



2021 Sustainability Report

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His Majesty King Hamad bin Isa Al Khalifa The King of the Kingdom of Bahrain

2021 Sustainability Report

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About this Report

This is Alba's sixth Sustainability Report. This Report highlights Alba's Environment, Social and Governance achievements during the 12 months from 01 January to 31 December 2021. The information in this Report focuses on the issues that are of impact to our stakeholders.

In 2021. Alba celebrated its Golden Jubilee of operations. In the 50 years since Alba was established, we have been recognized as one of the top industrial companies in Bahrain and the Region with high standards in environment practices, social contribution, and corporate governance. As we look into the future, we remain committed to be the ESG Change we want to see in the world.

All information and statements disclosed in the 2021 Sustainability Report relate to Alba's plant/ operations in Bahrain unless otherwise stated.

Deloitte & Touche Middle East has provided limited assurance on our Sustainability Report in accordance with the GRI Standards and on selected environmental and social KPIs. The assurance statement can be found on pages 104 to 106 of this Report. Deloitte & Touche Middle East (DTME) is independent from Alba at the point when this Report is issued.

This report references the GRI Standards.

FEEDBACK

We welcome your feedback on this report and our performance through:



Email IR@alba.com.bh



LinkedIn https://www.linkedin.com/company/Aluminium-bahrain



Twitter Aluminium Bahrain (@Alba4World)



Facebook https://www.facebook.com/Alba4World/



Instagram Aluminium Bahrain BSC (Alba) (@alba4world)

CAUTIONARY MESSAGE

This report contains statements that may be deemed as "forward-looking statements" that express the way in which Alba intends to conduct its activities. Forward statements can "believes", or any variations of such words that be achieved.

Alba has made every effort to ensure the report these forward-looking statements will occur. is as accurate and truthful as possible. However, by their nature forward-looking statements are qualified to inherent risks and uncertainties be identified using forward-looking terminology surrounding future expectations that could such as "plans", "aims", "assumes", "continues", cause actual results to differ materially from these projected or implied statements. Such certain actions, events or results "may", "could", statements are subject to risks that are beyond "should", "might", "will", or "would" be taken or Alba's ability to control and therefore do not represent a guarantee that events implied in

To note that all information and statements disclosed in the 2021 Sustainability Report relate to Alba's plant/operations in Bahrain.

A message from our CEO

Doing what is right for the environment and the society is more than just one decision. It is a sum of the choices we make every day. I can proudly say that Alba's business over the last five decades has been on the right path of sustainable development -- we have been conducting our business responsibly and ethically, always ensuring that we raise the bar when it comes to Environment, Social and Governance (ESG).

In 2021, we took significant strides to embed sustainability across all our operations as well as our value chain. We launched our new Vision, Mission and Values with the aim to align our people with the Company's current and future goals. We believe that our new Vision -- To be the number one Aluminium supplier for the generations to come; Mission --Being a responsible corporate citizen, we want to create value for all our stakeholders and society; and Values -- Safe & Green, Together, Ethics, Excellence and Resilience (STEER) are key to our growth in which Safety, People Development, Governance and Sustainability will be its linchpins.

'In 2021, we took significant strides to embed sustainability across all our operations as well as our value chain' We kicked-off our 2021 ESG journey by collaborating with a top-class sustainability consultant to develop a fully-fledged roadmap to realise Alba's ESG objectives in line with Bahrain's Economic Vision 2030. And this has prompted us to remodel our organisation structure to create a new division for ESG in late 2021.

While the Roadmap is taking shape to be launched in 2022, we ensured that our work did not stop and made significant strides in various areas of ESG.

One of the biggest achievements in 2021 was the commissioning of the first-of-its-kind US\$37.5 million zero-waste Alba Spent Pot Lining (SPL) Treatment Plant. Setting the benchmark in sustainability, the Plant transforms SPL into valueadded products, which can be used in other industries. We also issued a Public Tender for supplying and installing solar panels for our 5 to 7 MW Solar Farm Project, which will help us to diversify our energy sources and adopt clean energy. We also partnered with Bahrain's Sustainable Energy Authority (SEA) through an MoU to seek opportunities that will help Alba

leverage SEA's expertise to find sustainable energy solutions.

US\$ 37.5 m

Cost of zero-waste Alba Spent Pot Lining (SPL) Treatment Plant

Another interesting action was the shift from Safety, Health, and Environment (SHE) Campaigns to an umbrella wide ESG Campaigns that addressed global challenges such as Climate Change, Environment Conservation, Clean Energy, Carbon Footprint, Cyber Security, Industry 4.0 etc. These campaigns ensured the involvement of all our employees to drive the importance of ESG in our day-to-day lives.

'These campaigns ensured the involvement of all our employees to drive the importance of ESG in our day-today lives'

I am particularly proud of our environment-specific campaign 'A Tree for Every Employee' to boost biodiversity and fight climate change in line with HRH Prince Salman bin Hamad Al Khalifa, the Crown Prince and Prime Minister's announced Climate Change goals and commitment to double the number of trees in the Kingdom by 2035. Correspondingly, Alba extended its green initiatives beyond its premises to plant more trees on the main roads around the smelter, thus joining the National Initiative for Agricultural Development (NIAD) "Forever Green" Campaign that was held under the patronage of HRH Princess Sabeeka bint Ibrahim Al-Khalifa, Wife of His Majesty the King and President of NIAD Consultative Council.

Sustainable Development is an urgent need of the hour. As a business, we must have the mindfulness, compassion and courage to take actions that will have far-reaching impacts on the economic and social growth of our society.

As one of the largest Aluminium smelters in the world, we want to be the ESG change we want to see across our value chain. Our Roadmap will inspire change across our business operations as well as enable us to go above and beyond to achieve the right balance between our economic gains and social returns. Our outlook for 2022 and the years ahead remain that we produce responsibly and sustainably for the generations to come.

'Sustainable Development is an urgent need of the hour. As a business, we must have the mindfulness, compassion and courage to take actions that will have far-reaching impacts on the economic and social growth of our society.'

Ali Al Baqali CEO



About Alba

At plus-1.561 million metric tonnes per annum (2021), Alba is one of the largest smelters in the world with more than 50 years of excellence in Operations, Safety, Environment and Socio-Economic Development.

A blue-chip asset of the Kingdom of Bahrain, Alba completed five decades of commercial operations in May 2021.

Alba produces high-quality Aluminium products in the form of Standard and Value-Added Products (VAP)s, which are exported to more than 240 global customers through its sales offices in Europe (Zurich), Asia (Hong Kong & Singapore) and subsidiary office in the U.S. Alba is dual listed on Bahrain Bourse and London Stock Exchange and its shareholders are Bahrain Mumtalakat Holding Company B.S.C. © (69.38%), SABIC Industrial Investments Company (SIIC) (20.62%) and General Public (10%). Alba holds globally recognised certifications such as ISO 9001, ISO 14001, ISO 27001, ISO 45001, IATF 16949:2016,

ISO 22301:2012 Business Continuity Management System (BCMS) and ASI Performance Standard Certification and Ecovadis Certification.

As the first Aluminium smelter in the Middle East. Alba has been a major contributor to the social, industrial and economic development of the Kingdom of Bahrain. Alba sits at the heart of a thriving Aluminium downstream sector in Bahrain, which accounts for approximately 12% of the Kingdom's GDP. As one of the biggest national companies, Alba has ensured not only the employment of Bahrain nationals (84% in 2021) but also the enhancement of their capabilities through education, training, and development initiatives at every stage of their career.

Approximately 25% of our production is sold to Bahrain's downstream customers, with the remaining products exported to customers across 52 countries. Our international business activities are supported by our Sales and Marketing offices in our Bahrain headquarters, as well as our offices in Hong Kong, Switzerland, Singapore, and the United States.

12%

of Bahrain's GDP is contributed by Aluminium downstream sector

25%



of our production is sold to Bahrain's downstream customers

NATURE OF OWNERSHIP AND LEGAL FORM



Bahrain Mumtalakat Holding Company

69.38%



SABIC Industrial Investment Company

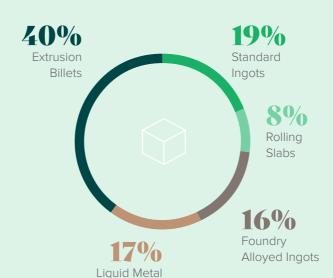
20.62%



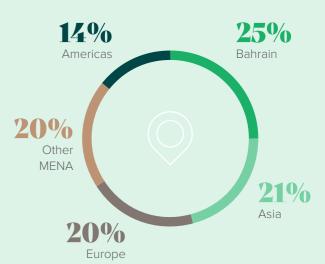
General Public

10%

SALES BY PRODUCT LINE 2021



SALES PER FOOTPRINT 2021



Total Sales (Metric Tonnes) 1,550,807

The Company's manufacturing operations are based at Alba's campus in Bahrain and include a portfolio of Value-Added Products such as Extrusion Billets, Standard Ingots, Foundry Alloy Ingots, Rolling Slabs, and Molten Aluminium for various industrial and applications (local and international).

Alba at Glance

50 🎗

years of successful operations

+240

customers across 52 countries

1.5m 🌣

metric Tonnes record production

40

countries with Sales Offices in Zurich, Hong Kong, Atlanta US and Singapore (excluding Bahrain Headquarters)

Our Charter



VISION

To be the number one Aluminium supplier for the generations to come



MISSION

Being a responsible corporate citizen, we want to create value for all our stakeholders and society



VALUES (STEER)

- **S**afe & green
- Together
- TogetheEthics
- Excellence
- **R**esilience



Customer-Focused

- Leader in Employee
- Safety and Health
 Environment Protection
- Employer of Choice

Our Value Chain and Business Strategy

Alba's business strategy is based on inclusive value. We aim to increase Alba's value by expanding our operations while reducing costs and improving our efficiency. Continual improvement throughout our operations will support our organic and sustainable growth, which in turn leads to expansion, as demonstrated in our Line 6 Expansion Project.

small-medium sized enterprises, though we also source major raw materials from many worldwide locations, including Australia, China, Europe, and South America.

Controlling our cost has become increasingly important especially amidst market volatility and sustainability related challenges. We do so mainly by implementing cuttingedge technologies in our operations, and by recycling materials for reuse in industrial processes. Such actions help us fulfil our strategy by maximizing shared value for all our stakeholders.

Alba relies on third-party suppliers for its major raw materials including Alumina, Green Petroleum Coke, etc. and natural gas as well as various vendors for spare parts and consumables. Alba's supply chain comprises third-party raw material providers, contractors, equipment providers, and logistics partners. Many of our suppliers are local and

We are committed to maintaining a sustainable, resilient, and responsible supply chain.



Products

Aluminium is an enabler to sustainable economic development as it is known as one of the most efficient and sustainable materials thanks to its lightweight quality, strength, and durability. Aluminium is also infinitely recyclable, making it one of the most sustainable materials in the world.

At the end of the product lifecycles, most of our Aluminium products can be fully recycled. Aluminium -based products are therefore essential enablers of a low-carbon future, offering energy-efficient,

carbon-saving solutions across transportation, construction, food and pharmaceuticals.

Using a variety of natural resources and sustainable materials, we also create high-quality Aluminium products that add value to Bahrain's economy, society and our customers' industrial processes. Our products are used in a wide variety of applications, such as building suite sections, Aluminium wires for electrical use or transmission lines, automotive wheels, gas pump

nozzles, electrical goods, household appliances, aviation construction, and many more.

Scan the QR code below to access Alba's Product Brochure:



Our Product Portfolio



EXTRUSION BILLETS

Soft alloys are used for architectural applications, building and kitchen suite sections. Hard alloys are used in a variety of engineering and transport applications.



LIQUID METAL

Converted into a range of value-added products such as primary aluminium alloys and master alloys. Used to produce primary aluminium based EC rod, alloy rod, and wire and alloy ingot; other applications include aluminium powder and aluminium pellets, aluminium wires for electrical and mechanical use, curved line conductors, Aluminium Clad Steel (ACS) wires for transmission lines, solid conductors and aluminium casting for car and truck wheels.



FOUNDRY ALLOYED INGOTS Primarily used by the automotive industry for manufacturing high quality automotive wheels, truck hubs and gas pump nozzles.



STANDARD INGOTS AND TEE INGOTS Re-melted at customer furnaces and then cast to produce a wide variety of end products that cover the entire spectrum of aluminium applications for the construction industry, transportation, electrical goods and household appliances.



Used for finished products such as ultra-light gauge foils and cookware foil. Lithographic applications include the production of offset printing plates. Used in the packaging industry, transport and aviation industries, construction and general engineering applications such as panelling, flooring and roofing.

Certifications

We are proud to have achieved numerous sustainability certifications, thus reflecting our aim to be an industry leader in sustainability. These recognitions translate our commitment to the highest ESG standards and best practices.



ISO 9001:2015 Quality Management Systems



ISO 14001:2015 Environmental Management Systems



ISO 45001:2018
Occupational
Health and Safety
Management Systems



ASI Performance Certification

Awards and Recognition

Our diligence over the past 50 years demonstrates that our operations are efficient and reliable in the most sustainable way. We are humbled to be the recipient of many awards within our industry in 2021 to include:



People First Leader Award (earned by Alba's CEO)



SafeGuard Hygiene Excellence and Safety Label



Gold Medal Award from the Royal Society for the Prevention of Accidents (RoSPA)



Best Corporate
Governance Award



Brandon Hall Group's Bronze Medal in Learning Awards



International Safety Award from the British Safety Council, UK

Alba's Response to COVID-19

The world has been disrupted by the COVID-19 pandemic since the start of 2020 and this has brought unprecedented challenges to our way of life and livelihoods.

At Alba, the Safety of our people

— employees and contractors —
always comes first. With one of the
largest workforces in Bahrain, we
launched our response strategy
to COVID-19 as early as January
2020 and implemented numerous
measures to educate and protect
our people from the negative impact
of this pandemic. We also strictly
adhered to the guidelines of the
National Taskforce for Combating the
Coronavirus (COVID-19), our Business
Continuity Plan, and our Emergency
Preparedness Plan.

In 2021, our efforts have continued with initiatives to ensure the Safety and wellbeing of our people. Alba has continuously shared with its employees and contractors' personnel COVID-19 protocols as well as the guidelines by the National Medical Taskforce to Combat COVID-19. Our executives have held daily briefing meetings on COVID-19 cases to monitor the number of cases internally. Our operational procedures have included temperature checks for employees and contractors, limiting external visitors and maintaining social

distancing. New control measures implemented during the year included validating the vaccination certificates of all employees and contractors' workers before they enter our premises and conducting rapid tests at Alba's Health Care Center and the organizations' gates for those who had not received the vaccine. Vulnerable employees were allowed to work from home in nonoperational departments, with priority given to those with chronic diseases (heart diseases, etc.), pregnant women and those following feeding hours.

