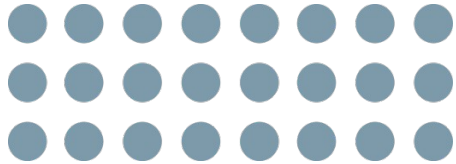


Exploring the value ESG creates in the aluminium industry



MENA
**HEALTH, SAFETY &
ENVIRONMENT**
FORUM 2022

6-7 September 2022



Overview of presentation

Environmental and sustainability factors in the aluminium industry

Aluminium Stewardship Initiative and premium customers

ESG ratings' influence on companies' market value, and future trends

الإمارات العالمية للألمنيوم
EMIRATES GLOBAL ALUMINIUM

EGA



Midstream

Jebel Ali

- Commissioned in 1979, eight separate expansions
- 1,577 reduction cells in seven potlines
- 12 casting stations
- 2,974MW power plant (at 35°C)
- 10.5 million gallons per day capacity desalination plant
- The site is the size of 250 football fields



Al Taweelah

- Commissioned in 2009, second phase in 2013
- 1,266 reduction cells in three potlines
- Nine casting stations
- 3,500MW power plant (at 35°C)
- 3.75 million gallons per day capacity desalination plant
- The site is the size of 555 football fields



Upstream

Al Taweelah alumina refinery

- First alumina refinery in the UAE, second in Middle East
- Two million tonnes per year production capacity
- Meets >40% of UAE's alumina requirements



United Arab Emirates



Guinea Alumina Corporation

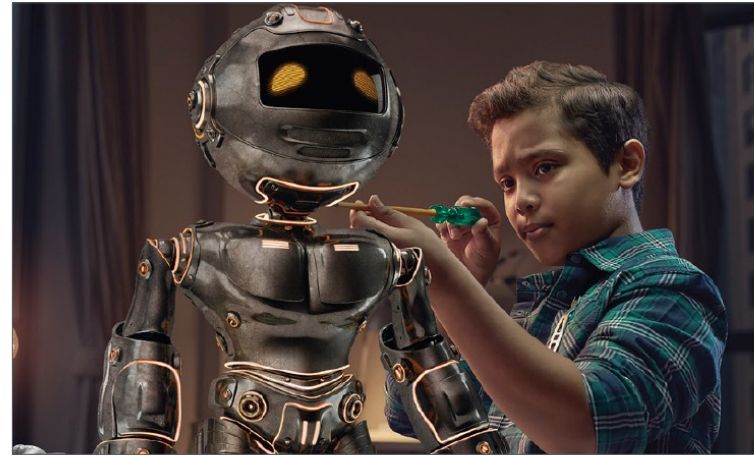
- Bauxite mine and associated export facilities
- Produces some 12 million tonnes of bauxite per year
- One of the largest greenfield investments in Guinea in the last 40 years



Guinea



Environmental and sustainability factors in the aluminium industry



Environment

- Historically, fluoride emissions were the major pollutant in the aluminium smelting business
- Modern smelters have 99% percent fluoride treatment efficiency
- International Aluminium Institute (IAI) was established in 1972
- Gradually from late 1980's onwards, GHG became the number one focus
- Alumina refinery environmental factors are bauxite residue, dust and caustic soda



Social



- EGA prioritises safety, first and always. EGA's safety performance is ahead of global industry benchmarks
- EGA in the UAE engages with local communities and schools, sponsors charities and events
- GAC complies with International Finance Corporation guidelines and performance standards
- GAC's bauxite operations extend over a wide area, with many neighbouring communities

Responsibility

A core value

EGA aspires to be measured amongst the world's most responsible metals and mining companies

\$1bn invested

in technologies and facilities to reduce and manage our emissions and waste since 2010

1st regional ASI member

a global programme to foster greater sustainability and transparency in the aluminium industry

1st regional certification

Al Taweelah site became 1st in the Middle East certified to ASI for sustainability practices and performance. Jebel Ali was certified in 2021.



asi  **Aluminium**
Stewardship
Initiative

Aluminium Stewardship Initiative (ASI) and premium customers



The ASI Performance Standard v3 (2022) defines:

11

principles

62

**environmental, social
and governance criteria**

with the aim to address sustainability issues in the aluminium value chain.

Aluminium Stewardship Initiative (ASI) and premium customers

2050 sustainability priorities:

- Under a 1.5-degree scenario, the aluminium sector must reduce its GHG emissions by over 95 per cent compared to 2020 emissions
- Low carbon aluminium production must be increased

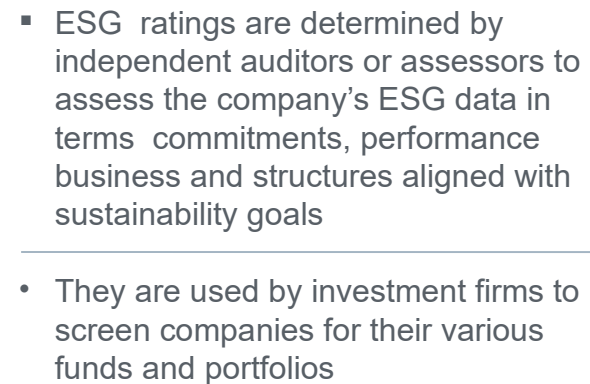


Aluminium Stewardship Initiative (ASI) and premium customers



Implications for EGA:

- EGA uses natural gas to generate power and like all other smelters uses carbon anodes in the process
- Competitive disadvantage compared to operations in North America, Norway, some African countries and Russia, which use hydro power
- Significant carbon tax introduced in 27 countries



A horizontal number line with an arrow pointing to the right. It is labeled with '0' at the left end, '50' and '75' in the middle, and '100' at the right end. Vertical tick marks are placed at each of these numbers.

ESG ratings influence on companies' market value, and future trends

Future trends:

- There is an international push to introduce a global carbon tax
- To remain competitive and attractive to investors, EGA will have to move to renewable or other low carbon energy sources.
- Switching carbon anodes for inert anodes
- Solution to bauxite residue to be found for the alumina refinery



Looking ahead



Low carbon products derived from solar power

Low carbon products derived from solar and nuclear power

An organisation aligned with the global sustainability standards for the aluminum industry

In 2022, able to supply ASI-certified aluminium from our facilities in Jebel Ali

By 2025 able to supply ASI-certified aluminium from our facilities in Al Taweelah

By 2030, will supply only ASI-certified aluminium

By 2050, will supply only ASI-certified aluminium with no embedded CO₂e

Significant first step towards decarbonisation

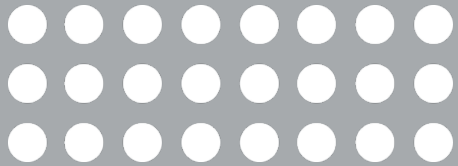


- Planned divestment of EGA's gas-fired power assets
- EGA would source power from grid, including increasing proportion of clean energy
- Would spur significant further development of solar power in UAE
- Vastly increase production of CelestiAL

Growing a business in recycling



- Planned 150,000 tpa recycling facility in UAE, producing billets from post-consumer and pre-consumer scrap
- Feasibility study underway, tenders for main work packages issued. Could begin production as soon as 2024
- EGA is also exploring a re-melt facility of around 30kmt per year to sweeten primary Foundry products up to 30 per cent for individual customers
- Plus interested in pursuing recycling projects with customers around the world



Thank you