Material Technologies

Each strategic business unit plays a distinct yet complementary role, like instruments in an orchestra.

Material Technologies, like strings, provides a solid foundation, pushing innovation and resilience. We transform materials for a sustainable future.

	ÇİM ŞA	KORDSA	
7 million tons Capacity	Countries of Production	100% FX Revenue Share	
25+ Ready Mix Concrete Plants	53% FX Revenue Share	546 R&D Patents	
	1		



Material Technologies

The Material Technologies SBU is at the forefront of material transition, capitalizing on technological advancements while reinforcing its commitment to sustainability.



Goal to achieve 40% sustainable products by 2030 Toward a sustainable future, driven by innovation and strategic investments

Shaping Industries for a Sustainable Future

In 2024, Sabancı Material Technologies Strategic Business Unit (SBU), along with its companies Akçansa, Çimsa, and Kordsa, made significant strides in the cement, tire and construction reinforcement and composite technologies toward a sustainable future, driven by innovation and strategic investments. The SBU is at the forefront of material transition, capitalizing on technological advancements while reinforcing its commitment to sustainability. From serving as a market leader in tire reinforcement to providing eco-friendly cementitious materials, the Material Technologies SBU is shaping the industries and contributing to a sustainable future.

Reinforcement and Composites: Advancing Material Science for Next-Generation Applications

As one of the world's leading companies, Kordsa drives innovation across its tire and construction reinforcement, and composite technologies business units. Particularly within its tire and composite businesses, Kordsa develops sustainable practices, most notably for the electric mobility and aerospace industries. Growing demand for electric vehicles (EVs) and sport utility vehicles (SUVs) has enabled Kordsa to spearhead advancements in tire technology with the launch of its REV brand. Focused on providing cutting-edge reinforcement materials for EV tires, REV prioritizes sustainability, durability, and low rolling resistance to meet the unique performance demands of electric mobility. Kordsa also includes additional products designed for tire differentiation, such as hybrid tire cord fabrics that enhance performance, stability, and safety and single-end cords to improve tire uniformity.

As part of its commitment to sustainability, Kordsa has introduced R-PET products to reduce environmental impact and support a circular economy. In 2024, the company also expanded its tire reinforcement product range to include recycled polyester yarn and sustainable nylon solutions. These innovations support the growing demand for eco-conscious products while enhancing tire durability, uniformity, and performance – all critical for the transition to electric vehicles.



Accelerating Growth and Sustainability through Strategic Investments and Innovation

In 2024, Kordsa made strategic investments to enhance operations and strengthen its market position with two new investment projects. The company expanded its Single End Cord finishing line for high-performance tires with a new line investment in Türkiye. An additional investment supported the production of Polypropylene Monofilament fiber reinforcement for Kratos - its construction reinforcement brand. Beyond these investments, Kordsa launched its compounding division in 2023. Since that time, the company has made meaningful progress with the introduction of Exenco, its compounding brand. Exenco focuses on highperformance, sustainable engineering plastics tailored for industries like automotive, electronics, and aerospace. These bio-based and thermally stable compounds are designed to meet the increasing demand for lightweight, durable materials with minimal environmental impact. Kordsa's collaboration with Sabancı University on solvent-based recycling technology further strengthens these sustainability efforts.



Innovating Globally, Leading Sustainably

Kordsa's strategic investments in research and development (R&D) have solidified its position as a global leader in material technologies. In 2024, the company expanded its global presence by opening the new Kordsa Advanced Materials Technical Center, strengthening its commitment to global innovation and its "Innovate Everywhere" vision. This center will focus on developing cutting-edge materials specifically for the mobility, aviation, and space technology sectors.

The company's commitment to sustainability is evident in its ambitious goal to achieve 40% sustainable products by 2030 and 100% by 2050. Following the 2023 approval of its 2030 targets by the Science Based Targets initiative (SBTi), Kordsa's 2050 targets were also validated in 2024, recognizing its consistent performance. Additionally, Kordsa's facilities in Türkiye and Indonesia received ISCC Plus certification, further validating its adherence to international sustainability standards.

Sabancı Holding Annual Report 2024

Material Technologies

The acquisition of Mannok marks a significant milestone for Sabancı Group, representing one of the most important international acquisitions in recent years.

Building Materials: Leading the Transformation of the Cement Industry

As Türkiye's cement consumption remains strong, driven by urbanization projects in earthquake-affected regions, Akçansa and Çimsa are playing a pivotal role in transforming the cement industry by embracing innovation and sustainability. While Türkiye's cement exports face challenges due to trade restrictions and increased global competition, the global cement industry is being reshaped by technological advancements. In Europe, the European Green Deal has spurred increased R&D efforts to develop sustainable alternatives to traditional cement. Moreover, the rise of startups in construction chemicals and concrete additives, particularly in the U.S. and Europe, signals a growing focus on disruptive technologies. This transformation is also reflected in the adoption of highvalue-added products like calcium aluminate cement, which are expanding in both application and geographic reach, driving the broader evolution of material technologies worldwide. The Material Technologies SBU is adapting to these transformative changes while proactively taking significant steps to enhance its global presence.

