

## **The Essar Group: A Profile**

The Essar Group is a multinational conglomerate and a leading player in the sectors of Steel, Oil & Gas, Power, Telecom & BPO, Shipping, Ports, and Projects. With operations in more than 25 countries across five continents, the Group employs 75,000 people, with revenues of USD 17 billion.

Essar began as a construction company in 1969 and diversified into manufacturing, services and retail. Over the last decade, it has grown through strategic global acquisitions and partnerships, or through Greenfield and Brownfield development projects, capturing new markets and discovering new raw material sources.

Today, the Group continues to expand its global footprint, focusing on markets in Asia, Africa, Europe, the Americas and Australia. Essar invests significantly in the latest technology to drive forward and backward integration in its businesses, and on leveraging synergies between these businesses. It also focuses on in-house research and innovation to be a low-cost manufacturer with high quality products and innovative customer offerings.

Alongside its ambitious business pursuits, Essar has been committed to its social responsibility. The Group runs community outreach initiatives in all its plant locations, with a focus on education, healthcare, environmental and agricultural development, and self-employment. Essar is committed to sustainable business practices. Our HSE (Health, Safety and Environment) management system is on par with global standards. We are also taking climate change initiatives to reduce our carbon footprint. This includes several CDM (Clean Development Mechanism) projects that can earn the company CER (Certified Emission Reduction) credits. A growing number of our businesses—with new businesses joining the list every year—are certified to international environment standards, like ISO 9001 /14001, and health and safety standards, like OHSAS 18001.

The Essar Group is widely regarded as a responsible and conscientious global employer. It has experience in managing businesses in different geographies with a culturally diverse workforce. This is why its people practices are sensitive to cross-cultural nuances. The Group's people strategy is focused on promoting a learning culture that continually enhances the professional skills of its employees.

The combined assets of Essar Power and Essar Oil constitute Essar Energy plc, a company that was listed on the London Stock Exchange in 2010 following a highly successful Initial Public Offer (IPO), the second largest overseas IPO ever floated by a company of Indian origin.

## **STEEL BUSINESS**

- A global steel producer with 14 million tonnes per annum of current capacity, with an aim to achieve a global capacity of 20-25 million tonnes
- Presence in key markets in Asia, Europe and North America
- Fully integrated from mining to retail: Essar owns a global portfolio of coal and iron ore mines and has access to all key raw materials, ensuring steady supply to its plants
- Strong downstream capability with a global network of processing centres and steel retail outlets
- Specialised plants for value-added steel products like pipes and plates
- Leadership position in the cold rolling, galvanizing and pre-coated segments

## **CURRENT OPERATIONS**

**Hazira, Gujarat, India:** A 10-million tonne steel plant at Hazira, largest in Western India. The plant is supported by a complete infrastructure setup, including a captive port, power plant, lime plant and oxygen plant.

### **Downstream facilities**

- Cold Rolling plant: 1.4 million tonnes
- Galvanizing plant: 0.5 million tonnes
- Annealing (CRA) plant: 0.66 million tonnes
- A 1.5-million tonne extra-wide plate mill
- A 600,000-tonne pipe mill

**Visakhapatnam, Andhra Pradesh, India:** 8-million tonne pellet plant

**Bailadila, Chattisgarh, India:** 8-million tonne iron ore beneficiation plant

**Pune, Maharashtra, India:**

- 600,000-tonne cold rolling plant
- 500,000-tonne galvanising plant
- 400,000-tonne colour coating plant
- 650,000-tonne pickling line

**Algoma, Ontario, Canada:** 4-million tonne steel plant

**West Java, Jakarta, Indonesia:**

- 400,000-tonne cold rolling complex

- 150,000-tonne galvanizing line
- Steel processing centre: 200,000 tonnes
- Essar Hypermart

**Retailing (across India):** Over 600 steel retail outlets branded Essar Hypermart and Essar Expressmart

**Services (across India & UAE):** Largest steel processing & distribution facilities in India with an annual capacity of 4 million tonnes located in Pune (Maharashtra), Hazira (Gujarat), Bahadurgarh (National Capital Region), Chennai (Tamil Nadu), Bhuj (Gujarat) and Dubai (UAE)

