

Business segment review

Advanced Materials

Leveraging innovative technology, we convert part of our carbon value chain into high-value products for various industries. With strategically located facilities in Europe and North America, we serve sectors including energy storage, specialty chemicals, coatings, construction, petroleum and more.



0.25 Mn MT
Sales volume

₹32,317 Mn
Revenue from operations

18%
Contribution to consolidated revenue

Market dynamics

In 2023, the Advanced Materials segment faced challenges stemming from a slowdown in customer confidence, impacting demand and pricing dynamics. The Advanced Materials segment saw increased competition from Asian products and was further impacted by various internal and governmental initiatives.

Additionally, recent developments in the USA and global trade tensions emphasised the importance of regional manufacturing presence.

End-industry applications

The Advanced Materials segment plays a pivotal role in sustainability by transforming materials that could also serve as fossil fuels into value-added raw materials which facilitate the development of next-generation technologies, including:

- ▶ Energy storage solutions
- ▶ Electric vehicles
- ▶ High performance chemicals for insulation industry
- ▶ Construction materials
- ▶ Lubricants in wind turbines
- ▶ Tyre additives for enhancing rolling resistance
- ▶ Coatings to reduce drag on vessels and minimise fuel consumption
- ▶ Next-generation tackifiers for essential hygiene products and high-performance adhesives

Our Advanced Materials segment targets high-growth, sustainable industries aligned with societal trends. These sectors exhibit substantial growth rates exceeding GDP averages.



Our response

With established facilities in Europe and North America, we are well-positioned to capitalise on the opportunities in these regions. To address market challenges, we prioritise cost management and operational efficiency.

We leverage our technical expertise to optimise customer product utilisation, ensuring maximum value extraction. Our ongoing research focuses on developing next-generation products and strategic partnerships to sustain long-term competitiveness.

Key developments of 2023

- ▶ Implemented advanced technologies including high-efficiency burners and dust-free bagging, reducing emissions and enhancing safety.
- ▶ Established a new facility for producing superior coating materials for battery anode materials, improving product quality.
- ▶ Implemented various technologies to improve yield and reduce raw material consumption, enhancing operational efficiency across our facilities. Additionally, expanded capacity in specialty pitches and coatings to meet growing market demand
- ▶ Introduced flexible technology solutions to enable the utilisation of eco-friendly raw materials, fostering a next-generation product portfolio with reduced environmental impact.
- ▶ Undertook improvements at the Hydrogenated Hydrocarbon Resins (HHCR) plant to increase efficiency and reduce operating costs, ensuring competitiveness in the market while maintaining high-quality standards.

Future prospects

In alignment with the growing demand for eco-friendly materials and practices, we aim to expand our presence in high-growth advanced materials markets through logistical hubs and regional assets. Furthermore, we seek to leverage our proprietary technologies through strategic partnerships, focusing on green infrastructure, environmental sustainability, waste reduction and circularity. By continuing to innovate and adapt, we aim to solidify our position as a leading provider of advanced materials in the global market.