

Conglomerate of Ecosystems

Blueprint of a Green Vision

Essar

Five decades of :

- **investing** globally with the **spirit of an entrepreneur**,
- **building** assets with **passion of an owner**, and
- **managing** business with **discipline of a professional**

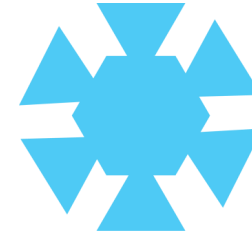
By 2030:

Be a conglomerate of 'green ecosystems', through:

- future centric and value accretive investments,
- return-based capital allocation,
- private equity protocol and processes,
- robust governance with risk mitigation & regulatory compliance, and
- decentralised operational management



Energy



Infrastructure



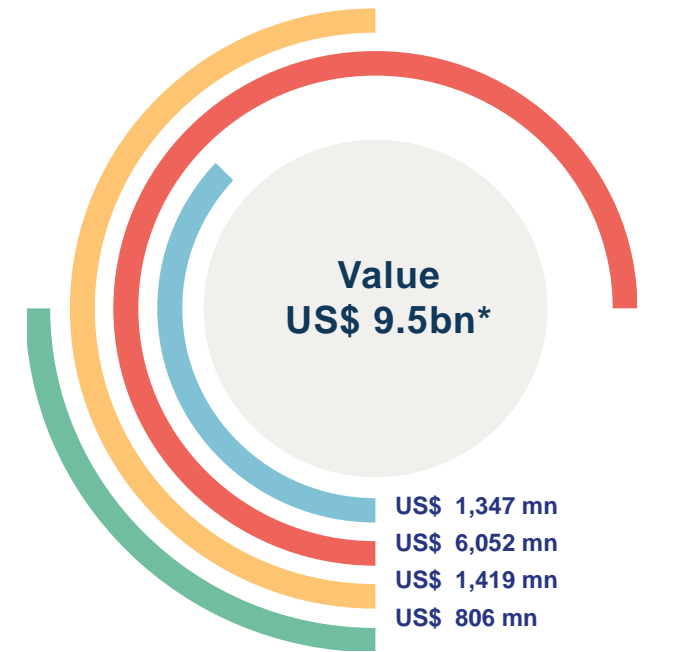
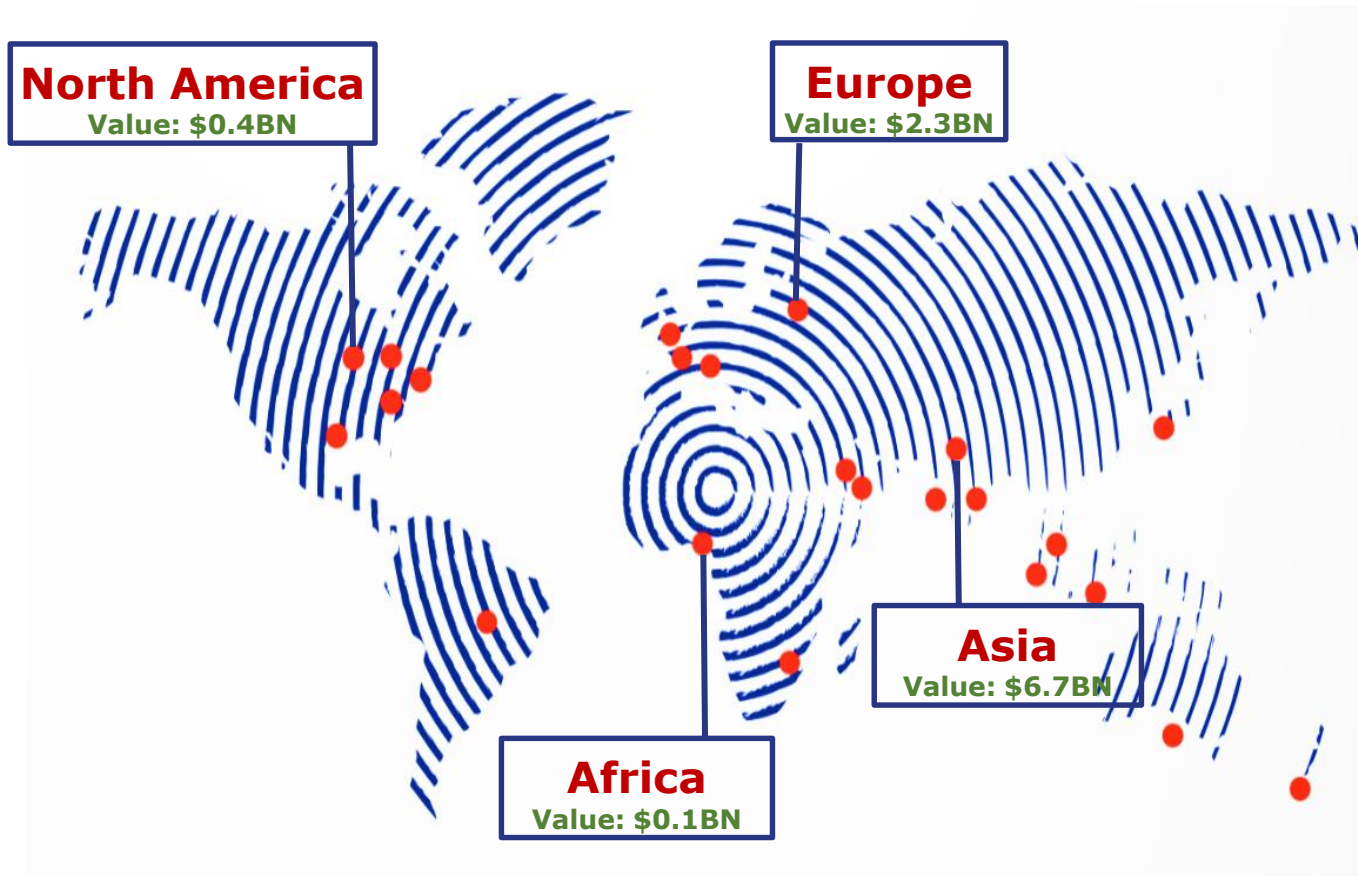
Metals & Mining



Technology & Retail



Footprint: Size & Scale



*Kroll valuation report as of March 2023

- Energy
- Infrastructure & Logistics
- Metals & Mining
- Technology & Retail

Expertise

Creating Value

Essar has invested in a portfolio of world-class companies across sectors and geographies

15

Key Portfolio Companies

\$15 bn

Portfolio Annual Revenues

7000+

Professionals

8

Countries

Entrepreneurship

Building Assets

Strategic investments in setting up world-class facilities in Steel, Power, Ports, Oil and Gas

10 million tonnes

per annum integrated **steel** making facility

168 million tonnes

per annum **ports** capacity

~5000 mw

generation capacity

32 million tonnes

per annum **refining** capacity

464 km

transmission network

90 mn

pan India **mobile network** customers

Experience

Realising Value

Monetized assets; Depicts quality of assets built

\$42 bn

value realised of which

\$18.8 bn

33% stake in Hutchison - Essar (Telecom)