Although our vaccination campaign was voluntary, we achieved a 99.7% vaccination rate across our workforce thanks to increased awareness and Alba's management team's keenness to ensure a safe working environment. We also recorded a low infection rate internally in comparison to external rates. Efforts are ongoing to encourage all employees and eligible contractors to register for the vaccine booster dose of COVID-19.



99.7% vaccination rate

across our workforce



Throughout 2021, Alba has continued its COVID-19 awareness campaigns for employees to reinforce the need for enhanced Safety and social distancing measures, especially at entry and exit gates. Monthly Safety messages from our CEO were disseminated across various platforms to update engage with our employees about COVID-19. These have included Safety videos, virtual meetings, and socially distanced visits to the shop floor. During the year, Alba Health Care Center continued to monitor quarantined employees and provided comprehensive testing and contact tracing programs.



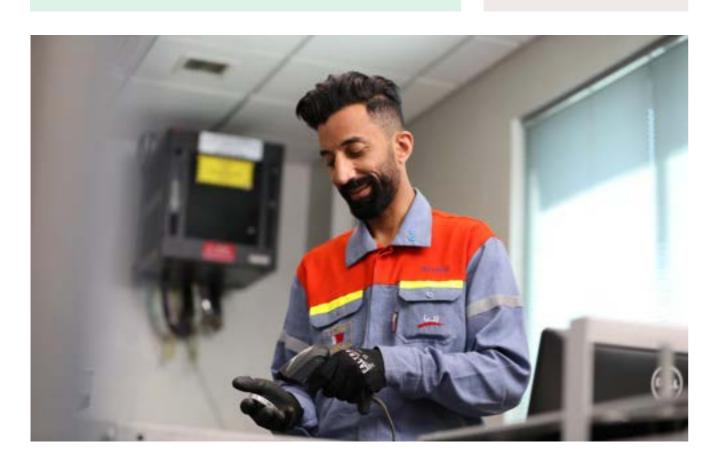
Further COVID-related initiatives throughout the year included:

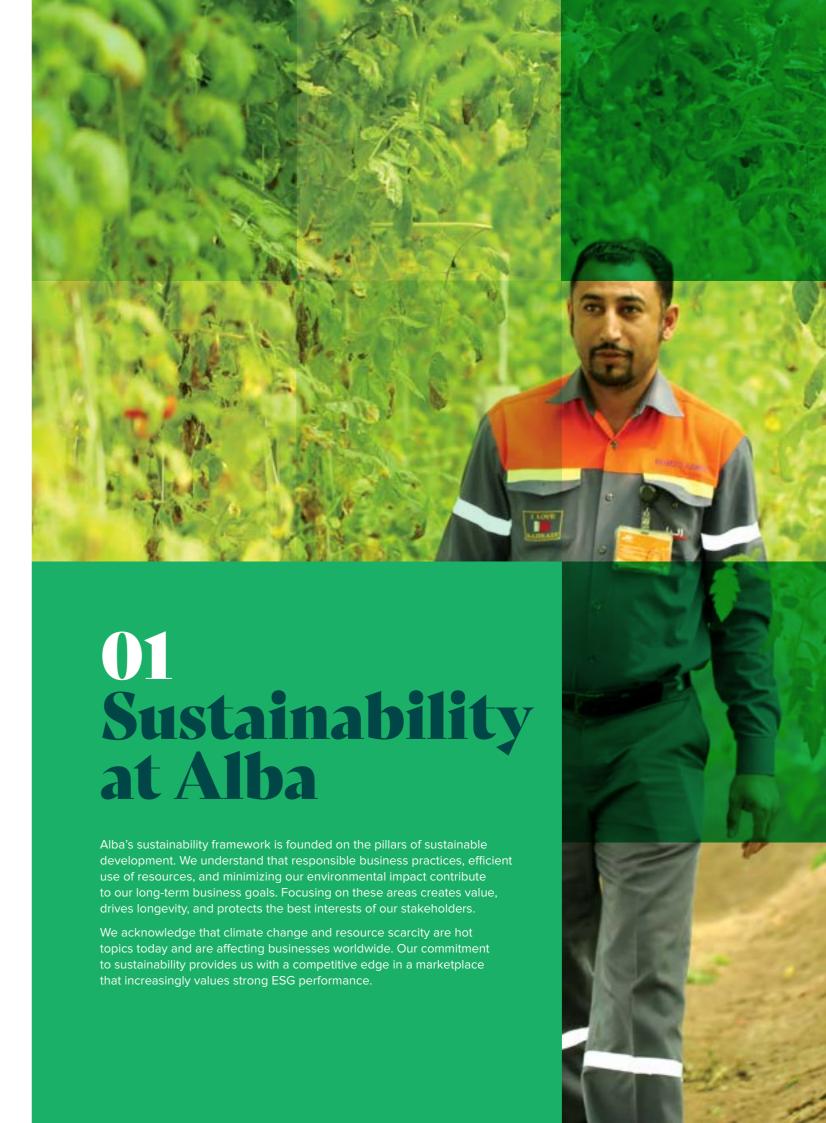
- Remote work or work from home whenever possible
- No business-related travel
- Reduced working hours for mothers
- Onsite temperature check before entering any common areas
- Take-away only in eating area
- Continuation of virtual meetings
- Continued plant-wide awareness raising with information, training, and posters
- Regular disinfection of public areas and AHCC
- Direct communication with employees
- Maintenance of national recommendations and instructions at Alba sites
- Maintenance of a triage section and checklist



Engaging with our customers was just as much of a priority as for our employees. Throughout 2021, we maintained to some extent in the first half of 2021 a remote working environment with the use of video conferencing and mobile applications for info sharing with our clientele.

Where physical presence was a must, we continued to adhere to social distancing norms with a mandatory mask policy. Free access to masks and hand sanitizers was provided for contractor employees, vendors, and customers since the onset of the pandemic. In addition, paper signatures were replaced with digital signatures for endorsement of contracts and other documents.





Our Sustainability Management Approach

Our management approach to sustainability is aligned with traditional business objectives, such as being an employer of choice, managing risk, preserving continuity, and sustaining growth.

Key aspects of this approach include assessing ESG risks and opportunities, life cycle impacts and sustainability KPIs, as well as communicating our sustainability mission and vision. Through ongoing engagement and dialogue with all key stakeholders. We develop strategies that serve their needs and best interests.

We continuously measure and improve the effectiveness of our management approach by assessing broader sustainability-related trends and risks, as well as opportunities and developments that can affect our business strategies and operations. A key element in our approach is using sustainability specific KPIs and targets to measure, improve, and communicate our sustainability performance.

Alba is committed to the Net-Zero Carbon targets set at the COP26 summit in 2021. We aim to decarbonize Aluminium and are taking measures across our operations to reduce emissions and make the Aluminium smelting process more energy efficient. Many of the ways in which we are doing this are set out in this report.

FURTHER KEY ASPECTS OF OUR COMMITMENT TO SUSTAINABILITY INCLUDE:

Prioritizing corporate responsibility and ESG considerations at the highest decision-making level.

Developing and nurturing our people to ensure they are prepared for the challenges of the future and that Alba remains an employer of choice.



Sustainability Framework and Priority Areas

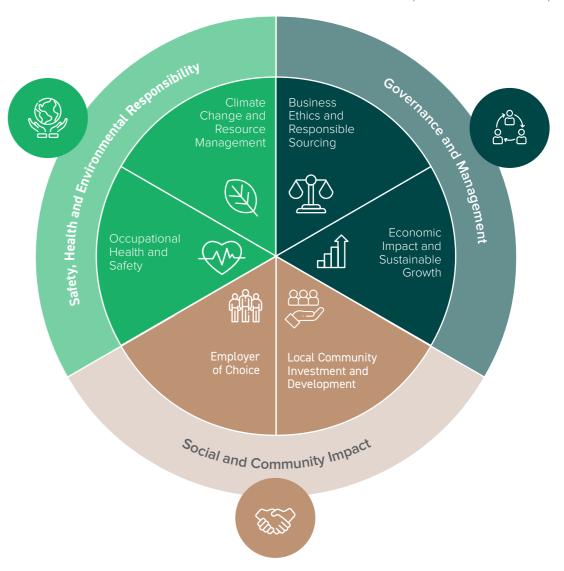
Our sustainability framework is designed to catalyze sustainability and add value by addressing priority areas and ensuring our vison of a sustainable future covers all our business and operations.

The framework summarizes what sustainability means not only to Alba, but also to the metals and mining industry, identifying key areas where we can affect positive change and further exemplify best practices.

The framework is based on our approach of managing material ESG issues by integrating sustainability into Alba's greater business strategy.

It was developed based on the collective results of an in-depth materiality assessment, stakeholder mapping, and researching the sustainability agendas of other key industry leaders.

Three central pillars emerged from this framework, all of which are designed to integrate and embed the consideration of ESG issues into every aspect of our business. The pillars are:





Safety, Health and Environmental Responsibility

Protecting the wellbeing of our employees and the environment directly feeds into the wellbeing of all our stakeholders. We achieve this through stringent measures to avoid all preventable Health and Safety incidents and by making a true commitment to sustainability. Maximizing Safety considerations while minimizing harmful environmental impacts is continually establishing Alba as a resilient, future-minded company.

OCCUPATIONAL HEALTH AND SAFETY

The Health and Safety of all our employees and stakeholders involved in Alba operations is our top priority. We take exceptional measures to ensure the highest Safety standards are met and our commitment to the health and wellbeing of our entire organization underpins everything we do.

ENERGY AND CLIMATE CHANGE

Implementing policies and initiatives to address climate change and improve resource management are important to us to improve our resource sustainability, improve our bottom line, and do our part in helping make this planet a better place for future generations.



Governance and Management

Good corporate governance and business management builds trust with key stakeholders, while driving sustainable growth and contributing to enhanced value creation.

BUSINESS ETHICS AND RESPONSIBLE SOURCING

Alba operates under the most stringent business ethics, with policies designed to ensure transparency and fairness. Our dedication to responsible sourcing helps keep our business both competitive and environmentally sustainable.

ECONOMIC IMPACT AND SUSTAINABLE GROWTH

At Alba, ensuring sustainable growth is one of our most important business policies, as we believe it is key to achieving the most impactful, long-term economic outcomes.



Social and Community Impact

Investing in the communities where we operate is more than simply part of our commitment to corporate responsibility. By investing in the capacity and wellbeing of our workforce, we build long-term relationships with some of our most crucial stakeholders. This is a direct investment not just in the communities that we serve, but in our own future.

EMPLOYER OF CHOICE

Being recognized as an "Employer of Choice" is very important to us. Knowing that we are seen as a great place for people from all walks of life to work for and with is an honour that we do not take lightly.

LOCAL COMMUNITY INVESTMENT AND DEVELOPMENT

We value the communities we work with and within, and place great importance on select, robust investments that drive development in those communities.



Materiality Assessment Process Approach

The principle of common but differentiated responsibilities is the foundation of Alba for an inclusive society. Looking beyond economic values, Alba is committed to connect with its various stakeholders within its value-chain (employees, local community, investors, suppliers, and clients) and bridge the gaps to create better businesses, contribute to the Government as well as make meaningful impact on Environmental, Social and Governance issues in the local community.

Addressing interests and providing regular feedback is key in the Company's vision to create value for all stakeholders and society. Stakeholders were identified based upon their impact and influence on the Company's operations as well as their importance to Alba.

Doing what is right is what guides Alba in everything we do. Our engagement with various stakeholders is governed by Alba's Code of Conduct and based on the Company's core values (Safe & Green, Together, Ethics, Excellence and Resilience).

Methods of Stakeholder Engagement

The table below identifies our key stakeholder groups and main engagement methods More information on our engagement with our stakeholders can be found in appendix A.

SUPREME COUNCIL FOR ENVIRONMENT (SCE) METHODS OF ENGAGEMENT FREQUENCY OF ENGAGEMENT MATERIAL TOPIC Regular meetings Regularly and When Needed Regulatory Reporting Periodic reports Site visits/inspections Periodic audits Official correspondences

CLIENTS AND SUPPLIERS/ VENDORS

METHODS OF ENGAGEMENT	FREQUENCY OF ENGAGEMENT	MATERIAL TOPIC	
Regular meetings (in-person) and virtual	Regularly as Required	Complaints	
Tender and procurement plans		Customer Technical Support	
Contractual relationships (OEM)		Product Quality Management	
SAP Ariba		Sustainability and ESG	
Alha Wehsite			

2021 Sustainability Report

EMPLOYEES		
METHODS OF ENGAGEMENT	FREQUENCY OF ENGAGEMENT	MATERIAL TOPIC
Inter: Connect	Daily Basis	Sustainability Report
Digital screens across the plant	Emails	Annual Report
WhatsApp	In-Person Meetings	Code of Conduct
Al Bayan Magazine (quarterly magazine)		Policies'
Alba Website		Regular Company's Updates
		Development of Human Capital (trainings)
		Safety and ESG Updates
		Grievance Mechanism
		COVID-19
INVESTORS AND SHAREHOLDERS		
METHODS OF ENGAGEMENT	FREQUENCY OF ENGAGEMENT	MATERIAL TOPIC
Disclosure of Quarterly Financials	Quarterly/Annual Basis	Sustainability and ESG Roadmap
Annual Report	Regularly as Required	Operational and Financial Results
Sustainability Reports		Principal Risks
Conference Calls and Webcasts		Strategy Updates
Regulatory Filings		COVID-19
Annual General Meeting		
Alba Website		
One-on-One Meetings		
Emails		
In-Person meetings		
REGULATORS (CENTRAL BANK OF BAHRAII	N, BAHRAIN BOURSE, MINISTRY OF INDUSTR	Y AND COMMERCE, LONDON STOCK EXCHANGI
METHODS OF ENGAGEMENT	FREQUENCY OF ENGAGEMENT	MATERIAL TOPIC
Participation in Review of Circulars and Regulations	Regularly as Required	Compliance with regulators
Engagement with Regulators on socio economic matters		Promoting Bahrainisation
		Social Investments
		COVID-19
GENERAL PUBLIC (COMMUNITIES) AND ME	DIA	
	FREQUENCY OF ENGAGEMENT	MATERIAL TOPIC
METHODS OF ENGAGEMENT		
	Regularly as Required	Grievance Mechanism
METHODS OF ENGAGEMENT Support NGOs and Philanthropic Projects		Grievance Mechanism ESG

Materiality Assessment

2021 Sustainability Report was compiled based upon the expectations/views of the stakeholders with regards to Environment, Social and Governance (ESG) interests. Alba has conducted a tailored engagement exercise with its various stakeholders, on top of its ongoing engagement to understand the stakeholders' expectations and how they could influence Alba's Material Topics. The material topics which have been identified based on peer reviews (desktop research) in public domains, Bahrain's Economic Vision 2030, disclosure by clients and vendors. The topics were aligned with national and international standards. As part of the assessment, a list of 15 material topics have been identified to develop the Materiality Matrix. During the preparation of 2021 Sustainability Report, there were no changes in the report boundary; as for the material topics, we have reformulated some topics for better clarity and added 'Corporate Governance' as a new material topic when compared to 2020.



