



# ENERGIZING THE WORLD

## Business Overview

Epsilon Advanced Materials is a leading global provider of battery material solutions, manufacturing high performance, innovative, quality, and green battery materials. The company is headquartered in Mumbai and complemented by a state-of-the-art manufacturing facility in Vijayanagar, Karnataka, India. Our journey started with a vision to energize the world by decarbonizing economies. Since 2018, we have been passionately dedicated to perfecting the art and science of advanced battery materials. We are here to be a trusted partner and to support the world in deconcentrating and diversifying the battery supply chain. With a focus on sustainability and efficiency, our products and solutions are designed to meet the ever-evolving needs of various industries.

Our operations span three continents, across Europe, North America, and South-East Asia, with plans for more facilities in the future.

Current Output

**10,000  
Tonnes**

Per annum by 2025

Aim

**100,000  
Tonnes**

**60 acres**

size of the manufacturing  
plant in India

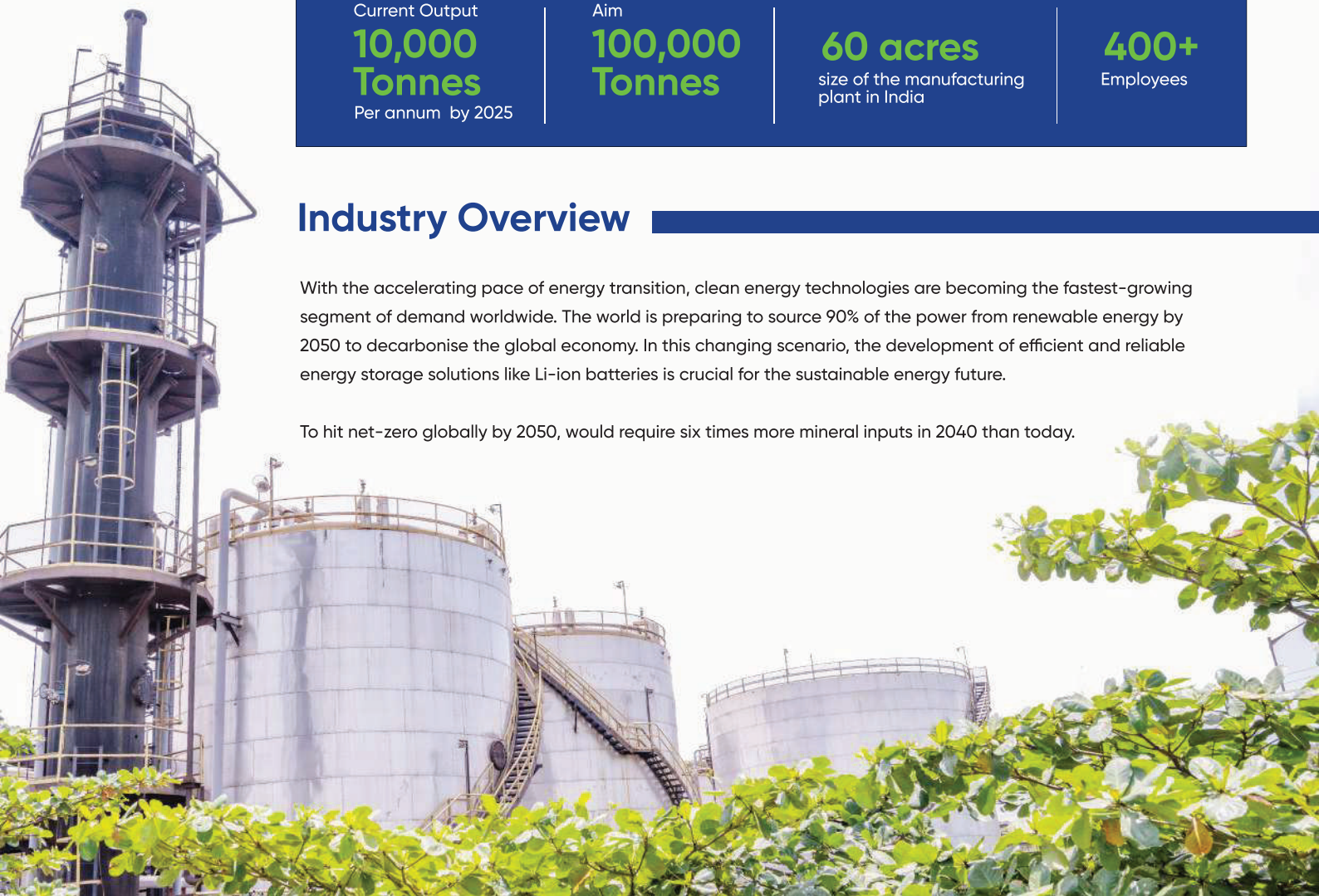
**400+**

Employees

## Industry Overview

With the accelerating pace of energy transition, clean energy technologies are becoming the fastest-growing segment of demand worldwide. The world is preparing to source 90% of the power from renewable energy by 2050 to decarbonise the global economy. In this changing scenario, the development of efficient and reliable energy storage solutions like Li-ion batteries is crucial for the sustainable energy future.