\$12.9 bn

Essar Oil

\$6 bn

Essar Steel

\$2.4 bn

Essar Ports & Power

\$1.9 bn

from other monetisations



Investment Themes

DECARBONISATION

Energy transition, climate smart, **sustainable mining & green steel** initiatives to reduce carbon footprint and promote clean energy **(SDG 7 & SDG 13)**



DECENTRALISATION

Infrastructure for a shared economy, and to create a more efficient system that reduces waste and drives greater efficiency **(SDG 9 & SDG 12)**



DIGITALISATION

Technology & Retail and leveraging AI to create cutting-edge distribution networks and platforms **(SDG 17)**

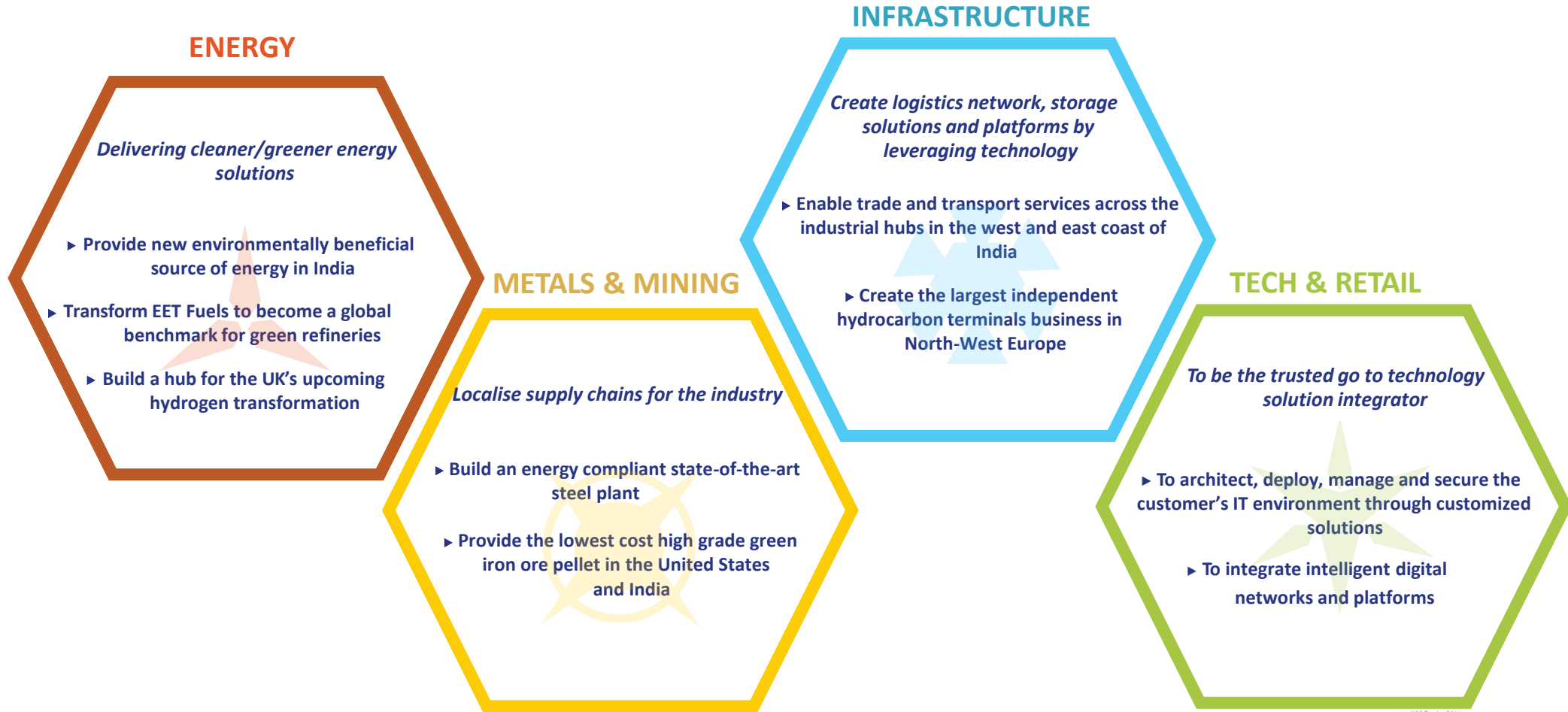


Aligned to the global need, with a focus on 'net zero' and 'positive impact', Essar is demonstrating its commitment to the UN Sustainable Development Goals (SDGs) and its role as a 'responsible global corporate citizen'.

Investment Objectives

Transition existing seed assets to 'green assets' for a post carbon economy

Transform sectors with investment in new age resources within the 'ESG' framework

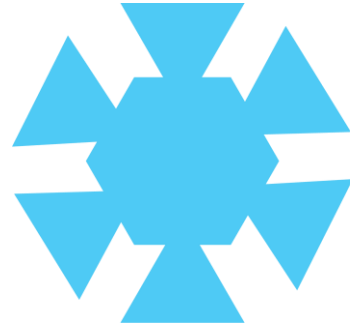


Portfolio



Energy

- Essar Oil & Gas Exploration & Production Ltd (EOGEPL)
- Essar Energy Transition (EET)
- Green Ammonia India