- 1. Climate Change
- **2.** Water and Wastewater Management
- **3.** Recycling & Waste Management
- 4. Energy Management
- **5.** Biodiversity



SOCIAL

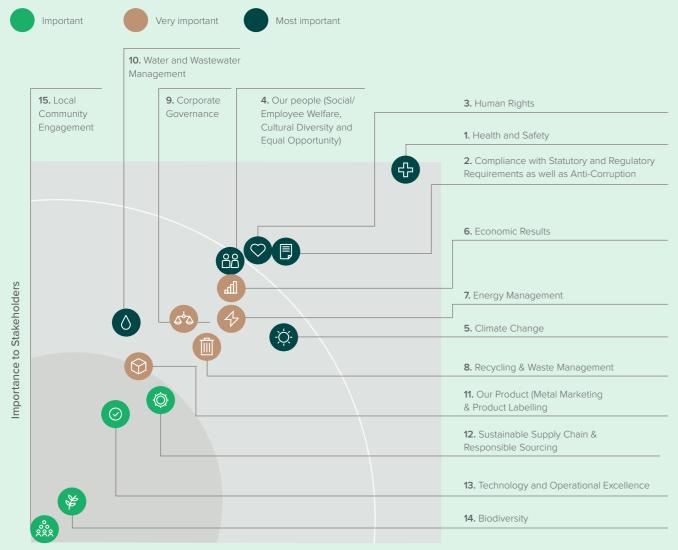
- **6.** Human Rights
- **7.** Our People (Social/ Employee Welfare, Cultural Diversity and Equal Opportunity)
- **8.** Local Community Engagement
- **9.** Health and Safety
- **10.** Technology and Operational Excellence
- **11.** Our Product (Metal Marketing & Product Labelling)



GOVERNANCE

- **12.** Corporate Governance
- **13.** Economic Results
- **14.** Compliance with Statutory and Regulatory Requirements and Anti-Corruption
- **15.** Sustainable Supply Chain and Responsible Sourcing

THE MATERIALITY MATRIX WAS DEVELOPED BASED ON THE SURVEY RESPONSES FROM INTERNAL AND EXTERNAL STAKEHOLDERS BY AVERAGING THE RANKING FOR EACH MATERIAL TOPIC



Significance of Impacts to Alba

Our Contribution to the SDGs

An important part of our sustainability strategy is focused to align our company, business strategy, and operations with practices that will help achieve the UN SDGs.

Alba believes the SDGs are an important set of related goals that will lead to a more sustainable society, improve quality of life, and help ensure a prosperous future for everyone. SDGs promote a longterm approach to address global challenges that are faced by all nations around the world and require collective actions from governments and leading companies to succeed.

Alba contributes to all 17 goals but some more than others. We have identified the following goals as those that are most important to us and where we can make the greatest contribution, as highlighted in this report.

Sustainability framework pillar

Sustainable Development Goals (SDGs)

How Alba is contributing



Governance and Management







- Business Ethics and Responsible Sourcing p.71
- Economic Impact and Sustainable Growth p.81





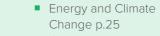




























Employer of Choice p.54

 Local Community Investment and Devleopment p.68

Our Performance in 2021

in Environmental

Conservation Projects



Zero Fatalities (both contractors and employees)



of Alba's Assets are ISO 14001:2015 Certified



SOx Intensity dropped year-over-year (YoY) by



185 Average Training Hours per Employee



Safe Working Hours without LTI



Local Procurement Spending



Membership Certification



Community Investment



KWh\KgAl **Energy Intensity**



New Hires



Return to Work from Parental Leave



Lost Time Injury Frequency Rate



GHG Intensity Ratio below



Youth Employment



Produced Electricity



Local Procurement



Reduction in GHG **Emissions Intensity**



1.5m **Total Production**















Worker H&S Committees



• •

• • •







Recycled Water as % of Total Water Consumed











of Board Seat are Occupied by Women











of Employees Receive

Performance Reviews

Savings Resulted from Dross Recovery and Reuse

Cost Savings Achieved

Incidents of Corruption

Reduced Hazardous

Waste (YoY)

Generation by

Zero

Security Breaches

Against Target





Energy and Climate Change

As a global leader in the Aluminium sector, we realize that our impact on climate change is inextricably linked to our management of resources. We are committed to do our part in achieving the Net-Zero Carbon targets ratified at COP26 and are taking actions across our operations to reduce emissions.

Environmental Management

RELEVANT UN SDGS





The SPL plant for recycling and processing of Alba's SPL started in November with an ongoing creeping to the input and output products from the plant. It is anticipated that in 2022, the SPL plant will process the SPL with its design nameplate capacity.

We are committed to implementing the highest environmental standards across all our areas and operations. Our core belief is that producing high-quality products should never be at the cost of the environment or the wellbeing of our employees and community members. In support of this, we operate a dynamic Health, Safety & Environment Management System (HSEMS).

The Aluminium production processes that Alba operates are specially designed to limit negative environmental impacts. These processes minimize both upstream and downstream impacts on the environment by focusing on a holistic approach that targets each step in the smelting process, from importing raw materials to exporting finished products. We are also committed to innovation, and continually look to assess new alternatives and operational improvements that can further improve resource efficiency. This approach helps us to better protect environmental resources and minimize the environmental impacts of our operations.

CERTIFICATIONS

Our Safety, Health, Environment Management Systems (SHEMS) are aligned with industry best practices and was designed to meet the requirements of ISO 14001:2015 (Environmental Management System) and the Kingdom of Bahrain's Supreme Council for Environment (SCE). All Alba's sites (100%) are ISO 14001:2015 certified, with audits conducted every six months to ensure compliance with these standards.

Our Environmental, Social and Governance management approach is directly aligned with the Aluminium Stewardship Initiative (ASI) and has official ASI certification against ASI Performance Standards covering 100% of Alba campus site in Bahrain. The last surveillance audit was performed in October 2021 conforming the retention of the ASI Performance Standard certification.

ENVIRONMENTAL INVESTMENT

One of the most important aspects of Alba's overall sustainability strategy is ensuring effective environmental investment. In 2021, we invested about BD8.1 million in environmental conservation projects; (the amount invested in Environmental Conservation Projects in 2020 has been restated to BD3.84 million versus what was reported in 2020 Sustainability Report (BD4.5 million) owing to reallocation of some of the amounts since they were paid in 2021).

The Company has worked with third party consultants in the last couple of years to get its products assessed in compliance with the requirements and guidelines of ISO 14040:2006 - Management System - Life Cycle Assessment.

A key focus of our Safety, Health and Environment (SHE) policy is our commitment to reducing pollution across our operations.

In 2021, we had 3 incidents of noncompliance relating to the exceedance in SO₂ in our Anode Baking Kilns treatment units. These exceedances were traced to a change in the Green Petroleum Coke (GPC) that had a higher release of SO₂ than the previous material used. To correct these exceedances, we had to blend and regulate the usage of the changed GPC material. While we had these minor exceedances, the Company remains committed to ensure full compliance with its policies.

INVESTMENT IN ENVIRONMENTAL **CONSERVATION PROJECTS** (MILLION BD)

2019		7
2020	3.84	
2021		8.1

COMPLIANCE WITH ENVIRONMENTAL LAWS AND REGULATIONS

-	3*
-	-
-	-
	-



Environmental Nuisance

Noise and ambient air quality are also important elements of our SHE management system. We conduct noise surveys at worksites along with regular monitoring for the quality of ambient air to ensure that our activities are not having a negative effect on the air quality where we operate and its surroundings.

2021 ENVIRONMENTAL ACHIEVEMENTS

Building on the successes in 2020, we have achieved against our 2021 targets set in place the following:

Expanding our ambient air quality monitoring coverage to include a wider range of pollutants, whilst increasing the coverage area to include the calciner in addition to the smelter.



Increasing automation and digitalization to further reduce paper-based actions and improve the accuracy and traceability of data [DocuSign eSignature solution is integrated with Alba IT cloud services].

Building our internal capacity to carry out direct measurements of Greenhouse Gas (GHG) emissions to improve accuracy and transparency in reporting GHGs for all stakeholders (in progress).

Configuring and integrating IT onsite infrastructure with Microsoft Azure Cloud services and AWS Cloud services.

Completing offsite backup on the cloud as part of the disaster recovery of existing systems.

Building full disaster recovery in the cloud for the existing system is in progress and expected to be completed in Q1 2023.

2022 **ENVIRONMENTAL** COMMITMENTS





Complete the Alba's Sustainability Strategy Roadmap.





Achieve the ASI Chain of Custody certification by taking the necessary steps to acquire certification requirements.



Perform comprehensive biodiversity assessment study to mitigate any identified biodiversity impacts.



Start the construction of the 5-7 MW Solar Farm by Q4.



Commit to plant 6,000 trees per year until 2027.



Commit to establish

mangrove tree nursery to produce 4,000 plants to be introduced to the natural habitat to support the restoration of mangrove forests.



Start the construction of Power Station 5 Combined Cycle Fourth block that will allow stopping the less efficient Power Station 3. This is expected to be completed by Q4 2024.



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ALBA SUSTAINABILITY STRATEGY AND ROADMAP

Reducing carbon and greenhouse gas emissions and reduction and improving energy management is top of the agenda for almost every world leader, as well as all industries including our own. Alba recognizes the need for comprehensive strategic plans to meet the intended national (i.e., 2060) and global (i.e., 2050) targets.

To this end, in September 2021 we recruited a leading consultancy, US-based SCS Consulting Services, to undertake an inclusive study to identify initiatives that will enable us to achieve net-zero GHG emissions by 2060. The six-month project will inform and shape our future sustainability strategy and roadmap.

SCS began the work with data collection, market and regulatory assessment, customer surveys and peer assessment. The market assessment included an evaluation of current and impending regulation that may impact Alba in the future and SCS identified which ESG topics to prioritize. They then conducted an exclusive workshop for Alba's executives and senior management that identified six pillars: decarbonization; green energy and Aluminium; the circular economy and secondary Aluminium; employee welfare; collaboration and partnerships; and transparency, communication and due diligence on which our roadmap will be built.

GHG and energy management are a major feature of our six-pillars approach. However, the project extended to identify holistic ESG issues, including supply chain improvement, collaboration with internal and external bodies, and existing projects such as Life Cycle Assessment (i.e., identifying the impacts of transportation and logistics on Alba's operations).

Following the session with executives, a further workshop was conducted for managers to identify initiatives for each pillar. This resulted in 20 initiatives that will form part of our roadmap of Alba. These vary from energy efficiency improvements to explore using carbon capture technology and adopting Inert Anode technology, building a solar farm, the use of hydrogen and many more. These initiatives were divided into two categories, GHG initiatives and stakeholder initiatives, and include actions such as collaboration with universities and government, equal employment opportunities, supply chain improvements and responsible sourcing.

At the end of this ongoing exercise, SCS will develop a comprehensive sustainability roadmap incorporating each of the priority ESG topics and their associated initiatives. The roadmap will include a high-level cost estimate for implementation, potential benefits and target customer segment, and identify responsible persons (internal and external) and high-level action plans to ensure a successful implementation. The project is now

in its final stage of development and Alba's new Sustainability Strategy and Roadmap is scheduled to be delivered in February 2022.

'Reducing carbon and greenhouse gas emissions and reduction and improving energy management is top of the agenda for almost every world leader, as well as all industries including our own'



Emissions and Resource Management

RELEVANT UN SDGS









Climate change is one of the greatest threats humanity has faced, and we recognize that immediate action needs to be taken to combat it. As one of the largest industrial leaders in the region, Alba is committed to climate leadership within the Gulf and throughout our entire industry.

Alba aims to adhere to the national strategy for climate change set out by HRH Salman bin Hamad Al Khalifa, the Crown Prince and Prime Minister, which aims to achieve a 30% reduction in Greenhouse Gas (GHG) emissions by 2035 and net-zero by 2060. Alba's own sustainability strategy aligns with this and other national and international accords.

We have developed a robust monitoring and recording mechanism to capture GHG emissions at all scopes (1 and 2) from our operations. This is in accordance with the Intergovernmental Panel on Climate Change standard and International Aluminium Institute protocols and guidelines, which stipulate the mechanism of calculating GHG in the Aluminium industry. This is verified every 18 months via Aluminium Stewardship Initiative audits, annually by the sustainability report auditors, and every five years by an independent consultant for the Life Cycle Assessment. Results are published monthly and communicated to top management regularly, ensuring any deviation from the GHG targets is captured. In 2021, Alba achieved its targets below 8 CO₂ tonnes per tonne of Aluminium and GHG emission intensity ratio of 7.921.

Energy Intensity Ratio uses energy consumption in Alba operations.
Energy Intensity Ratio is per tonne of Alumnium produced (t Al). The types of energy included in this ratio are for fuel (natural gas, diesel, and gasoline) and electricity (indirect/imported).

'In 2021, Alba achieved its targets below 8 CO₂ tonnes per tonne of Aluminium and GHG emission intensity ratio of 7.921.'