To hit net-zero globally by 2050, would require six times more mineral inputs in 2040 than today.





## Projects



### India

- Signed an MoU with Government of Karnataka
- Invest **INR 9000 Cr** to Boost EV Battery Component Production
- Project will focus on manufacturing anode material graphite for Lithium-ion batteries in line with the 'Make in Karnataka' vision; enabling us to cater to **10 million EV's**.
- The facility would employ **75% local people** to support economic development in the region.

## Global Projects

### Finland

- MoU signed with City of Vaasa and Finnish Minerals Group to establish anode material projects in the Vaasa region of Finland.
- Setting up a graphite processing plant for manufacturing **50,000 Tonnes Per Annum**, anode material plant. The first phase will build a production capacity of **10,000 tonnes per annum**, and the second phase will add **40,000 tonnes per annum**.  
United Kingdom
- We are currently in the planning stages of establishing a **50,000 TPA synthetic graphite facility in the UK**, with the aim of utilizing locally sourced feedstocks to produce high-value anode products that support the ongoing energy transition.

### USA

- Planning to construct a facility in the USA that will produce **50,000 TPA of anode quality graphite, capable of powering 850,000 vehicles**. **Initial goal is to launch a 10,000 ton per year unit by 2026**, with the aim of expanding to 50,000 tons per year by 2031. Identified 3 sites, will be announcing our final selection in May 2023.



# Innovation

**50 PATENTS AND  
10 EQUIPMENT DESIGN**

copyrights by 2025

Cater to multiple applications ranging from consumer electronics to electric vehicles, potentially addressing

**98% OF THE MARKET**

## Sustainability



### Resource circularity

**100%** backward integrated facility

**78%** lesser GWP than competitors – LCA Cycle



### Energy circularity

**84%** of our energy needs are met through recovered waste gases.

**100%** electrified plant



### Water circularity

**100%** backward integrated facility

**78%** lesser GWP than competitors – LCA Cycle

## CSR Impact Made

Impacted, **300,000 lives in 49 villages, across 3 states**

The focus of our impact is across six sub-sectors:

**Health, Education, Gender Equality, Community Infrastructure, Promotion of Sports, and Environment.**



### SDG 3 Building Resilient Health Systems

We made a meaningful contribution to upgrade the anaesthesia department at Vijayanagar Institute of Medical Sciences (VIMS), Ballari. The hospital is a super speciality medical institution where 15,000 surgeries are conducted annually, on average. With our contribution, 4,000 patients have been treated at this hospital. The number of tests done by the Central Lab has increased post assistance, where previously the patient load at the lab was 100-125 patients. After our assistance the average went up to 250 samples, 2x increase in daily testing of blood samples at the central laboratory, VIMS. In addition, 12 Ophthalmology equipment provided, which has helped in amplifying vision care.

### SDG 4 Fostering Innovation and providing equitable education to all.

Around 1700 kids were empowered with our smart classes in the government schools of Kodalu and Chikkanthapur. Through our initiatives, we have also impacted lives of 300 children through 9 aanganwadis. 1000+ students impacted by the modern library.



## SDGs Gender Equality

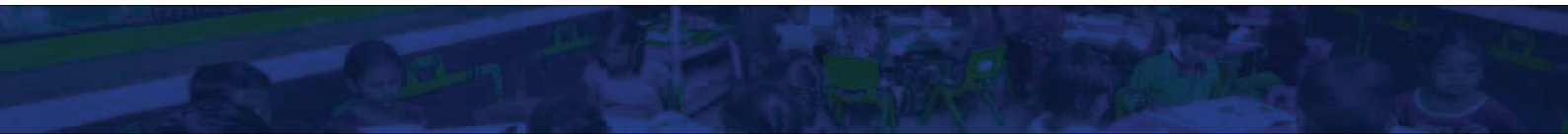
30+ women rural women from Bellary district were trained in provisioning of sanitation services at public and private sector offices.

## SDG 6 Clean Water & Sanitation

Around 12 lakh litres of drinking water supplied to 3 villages during FY21. Through our Safe Drinking Water program, we have been ensuring availability of safe drinking water in our DIZ villages of Chikantapur, Kodalu, and Anantapur for the past two years through the supply of tankers during water-stressed months. For the year 2023-24, we plan to install 3 RO water purifiers with capacity of 42 lakh litres of water, benefitting around 7000 beneficiaries with clean drinking water.