Infrastructure

- Essar Ports Ltd
- Essar Power
- PT MBL
- Essar Projects
- Essar Shipping



Metals & Mining

- Mesabi Metallica Co, US
- Green Steel Arabia, KSA
- Essar Minmet Ltd



Technology & Retail

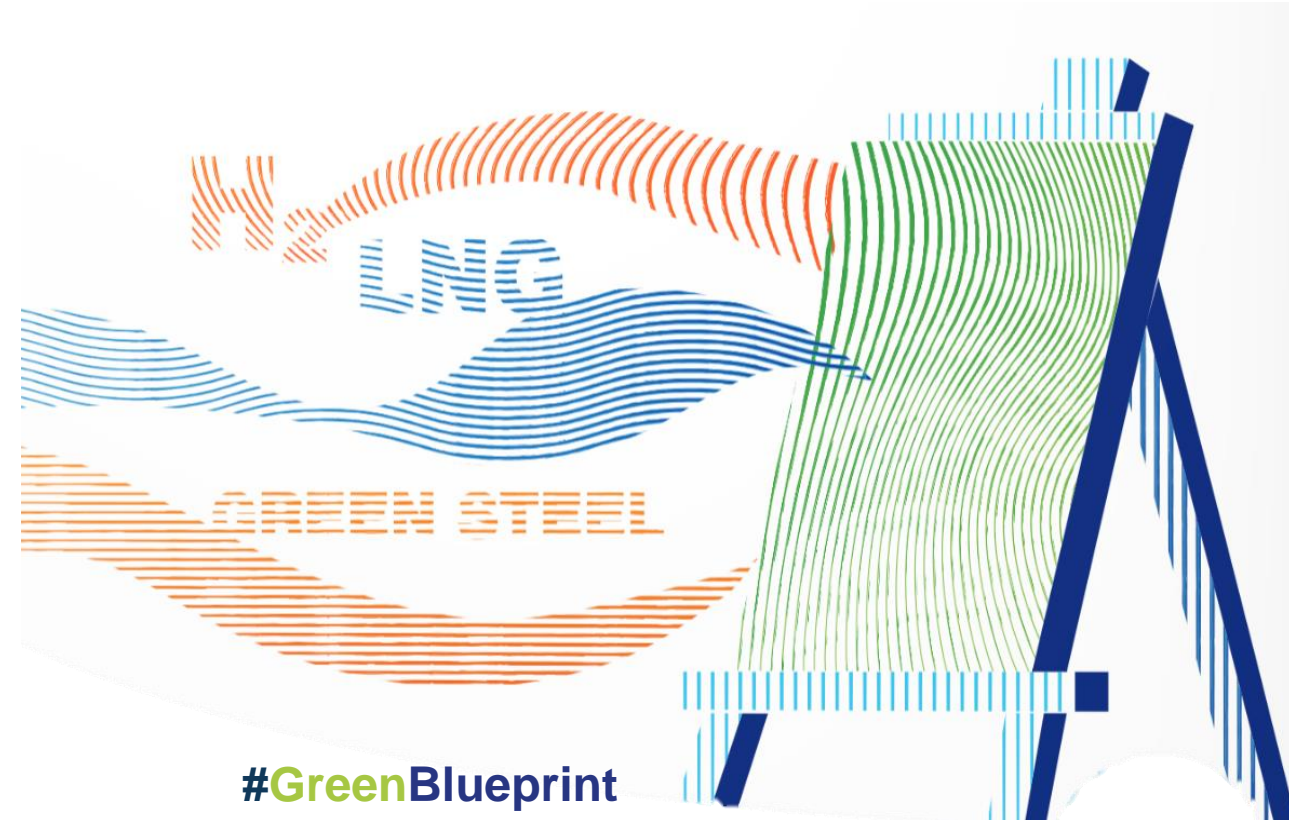
- Exponentia Ventures
- Green Mobility
- Black Box
- Pluckk



Conglomerate of Ecosystems

Building Green Ecosystems of:

- **Hydrogen** along with decarbonisation initiatives for creating a sustainable industrial economy.
- **Mobility** by innovating logistics for eco-friendly transportation.
- **Steel** through supply chain decentralization by transforming mineral resource platforms in the shared economy.



Hydrogen Ecosystem

Production and Supply Side

EET Hydrogen Facility (UK):

- Establishment of a production facility in the North West of the United Kingdom.
- Operated under the EET Hydrogen brand.

Carbon Capture Collaboration:

- Collaboration with ENI for a carbon capture facility to prevent CO₂ release into the atmosphere.

Green Hydrogen and Green Ammonia Imports:

- Imports from Essar's Salaya, India production facility.
- Proximity of Salaya port ensures low-cost and easy export.

Logistics and Storage Solutions:

Stanlow Terminals: UK's largest independent bulk-liquid storage terminal. Supports storage and logistics for clean fuels in the UK.

Consumption and Demand Generation

Transitioning Stanlow Refinery:

- Transformation into the UK's first low-carbon refinery.
- Conversion to a hydrogen furnace.

Government Backing:

- Supported by the UK government as a strategic national asset.

Regional Impact:

- Supports the clean energy transition in the North West industrial belt.

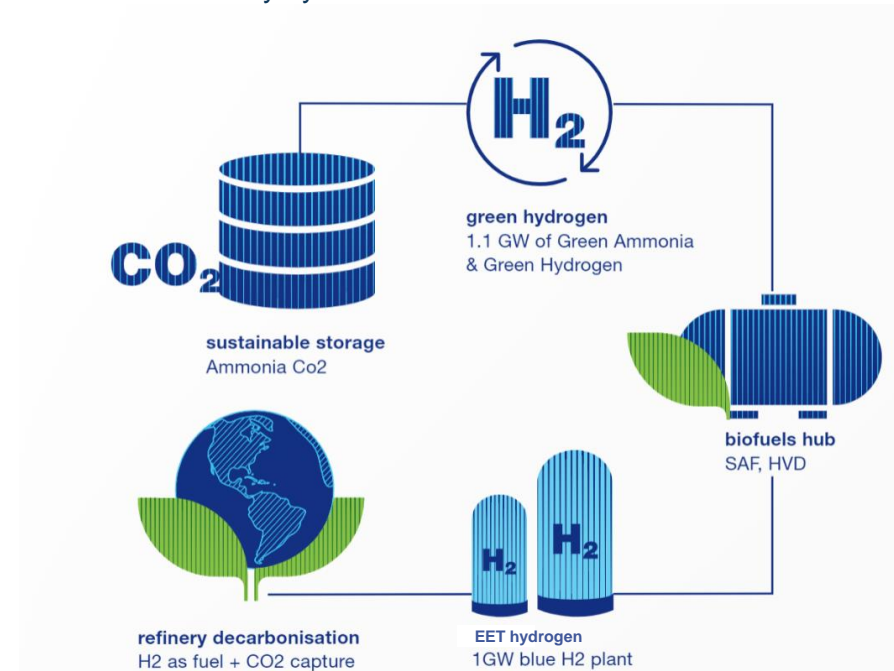
Environmental Impact

Hydrogen Generation and Carbon Capture:

- Investments to generate 1.35 GW of hydrogen, sufficient to power a city like Liverpool.
- Carbon capture to capture 1.8 million tonnes per annum, equivalent to removing 750,000 cars from the roads.

Refinery Emission Reduction:

- Essar's refinery operations to reduce emissions by half by 2030 and eliminate them entirely by 2040.



Green Mobility Ecosystem

Current Need: Decarbonisation

Global Urgency:

- Need for a decarbonized world is imminent.
- Interim fuel required as net-zero technologies evolve.

Interim Solution: LNG - Driving Global Needs

Strategic Choice:

- LNG identified as a best suitable interim fuel.
- Focus on pushing India towards becoming a gas-based economy.

Collaborative Initiatives

Terminal Development:

- Essar, in partnership with Arcelor Mittal, to build a 6MTPA LNG terminal at Hazira.

Infrastructure Expansion:

- Through Ultra Gas & Energy, developing India's largest network of 100 Internet of Things (IoT)-enabled LNG outlets.
- Future-ready for EV charging, hydrogen, bio-LNG, etc.

Industry Impact

Trucking Industry Focus:

- LNG's unmatched mileage makes it ideal for the trucking industry.

SME Catering:

- Immense value for small and medium-scale industries.
- A 100-station network catering to just-in-time requirements.