ENERGY CONSUMPTION WITHIN ALBA

	2019	2020	2021
Natural gas consumed in the smelter (mmBTU)	164,752,873	166,354,110	166,054,973
Natural gas consumed in the calciner (mmBTU)	497,085	560,425	572,864
Total natural gas consumed (mmBTU)	165,249,958	166,914,535	166,627,837
Electricity produced (MWh)	19,749,692	22,722,372	23,105,846
Electricity Exported (MWh)	98,311	459,533	460,067
Electricity Imported (MWh)	104,818	509,304	319,413
Total fuel consumed internally (MMBTU)	364,929	323,147	297,662
Total indirect energy consumption (GJ)	377,346	1,833,494	1,149,886
Energy intensity ratio (KWh/kg Al)	15.22	14.52	14.71
Total direct energy consumption (GJ)	173,476,837	171,260,498	172,113,954

The fuel used in Alba consists of natural gas for electrical power generation [part of which is exported to Bahrain's National Grid as part of an exchange program] and for firing furnaces (heating). We also use Diesel and Gasoline for operating vehicles [the Company does not rely on renewable energy to generate power; in addition, Alba does not sell heating, cooling, and steam]. Alba's total energy consumption amounts to 173,263,840 GJ.

POWER GENERATION WITHIN ALBA IN 2021 Z021 Total Power Generation (MWh) 23,105,846.430 Exported (-) (MWh) 460,067 Imported (+) (MWh) 319,178 Total Power Consumption in 2021 (MWh) 22,964,957.430 Total Aluminium Production (Net Finished) (MT) 1,561,222

To note: 1 GJ corresponds to 0.947817 MMBTU

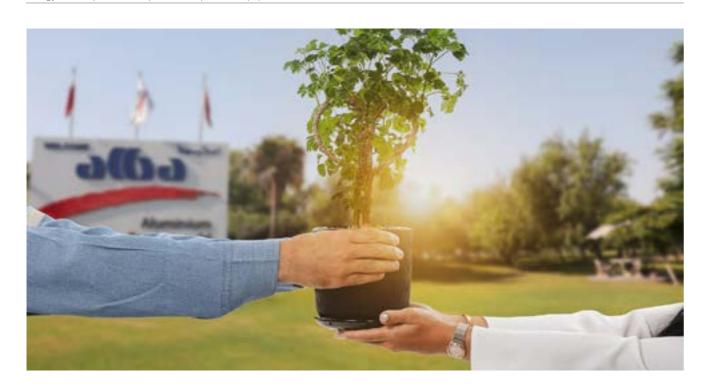
The total direct energy consumption consists of the energy that is internally generated and consumed within Alba in addition to the natural gas used for heating and the energy from Diesel and Gasoline.

The natural gas consumption data are based on monthly invoices from Tatweer Petroleum (national gas supplier) and similarly, the vehicle fuels are based on actual consumption figures as provided by Bahrain Petroleum Company (BAPCO) through Alba's Central

Workshop. Power consumption figures are based on metered electrical power that is monitored by the Company's monitoring and control systems. Fuel volume is converted to energy based on standard conversion factors from reliable web sources.

ENERGY CONSUMPTION WITHIN ALBA

	2019	2020	2021
Total energy production (TJ)	69,994	80,146	82.680
Total fuel consumption from renewable sources (litres)	0	0	0
Total fuel consumption (litres)	9,731,129	8,323,819	7,581,343
Diesel Consumed by Plant Infrastructure (litres)	8,184,475	7,679,415	7,148,000



Our focus in the near future is to improve the overall energy efficiency of our power stations. Following Alba's Board approvals in December 2021 to add additional block to Power Station 5, Block 4 will bring the Company one step closer in our race towards decarbonisation in terms of higher efficiency and lower greenhouse gas emissions.

As part of our efforts to diversify our energy sources and adopt clean energy, Alba issued a Public Tender in 2021 for supplying and installing solar panels for our Solar Farm. This is in line with the Kingdom of Bahrain's Economic Vision 2030 and its Green/Renewable Energy Targets, led by HRH the Crown Prince and Prime Minister. The Solar

Farm Project will have a capacity between 5 MW – 7 MW and will cover an approximate surface area of 37,000 square meters spread over operational areas and car parks in Alba plant as well as Alba Club.

ENERGY CONSUMPTION WITHIN ALBA

	2019	2020	2021
Electricity from EWA (MWh)	104,818	509,304	319,178
Electricity from EWA (GJ)	377,345	1,833,494	1,149,041
Heating and cooling Consumption (GJ)	5,155,366	5,287,306	5,296,327
Steam Consumption (GJ)			0

ENERGY EFFICIENCY

	2020 TARGET	2020 ACTUAL	2021 TARGET	2021 ACTUAL
Average gross volt per pot	4.15	4.14	4.36	4.36
Specific energy consumption (KWh/kg)	13.25	13.12	13.51	13.54



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	Measure	Target	Description	Commentary	
1.	ACC Fan Washing	Twice / year	Maintain steam turbine pressure to increase steam turbines output	ACHIEVED [PS3&4 were washed twice]	<u>~</u>
2.	Online Gas Turbine Compressor Washing	Weekly	Increase gas turbine output and performance	PARTIALLY ACHIEVED Done for PS3 GTs on weekly basis, For PS4, online water wash was stopped as the fogging system acts like a water wash, and it is kept in operation daily almost for 80% of the year	
3.	Optimizing Power Import & Export with EWA	* Zero Balance at the end of each year *Import in winter * Export in summer	Well managed to increase the overall plant efficiency	As planned, power import is taking place during highly efficient machines outages. In the summer, the imported power is exported back to EWA targeting Zero Yearly Balance. During emergencies, Power Import/ Export may not be as per plan which affects the yearly Zero Target Balance. For 2021, Total Export: 460,067 MWhr	
				while Total Import was 319,178 MWhr 2021 Balance: 140,889 MWhr	
4.	Steam Turbine Ejector System/ Vacuum Level in mbars	<350 Summer, <150 Winter	Control Steam turbine efficiency	ACHIEVED The Vacuum Pressures for PS3 & PS4 STs are maintained below target	<u>~</u>
5.	Steam Circuit High Demin Water Consumption	PS3<240 m ³ & PS4<1392 m ³ with fogging	Optimize demin water consumption	ACHIEVED The average consumption did not exceed the target	Q
6.	Maximum Utilization of PS5/PS4 Machines (High Efficiency Machine Run First)	Minimize running of low efficient machines	Increase overall plant efficiency	As load dispatch strategy, PS5 & PS4 are fully utilized. The usage of PS3 machines is minimized/limited	⊘
7.	Maintain Optimum Spinning Reserve	80-100 MW	Avoid excess gas consumption	NOT ACHIEVED 2021 average Spinning Reserve was 160 MW as per OSI, due to system configuration, and minimum no. of machines that need to be in service	
8.	Gas Turbine Air Intake System	<100 mbar (mmwc)	Air intake DP lower than 100 will reflect on the gas turbine efficiency	ACHIEVED All PS3 & PS4 Gas Turbines air intake filter DP are Maintained below 100 mm	IWC
9.	PS4 GT Fogging System Availability (Pump's Availability)	>95%	Insure availability of pumps for optimum operation	ACHIEVED	⊘
10.	Hot Gases Leakage Through By-pass Stack	<200 °C	Insure full heat to boiler	ACHIEVED The average Hot Gas leakages for PS3 machines were 1790°C.	<u>~</u>

In addition to these measures, we are adopting more renewable energy in the form of solar power. Solar panels will be introduced onto car shades and rooftops of all Alba buildings, and the collection and storage of solar energy will be utilized to operate smaller, non-processing facilities.

Emissions and Air Quality

Alba's Safety, Health & Environment (SHE) policy contains specific actions and targets relating to emissions and air quality standards. We measure all our emissions from all major sources against legal limits, industry standards, and international guidelines. Continuous emission monitoring systems are in place at our modern potlines and power stations, and a dedicated laboratory and team conducts emission sampling and analysis plantwide. All our new and modern plants are constructed with the best available environmental performance technologies.

The gross direct GHG emissions for 2021 was 9,077,589t $\mathrm{CO}_2\mathrm{e}$ and the gasses that were considered in the calculations are CO_2 , CH_4 , $\mathrm{N}_2\mathrm{O}$, and PFCs - all of which are non-biogenic. Our source of emission factors and the global warming potential (GWP) rates is the Intergovernmental Panel on Climate Change (IPCC) 5th Assessment Report in addition to the country specific factors as determined in collaboration with University of Bahrain. The Company relies on operational control to

monitor its GHG emissions and implements strict procedures in its different business units to consolidate the GHG emissions' data.

Greenhouse Gas emissions are being calculated from Alba Plant and Calciner Plant taking into consideration the monthly departmental official figures such as metal production, combustion fuel, packing coke, pitch volatiles, soda ash addition, calcination process, anode consumption and PFC emissions. The calculations are based on equations provided in the 'International Aluminium Institute (IAI) - The Aluminium Sector Greenhouse Gas Protocol' of October 2006 which is an addendum to the WRI/WBCSD Greenhouse Gas protocol and the '2006 IPCC Guidelines for National Greenhouse Gas Inventories'. We maintained our GHG intensity level in 2021 below 8 tCO_ae/tAl, by utilizing the efficient Power Station 5 and stopping the older, less-efficient Power Stations 1 and 2. In 2021, our GHG emissions intensity fell slightly, by 0.5%, from 7.962 in 2020 to 7.921. Alba uses standard methods

of calculations adopted by the guidelines from IPCC and IAI protocols and guidelines.

'We maintained our GHG intensity level in 2021 below 8 tCO₂e/tAl, by utilizing the efficient Power Station 5 and stopping the older, less-efficient Power Stations 1 and 2'

DIRECT GREENHOUSE GAS (GHG) EMISSIONS (SCOPE 1) INDIRECT GREENHOUSE GAS (GHG) EMISSIONS (SCOPE 2)

	2019	2020	2021
GHG emissions from fuel consumption (Metric Tonnes of CO ₂ e)	265,904	256,000	254,866
GHG emissions from electricity consumption (Metric Tonnes of CO ₂ e)	9,836,324	9,313,723	9,217,292
Total direct GHG emissions (metric Tonnes of CO ₂ equivalent)	9,814,093	9,086,005	9,077,589
Total indirect GHG emissions (metric Tonnes of CO ₂ equivalent)	22,232	226,718	13,703
Total GHG Emissions (metric Tonnes of CO ₂ equivalent)	12,184,000	12,165,272	12,367,219
GHG emissions intensity ratio	9.294	7.962	7.921
GHG emissions from transportation of personnel (Metric Tonnes of CO ₂ e)			276
GHG emissions from transportation of products (Metric Tonnes of CO ₂ e)			
Biogenic CO ₂ emissions (Metric Tonnes of CO ₂ e)	0	0	0

*GHG Intensity Ratio is per tonne of Net Finished Product. Direct emissions (Scope 1) and Indirect emissions (Scope 2) are included in the GHG Intensity ratio calculation. Gases included in this calculation are CO₂, CH₄, N₂O, and PFCs. The Company adopts gross-location method to report its Indirect emissions (scope 2) and GHG emissions were calculated based upon data from each unit of operation.

The figures in GHG emissions have been restated in 2019 and 2020 to include the liquid fuel. gasoline, and diesel in the total fuel mix of the Company.

NOx, SO₃, Total Fluoride, Total Particulate, and Volatile Organic Compounds emissions have been reported for 2019, 2020 and 2021 in tonnes as well as in terms of intensity ratio in kg/t Al. These emissions are generated from different sources in Alba smelter based upon direct measurements of the pollutant concentration then converted to quantity based on the volume flow

rate from the respective source and reporting duration. The Company relies on ASTM and USEPA standard procedures for source sampling, analysis and calculation standards.

Our SOx intensity decreased by 4.4% in 2021, while PFC (all potlines) increased slightly from 0.22 kg/mt Al to 0.31 kg/mt Al and particulate emissions rose from 1.02 kg/mt Al to 1.25 kg/mt Al over the same period. VOC (kg/t Al) also increased slightly, from 0.0641 kg/mt Al in 2020 to 0.0647 kg/mt Al in 2021.

4.4% decrease in SOx intensity in 2021

NOX, SOX, AND OTHER SIGNIFICANT AIR EMISSIONS

	2019	2020	2021
NOx (tons)	9,329	7,890	7,183
SOx (tons)	28,864	31,340	30,040
VOC (kg/t Al)	0.0639	0.0641	0.0647
Total fluorides (tons)	642	753	883
PFC (all potlines) (kg/t Al)	0.40	0.22	0.31
Particulates emission (kg/ t Al)	1.42	1.02	1.25
SOx Intensity (kg/t Al)	22.24	20.30	19.40
POP (mg/Nm³ per tonne of aluminium produced)	0	0	0

Alba regularly monitors emissions from its operations. Our main monitoring program is for GHG emissions to ensure we achieve 30% reduction target by 2035 and net-zero by 2060. We have a comprehensive plan in place to help us meet this goal.

We also quantify emissions released into the air and report this data on a regular basis to the local authorities as per the local legislation.

Alba aims to minimise all harmful emissions that may negatively impact air quality, and our SHE policy, introduced in 2020, guides our efforts in this direction.

30% of



GHG reduction target by 2035 and net-zero by 2060



Water Management

RELEVANT UN SDGS







Water is the most valuable resource in the world and the importance of good water management cannot be overstated. This is especially true in Bahrain and the greater Gulf region, where water scarcity is a geographical reality. Climate change is likely to have a significant impact on available water supplies, making environmental management a crucial part of the holistic approach to ensuring the availability of future water resources.

As there are no natural water sources suitable for direct consumption, we depend on our desalination plants to provide the water needed in terms of quantity and quality. The main source of our desalinated water is from our Marine Desalination Plant that relies on sea water as feed. The energy requirement for this Plant is provided from the waste heat generated in the calcination process. The potable water generated from this plant is not only used in Alba but also a major part is given to the national water network.

At the smelter side, we have 3 reverse osmosis (RO) plants and a demineralisation (demin) plant That are partially operated to provide the high-quality water needed for our steam turbines. The RO plants can also treat the brackish underground water to the required quality. 3 different types of water are produced: Potable, Process and Demin. The potable water is consumed by employees while process water is used in some specific cooling applications in Alba that requires water with lower

dissolved solid content and demin water is used to generate steam that is used for our steam turbines - this application requires the minimum dissolved solids.

Alba has two main streams of water source for its operations, the desalination plant at Calciner and Marine and ground water extraction. In 2021, Alba consumed 3,604,552 m³ in its operations, an increase of 7.1% from 2020, due to the commissioning and launch of our new Power Station 5 and Cast House 4; however, the amount of consumed water that is recycled has also increased by 25% and is currently reused inside the organization for our artificial lake and irrigation.

25% \(\(\)

increase in the amount of water recycled

Water is managed by a dedicated section at the Power Station department. The section is responsible for the management, monitoring and controlling of the activities around the three reverse osmosis plants and the sewage treatment plants. The main water stream arrives at our smelter from the Calciner and Marine desalination plant. There are robust control measures in place to ensure the quality of each type of water production – potable, processed or demineralized – which is used in our boiler for power generation.