## SDG 7 Affordable clean energy

Under the program, 1300 LED streetlights were installed, benefitting 8,000 people from three DIZ villages.



## SDG 11 Building India's Sporting Landscape

500 Athletes will achieve their dream of winning an Olympic medal. We had partnered with Inspire Institute of Sports (IIS) to support the quest for Olympic goal by Indian sportsperson. India wishes to see podium finishes of its athletes and sports persons in future Olympics.

## SDG 15 Restoring Environmental Ecosystems

In collaboration with the forest department, we undertook a plantation drive along four stretches totalling 14.23 km and planted around 17 species of saplings in and around the CSR villages. We believe natural ecosystems and biodiversity is humankind's most valuable heritage. We had undertaken a detailed environmental impact assessment of our plant and developed 44-acre green belt by planting 40,000 saplings so far to restore the ecological balance.



## Board of Directors



**Vikram Handa**

Founder and Managing Director



**Sunit Kapur**

CEO & Executive Director



**Dr. C. Natarajan**

Executive Director



**Prof. Sagar Mitra**

Non- Executive Director



**Rakesh Bhartia**

Non- Executive Director



**Anil Shrivastava**

Non- Executive Director

## Our Advisory Board Members



**Prabhakar Patil**

Advisory Board Member



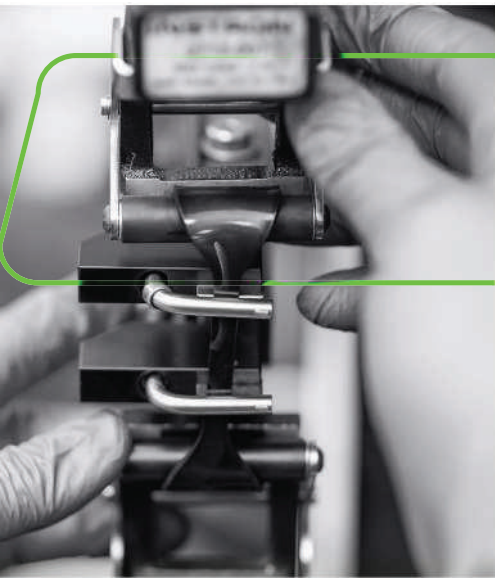
**Mr. Lokendra Jain**

Advisory Board Member



**Dr. Raghunathan**

Advisory Board Member



## Our Expertise

### **Battery Material Manufacturing:**

Patented process converting industrial waste into high-performing, innovative, customised, lab to market battery materials and solutions.

### **ESG Compliant operations:**

Business operations based on circular model: 100% vertical integration i.e., minimizing the need for resources by keeping existing materials in the production cycle,

### **Green Products:**

Final products are manufactured with 78% lower carbon emissions and lower global warming potential (GWP) compared to other global manufacturers.

### **Customized Solutions:**

Catering to multiple applications ranging from consumer electronics to electric vehicles, potentially addressing ~98% of the market.

### **Enhanced Quality Control:**

Comprehensive in-house battery testing capability

## Our Products

### **Anode**

#### **Epsilon Synthetic Graphite Anode EMG Series**

Various grades of synthetic graphite with properties, designed to meet our customer's specific requirements.

#### **Graphitised Natural Graphite Anode EGNG SERIES**

Processing of natural graphite flakes in an environmentally friendly thermal treatment process. Actively working with key graphite miners based out of India to meet battery grade specification.

#### **Blended Graphite (Synthetic + Natural) Anode ESN SERIES**

Blended graphite customised as per customer requirement by matching the desired parameters of the final anode products.

In the blend material, we can have benefit of high capacity of Natural Graphite and better rate performance of synthetic graphite.

With our pre-blended material, we aim to reduce overall processing time for making anodes.

### **Cathode**

#### **LFP Cathode (Upcoming)**

We will announce our plans to build a large scale facility in FY2023.

## Certification/ Qualifications

ISO/IEC 17025:2017 Mar'23

## Awards & Recognition

Most Sustainable EV Battery Material Provider of the Year at EV Charge Leadership Awards 2023

Manufacturing Excellence of the Year for Materials at EV Manufacturing Week Awards 2022

IESA Emerging Company of the Year in energy storage and supply chain at IESA Industry Excellence Awards 2022

Business Leader in R&D Award at EV state summit awards, Karnataka 2022

Business Leadership and Clean Mobility Leadership Award at EV state summit awards, Maharashtra 2022



## For more information contact

Name

Designation

Email

Phone No