Strategic Sourcing

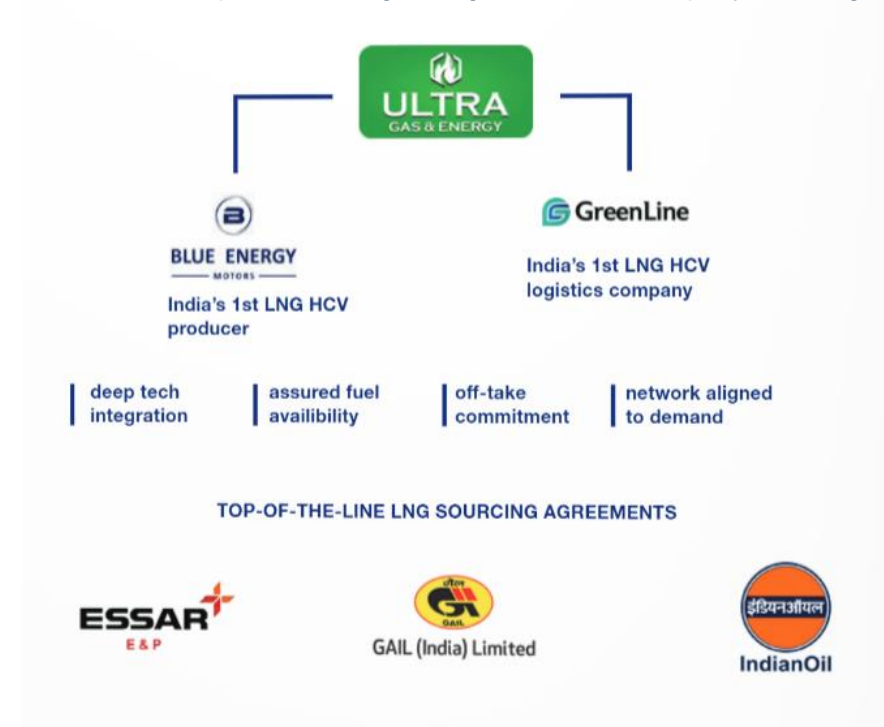
Sourcing Partners:

- Essar Exploration & Production, GAIL, Indian Oil.
- Collaborations with Greenline (India's first LNG logistics company) and Blue Electric (India's first LNG HCV producer).

Market Growth

Growing Clientele:

- Partnerships ensure a growing clientele in a rapidly evolving market.



Steel Ecosystem

Global Footprint: Steel-Making Capacities

Saudi Arabia:

- 4-MTPA Green Flat Steel Complex underway.
- Focus on minimizing emissions and environmental impact.

Odisha, India:

- 14-MTPA steel beneficiation and pellet plant – Largest in India.
- Utilizing pellets to minimize emissions and improve furnace productivity.

Sustainable Operations in Odisha

Green Initiatives:

- Use of natural gas and renewables to minimize carbon footprint.
- MoUs in place with Essar Power's planned solar plants.

Efficient Logistics:

- 245-km slurry pipeline for green, sustainable, and efficient logistics.
- Return water pipeline aligned with the zero water discharge principle.

Strategic Location:

- Near iron ore mines, Paradip port, and international markets for minimal environmental impact.

Future-Ready Technology in Saudi Arabia

Diverse Product Range:

- 4-MTPA Green Flat Steel Complex to produce premium-quality steel products.

Environment-Friendly Practices:

- Technologies like Pellets, DRI, EAF, and slab casting reduce power usage and carbon emissions (40-60%).

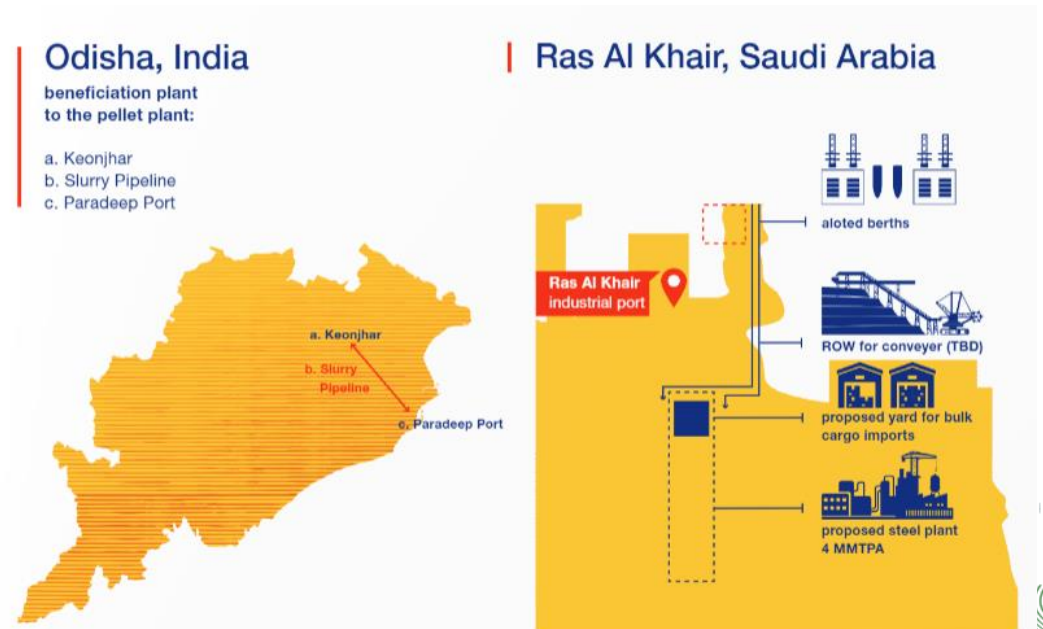
Hydrogen Integration

- Future-ready manufacturing technology to replace natural gas with hydrogen.

Efficient Product Evacuation

Strategic Port:

- Port construction for easy, swift, and clean product evacuation.



Governance & Management

Board Composition

All operating companies have Board of Directors comprising of:

- **Executive Directors**
- **Non- Executive Directors (Independent and Nominee)**
- **Investor Directors**

Sub committees

Committees with delegated powers for focused oversight

- **Audit**
- **NRC**
- **CSR.**

Group Monitoring Committee

- Approve strategic and new investments for portfolio companies.
- Review Annual Business Plans (ABPs) and monitor portfolio companies.
- Ensure management bandwidth aligns with approved business plans.
- Develop a sustainable financing strategy for the Group.
- Maintain prudent financial policies for consistent stakeholder returns.
- Recommend shareholder nominees on the board of portfolio companies
- Implement a robust Risk Assessment, Mitigation, and Compliance system.
- Enhance Essar Brand perception and instill Core Values among stakeholders.