We have 3 sewage treatment plants (STP) at the smelter to treat the domestic type of sewage. The treated water from the STP complies with the national standards for

effluent water quality and is mostly used for the landscaping around the plant. The brine water that is generated from the RO plants is of high salinity; hence is discharged to the sea. The Marine Plant has a different discharge consisting mainly of cooling water and the brine stream from the Marine Desalinations Plant.

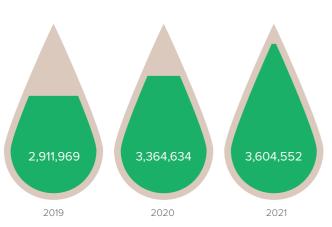
To ensure the effluent quality in compliance with the legal obligations, we have frequent sampling and analysis by our internal laboratory as well as independent third-party laboratories in addition to online monitoring of key parameters within the process.

The ESG department is responsible for monitoring and compiling data related to water management within our operations. The data is extracted from different sources, and the Power Station, Calciner and Marine plant and external laboratories provide comprehensive tests in addition to our internal lab. We report compliance results to the Supreme Council for Environment on quarterly basis. In 2021, we reported no deviations, exceedances, or noncompliances during the year.

TOTAL WATER WITHDRAWAL BY SOURCE (M₃) 2019 2020 Fresh water used (from purchased) Non-contact cooling water Fresh water used (growstad by the Company) 2.0% 000 2.264 634

Tresh water asea (nom parenasea)			
Non-contact cooling water	-	-	-
Fresh water used (generated by the Company)	2,911,969	3,364,634	3,604,552
Water discharged to sea (excluding non-contact cooling water)	99,167,327	104,489,891	127,740,438
Water discharged other than to the sea	-	-	-
Water recycled or reused	188,510	140,043	186,447
Total water consumption	2,911,969	3,364,634	3,604,552
Recycled water as percentage of total water consumed (%)	6	4	5

FRESH WATER USED (GENERATED BY THE COMPANY)



RECYCLED WATER AS PERCENTAGE OF TOTAL WATER CONSUMED





2021

6% 40

5%



With the full commissioning of our new Power Station 5 and Cast House 4, Alba's water consumption has increased by 7.1% year-overyear. However, the volume of water recycled has also increased by 33% year-over-year. In 2021, we extracted 550,020 m³ of ground water, which was processed by our three reverse osmosis plants. For our other water stream, our smelter received 3,257,338 m³ from the Calciner and Marine water desalination plant out of its total production of 10,558,194 m³. A large part of the desalination plant's water production is used to augment the national water grid, with the remaining water used for the plant's own operations. The amount of effluent discharged to sea was 127.740.438 m³. All the effluent we send to sea undergoes continuous monitoring for quality to ensure that there is no adverse impact on the surrounding ecosystem.

Our water and wastewater analysis approach are attested by a third-party analysis laboratory, using testing methods in accordance with the American Public Health Association (the Examination of Water and Wastewater Standard Method, the ICP-AES method and the Hach Water and Wastewater Analysis Procedures Manual). Tests are carried out monthly to ensure regular monitoring, with quarterly reporting to the SCE in accordance with the compliance obligation requirement.

In Alba, we go beyond the local standards when controlling the quality of effluents discharge – we rely on the regulations established by the Supreme Council for Environment (SCE) for meeting the national standards (reference: order # 3 of 2021 - list contains 32 physical, chemical, and biological parameters) and International Finance Corporation (IFC) – Wastewater and Ambient Water Quality Guidelines.

In addition, the Company meets its water needs by relying mostly on its desalinated sea water while ground water is used during annual maintenance shutdown of the Marine Desalination Plant. Alba follows this process in order to preserve our stressed ground water resources.

The volumes are determined from the control and monitoring systems that are connected to online flow meters.

The total water withdrawn from the sea was 138,299 megaliters where most of it is used for cooling and a small portion is desalinated. The total brackish groundwater abstraction was 550 megaliters.

SEA WATER WITHDRAWAL (M3)

2019	107,353
2020	113,594
2021	138,299

Total water discharged from our Calciner Plant was 127,722 megaliters while the water discharged from the Smelter was estimated at 203 megaliters. Both are discharged to the sea though separate effluent discharge lines. The key parameters for the discharge from our Calciner Facility are the temperature and pH. These parameters are being monitored and controlled through automatic monitoring and control systems to ensure full compliance with the national regulation.

The total water consumption in all areas is 3,257 megaliters which is produced from the Calciner and Smelter Desalination Plants (Calciner produced a total of 10,558 megaliters of potable water in 2021). 7,301 megaliters of Calciner produced potable water was provided to the national potable water network. Potable water quality is closely monitored through our internal laboratories to ensure compliance with the drinking water standards. Volumes of potable water are being monitored by our monitoring and control systems through flow meters.

3,257 \Diamond

consumption in all areas

HIGHLIGHT: DIGITAL TRANSFORMATION FOR WATER RESOURCE MANAGEMENT



Water Resource Management involves accounting and monitoring of water supplies, consumption patterns, and final discharges of the wastewater. However, it also depends on the data collection to assess the water footprint, losses, leakages and thus improving the Water Management System. The aggregation of the Company's data was manually managed by recording the flowmeter readings which are in different locations within the Company's vicinity.

As the Company is charting its journey towards Industry 4.0, smart flow meters were installed at the main spots of the water network then integrated into the operational monitoring systems such as SCADA. The new system facilitates retrieving the data for allocation, regulation and conservation of water resources.

Waste Management

RELEVANT UN SDGS







The waste management relates to Alba's operations only (Alba Plant and Alba Calciner Plant) and any impact related to waste generated from Alba plant/operations in Bahrain doesn't include waste from the Company stakeholders (value-chain upstream and downstream).

We produce several types of solid waste streams through our operations that are common to our industry. We are committed to adhering to a waste management strategy that preserves and protects the environment by abolishing negative impacts from the disposal of waste and by exploring innovative, sustainable opportunities and solutions for processing the waste and/or reducing the amount of generated waste. This applies to all generated waste from our main smelter and its associated business units, Calciner and Marine and the newly commissioned Spent Pot Lining (SPL) plant.

We developed our Waste Management Strategic Plan in 2018 and have implemented a follow-up mechanism to ensure it is followed. The policy aims to protect the

environment and health of people, reduce the negative impacts of waste, reduce waste disposal to landfill, and explore new recycling or re-use methods for un-recycled waste. Following the completion of the USD 40 million SPL plant, we were able to significantly reduce the amount of hazardous waste disposed of in 2021, from 19,335 tonnes to 13,082, a reduction of 32%. Moreover, by finding new opportunities for recycling waste, the total amount of waste recycled in 2021 exceeded waste sent to landfill for the first time, an important milestone on our quest to achieve zero waste process to landfill.

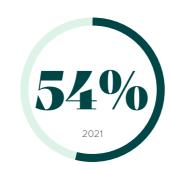
We aim to reduce our disposable waste to minimum, enhance the waste segregation efforts and maximise selling our scrap materials to downstream recycling facilities. Our scrap materials include metallic materials, timber plastic, rubber, paper and used oil – all of these are sold to downstream recyclers who are approved by the environmental regulator to recycle these items in a responsible manner. Sold scrap is weighed and consolidated and invoiced on monthly basis.

In 2021, we received no environmental notices or contraventions from the local environment authority regarding our operations. Our Waste Management Policy will be due for its first fiveyearly review in 2023.

% OF WASTE RECYCLED OUT OF TOTAL GENERATED WASTE







TOTAL WASTE DISPOSED

	2019	2020	2021
Total Hazardous Waste Disposed (Tonnes)	30,723	19,335	13,082
Total Non-Hazardous Waste Disposed (Tonnes)	16,410	21,568	14,847
Total Waste Disposed (Tonnes)	47,133	40,903	27,929
Total Waste Recycled (Tonnes)	9,173	36,145	33,030
Total Waste Generated (Tonnes)	56,306	77,048	60,831
% of Waste Recycled out of Total Generated Waste	16%	47%	54%

Alba generates different waste materials from its operations to include Carbon Dust, Cast Iron Slag, Spent Pot Lining (SPL), Office and Cafeteria Waste, General Waste. Refractory Waste. Construction Waste, Calciner Bag House Ash, Medical Waste, Mixed Rubbish Waste, Trees and Grass (Landscaping), SPL Steel, SPL Hazardous, FTP and GTC Scale, Rodding Reject Materials, Refractory Waste, Used Carbon Butts, Insulation Material, Un-refined Solid Sulphur, Construction, Steel, Cast Iron, Timber, Batteries, Oil Drums, Oil, Tires &

Rubber Belts, Aluminium, Copper, Filter elements, Plastic, Paper & Cartons and Jambo bags.

The transportation of waste to treatment, disposal and recycling centers is done by contractors who have a valid license from the Supreme Council for Environment (SCE) being the environmental regulator.

Disposal and treatment centers are also having their environmental operating license by the environmental regulator.

Any waste movement is covered under the Waste Disposal Request (WDR) Approval by the environmental regulator, where the applicable form is filled by three parties, waste generator provides information on type and quantity of waste, waste transporter, and final destination of treatment. disposal or recycle. The WDR will be assessed by the SCE (either or rejected considering the sound environmental approach and the adopted proper waste management).

The below table provides insights on the waste materials which the Company deems material in terms of weight threshold of 1,500 tonnes.

TOTAL WEIGHT OF WASTE BY TYPE AND DISPOSAL METHOD (TONNES)

		2019	2020	2021
Cast Iron Slag	Disposed/Un-Recycled	935	765	2,675
SPL	Disposed/Un-Recycled	30,723	19,335	13,082
General Waste	Disposed/Un-Recycled	3,263	2,992	2,865
Refractory Waste	Disposed/Un-Recycled	6,672	8,430	7,504
SPL Steel	Recycled	2,737	4,698	3,828
SPL Hazardous	Recycled	-	-	9,783
Rodding Reject Material	Recycled	-	2,615	3,767
Refractory Waste	Recycled	-	7,965	4,235
Used Carbon Butts	Recycled	-	7,825	1,945
Construction	Recycled	2,154	2,377	2,109
Steel	Recycled/Sold	1,894	2,040	2,979

TOTAL WEIGHT OF HAZARDOUS WASTE BY DISPOSAL METHODS (TONNES)

	2019	2020	2021
Reuse	-	-	-
Recycle	-	-	3,289
Composting	-	-	-
Recovery including energy recovery	-	-	-
Incineration	-	-	-
Deep well injection	-	-	-
Landfill (SPL) (%)*	100%	100%	57%
Onsite storage	-	-	6,494
Offsite storage	-	-	-

*All hazardous waste was directed to SPL Treatment Plant

TOTAL WEIGHT OF NON-HAZARDOUS WASTE BY DISPOSAL METHODS (TONNES)

	2019	2020	2021
Reuse	4,306	4,358	5,344
Recycle	9,173	36,145	27,686
Composting	-	-	-
Recovery including energy recovery	-	-	-
Incineration	90	126	-
Deep well injection	-	-	-
Landfill	16,410	16,510	14,847
Onsite storage	-	-	-
Offsite storage	-	-	-

	2019	2020	2021
Total number of significant spills (> one barrel)	-	-	-
Volume of spills (Liters)	-	-	-
SALES REVENUES FROM SALE OF (BD)			
	2019	2020	2021
Steel	111,560	133,728	208,495
Cast Iron	25,083	22,763	29,808
SPL Steel	327,309	573,000	727,860
Timber	12,481	12,585	6,886
Batteries	4,153	4,504	3,901
Oil Drums	2,170	1,722	1,220
Oil	6,137	13,229	12,591
Aluminium	7,831	4,284	5,364
Copper	2,046	3,623	6,579
Plastic	1,212	411	709
A/C Condenser	44	-	-
Paper & Cartons	3,625	1,547	1,604
Anode Butts (from Power Outage in 2017)	570,000	57,000	20,742
Jambo Bags	844	939	728
Scrap Steel (including SPL Steel)	136,643	579,310	-

The organization managed to recycle most of its significant waste, albeit the Spent Pot Lining after the commissioning of the SPL Treatment Plant. Efforts are being made to find sustainable solutions for the remaining process disposed/unrecycled waste such as the Carbon Dust, Cast Iron Slug Waste, Refractory Waste and Construction Waste.

The organization have constructed its standard for measuring and monitoring the quality of its effluent in Alba Code of Practice (ACOP067). The given ACOP parameters are derived from the national environmental legal limits and the International Finance Corporation (IFC) Performance Standards.





HIGHLIGHT STORY: SPENT POT LINING TREATMENT PLANT



As part of the Aluminium production process, the lining of the electrolysis cells (or pot), consisting of insulation, carbon cathodes and steel collector bars, is typically changed every five years at the end of its life. This results in spent pot lining (SPL) material, which is considered hazardous and requires proper handling and storage. Alba has historically generated some ±20,000 tonnes of SPL per year; in the past, we would store this material internally before transporting it to a specialized, government-owned landfill. However, the recent expansion to our facilities, with a new, large Reduction Line 6, meant our annual SPL generation rose to ±25,000 tonnes per year with as much as 35,000 tonnes in some years. With local environment authorities seeking to reduce the size of landfills, a more sustainable solution was needed for the SPL.

±25k
tonnes of generated
SPL per year

The Company looked at many options to sell the SPL to cement and steel factories as well as explored treatment and recycling options for the management of SPL material but without success. However, after extensive research, a new, sustainable option emerged – building our

own SPL treatment facility, which would enable us to dispose of our SPL material in an environmentally friendly and sustainable manner. The project was formally announced in 2019 and in December 2021 Alba's c.US\$37 million SPL Treatment Plant, the first of its kind in the Gulf region, began operations. Constructed in collaboration with Bahrain's SCE, this innovative plant offers a zerowaste process with capacity to treat 30,000 tonnes – 35,000 tonnes of SPL per year, converting it into value-added products.

The next step for Alba is to retrieve the SPL material that was previously disposed of in the dedicated landfill and bring it for treatment in the SPL Treatment Plant so it can be detoxified and refined with no hazardous residuals. We are also in high level discussion to explore helping neighbouring smelters in the

Gulf region to treat their SPL in the future as part of our corporate social responsibility with the winner being the environment!