Boosting Global Growth with Mannok Acquisition

In 2024, Çimsa made significant progress in executing its ambitious three-pillar transformation strategy: 'From Cement to Building Materials,' 'From Local to Global,' and 'From Grey to Green.' Following its previous expansions in Spain (with the acquisition of the Bunol Plant in 2021) and in the U.S. (through organic investment), Çimsa has now taken an important step by acquiring 94.7% of Mannok Holdings DAC, a leading building materials producer based in the Republic of Ireland, for EUR 253.5 million. This marks Çimsa's third major global move in the past three years, further strengthening its position in the UK and Irish markets and advancing its vision of becoming the 'Sabancı of the World.' Mannok offers a broad range of products, including cement, cement-based products (such as rooftiles, precast, and concrete), insulation materials, and recyclable packaging, and employs over 800 people. The acquisition of Mannok marks a significant milestone for Sabancı Group, representing one of the most important international acquisitions in recent years.

Pioneering Sustainability with Innovative Solutions

In 2024, Çimsa and Akçansa advanced sustainability in the cement industry through key initiatives. Çimsa's "Green Wave" project unites low-carbon products like Ecoshine and Ecofort under a strategy focused on emissions reduction and meeting customer expectations. Similarly, Akçansa's "Sustainable Product Movement" groups its eco-friendly products under "Green for Cement" and "Green for Concrete," with sustainable product sales approaching 40% for both companies.

The Material Technologies SBU's commitment to sustainability was exemplified by the launch of the RapiDome project in 2024. Integrating 3D printing technology with OpaCrete white concrete, the Material Technologies SBU has revolutionized the construction industry. This major innovation reduces construction's carbon footprint, enabling the creation of 3D-printed houses in just 48 hours. RapiDome's adaptability to various climates and its potential for post-disaster housing highlight the technology's social and environmental impact. The Sabanci Technology Center in Munich, operational since last year, is the innovation hub for developing cutting-edge products and solutions for the Sabanci ecosystem, continuing to drive pioneering breakthroughs for a sustainable future.

Moreover, Akçansa continues to set an example in the industry by actively supporting the circular economy through the implementation of its Construction and Demolition Waste (CDW) project, which allows for the reuse of construction and demolition waste in production.

Investing in a Sustainable Future: Renewable Energy and Capacity Expansions

The Material Technologies SBU's 2024 investment strategy for the building materials companies reflects a long-term growth vision, focusing on increased effectiveness and sustainability. Further renewable energy investments have strengthened the companies' decarbonization strategy. Two key investments were announced at the Eskişehir plant: a solar power plant and a waste heat recovery system. Upon commissioning, these renewable energy investments will supply about 40% of the Eskisehir plant's electricity needs. In 2024, a new EUR 4.2 million solar power plant (SPP) – featuring 11,000 solar panels covering 100,000 square meters (approximately 14 football fields) - became operational at the Bunol plant. As a result, this SPP was widely recognized as a benchmark sustainability project within the European building materials industry. These investments support the 2050 net-zero emissions goal, backed by a EUR 25 million loan from the European Bank for Reconstruction and Development (EBRD) and a USD 70 million green loan agreement with the International Finance Corporation (IFC).

Following the successful completion of a USD 45 million calcium aluminate cement (CAC) investment last year, an additional USD 32 million capacity expansion investment was announced in 2024, bolstering global CAC production at the Mersin plant. Scheduled for completion in the first half of 2026, this expansion aligns with the strategic goal of advancing sustainable building materials to meet growing demand for environmentally friendly construction solutions. The previously announced USD 82 million US grinder investment is set to become operational by the end of 2025.



In 2024, Çimsa's share in Sabancı Building Solutions increased to 68%, the company's growth arm for international investments, and rebranded the company as Çimsa Building Solutions.

Future and Beyond

To further strengthen its position in materials and material technologies, Sabancı Holding Material Technologies SBU remains committed to evaluating new opportunities in the coming years. In parallel, emerging technologies are actively tracked through startup collaborations, ensuring the SBU stays at the forefront of innovation. With an investment in C2CA, a waste concrete upcycling startup, the number of directly invested startups totaled four in 2024. This year, the pilot plant project at Bunol was initiated in partnership with FenX, a startup previously invested in, that specializes in converting mineral waste into insulation materials.

These initiatives reflect the Material Technologies SBU's ongoing efforts to drive innovation, enhance sustainability, and create long-term value for stakeholders, contributing to a more sustainable and circular global economy.

Sabancı Holding Annual Report 2024