**Dudley, West Midlands, UK:** A 500,000-tonne steel processing centre

#### **UNDER EXECUTION**

**Paradip, Orissa, India:** A 12-million tonne pellet plant at Paradip close to the port

**Jodha-Barbil area, Orissa, India:** A 12-million tonne iron ore beneficiation plant

**Minnesota, USA:** A 7-million tonne pellet plant, a concentration plant and a direct-reduced iron plant

#### **OIL & GAS BUSINESS**

- A fully integrated oil & gas company of international scale with strong presence across the hydrocarbon value chain from exploration & production to oil retail
- Access to a global portfolio of onshore and offshore oil & gas blocks, with about 45,000 sq km available for exploration
- Largest coal bed methane (CBM) player in India
- Over 300,000 bpsd (barrels per stream day) of crude refining capacity that is being expanded to 405,000 bpsd
- Fifty percent controlling stake in Kenya Petroleum Refineries Ltd, which operates a refinery in Mombasa, Kenya, with a capacity of 80,000 bpsd
- Over 1,600 Essar-branded oil retail outlets in various parts of India

#### **CURRENT OPERATIONS**

##### **Exploration & Production:**

**Asia, Africa & Australia:** Diverse portfolio of offshore and onshore Oil & Gas blocks as well as Coal Bed Methane blocks

- Ratna and R-series fields near the Mumbai High field in the Mumbai offshore basin
- 50 percent interest in one shallow water offshore exploration block MB-OSN-2005/3, near the Mumbai High field in the Mumbai offshore basin
- 70 percent operating interest in Mehsana oil and gas block that has started crude production
- 100 percent interest in 1 CBM block in Raniganj, Durgapur, West Bengal, which is close to commercial production
- 100 percent interest in 1 CBM block in Rajmahal, Jharkhand
- 100 percent interest in 1 CBM block in Sohagpur (Parts of Madhya Pradesh and Chhattisgarh)
- 100 percent interest in 1 CBM block in Talcher, Orissa
- 100 percent interest in 1 CBM block in Ib Valley, Orissa
- 100 percent interest in 2 exploration blocks in Assam
- 100 percent interest in 1 exploratory block in Nigeria shallow offshore
- 100 percent interest in 1 oil and gas block in Vietnam
- 100 percent interest in 2 exploratory blocks in Madagascar
- 100 percent rights in 2 exploration blocks in Northern Territory, Australia offshore
- 49.5 percent interest in 1 on-land exploration South East Tungal block in Indonesia

### **Refining:**

**Vadinar, Gujarat, India:** World-class 10.5-million tonnes or 220,000 bpsd refinery (operating at 14 million tonnes or 300,000 bpsd) producing fuels compliant with latest emission standards; being progressively expanded to 18 million tonnes (375,000 bpsd) and 20 million tonnes (405,000 bpsd)

### **Major units:**

- Crude Distillation Unit: Current potential capacity of 14 million tonnes
- Vacuum Distillation Unit: Current potential capacity of 7.2 million tonnes
- Vis Breaker Unit: Current potential capacity of 2.2 million tonnes (Axens, France)
- Continuous Catalytic Regenerator: Current potential capacity of 1 million tonnes (Axens, France)
- Fluid Catalytic Cracking Unit: Current potential capacity of 3.3 million tonnes (Stone & Webster)
- Diesel Hydro Desulphurisation unit: Current potential capacity of 4.5 million tonnes (Axens, France)
- Naphtha Hydro Treater: Current potential capacity of 1.6 million tonnes
- Dedicated infrastructure includes a captive power plant, dispatch facilities by rail, road, sea and pipeline, associated tankages, pipelines, water intake facilities, and a

Single Buoy Mooring system, which can accommodate Very Large Crude Carriers, to receive crude

**Mombassa, Kenya:** Fifty percent controlling stake in an 80,000 bpsd refinery run by the Kenya Petroleum Refineries Ltd (KPRL); the remaining 50 percent is owned by the Kenyan government

### **Retailing:**

#### **Across India:**

- Marketing network of over 1,380 operational retail outlets with over 250 outlets in various stages of construction
- Tie-ups with other oil marketing companies that gives Essar Oil access to product and right to use their terminals and facilities for placing and marketing our products. This gives the company pan-India presence with more than 30 supply locations.