Energy: 14 Board Members



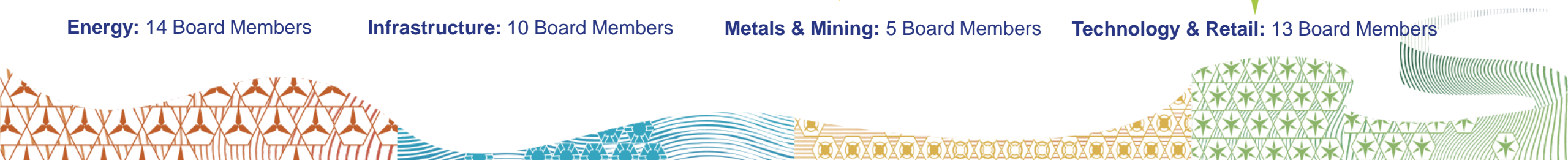
Infrastructure: 10 Board Members



Metals & Mining: 5 Board Members



Technology & Retail: 13 Board Members



Leadership – Group Monitoring Committee



Sh. Shashi Ruia
Founder



Sh. Ravi Ruia
Co Founder



Prashant Ruia
Member – Founding Family



Anshuman Ruia
Member – Founding Family



Smiti Kanodia
Member – Founding Family



Rewant Ruia
Member – Founding Family



Vikas Saraf
Advisor



Haseeb Drabu
Managing Partner



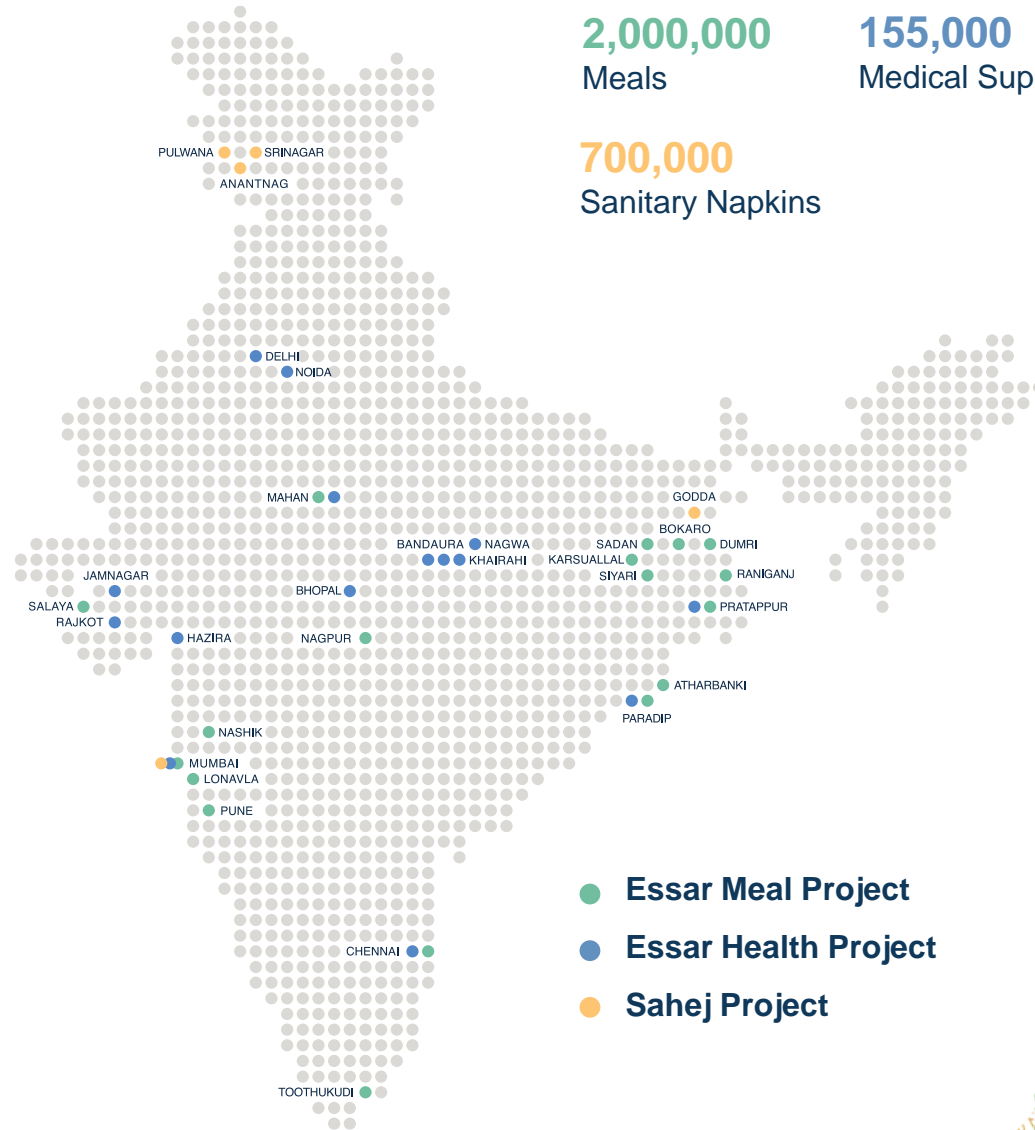
Dhanpat Nahata
Managing Partner



Essar Foundation

Essar Foundation has a rich heritage of 50 years of service across Pan-India; in health, education, livelihood, women empowerment, sports, environment and infrastructure. The Foundation has always stood by the nation in every emergency, be it Covid-19, floods, famine or drought.

Reaching out to vulnerable sections of the society; like homeless, daily wage earners, transgenders, women with a background of domestic violence, slum dwellers, migrant labourers, marginalised families, ragpickers, orphanages, families in remote villages, Adivasi tribe



2,000,000
Meals

155,000
Medical Supplies

700,000
Sanitary Napkins



Avid Learning

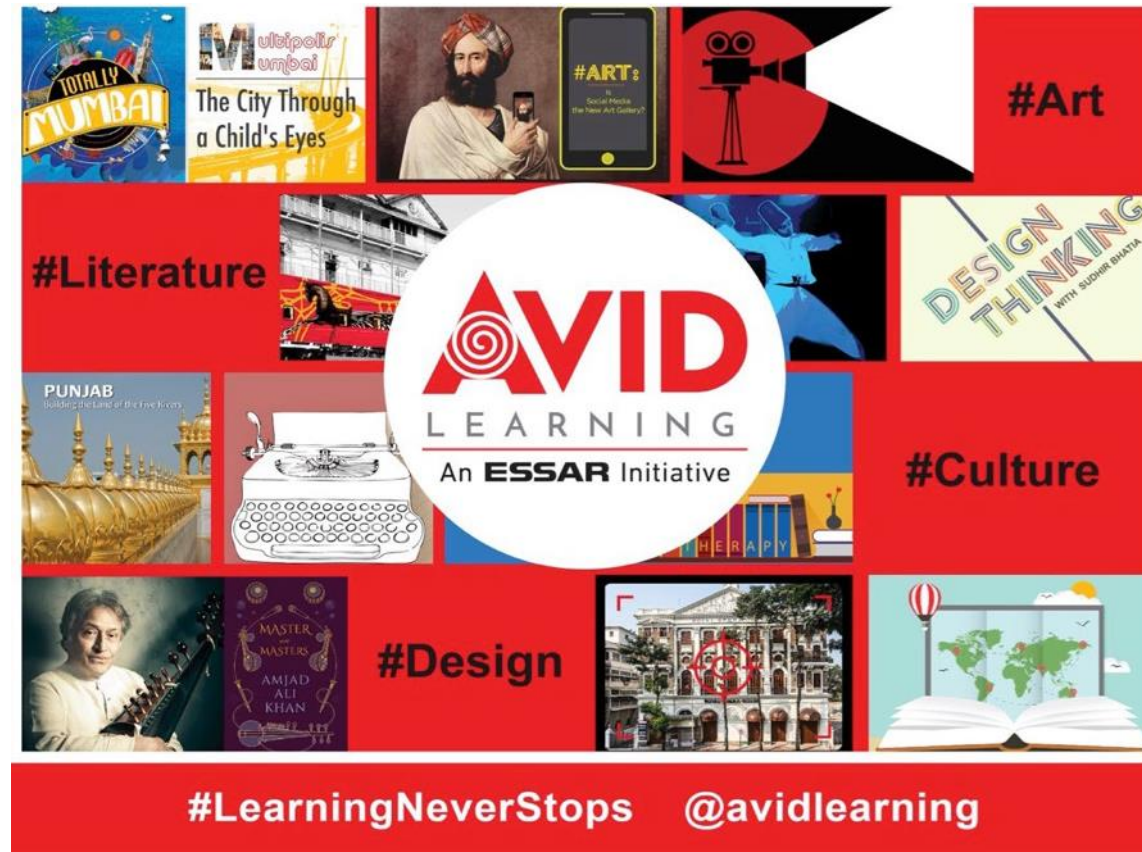
India's Pioneering Cultural Programming Platform