The amount of hazardous waste we generate is expected to decrease further in the coming years due to the establishment of Alba's SPL treatment facility, which can treat and convert SPL material into useful by-products for the cement industry. Additionally, specific waste-related goals, targets, and processes have been established for each of Alba's business units to address the solid and effluent waste they generate. These goals and targets are mandatory for solid waste and voluntary for effluent waste. Currently, time-bound targets have been set for solid waste reduction, but not yet for effluents.

As ESG is our only way forward, we have proudly established this one-of-a-kind Project, and gone above and beyond to achieve the right balance between our economic gains and social returns.

We are also pleased to have achieved despite COVID-19 challenges savings of US\$6.5 million, corresponding to 15% benefits, versus SPL Treatment Plant allotted CAPEX of US\$44 million," as stated by the Chairman of the Board His Excellency Shaikh Daij bin Salman bin Daij Al Khalifa.



Waste Generated and By-Products

Aluminium production invariably generates some waste and byproducts, regardless of which processes are used. One way of minimizing waste and putting by-products to good use is to reintroduce waste materials back into the Aluminium manufacturing process. Alba has implemented this as a key aspect of our waste management strategy, developing innovative ways of finding value-adding uses for by-products and co-products that would otherwise be sent to landfill. We also collect scrap Aluminium from our industrial customers to use as input material in the production of new Aluminium products. By using post-industrial recycled content in our products, we reduce the demand for raw materials and further reduce the energy and costs required for producing new products.

Below are more specific details on how we manage our four main waste streams: liquid waste, SPL, carbon dust, and general waste.

LIQUID WASTE

Nearly all liquid waste we generate is reused or recycled, the only exceptions being mixed oil-water, lime sludge, and cooling water sludge. All types of generated waste from liquid petroleum and cooling tower blowdown is recycled, with the latter reused as irrigation water and treated sewage sludge. We also comply with Bahrain's legal limits for effluent discharge to the sea.

SPENT POT LINING (SPL)

SPL is the lining material of retired smelting pots, consisting of insulation refractory, carbon cathodes, and steel collector bars. Steel collector bars are recovered for recycling, while the insulation bricks, carbon cathode, and mixed fine materials must be sent to specialized landfill sites as hazardous waste.

Alba's new SPL Treatment Plant was commissioned in December 2021 following an investment of around BD13.9 million (c.US\$37 million), has the capacity to treat 30,000–35,000 tonnes of SPL per year, converting it to value-added products which can be used then in the cement industry.

CARBON DUST

Carbon dust is produced from processes in carbon plants, in which the clean fractions are recycled back into the process for making anodes. The fraction that is generate from the shoot blasting stage at the Rodding plant is highly contaminated with bath and steel from the shoot blast media and is not suitable for recycling, so must be sent to specialized landfills as hazardous waste. Alba generated around 7,300 MT of carbon dust in 2021 an increase of around 50% versus what the Company used to generate prior to the commissioning of reduction line 6. The Company has exported 1,243 metric tonnes of Carbon Dust to India in 2021.

metric tonnes of Carbon
Dust exported to India in 2021

GENERAL WASTE

General waste is produced from most processes, such as miscellaneous waste from site canteens, offices, and other municipal-type waste.

Total weight of waste generated from Alba operations is 60,831 metric tonnes consisting of recycled and disposable waste. Recyclable waste weight is collected from direct weight measurements prior to exiting the Company's premises while disposable waste weight is determined based on average unit weight of the specific waste.

'By using postindustrial recycled content in our products, we reduce the demand for raw materials and further reduce the energy and costs required for producing new products'

HIGHLIGHT: INSULATING OIL IN POWER TRANSFORMERS

The Company relied on 'Oil Regeneration' in Reduction Line 3 Rectiformers and some of the Inter-Bus Transformers interconnecting Switch-House 5 to Switch-Houses 1, 2 & 3 to restore the insulating and cooling properties of the existing oil which got oxidized over the years of service.

By relying on the Oil Regeneration between 2020 & 2021, the Company managed to optimise its spending on new oil rather than disposing the old one, and the intention is to rely on this strategy in 2022.

Materials Management

Our approach to Materials
Management ensures that the
optimal quality and quantity of
Alba's materials are available at the
lowest possible cost throughout all
phases of operation. We believe that
effective material management has
a significant impact on key areas,
including time and cost. This includes
all material-related activities, from
raw material acquisition to receipt
by our customers. Proper materials
management greatly impacts our
business logistics and supply
chain management.

	2019	2020	2021
Renewable materials used	-	-	-
Non-renewable materials used (Alumina)		3,141,499	2,875,130
Total materials used (Tonnes)		3,141,499	2,875,130

2019 2020 2021 Amount of Dross Recovered and Reused in Alba Operations (Tonnes) 20,986 Dross recovery (Tonnes) 3,672 Savings resulted from Dross recovery and 9,095,916

HIGHLIGHT: REDUCE METAL TAPPED WITH BATH IN REDUCTION LINE 6

reuse (US\$)

Aluminium metal is tapped along with bath from the high-level pots. The tapped metal in the skips is sent for processing to remove any contamination stemming from bath materials.

By following this approach, the Company was able to only recover 85% of the metal during this process; on average, 264 metric tonnes of metal were then lost a year. Solution: The team has used DMAIC methodology to identify various factors which affect the metal tapping along with the bath tapping then developed sustainable solution to reduce the contamination by 50%.



Biodiversity

RELEVANT UN SDGS





Nature is critical to our survival and having healthy and biodiverse ecosystems is vital for preserving human survival and limiting the impacts of climate change. Alba aims to promote sustainable land use practices and avoid negative impacts to natural habitats and species in our operations. Whilst we do not have a standalone biodiversity policy, the Company will soon incorporate it into Alba's SHE Policy. In addition, Alba has implemented various standards into its operations with the inclusion of Biodiversity Conservation and Social Impact Assessments for new projects

Alba is in a governmental approved industrial area and does not have any impact on the IUCN Red List species and national conservation species with habitats in areas affected by its operations.

Our guidelines ensure that when impacts are unavoidable the correct mitigation measures or restoration projects are carried out, and environmental impact assessments carried out to help us understand the extent of the impacts projects may have. An example of this is the Alba Port Capacity Upgrade Project, where a thorough Environmental and Social Impact Assessment (ESIA) was conducted to identify the flora and fauna that would be affected by the upgrade. Extensive impact monitoring, mitigation and minimization measures were put in place and implemented effectively to alleviate negative impacts.

Across our operations biodiversity impact mitigation efforts include:



Habitat Restoration



Marine Water Quality
Management Plan (MWQMP)



Marine Noise Management Plan (MNMP)



Fuel Spill Contingency Plan

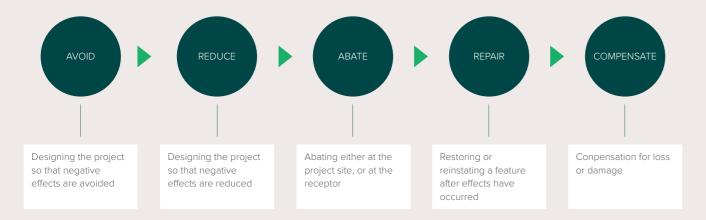


TSS Monitoring Programme



Tactical Response Plan (TRP)

ALBA FOLLOWS THE MITIGATION HIERARCHY BELOW:



Following each of the ESIAs and other impact assessments, including monitoring efforts implemented after completion of the assessments, it has been determined that none of Alba's projects and operations have caused any significant impacts to biodiversity, critical habitats, or bodies of water.

We have incorporated IFC
Performance Standards (PS6 –
Biodiversity Conservation and
Sustainable Management of
Living Natural Resources) into our
operations. According to the IFC,
PS6 recognizes that protecting and
conserving biodiversity, maintaining
ecosystem services, and sustainably
managing living natural resources
are fundamental to sustainable
development. The requirements set
out in this Performance Standard
have been guided by the Convention
on Biological Diversity.

THE OBJECTIVES OF IFC PS6 ARE:



- To protect and conserve biodiversity
- To maintain the benefits of ecosystem services
- To promote the sustainable management of living natural resources through the adoption of practices that integrate conservation needs and development priorities

Alba has been a member of the Aluminium Stewardship Initiative (ASI) since 2019 and received a three-year certification to the ASI Performance Standard in 2020. During the ASI performance standard audit and the recent ASI surveillance audit, the auditors indicated weakness in elements relating to our management of biodiversity and alien species. Consequently, Alba's management established a scope of work to resolve the issues and to comply with the ASI requirements and similar ESG standards.

We have commissioned Environment Arabia Consultancy Services WLL (EACS) to prepare a Biodiversity Action Plan. The plan will include a comprehensive study of biodiversity and alien species, including the identification, assessment, evaluation and control within the area of the influence for our operations and facilities, for both the marine and terrestrial components. The study will meet the International Finance Corporation, Bahrain National Biodiversity Strategy and Action Plan (NBSAP) and United Nations Environmental Program (UNEP) as well as ASI requirements. It will pay specific attention to any interactions between Alba's operations and:

- Alien species that could have adverse impacts on indigenous species:
- Any protected high value biodiversity areas; and
- Any species that are threatened, endangered and/or labelled in the national and international lists of endangered species.

The study is scheduled for completion in 2022 with a comprehensive report and recommendations that will drive Alba's Biodiversity Action Plan ahead.

Our plan will also need to align closely with the priorities of the Bahrain National Biodiversity Strategy and Action Plan to enable it to contribute to the broader vision of both national and regional biodiversity conservation. We will therefore undertake stakeholder engagement with relevant government authorities to collate baseline information in relation to our area of influence.

THE OBJECTIVES OF THIS ENGAGEMENT ARE TO:

- Obtain information relating to sensitive marine and terrestrial species and habitats in the study area:
- Develop a proposed Area of Influence encompassing Alba's landholdings and buffer zones (extent of buffer zones to be agreed)
- Identify key concerns and issues relating to our operational works that stakeholders may have and guide the assessment to be undertaken.

'Our plan will also need to align closely with the priorities of the Bahrain National Biodiversity Strategy and Action Plan to enable it to contribute to the broader vision of both national and regional biodiversity conservation'

Occupational Health and Safety

We believe that health begets wealth, and health and Safety is our highest concern and utmost priority. We maintain and promotes a culture of health and Safety throughout our operations, with a range of practices and measures to minimize and mitigate the potential risks and hazards that our employees and other stakeholders could potentially be exposed to. This responsibility is owned by everyone who engages with Alba. Having strong procedures in place reduces our overall risk, ensures wellbeing and allows our business to operate safely and efficiently.

Our approach to Safety was recognized in 2021 when we received the International Safety Award after reaching 20.210 million working hours without a Lost Time Injury (LTI).

Safety and Health

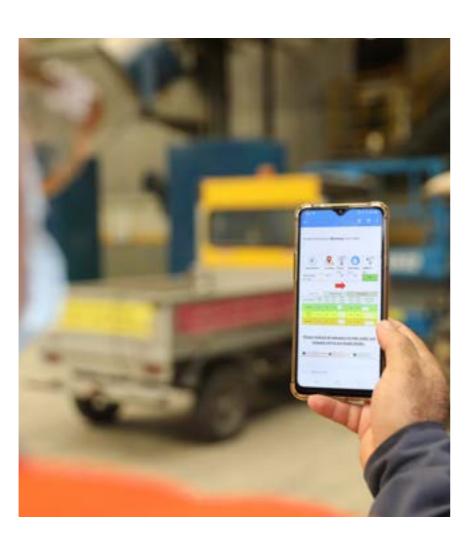
RELEVANT UN SDGS







Alba believes that Safety and productivity are mutually inclusive. As an employee-centric business, we have both a responsibility and a duty of care to ensure that all our workforce – employees and contractors' personnel – are safe. We employ a comprehensive Health and Safety Management System (HSMS) which is compliant with ISO 45001:2018 and covers the production and marketing of primary Aluminium, calcination of petroleum coke, water desalination, anode manufacturing, smelting, casting, and captive power generation, and ensures we comply with all applicable legal and contractual requirements for health and Safety. It also provides a common framework for the management of health and Safety across Alba.



Our Health and Safety procedures are based on the Plan, Do, Check and Act concept to ensure continuous improvement through the implementation of life cycle. Work procedures are reviewed and updated annually, and any changes as well as updates are communicated to all stakeholders.

Alba's CEO is in the driving seat when it comes to Safety and Health as he is committed to ensure the effectiveness of our HSMS and that our Safety and Health objectives are compatible with the Company's strategic direction. The Director Health and Safety, Fire and Security is assigned by the CEO to ensure that HSMS conforms to ISO 45001:2018 requirements and all system requirements, including legal obligations, are implemented, and maintained. Meanwhile, our top management oversees the integration of our HSMS into Alba's business processes, thus ensuring that the necessary resources are available and promoting the use of a process approach and risk-based thinking to enable HSMS to achieve its objectives. Alba's management communicates the importance of Safety & Health by continuously

engaging with employees to promote continual improvement.

Alba's Health and Safety performance is monitored, measured, analyzed, and evaluated regularly. We determine what needs to be monitored and measured, and the methods to be used, including leading and lagging indicators, to ensure valid and accurate results. We have also established a live dashboard, which included the leading and lagging indicators, which is accessible to Alba's management responsible for Health and Safety performance. Executives and management review Health and Safety performance monthly and agree any necessary actions to improve performance. The effectiveness of the HSMS is evaluated through regular internal audits.

According to Alba Code of Practice ACOP-031: Safety, Health, and Environment (SHE) Representatives are non-management staff employees elected by their peers to assist and participate in the implementation of Alba SHE Management System in their respective department. This is not a full-time duty, but rather a role taken in additional to their regular duties. In brief, SHE Representatives volunteer to assist in prompting SHE matters to ensure a safer, healthier, and environmentally sound workplace. In addition, SHE representatives share work-related hazards with their counterparts in other departments to identify the potential hazards and eliminate potential incidents of the same nature.

The SHE Policy demonstrates Alba's commitment to protect the Safety and Health of its employees and contractors' personnel by providing safe practices. Employees are empowered to highlight their concerns to their respective line managers. However, if the employee/contractor's personnel don't feel comfortable to speak to others directly, Alba has in place a reporting platform (Integrity Line) through which he/she can report in confidence any incident. The Integrity Line is operated by an independent company.



