbH is a fully-owned subsidiary of Quanex Building Products Corporation, (NYSE: NX) a global, publicly traded manufacturing company primarily serving OEMs in the fenestration, cabinetry, solar, refrigeration and outdoor products markets. Edgetech Europe GmbH services markets in continental Europe with a total of 490 employees and 17 extruders. The company strives to be “A Part of Something Bigger” by improving the performance and aesthetics of end products through continuous innovation, helping customers achieve greater production efficiencies, and giving back to communities where it operates.

CONCLUSIONS AND OUTLOOK

“The future of construction will be characterised by sustainability and energy efficiency. With our forward-looking strategy and ongoing commitment to research and development, we are ideally positioned to master these challenges and penetrate new markets. Projects such as Kalifornia demonstrate that sustainable construction can be both ecologically sound and aesthetically pleasing, while also offering economic benefits,” concludes Johann Artamonov.

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