### **UNDER EXECUTION**

#### **Vadinar, Gujarat, India:**

- Expansion of existing refinery to 18 million tonnes and further to 20 million tonnes
- Additional single point mooring system to handle crude

### **POWER BUSINESS**

- Current generation capacity of 1,600 MW that is being expanded to 6,100 MW by 2012, and to 11,470 MW by 2014
- Growing portfolio of gas, coal and liquid fuel-based power plants
- One of the lowest cost power producers
- Exploring new opportunities in conventional and renewable power generation globally
- Expanding in the transmission sector; first private power company to get a transmission license

### **CURRENT OPERATIONS**

#### **Hazira, Gujarat, India:**

- 515 combined cycle MW plant, gas-based; 215 MW captive to Essar Steel's Hazira steel plant and 300 MW supplied to Gujarat Urja Vikas Nigam
- 500 MW combined cycle plant, gas-based; captive to Essar Steel's Hazira steel plant

**Vadinar, Gujarat, India:** 120 MW co-generation plant, oil-fired; captive to Essar Oil refinery, and 380 MW natural gas fired based plant that provides power and steam to the Essar Oil refinery

**Algoma, Ontario, Canada:** 85 MW, co-generation; captive to Essar Steel Algoma plant

#### **UNDER EXECUTION**

##### **Gujarat, India:**

###### **Salaya:**

- Phase I: 1,200 MW, imported coal based
- Phase II: 1,320 MW, imported coal based  
: 600 MW, pet coke based

**Vadinar:** 510 MW oil-fired co-generation plant; will supply power and steam to Essar Oil's expanded refinery.

**Hazira:** 270 MW multi-fuel plant

##### **Mahan, Madhya Pradesh, India**

- **Phase I:** 1,200 MW, pit head coal based
- **Phase II:** 600 MW, coal based

##### **Tori, Jharkhand, India**

- **Phase I:** 1,200 MW, pit head coal based
- **Phase II:** 600 MW, pit head coal based

**Paradip, Orissa, India:** 120 MW coal-based plant to supply power to Essar's upcoming pellet plant in that location

##### **Orissa, India:**

- **Navabharat I:** 1,050 domestic equity coal based
- **Navabharat II:** 1,200 domestic / imported coal

#### **COMMUNICATIONS BUSINESS**

- A global player in the communications sector with presence in telecom services, CDIT and Business Process Outsourcing services
- Telecom services in India and Africa with over 135 million subscribers
- Partnership with Vodafone Plc, with 33 percent stake in Vodafone Essar Ltd
- A 14 percent stake in Indus Towers
- India's largest telecom retail network, with over 1,000 outlets in more than 150 towns and cities
- Business Process Outsourcing services, employing over 50,000 people

## **CURRENT OPERATIONS**

### **Telecom Services**

- **Vodafone-Essar:** Joint venture of Essar Group and the UK-based Vodafone Group, with over 135 million subscribers
- **“yu”:** A GSM-based mobile services network in Kenya with over 1 million subscribers

**Telecom Towers:** A 14 percent stake in Indus Towers, world's largest tower company with over 100,000 towers

**Consumer Durable and IT Retail:** Operates over 1,000 The MobileStore and seven The ElectronicStore outlets across India. Largest telecom retailer within the organized sector.

**IT-enabled Services:** Aegis, a global leader in Business Process Outsourcing (BPO), employs over 50,000 employees with expertise in the telecom, BFSI, travel & hospitality, consumer goods, retail and healthcare domains as well as engineering services, serving several Fortune 500 companies from 47 delivery centres across 11 countries.

Aegis also owns a majority stake in AGC Networks, a leading provider of communications solutions.

## **SHIPPING, PORTS & LOGISTICS BUSINESS**

- An integrated logistics solution provider with presence in sea transportation, ports & terminals, logistics and oilfields services
- One of India's largest operator of ports
- Fleet of 26 vessels, with an additional 12 new ships on order
- Building a cargo handling capacity (dry, bulk and liquid cargo) of over 150 million tonnes

- Contract drilling services to global oil majors, with a fleet of 12 onshore rigs and one semi-submersible offshore rig; two new jack-up rigs on order

## **CURRENT OPERATIONS**

**Sea transportation:** Diversified fleet of 26 vessels including VLCCs, mini-bulk carriers, Supramaxes, tugs and cape-sizes

- Provides crude oil and product transportation services
- More than 220 ship years to leading Indian and global oil majors and commodity traders; combined tonnage of over 1.4 million