TYPE OF INJURY AND RATES OF INJURY, OCCUPATIONAL DISEASES, LOST DAYS, AND ABSENTEEISM, AND TOTAL NUMBER OF WORK-RELATED FATALITIES, BY REGION AND BY GENDER

	2019	2020	2021
Lost Time Injuries Frequency Rate (per million manhours)	-	0.1	-
Total Recordable Injury Frequency Rate (TRIR) for employees	1.00	1.59	0.65
Total Recordable Injury Frequency Rate (TRIR) for contractors	0.92	2.01	1.17
Fatalities (contractors and employees)	-	-	-
Sick leave (number of days)	32,968	59,368	51,140
Near Miss Incidents	8,225	7,100	8,241
Employees trained in health and Safety practices	7,867	10,090	3,905
Contractors trained in health and Safety practices	1,966	3,969	3,959
Safety observations reported (unsafe act and unsafe condition)	53,449	86,230	95,495
Safety Audits	1,626	1,971	1,996

The Company reports six main types of work-related injuries: Fatality, Lost Time Injury (LTI), Restrict Work Cases (RWC), Minor Case (MC), First Aid (FA) and Bahrain Industrial Injury (BII).

Alba finished 2021 with more than 20.210 million safe-working hours. The predominant work-related hazards at Alba are:

Molten Metal Handling Hazard

Moving Vehicles

Suspended Loads

Exposure to Chemical Compounds Hazard

Working at Heights

High Intensity Electrical Exposure Hazard

Occupational Noise

Electrical Direct Current Hazard

According to the requirement SHE Representatives' data template, the frequency rate

In terms of work-related ill health, the Company reports its certain KPIs for its employees and contractors' personnel.

ALBA EMPLOYEES

- The number of fatalities as a result of work-related ill health: 0
- The number of cases of recordable work-related ill health: Three cases
- The main types of workrelated ill health: Noise Induced Hearing Loss



- The number of fatalities as a result of work-related ill health: 0
- The number of cases of recordable work-related ill health: 0
- The main types of work-related ill health: None

According to the requirements of SHE Representatives' data collection template, the frequency rate calculated is based on 1,000,000 safe working hours.



The Company conducts comprehensive local risk assessment to determine potential work-related hazards that pose potential risk of ill health for its employees and contractors' personnel. In 2021, no cases of ill health have been detected; it is worth noting that the Company has in place Risk Assessment procedures (ACOP no. 042A) which apply to all activities undertaken at Alba premises and Calciner Plant. Hazard Identification, Risk Assessment and Control procedures are available to Alba staff, contractors, and consultants on the job.

Also, inspections and audit programs are administered regularly. The Health and Safety statistics are based on OSHA Reporting Standards and they are in conformance with the local regulator (Ministerial Order 12 of 2013 Reporting of Occupational Injuries and Diseases).

Alba policies and procedures illustrate that the Company will report all type of injuries defined by the local legislator such fractures, total loss of any organ, dislocation of shoulder, hip, knee, or spinal cord vertebrae, temporary or permanent loss of vision, any eye injury, electrocution, shock, suffocation, or heat exhaustion, third degree burns and any injury that requires admission to hospital more than 24 hours.

Alba had 0 LTI in 2021. The number of recordable work-related injuries stood at 11 in 2021 (8 for contractors' personnel and 3 for Alba employees).

0

LTI in 2021

11

recordable work-related injuries in 2021.

H&S training programs, essential for competent and effective management of Health and Safety, are managed and delivered by the Safety and Health, (SHE) department rather than our Training department. This ensures that the training programs are designed and delivered, and outcomes aligned with, information and feedback from our Safety statistics, incident investigations, inspections, and audits.

Each year, a training needs analysis is developed to identify which competences are required by both employees and contractor personnel. Supervisors register relevant employees with our training portal and select appropriate courses. Assessments are also carried out for each candidate after the completion of their training.

We also operate a Safety Code of Practice, which is designed to ensure a safe working environment not only for our workforce, but also for the local community, our neighbours and other stakeholders. In 2021, we updated the Code to elaborate on the specific requirements of S&H training for new recruits and the development of a SHE-specific orientation program. This is designed to communicate site-specific hazards, safe working practices and emergency procedures to individual departments.

We deliver many Safety-related training programs to our workforce. We are also an IOSH Approved Trainer for the ISOH Managing Safety and ISO Working Safely programs, both of which are important in raising competency levels. In 2021, while considering the required COVID-19 precautions, we delivered S&H trainings to 7,864 employees and contractors' personnel versus 14,059 employees and contractors' personnel in 2020 to ensure the safe commissioning of Line 6 Expansion Project.

Contractors' employees are treated in the same way as our own employees and provided with all necessary training. Alba operates a strict awareness regime to ensure that new entrants are fully aware of S&H issues and badges allowing access for contractors and visitors are only issued after they have received the necessary security and S&H inductions.

Safety risks are identified by the respective Departmental Superintendent/Supervisor (as process owners with the assistance of the SHE coordinators or representatives. Our Code of Practice provides guidance to employees and contractors on identifying and controlling risks and hazards. Hazard identification procedures are in place to address both routine and non-routine occupational activities and, when applicable, those associated with activities and equipment provided by contractors. To ensure continual improvement and to adapt to new risks and hazards, these measures are conducted at least once every three years and updated as necessary. Risk assessments teams are required to introduce control measures to mitigate the risk to an acceptable level using a well-defined hierarchy of controls:

- **1.** Eliminate complete elimination of the hazard
- 2. Substitute replace the material or process with a less hazardous one
- **3.** Redesign redesign the equipment or work processes
- **4.** Separate isolate the hazard by guarding or enclosing it
- **5.** Administrative providing controls such as training and procedures
- **6.** Personal Protective Equipment (PPE) use properly fitted where other controls are not practicable.

50

The identification procedures address company-wide processes and includes aspects arising, or likely to arise, resulting from:

- Change, including planned and new developments, and new or modified activities, products and services
- 2. Normal operating conditions
- **3.** Abnormal conditions and reasonably foreseeable emergency situations
- **4.** Incidents, accidents and potential emergency situations
- **5.** Past activities, current activities and planned activities.

The SHE department consists of the following sections, which provide integral support to Alba on safety matters:



SAFETY COMMUNICATION

We have established various methods to communicate and report work-related SHE matters to include:



SAFETY INCIDENT MONITORING AND REPORTING

All staff are responsible for identifying hazards, risks and incidents. Established procedures outline the correct hazard and risk monitoring, reporting and mitigation systems to reduce the chance of injury or damage. The aim of the procedures is to ensure that unsafe incidents are not only recorded but can contribute to learning to mitigation measures to prevent future incidents.

Our incident investigation process is governed by the Alba Code of Practices (ACOP), particularly the section related to Incident Reporting and Investigation. The responsibility of incident investigations rests within concerned area Executives and Directors as well as supported by departmental managers. Together the team will investigate an incident, identifying potential future risks and hazards, and complete a log of corrective actions. An incident report will be generated and submitted to a centralized SHE department within two weeks of an incident to limit the possibility of any future incidents. Any high-potential near misses and any injuries by be notified within 24 hours and a mail alert sent to all employees.

This process ensures that future risks are mitigated to limit the chances of any repeat incident. Following the report, corrective actions are taken across any similar areas so

that future risks are mitigated not only where the incident occurred but across any similar activities.

All injuries and high-potential near misses are reviewed monthly to ensure best practice is followed and all information is shared across other departments.

The purpose of Safety observations is to improve conditions and behaviours around the plant.

These observations might include housekeeping, hygiene, ergonomics, layout improvement, or other areas that could lead to unsafe conditions or accidents in the future. Due to an increase in company-wide awareness and an increased number of Safety audits, the total number of Safety observations increased by 10% in 2021.

increase in Safety observations in 2021

ENGAGING EMPLOYEES IN SAFETY & HEALTH

Alba fosters a strong Safety culture by engaging employees in Health and Safety initiatives. This ensures that our workforce have high awareness of Safety and is well prepared to manage any issues and help prevent future incidents. Our SHE policies mandate that employee representatives participate in monthly health and Safety meetings to discuss incident statistics, progress toward targets, and general employee health and Safety issues. In addition, numerous health and Safety activities are held throughout the year. Alba also provides financial support for health and Safety initiatives such as the Global SHE Conference and Exhibition, and the National Health Authority Conference.

We believe that training is vital both for engaging employees and helping ensure they are equipped to properly undertake their health and Safety responsibilities. In 2021, 3,905 employees were trained in Health and Safety practices, and a further 3,959 contractors or their employees.

3,905 \(\(\)

employees were trained in Health and Safety practices in 2021

MATERIALS USED BY WEIGHT OR VOLUME

Percentage of Total Workforce Represented in Formal Joint ManagementWorker Health and safety Committees that Help Monitor and Advise on
Occupational Health and safety Programs

HEALTH AND SAFETY TRAINING

	2019	2020	2021
Employees trained in Health and Safety practices	7,867	10,090	3,905
Contractors trained in Health and Safety practices	1,966	3,969	3,959
% of workforce represented in joint management- worker H&S committees (including walkthrough)	91%	96%	100%

COVID-19 meant that 2021 was another challenging year for health and Safety, especially for the physical and psychological impact of the pandemic on employees. However, Alba it was also a record-breaking year for Alba as we achieved 20 million safe working hours.

We achieved zero fatalities or major lost-time injuries (LTI) during the year (against 1 LTI in 2020), with 11 recordable injuries. There were 8,241 near misses reported, driven by our excellent reporting culture. The total number of injuries recorded fell by 30% in 2021, from 49 the previous

year to 34. These statistics reflect the effort made by executives, senior management, employees and other stakeholders to ensure a safe workplace.

ALBA PROVIDES A YEAR-ROUND INTENSIVE TRAINING PROGRAMME WHICH INCLUDES THE FOLLOWING MODULES:



Risk Assessment



Industrial Hygiene



Hot Work Permit



Basic Lifting Tackle



Confined Space



Fire Fighting



Manual Handling



Incident Investigation



Behaviour Observation



Permit

Excavation





Working at Heights

Process Safety Management

Emergency Preparedness and Response

We have a robust and dynamic emergency preparedness plan to proactively protect business continuity and the wellbeing of our stakeholders. We are committed to safeguarding all our assets, both human and material, against emerging risks of unpredicted events such as extreme weather, fires, natural disasters, and system failures.

Our efforts extend far beyond regulatory compliance. Our Code of Practice includes a specific Emergency Preparedness and Response Plan (EPRP), which provides essential elements such as mandatory periodic risk assessments,

implementing Job Safe Practices, providing firefighting emergency equipment, fire protection and detection systems, and an established emergency response team. The plan applies to all Alba employees, visitors, and contractors. Specific guidance for Alba's EPRP can be found within the overarching SHE policy.

Alba's Safety management systems seek to avoid emergency situations at all costs, and measures are in place across the whole workforce to minimize and mitigate the risk of accidents and escalations leading to an emergency. However, when

an emergency to arise, our onsite **Emergency Communication Centre** (ECC) can help deal with the situation and ensure that the correct procedures are followed. The ECC is home to a security control room where the necessary communication devices are available. A computerized system enables emergency SMS messages to be sent to all necessary team members to deploy a rapid response. Whilst Alba trains all staff to work towards the highest levels of SHE, the emergency systems are in place for worst-case scenario responses.



Employer of Choice

Alba focuses on attracting, retaining, developing and motivating people who can perform extraordinarily. We seek to be an employer of choice by offering staff a safe, empowering and caring work environment that nurtures their career development and wellbeing. We not only invest in our people but also in the communities where we operate to ensure positive and inclusive development.

2021 ACHIEVEMENTS



Specific HR achievements in 2021 include:

- Implementing our Social Management System
- Carrying out a Risk Assessment of our HR functions
- Benchmarking HR practices
- Winning the Employees-First Leader Award

OUR COMMITMENTS FOR 2022 INCLUDE:



- Implement Risk Management Plan
- Implement Employees' Portal for all HR and Payroll-related employees' services

OUR FAIR AND EQUITABLE WORKPLACE POLICIES ARE BASED ON:



MERIT-BASED ADVANCEMENT

all advancements within Alba, regardless of any group identity, are determined on of merit and performance alone. Clear and consistent criteria are applied to all candidates for vacant posts. Only the most capable shall be promoted.



STRONG COMMITMENT TO DEVELOPMENT

this is essential for all Alba employees. We seek to provide a conducive environment for improving qualifications and skills in line with employment position and responsibilities.



FAIR AND EQUITABLE **DISCIPLINARY PROCESS**

all disciplinary processes will always be fair and equitable. Any individual who is part of any disciplinary review shall never be denied the opportunity to forward their case or grievance to the HR Department. Every individual is presumed innocent of any and all alleged violations unless proved otherwise after a thorough investigation. Disciplinary actions strictly follow Alba's Disciplinary Procedure and Guide.

In 2021, Alba implemented a Social Management System, which will help improve goals and progress related to our social improvement objectives and targets. The system operates to international standards and was audited and successfully recognized by Aluminium Stewardship Initiative (ASI).

WORKFORCE PROFILE

TOTAL WORKFORCE (FULL TIME EQUIVALENTS - FTES) BY GENDER:

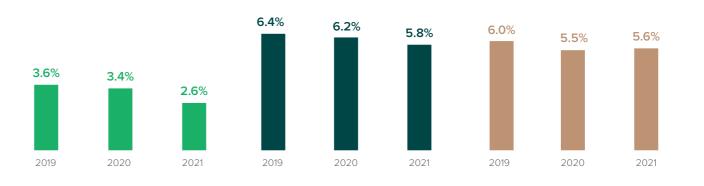


FEMALE REPRESENTATION

% IN NON-MANAGEMENT

% IN MIDDLE MANAGEMENT

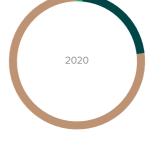
% IN SENIOR MANAGEMENT



TOTAL NUMBER OF EMPLOYEE BY EMPLOYMENT LEVEL



т	tal FTEs	3.181	т
	Number of Non-management employees	2,428	-
_	Number of Middle management employees	703	•
•	Number of Senior management employees	50	







		2 125
Number of Number o	Non-management	2,391
 Number of Number of Number managemer 	Middle nt employees	690
Number of S managemer	Senior nt employees	54

TOTAL NUMBER OF EMPLOYEES BY EMPLOYMENT CONTRACT (PERMANENT & TEMPORARY) & BY GENDER					
	MALE	FEMALE	TOTAL		
Permanent Contract	2,556	90	2,646		
Temporary Contract	474	15	489		
Total	3,030	105	3,135		

TOTAL NUMBER OF EMPLOYEES BY EMPLOYMENT CONTRACT (PERMANENT & TEMPORARY) AND BY REGION

	ASIA	EUROPE	MENA	TOTAL
Permanent Contract	-	-	2,646	2,646
Temporary Contract	4	7	478	489
Total	4	7*	3,124	3,135

*Alba Manager in US is part of Europe workforce

Whether a significant portion of the organization's activities are performed by workers who are not employees. If applicable, a description of the nature and scale of work performed by workers who are not employees.