Essar's cultural philanthropy arm, with firmly entrenched in India's cultural ecosystem;

Founded in 2009, Avid Learning is one of Mumbai's leading public programming platform. Avid Learning has gained a reputation for curating thought-provoking, innovative and path-breaking content spanning a variety of topical subjects and trends.

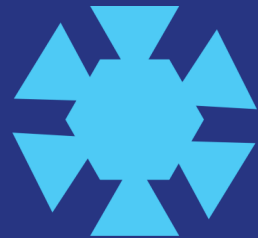
Avid Learning aims to probe meta issues and initiatives which directly impact cultural policy, education and the creative sector in India.

Staying true to its credo that **#LearningNeverStops**, the platform is continually in search of path breaking programmes and emerging opportunities for discerning audiences worldwide.





Appendix- Portfolio Assets



Essar Energy Transition (EET)

EET Fuels UK



To become World's First
Green Fuel Refinery

95% CO₂ reduction & bio-
fuels blending

*EBITDA potential from
Energy Transition &
Sustainability initiatives:*

Refining EBITDA: \$350mn
Debottlenecking: \$70mn
Optimisations: \$210mn
Decarbonisation: \$270mn
CBAM: \$200mn

EBITDA: \$1.1bn
Capex: \$900mn

EET Hydrogen UK



UK's first and
Largest Low Carbon
H₂ producer

1.35GW Blue H₂

HPP1: 350MW
HPP2: 1 GW
HPP3: 1GW
HPP4: 1GW

EBITDA: \$300mn
Capex: \$1.8bn

EET H₂ Power UK



World's First 100%
H₂ fired power plant

100MW H₂ Power
Plant

EBITDA: \$80mn
Capex: \$275mn

Stanlow Terminal UK



UK's largest fuels
storage facility

UK's largest bulk
liquid storage
terminal
(3 mn cbm)

EET Retail UK



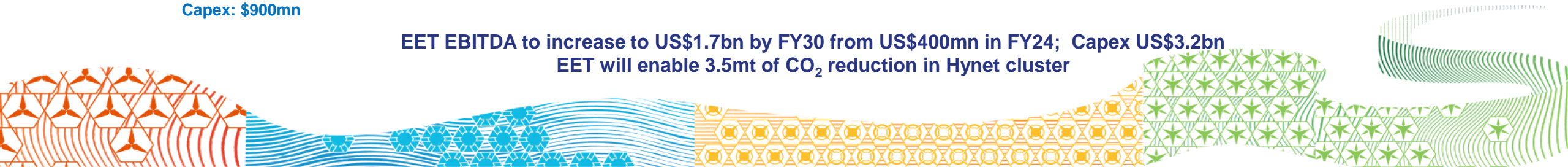
To become
UK's Leading Low
Carbon Fuel Retailer

UK: 700 sites

1.9bn litres

2.8 mn litres per site

EET EBITDA to increase to US\$1.7bn by FY30 from US\$400mn in FY24; Capex US\$3.2bn
EET will enable 3.5mt of CO₂ reduction in Hynet cluster



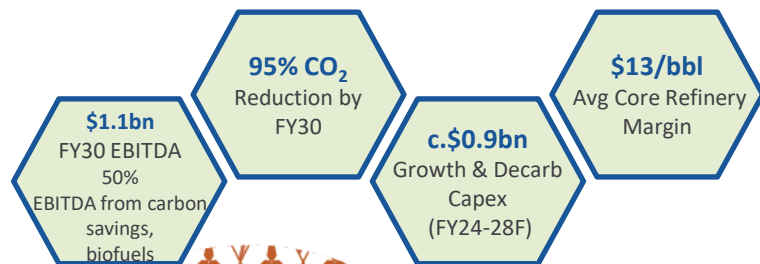


To become World's First Green Refinery – 95% CO₂ reduction

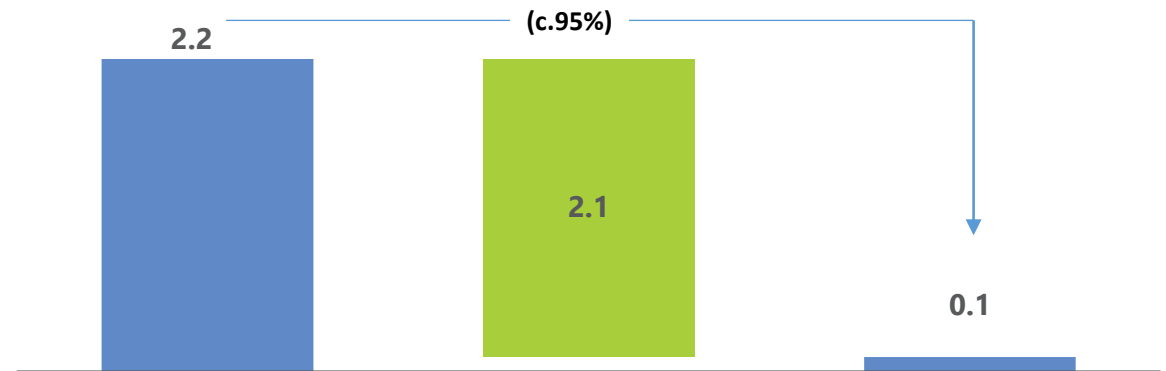
The Essar Energy Transition Opportunity

- ❑ EOUK's main asset is Stanlow refinery (10mtpa - 16% of UK's road fuel demand), one of the most advanced refineries in Europe (top 15% in Europe by complexity)
- ❑ **US\$0.9bn capex plans to transform Stanlow** into world's first green refinery
- ❑ Stanlow will become **World's First Green Refinery** - 95% CO₂ reduction & bio-fuels blending
- ❑ Unique competitive advantages:
 - ❑ **Access to Hydrogen (EET Hydrogen) and**
 - ❑ **Proximity to CCUS**

