

Essar's Global Blueprint for the Future of Energy

Essar Ports Salaya Terminal, Gujarat, India

We are living through one of the most transformative decades in modern history. Technology is evolving at a pace the world has never witnessed. Artificial intelligence is reshaping industries, rewriting business models and redefining the speed at which companies must innovate. At the same time, global energy markets are undergoing the most significant rebalancing in a century, driven by geopolitical realignments, supply-chain diversification, climate commitments and a heightened focus on energy security.

For global enterprises, this moment demands clarity of purpose, industrial scale and the courage to innovate. At Essar, we have spent more than five decades building precisely such an organisation - one that began in India and has grown into a multinational business with a presence across Asia, the UK, Europe, the United States and the Middle East. Our businesses span continents, but our values, resilience, innovation and responsible growth remain distinctly Indian. Our journey reflects the confidence of a rising India and the ambition of a global enterprise committed to shaping the technologies, industries and fuel systems of the future.

Essar's evolution mirrors India's emergence on the world stage. What started as an entrepreneurial venture has transformed into a diversified global platform operating across core sectors of energy, infrastructure, metals and mining, and technology and retail, with aggregate revenues standing at approximately US\$15 billion.

As energy systems worldwide undergo transformation, Essar's cross-continental footprint allows it to integrate global capabilities with local insights. Whether pioneering low-carbon technologies in the United Kingdom, building digital infrastructure in the United States, or accelerating

clean energy in India, Essar brings a uniquely global expertise shaped by a strong foundation of an Indian perspective.

Driving the UK's Low-Carbon Transformation

Through Essar Energy Transition (EET), Essar is delivering one of the UK's most ambitious industrial decarbonisation programmes. The Stanlow Manufacturing Complex, one of the UK's largest refineries is being transformed into a global model for low-carbon fuel production.

EET's initiatives include:

- Transitioning Stanlow into one of the world's first low-carbon process refineries
- Targeting a 95% reduction in emissions through carbon capture and hydrogen adoption
- Developing 1,350 MW of low-carbon hydrogen capacity, scalable to 4,000 MW
- Establishing Europe's first hydrogen-ready combined heat and power plant
- Creating a next-generation energy storage and logistics network across the region

These projects not only enhance UK's energy security but also strengthen the region's competitiveness in clean industrial manufacturing.

Accelerating Clean Energy in India and Other Emerging Markets

As one of the world's fastest-growing economies, India plays a central role in the global energy transition. Essar's clean energy platforms are designed to support this transformation while contributing meaningfully to global sustainability goals.

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Essar Oil and Gas Exploration & Production Ltd. (EOGEPL) is advancing India's shift to cleaner energy through responsible development of unconventional hydrocarbons. As the country's largest Coal Bed Methane (CBM) producer, the company contributes nearly half of India's total CBM output and aims to increase its share of national gas production from 1% to 5% within five years.

Essar Future Energy is building India's first commercial-scale bio-refinery at Salaya, Gujarat, producing Sustainable Aviation Fuel (SAF) and Hydrogenated Vegetable Oil (HVO). This facility will serve global aviation markets and lay the foundation for future green fuels such as e-methanol and green ammonia.

Essar Renewables is steadily becoming a formidable player in the renewable sector. The business has an ambitious target of developing a 15 GW portfolio across solar, wind, battery storage and EV charging infrastructure.

These efforts position Essar as a contributor to cleaner molecules and sustainable mobility solutions in India.

Reimagining Traditional Sectors through Sustainability and Innovation

A modern energy transition cannot be achieved without transforming the heavy industries that power global economies. Essar's traditional businesses are undergoing strategic modernisation to stay relevant in a low-carbon world.

Mesabi Metallics in the United States has been established to decarbonise the global steel industry and is developing a 7 MTPA high-grade iron ore pellet project, advancing the global shift toward greener steelmaking technologies. The company aims to fulfil and accelerate the increased demand for Direct Reduced high-grade iron ore pellets for Green Steel transition.

Essar Ports, with an expertise of setting up 200 MTPA global port capacity, is building digitally enabled, efficient and sustainable port ecosystems across India, Indonesia and the UK, critical nodes in a world increasingly dependent on resilient supply chains.

Essar is also building a comprehensive Green Mobility Ecosystem that includes the manufacturing of green

trucks, large-scale logistics operations and advanced refuelling and charging infrastructure, with the objective of decarbonising heavy-duty road logistics in India. Blue Energy Motors (BEM) is producing next-generation LNG- and EV-powered vehicles that significantly lower emissions for global industries. Committed to significantly reducing carbon emissions from road transport, GreenLine operates a fleet sourced from BEM, and is supported by its subsidiary Ultra Gas & Energy (UGEL), which is leading the establishment of LNG fuelling hubs across the country. Together, these businesses are creating a complete and future-ready ecosystem for LNG- and EV-based heavy-duty logistics.

Black Box, Essar's global digital solutions company, supports more than 100 Fortune 500 clients across 35 countries with cybersecurity, network integration, digital workplaces and data centre solutions, critical enablers of future energy and industrial platforms.

Leading Responsibly in a Time of Global Transformation

The next phase of global growth will belong to enterprises that can balance scale with sustainability, innovation with pragmatism, and global aspirations with local impact. Essar's strategy aligns with these imperatives. By combining decades of industrial experience with bold investments in new-age, low-carbon and technology-centric platforms, Essar is building systems that are globally competitive and environmentally responsible.

From India to the world, Essar's mission is clear; to lead industries that matter, shape the energy systems of tomorrow and create a future where economic growth and environmental responsibility move forward together.

As the world enters a new era of integrated, intelligent and low-carbon development, Essar is committed to being a trusted global partner—strengthening energy security, accelerating decarbonisation and building the infrastructure that will define the decades ahead. ●



Stanlow Manufacturing Complex at Essar Energy Transition, United Kingdom...