

# Evolving with industry shifts



As the industry landscape shifts, we track and monitor evolving regulations, market trends and technological advancements to adapt and leverage opportunities while managing risks. We are advancing our operations through sustainable innovations in carbon-based products, enhanced energy efficiency in cement production and expanded high-value applications in advanced materials.

## Carbon Calcination

In the Carbon segment, our calcination business is navigating a rapidly changing market driven by new regulatory standards, technological advancements and increasing demand for high-quality products. We are committed to enhancing our capabilities, expanding our product portfolio and leveraging our advanced technology to meet current and future market needs.



### Emerging opportunities

#### 1. Shaft calciner commissioning and GPC import relaxation

We are strategically positioning ourselves to benefit from the commissioning of our shaft calciner, which will reach its full design capacity of 370,000 MT/annually by late Q1 2025. This capacity, coupled with the relaxation of GPC import restrictions in India, will enable us to blend calcined petroleum coke (CPC) for improved product solutions, catering to a broader customer base. This shift in market conditions provides an opportunity to supply higher volumes of shaft CPC and blended shaft/rotary CPC, meeting the growing demand.

#### 2. Raw material supply optimisation

The increase in domestic raw material demand in India, driven by GPC allocation changes, presents a significant opportunity for us to establish long-term agreements with suppliers. This approach will ensure the availability of raw materials at competitive prices while optimising our balance between domestic and imported materials. Our global operations will enable us to capitalise on freight synergies, driving cost efficiencies.

### 3. New product development (biocarbon and non-traditional applications)

We are investing in developing biocarbon materials, which hold great promise for applications beyond traditional uses. An industrial trial scheduled for H1 2025 will provide in-depth insights into the long-term viability of biocarbons, especially in non-anode applications. We are also exploring non-traditional applications for calcining, collaborating with industrial partners to unlock new market potential.

### 4. Collaborative innovation

Our Carbon and Advanced Materials segments are working jointly to develop new battery anode materials as another avenue for growth. By combining our expertise in calcining with cutting-edge materials technology, we aim to contribute to the growing demand for high-performance materials used in energy storage solutions.

#### Our response

We actively respond to these opportunities by scaling up our calcining capacity, optimising raw material procurement and developing innovative products such as biocarbon and next-generation anode materials. We are also leveraging our industry-leading pollution control technologies to maintain a competitive edge in the Indian market, where regulatory changes will likely impact other industry players.



## Carbon Distillation

In the Carbon segment, our distillation business is pivotal in enabling a transition to cleaner, greener and more sustainable technologies. Our diverse range of speciality carbon products supports industries that drive decarbonisation, such as steel production, aluminium manufacturing and battery technology.

### Emerging opportunities

#### Specialty carbons for high-tech applications

Our product offerings are integral to the development of cleaner technologies across various sectors:

- **Electrodes for steel production:** Our specialty carbons are a key component in electric arc furnaces and DRI processes, contributing significantly to the steel industry's decarbonisation efforts.
- **Anodes for aluminium:** We supply high-quality anode raw materials used in aluminium production essential for industries such as electric vehicles (EVs), aerospace and automotive manufacturing.
- **Specialty carbon for Li-ion anodes:** Our carbon materials are critical for producing lithium-ion batteries, powering the growing demand for EVs and renewable energy storage.
- **Advanced carbon materials for aerospace and defence:** We are also a key supplier of high-tech carbon materials used in aerospace, nuclear power and defence sectors, providing cutting-edge solutions to producers of carbon fiber and graphene.

#### Our response

We are responding to these opportunities by investing in sustainable raw material sourcing, enhancing our product innovation capabilities and expanding our global footprint. Our continued focus on cost leadership and scaling production will ensure we remain competitive in this rapidly evolving market.

# EXTERNAL ENVIRONMENT



Phthalic Anhydride Advanced Materials & Waste-Heat Recovery plant in Zelzate, Belgium

## Advanced Materials

The Advanced Materials segment intends to capitalise on growth opportunities driven by technological advancements, shifting consumer demands and our focus on sustainability. By expanding our product offerings and improving manufacturing processes, we aim to deliver high-performance materials to meet the needs of industries like automotive, electronics and renewable energy.