**Ports & Terminals:** Among India's largest owners and operators of ports

- Vadinar, Gujarat, India: A 58-million tonne port and terminal facility to provide handling, storage and terminalling services for crude oil and petroleum products to refineries and traders.
- Hazira, Gujarat, India: A 30-million tonne all-weather deep draft bulk terminal for import of iron ore, pellets, coal, limestone and export of finished steel products

**Logistics:** Provides end-to-end logistics services – from ships to ports, lighterage services to plants, intra-plant logistics and dispatching finished products to the final customer

- Owns transshipment assets to provide lighterage support services, onshore & offshore logistics services
- Manages a fleet of 5,000 trucks for inland transportation of steel and petroleum products

**Oilfields services:** Provides contract drilling and related services to oil and gas companies worldwide, operating both offshore and onshore in diverse countries.

- Owns a fleet of 13 rigs, which includes 1 semi submersible rig and 12 onshore rigs

## **UNDER EXECUTION**

**Ports & Terminals:**

- **Hazira, Gujarat, India:** Bulk terminal capacity increase to 50 million tonnes
- **Salaya, Gujarat, India:** A 20-million tonne integrated terminal facility for handling coal and pet coke used in power plants
- **Paradip (Orissa, India):** A 14-million tonne deep draft coal berth, as part of an agreement with the Paradip Port Trust to execute a BOT (build-operate-transfer) project, with rights to operate the berth for 30 years

- Developing Central Quay-3 to handle a 16-million tonne mechanization terminal under a ten-year License Agreement with Paradip Port Trust for export of iron ore and pellets

#### **Sea transportation:**

- Order Book of 12 new building vessels
- MOA signed for acquisition of 2x13,000 dwt Dry Bulk carriers

**Oilfields services:** Two new jack-up rigs on order

### **PROJECTS BUSINESS**

- Forty years of engineering, procurement & construction (EPC) capabilities, including expertise in offshore EPC
- Among the top two EPC companies in India, with a growing external customer base
- Built almost all of Essar's industrial assets in the steel, oil & gas, power and ports sector; currently executing Greenfield or Brownfield expansion in all these sectors
- Owns over 3,000 nos. construction equipment worth over USD 250 million
- Over 12,000 tonnes per annum (TPA) of fabrication facility with waterfront load-out facility
- Dedicated Engineering Centres specializing in Process, Engineering and Design for various industrial sectors, with over 1,200 engineers
- Global procurement support in India, Middle East, Europe and China and excellent vendor relationships

### **MINERALS BUSINESS**

- Access to over 1.6 billion tonnes of iron ore reserves and 450 million tonnes of coal reserves.
- Iron ore and coal mines in Asia, Africa and North America
- Major focus on iron ore, coal (thermal and metallurgical) and limestone required for the steel and power sectors
- Potential to set up large-scale mining operations to secure captive needs and for merchant sale

### **CURRENT OPERATIONS**

#### **Iron ore mines**

- **Chhattisgarh, Jharkhand and Maharashtra, India:** Managing and developing iron ore mines to supply to Essar steel plants
- **Minnesota, USA:** Iron ore mines on the Mesabi range with reserves of over 1.4 billion tonnes; these are linked to Essar's upcoming pellet plant in the area

## Coal

- **Mahan, Madhya Pradesh, India:** Mahan Coal Limited linked to Essar's power project in the state; production of 8 million tonnes
- **Chakla and Ashok Kerkata, Jharkhand, India:** Coal block linked to Essar's power project in Jharkhand; a production of 4 million tonnes
- **Behraband, Madhya Pradesh, India:** Coking coal block linked to Essar's steel project
- **Indonesia:** Aries coal block under development and will supply coal to imported coal based power projects in Jamnagar and Salaya
- **Mozambique, Africa:** 5 coal blocks in Tete and Niassa provinces, exploration and geological mapping in progress
- **Kentucky, West Virginia, USA:** One of the leading coal producers with reserves of 200 million tonnes (50 percent metallurgical and 50 percent thermal). Captive and merchant sales to Essar Steel and other players in USA

## UNDER EXECUTION

- **Orissa, Jharkhand and Karnataka:** Sourcing from mines to secure iron ore supply
- **South America:** Prospecting licenses to secure supply to pellet plant in the area