Significant investments to decarbonise the refinery



World's first green refinery - 95% CO₂ reduction by FY30



Tear Sheet

World's first green refinery	<ul style="list-style-type: none"> • 95% reduction in CO₂ emissions (2mtpa) by FY30 • CO₂ reduction by <ol style="list-style-type: none"> 1) Hydrogen Fuel Switching 2) Industrial Carbon Capture 3) 100% H₂ Fired CHP
Structural Initiatives for Sustainability	<ul style="list-style-type: none"> • Sustainability to increase from <ol style="list-style-type: none"> 1) Debottlenecking 2) Refinery optimisation, and 3) CBAM

EET - Hydrogen



World's Leading 4GW Low Carbon Hydrogen plant with compelling economics

Overview

❑ Catalyst of UK's Low Carbon Hydrogen Economy

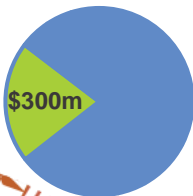
- Project has received government approval for CfD (Contract for Difference) mechanism for 350MW (HPP1)
 - EET Hydrogen will also pursue opportunities beyond HPP1 into HPP2/3/4, Green H2, projects and mobility
- 1 of 2 projects (HPP1) in the UK which has received Government approval
- 1st project (HPP1) to commence operations in the UK

❑ Leverages Huge Captive Market in the North West

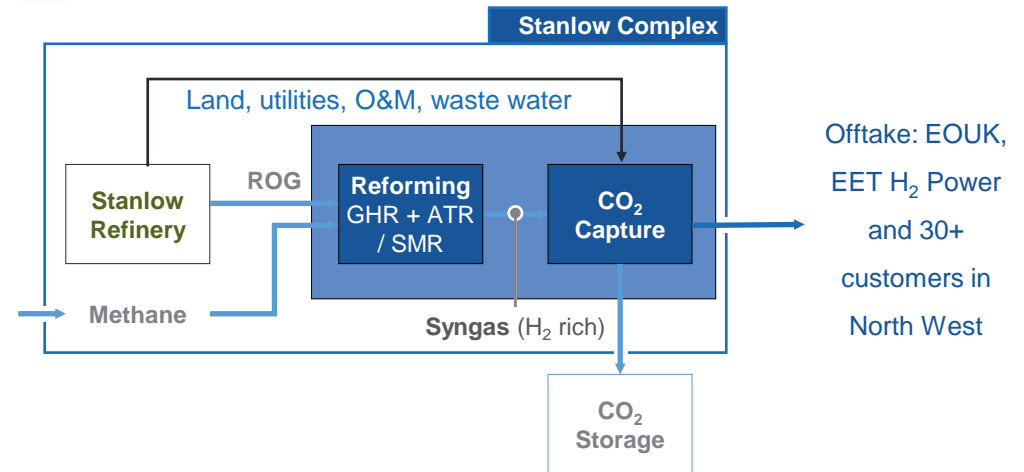
- Exclusive hydrogen player in the North West cluster
- EOUK as anchor offtaker out of 3-4 GW of demand from 30+ customers in North West

❑ Government Revenue Support

EET Hydrogen – Contribution to Total FY30E EBITDA



EET - Flow Sheet



Tear Sheet

Technology (HPP1)	Gas Heated Reformer (GHR) Autothermal Reformer (ATR)	Energy Source	Natural Gas + ROG
Technology (HPP2, 3 & 4)	Steam Methane Reformer (SMR)	Annual Offtake	Refinery for Plant 1 and wider HyNet NW Cluster for Phase 2-4
Key Products	H ₂ - 11 TWh p.a. for HPP1 and HPP2	Permits	Existing Security Approvals and Environmental Permits



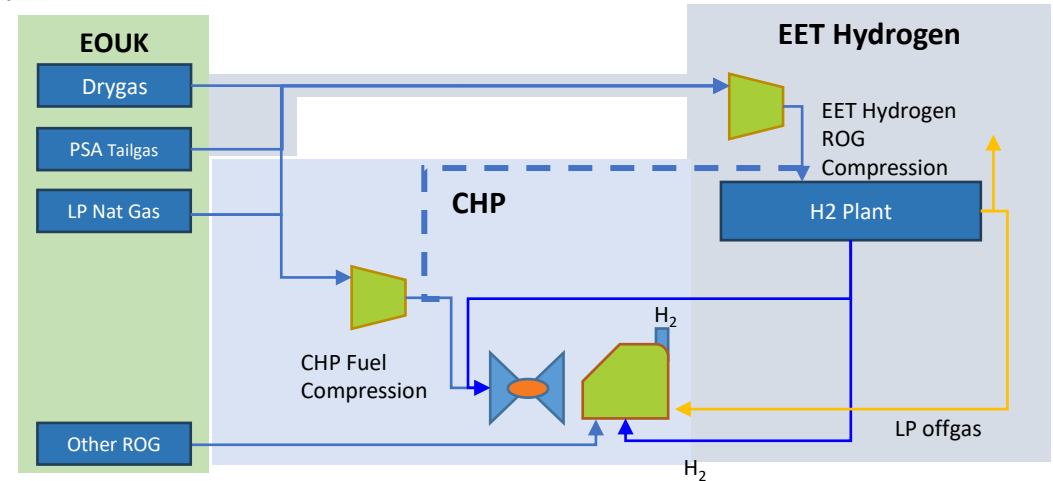


EET H2 Power will be the First 100% H2 Fired Power Plant Globally

Overview

- ❑ **First of-its-kind H₂-powered power plant globally**
- ❑ **Capacity of 100 MW in the UK (Stanlow)**
 - To be developed in two phases: COD in FY27 and FY29
- ❑ **Customers: EOUK, EET Hydrogen & Third Parties**
- ❑ **EET Hydrogen to supply H₂**
 - Multi-fuel plant – can also operate on Natural gas and RoG
- ❑ **Capex optimisation through modularisation**
 - Capex: \$275m
 - Leverage on modularisation strategy for construction to optimise costs and schedules
 - EBITDA of \$80m through sale of power and steam
 - CO₂ savings - additional benefit

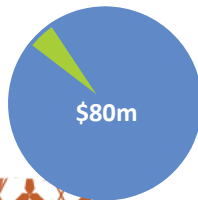
EET Flow Sheet



Tear Sheet

Key Products	Power and Steam	Production Geographies	UK
Capacity	100 MW power	Markets	EOUK refinery, EET Hydrogen