## Emerging opportunities

### Growth in the pure monomer resin segment

We are identifying growth opportunities in the pure monomer resin segment, where we see increasing demand and favourable market conditions. This segment offers attractive profit margins and we focus on the growth potential in the US market, where competitors are struggling and pricing is more favourable.

### Our response

We are committed to ensuring a sustainable supply of raw materials and investing in innovation to develop new product recipes and processes. By leveraging our scale and global presence, we aim to maintain a competitive edge and meet the growing demand for advanced materials.



## Cement

The Cement segment is poised for growth as infrastructure spending accelerates and demand for construction materials rises. We are focusing on positioning ourselves as a key supplier to meet the increased demand for cement, driven by government spending and infrastructure development.

### Emerging opportunities

#### Government spending and cement demand growth

With increased government spending on infrastructure projects in India in 2025, we anticipate a rise in cement demand. Our strategy is to ensure we are well-positioned to meet this demand with sufficient production capacity and logistics support.

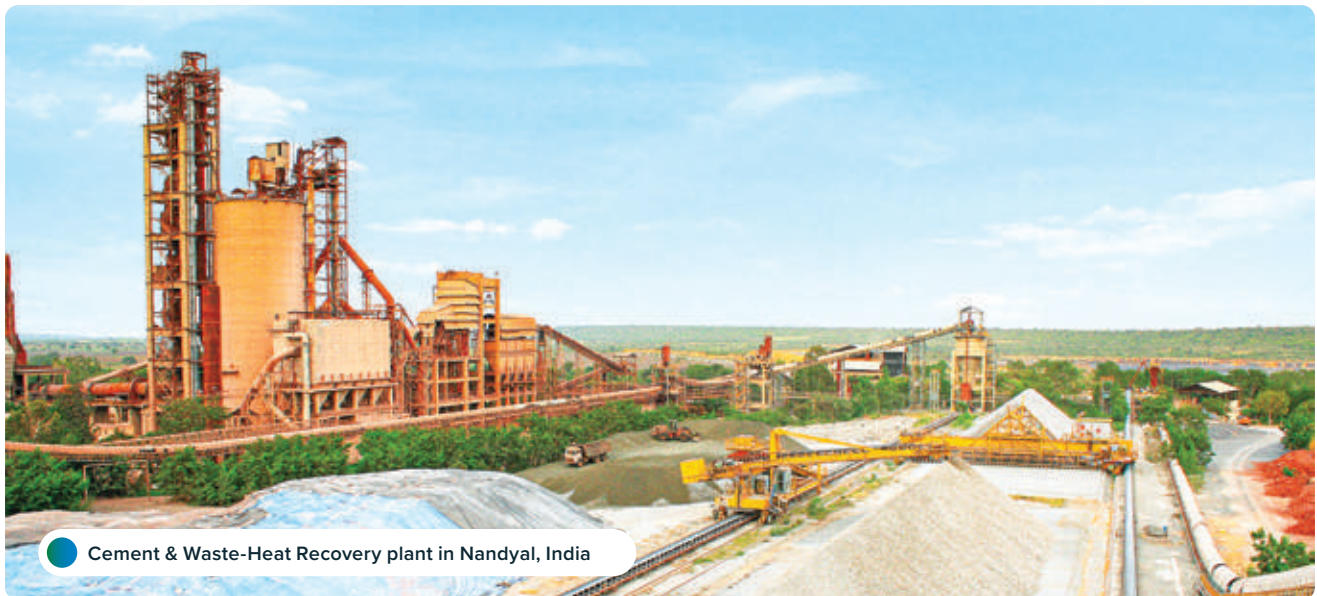
#### PWD approval for cement supply in Tamil Nadu

In December 2024, we received a Certificate of Product Approval for PPC from the Public Works Department (PWD) of the Tamil Nadu government, followed by approval for OPC Grade 53 in March 2025. This certification signifies that our products have undergone rigorous quality checks and meet the standards set by the Tamil Nadu government. It enables us to supply cement for government infrastructure projects, strengthening our market presence in the region.

### Our response

We are responding to these opportunities by expanding our production capacity and strengthening our supply chain.

With PWD approval in Tamil Nadu, we are now well-positioned to capitalise on the expected rise in cement demand as infrastructure projects ramp up.



Cement & Waste-Heat Recovery plant in Nandyal, India