EET H₂ Power – Contribution to Total FY30E EBITDA



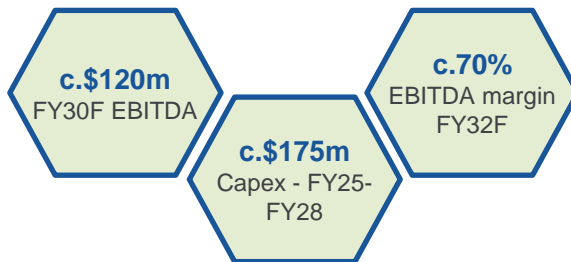
EET – Stanlow Terminals

UK's largest bulk liquid storage facility; expanding capacity with focus on 3rd Parties

Overview

- ❑ **UK's largest independent bulk liquid storage terminal**
 - 2 business segments: Essar Oil storage capacity & Third-party business
 - 3m m³ total storage capacity by 2026
- ❑ **Take-or-pay contract with EOUK, providing revenue certainty for next 20 years**
- ❑ **Strong growth potential from Third-party business**

UK's largest fuel storage terminal – expanding capacity



– Focus on Third Party businesses



Tear sheet

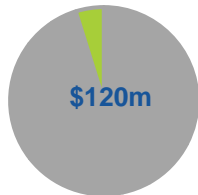
Technology	Storage, blending and distribution	Tranmere KPIs	2 berths, 140 ships handled per year, 10m tonnes of crude handled p.a.
Key Products	Biofuels, ammonia, CO ₂ , bulk liquids	Stanlow Berths KPIs	6 berths, 600 ships handled per year, wide range of products
Connectivity	Mainline rail, port; refinery, road, UK Oil Pipelines (UKOP), Manchester pipeline		

To become UK's leading Low Carbon Fuel Retailer

Overview

- ❑ To become one of the leading Low Carbon Fuel Retailer in the UK
- ❑ Asset light model
 - Company Lease Dealer Operated (CLDO)
- ❑ EET Retail has strong growth plans
 - 700 retail sites by FY30
- ❑ Each retail outlet is expected to sell 4.3mn litres p.a.
 - Total volume of 1.9bn litres
- ❑ EET retail to generate \$120mn of steady-state EBITDA

EET Retail – Contribution to Total FY30E EBITDA



– Driving Community Convenience



Sites	700 in the UK	Model	CLDO & DODO
Total Sales	1.9bn litres p.a.	Throughput / outlet	2.8 mn litres p.a.





Geographically diversified E&P portfolio with proven prospects

Essar Exploration and Production Ltd (EEPL) holds geographically diversified conventional and unconventional assets portfolio with significant prospects

Global E&P exposure

Vietnam

~5.4 BBOE of combined in-place

- Block with four prospects with available mix of Oil, Gas and condensate.

India

~12TCF of in-place resources of Unconventional asset in the most high growth gas market

Nigeria

~250mmbbl of Oil and 1.1 TCF of gas in place

Investments:

US\$1000mn investment till date

Production Ramp up along with Fuel and geographical diversification

Vietnam:

- Declared one of the largest gas field discoveries (Ken Bau) of Vietnam by IHS Markit and Wood Mackenzie.
- 45% ownership in partnership with ENI

India:

- First Indian E&P company to achieve over 1mmscmd of CBM production and delivering highest production of 82BCF till date
- Plan to invest over \$250m in expanding production



KEN BAU FIELD - A HISTORICAL DISCOVERY OF VIETNAM'S OIL AND GAS INDUSTRY

OIL & GAS / ASIA

Eni strikes one of the biggest gas finds in Southeast Asia for 20 years

30/07/2020, 6:58 am

ENERGY VOICE
Leading the global energy conversation

Infrastructure



Essar Power Canada / India



Focused on transitioning into sustainable energy portfolio

Algoma Power, Canada

- 85MW co-generation power plant
- Assured offtake – PPA

EPGL 1, Gujarat

- 1,200 MW thermal power plant at Salaya

Essar Ports India



One of the fastest growing private sector port & terminal developer

- Current capacity: 20MTPA in Salaya, Gujarat
- Fully mechanized state of the art capacity
- Operate at 15 mt with third party tie up.

PT MBL Indonesia



One of the fastest growing coal mining company in Asia

- High grade thermal coal 5800 GAAR
- Total mining: 20MTPA
- Own mines: 10MTPA
- 3rd Party mines: 10MTPA

Essar Projects Global



Leading EPC company delivering innovative end to end solutions

- Experienced EPC company: US\$10bn+ projects executed

Essar Shipping & OGD Services India



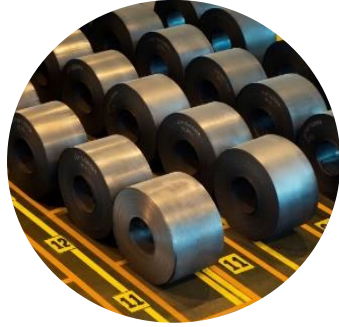
Engaged in offshore and onshore oil field drilling shipping and OGD services

- Owns and operates an offshore semi-submersible drilling rig, Essar Wildcat
- To complete construction of two Jack-Up Rigs at an investment of US\$ 130 mn

Metals & Mining



KSA Project Saudi Arabia



Largest flat Green steel complex across entire MENA region.

- Building a 4-MTPA steel plant in Ras Al-Khair, Kingdom of Saudi Arabia (KSA).
- Flexibility to use H₂ as reducing agent in the DRI plant.

Essar Minmet India



Leading environment friendly pellet plant

- A 14-MTPA Iron Ore Pellet project in Paradip, Odisha
- To deliver high quality pellets of DR and BF grade
- State of the art technology with Low carbon emissions

Mesabi Metallics USA



World class pellet facility at Nashwauk, Minnesota

- 7 MTPA DR grade Iron Ore Pellet Making
- Target market – North American steel producers
- Access to 1.7bn tonnes of high grade iron ore
- US\$1.5bn invested till date

Tech & Retail



Blackbox Global



**Fast Growing Global
Technology Solution
Integrator**

Global presence

- Present in 35+ countries in the Americas, Europe, APAC, Middle East Asia , Africa
- 250 + Fortune 500 customers

Leading IT Solution
Integrator, Technology
Product solution provider

Green Mobility India



**Greenline - To become India's largest green
fleet operator by 2025**

- Dominant market share in LNG and Electric powered freight hauling
- Sharp reduction in carbon footprint & fuel costs; 10,000 trucks by 2026

**Blue Energy Motors – First mover in LNG
truck manufacturing in India**

- Focus on long haul vehicles
- Low cost manufacturing capability

**Ultra Gas & Energy - Disrupting Clean
Energy Marketing and Distribution in India**

- Pioneering LNG access for automotive
- State of the art retail outlets

Pluckk India



**Digitally integrated platform
selling fresh fruits &
vegetables (FnV)**

- Digital platform: 24 hour farm to fork supply chain model
- 20+ categories and 300+ products
- Only FnV brand certified “Plastic Neutral” in India
- Raised US \$ 5mn in Jan 2021 and grown 4X since





Thank You

#GreenBlueprint

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