Alba employed 1,006 indirect workers to perform less critical jobs such as material movements, housekeeping and labour support in operation and maintenance activities.

An explanation of how the data have been compiled, including any assumptions made.

All expatriate employees are on fixed term / temporary contract while all national employees are on permanent contract. All employees are in Bahrain campus except for the expatriates who are working in the sales' offices in Europe, Asia, and Singapore. All labours (indirect workers) are not employed directly by Alba but hired through contractors.

indirect workers to perform less critical jobs such as material movements, housekeeping and labour support in operation and maintenance activities



Training and Development

RELEVANT UN SDGS







Without our team of dedicated, competent individuals, we would not be in the position that we are today as not only a smelting leader, but also a business leader in the Gulf region. Our primary employee development objective is to harness and develop local talent to expand this leadership even further.

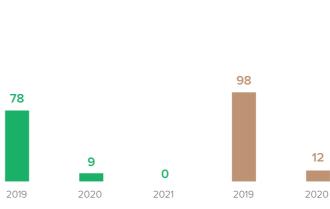
We have an extensive Training and Development Programme (TDP) to help accomplish this goal. Employees in the TDP can take on larger responsibilities, enhancing their opportunities to achieve higher positions within Alba by the end of the program.

Our training programs, however, are not limited to our employees. We cooperate with several organizations to bring training and development opportunities for Bahrainis more widely. This leads to improved technical expertise and internationally competitive skills to the country, which in turn further develop the entire industrial sector.

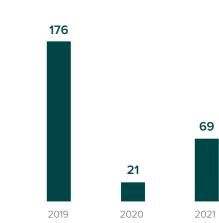
We are also proud to be a strategic partner in the First Deputy Prime Minister (FDPM) Fellowship, an initiative led by His Royal Highness Prince Salman bin Hamad Al Khalifa, the Crown Prince, Deputy Supreme Commander, and First Deputy Prime Minister of Bahrain. This program is aimed at building leadership skills among young Bahrainis working in middle management positions across all areas of government.

'Our primary employee development objective is to harness and develop local talent to expand this leadership even further'

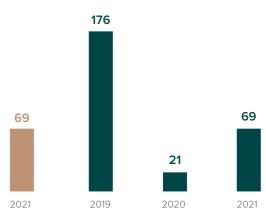
NUMBER OF TRAINEES (SCHOOL STUDENTS)



NUMBER OF TRAINEES (UNIVERSITY STUDENTS)







To ensure quality and optimization of our operations and processes, our employees are encouraged to participate in Six Sigma Green Belt Training. We run various Operational Excellence training programmes to train employees at different levels:



SIX SIGMA YELLOW BELT PROGRAMME

for non-supervisory employees



FAILURE MODES & EFFECT ANALYSIS (FMEA)



employees

CAPITAL EXPENDITURE (CAPEX) FAMILIARIZATION





For our employees, we provide in-house job skill craft courses, vendor training courses, and language training courses. We strongly encourage and support the academic development of our workforce by collaborating with academic institutions, including local and international universities and training institutions, to sponsor employees' higher studies.

We offer a wide range of training programs that are directly linked to employees' growth and development, along with a tailored training plan for each employee to address gaps identified in the skills matrix. Further programs boost the skills and capabilities of employees in managerial positions. Below is a comprehensive list of the technical and non-technical courses offered at Alba:



- Process-oriented Operation Training
- Equipment-specific
 Maintenance Training
- OEM and Specialised Training for Maintenance
- Academic (Diploma/ B.Sc. courses in collaboration with our partners of universities and institutions)
- Vendor training courses on new processes and equipment

NON-TECHNICAL COURSES

- Soft skills development courses
- Language skills development courses
- SAP and MS-office courses
- SHE & First Aid Training of Alba & contractor employees

The environmental training packages are a mandatory requirement in the above-mentioned skill matrix and the employee's development scheme. Environment training covers:







Environment Aspects & Impacts

Waste management & procedures

ALBA Environment standards, Policy & procedures

Despite the ongoing challenges of the COVID-19 pandemic, we were able to increase the training hours for our workforce by 2.8% in 2021 from 506,790 to 521,116. We were pleased to triple the average training hours per person for our female employees from 39 in 2020 to 118.

	2019	2020	2021
Total number of Training for total workforce (hours)	960,527	506,790	521,116
Total number of Training for males (hours)	954,767	502,509	508,777
Total number of Training for females (hours)	5,761	4,281	12,338
Average hours of training per year per male employee	309	168	168
Average hours of training per year per female employee	50	39	118
Average hours of training per year per employee	300	164	166
Total Cost of Training (BD)	1,502,156	1,115,432	1,379,294
Average Cost of Training per Individual (BD)	470	361	440
Total trainees and sponsored employees	176	21	52
Number of trainees: School students	78	9	-
Number of trainees: University students	98	12	52

AVERAGE TRAINING HOURS/EMPLOYEE



Non-Management

190

OURS



Middle Management (FLIN & SLIN)

95

nirs



ment Senior Management
) (Manager,
Director, CXO)

34

hours

We offer a wide range of technical and non-technical courses. There are pre- and post-test evaluations for each course to ensure their effectiveness, including knowledge and performance, as verified by our skills matrix process, on-the-job task performance evaluation, classroom tests, verbal interviews, presentations and assessments for license-based training.

Our internal training target is to achieve a percentage of hours spent on Training over Total Employee man-hours of 5% (as per the industry standard). We have in place a variety of measures to meet this annual target and we have been consistently exceeding our own targets in the last couple of years.

60

THE COMPANY RELIES ON VARIOUS PROGRAMS TO UPGRADE ITS EMPLOYEES' SKILLSET.



YEARLY DEPARTMENTAL TRAINING NEEDS ANALYSIS

An analysis on the training needs is carried out with each department to analyse the requirements in respect to the programs which should be adopted to upgrade the knowledge and skills of its employees. Once the analysis is compiled from all departments, then the trainings are scheduled in consideration of available resources, budgets, and approvals. Thereafter, the Training department communicates the schedules and training plan with department managers. To note, training courses are done by in-house specialists, external consultants or OEM vendors or through on-job activities and job rotation supervised by a mentor.



SKILLS MATRIX ASSESSMENTS

Each Non-Supervisory job has a unique skills matrix (set of skills to perform the job). Each of these skills is further broken down into various elements to explain the activities required to perform the job and performance criteria during evaluation. Every employee working on a job at a grade becomes eligible to be assessed for the next higher grade after spending a specified number of years. During the evaluation, the employee (he/she) is assessed on each of the skills listed in Skills Matrix of the job for the higher grade. Assessments are practical on the job at workplace, theoretical through written tests, verbal through questions with demonstration stretching to few months. During the assessments, all gaps in skillsets identified are addressed through training courses – Classroom and On the Job. Then, the employee (he or she) is assessed again for competence for the higher grade. Once competence is proven, the assessment goes through a verification interview by a panel consisting of Training Head and Department superintendent post which the employee (he or she) is promoted to the next higher grade.



TDPS (TRAINING DEVELOPMENT PROGRAMS) FOR MANAGEMENT POSITIONS

As part of the Succession Planning for Management staff positions, an employee is selected to undergo a TDP program for his/her development and on successful completion of the program, the employee is then promoted. A TDP program is a personalized program prepared for an individual employee for an identified position and has several modules for different aspects of the required development. The program duration ranges between 1 and 3 years. The candidate's progress is evaluated at formal phase reviews every 6 months by a panel consisting of Manager, Director and CXO.

Our employees receive continuous training to meet the Company's needs all the while furthering personal development. The employees' competence is ensured by the in-built skills' evaluation/ monitoring in the training initiatives which contribute to the overall productivity of the Company. Our employees, at time of departure or superannuation, will find themselves in a comfortable position if they

choose to leave Alba; in addition, the given references would be highly valued given the Company's solid reputation in the market. Thanks to the well-structured remuneration mechanism in the Company, the employees will also receive handsome end-of contract financial support which enable them to manage the career endings well.

Inclusion, Diversity and Equal Opportunity

RELEVANT UN SDGS



of Expatriates

% of Locals in the total workforce



Alba is an Equal Opportunity
Employer, which stems from the
core of our values surrounding
inclusion and diversity. We follow
a strict policy of providing equal
employment opportunities in
compliance with applicable laws.
We provide fair salaries based on
the HAY Job Evaluation System.
We strive to ensure that payment
is commensurate with work
experience, and we strongly believe
in transparent and fair recruitment

and promotion processes, as well as policies that promote job stability and ample career growth opportunities. This is part of what makes Alba an annual Employer of Choice.

We believe in respect for all beliefs and fair treatment of all employees and community members. Alba offers provisions for female employees to take paid leaves of absence and has policies in place to ensure equal pay regardless of gender.

Alba has a formal written policy to address grievances, two active labour unions that all employees are free to join, and a number of committees dedicated to establishing excellent employee

relations. All employees throughout the organization are responsible and accountable for implementing applicable HR policies. We review and update our HR policies at least every two years, or as necessary. Platforms and procedures for reporting grievances are available for all employees in each department and they are encouraged to report any incidents of discrimination through our Integrity Line via one of two categories: "Fair treatment and Equal Opportunity" or "Respect and Non-Harassment". Depending on the nature of the grievance, the procedure generally follows three stages: Department Manager, CXO, then the CEO if necessary.

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DIVERSITY OF GOVERNANCE BODIES AN	D EMPLOYEES (GENDER)		
	2019	2020	2021
# of Female	115	109	105
# of Male	3,066	3,021	3,030
Total	3,181	3,130	3,135
DIVERSITY & EQUAL OPPORTUNITY			
	2019	2020	2021
# of Local	2,657	2,602	2,646

DIVERSITY OF GOVERNANCE BODIES AND EMPLOYEES (AGE RANGE)					
	2019	2020	2021		
18-30	817	760	757		
31-50	2,140	2,150	2,152		
51 and above	224	220	226		
Total	3,181	3,130	3,135		

524

528

Percentage of individuals within the organization's governance bodies in each of the following diversity categories:

a. Age group: under 30 years old, 30-50 years old, over 50 years old.

We classify employees as N1 category – Executives; N2 category – Directors and Managers; N3 Category – 2nd Line employees including, Superintendents, Heads and Sr. Engineers; N4 Category – 1st Line employees including Supervisors, Planners, and Engineers; and N5 – Non-Supervisory employees. N1 & N2 are classified as upper management while N3 & N4 are middle and N5 is non-supervisory.

EMPLOYEE CLASSIFICATION BY AGE RANGE

	Upper	Middle	Non-Supervisory	Grand Total
Less than 30 years old	-	3	634	637
30 to 50 years of age	37	594	1,646	2,277
Greater than 50 years of age	17	93	111	221
Grand Total	54	690	2,391	3,135

b. Other indicators of diversity where relevant (such as minority or vulnerable groups).

Bahrain Labour Law treats everyone as equal and there are no identifiable minority or vulnerable groups defined.

In line with Bahrain's Labour Law (Title XIV – Collective Labour Disputes – Chapter 1 for Collective Bargaining), Alba has 2 Unions: Alba Labour Union (ALU) and Alba Trade Union (ATU). Out of 3,135 employees, 47.4% are in ALU and 15.6% in ATU [below table is for reference]

GRIEVANCE MECHANISM

Alba's grievance mechanism is a process designed to receive and facilitate the resolution of affected parties' concerns and grievances regarding Alba's performance. Grievances can be logged via the Alba Integrity Line. This is an independently operated, confidential reporting hotline that works in

multiple languages via a toll-free phone system or via our intranet 24 hours a day, every day. Alba tracks, evaluates and responds to all grievances in accordance with our grievance mechanism procedures

In 2021, we received no grievances or incidents of discrimination.

UNION



		NO.	%
ı	ALU	1,488	47.4
	ATU	488	15.6
ı	NEUTRAL	1,159	37
	Total	3.135	100%

GRIEVANCE

NUMBER OF GRIEVANCES RECEIVED



2020

2019

TOTAL NUMBER OF INCIDENTS OF DISCRIMINATION





Employee Engagement and Wellbeing

RELEVANT UN SDGS



Nothing is more important to us at Alba than the wellbeing of our employees. We prioritize and promote employee engagement and wellbeing in a variety of ways to ensure our employees are motivated and satisfied.

This includes a commitment to work alongside and with two Alba unions to address any issues that may arise. Though collective bargaining agreements are not the norm in Bahrain, we feel it is imperative that the HR Department works with these unions to create what is best for employees.

Alba's Human Resources (HR) department is supported by the following three sections that are dedicated to managing employee related functions and issues:



Compensations and Benefits



Employee Relations and Alba Housing Scheme (Albaskan)



Employee Services

PERCENTAGE OF EMPLOYEES **RECEIVING REGULAR** PERFORMANCE AND CAREER **DEVELOPMENT REVIEWS**

100%

100%

100%

EMPLOYEE BENEFITS

We believe wellbeing is a critical element in helping our employees be at their best each day. That is why we strive to provide benefits and programs that are industrycompetitive and focused on employee well-being, while removing any barriers to employees achieving their full potential.

All Alba's permanent and temporary contract employees have a spectrum of benefits to include Health Insurance, Long Service Awards, Employee Allowance, and Pay Raise except for the following benefits which apply to permanent contract employees: AlBaskan Housing and Loan Scheme, Alba Savings Benefit Scheme, Alba Scholarship for Employee Children, Retirement Benefits, and Social Security while Paid Vacation applies to the temporary contract employees (based in Bahrain and Alba Sales' offices).



Health Insurance



Albaskan Housing and Loan Scheme



Alba Savings Benefit Scheme



Alba Scholarship for Employee Children



Retirement Benefits



Long Service Awards



Employee Allowance



Pay Raise



Paid Vacation



Social Security

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PARENTAL LEAVE

Alba's parental leave policy helps female workers take care of themselves and their new-borns, all without needing to worry about their position while they are absent. All female employees are entitled to paid maternity leave over a 60-calendar-day period, with the option to take an additional 15-days of unpaid leave. In addition, they may take around two hours daily during working hours to feed their child, for up to two years. In 2021, seven female employees took maternity leave, with a 100% return-to-work rate.

PARENTAL LEAVE					
	2019	2020	2021		
Parental leave - Female employees	14	5	7		
Percentage of female employees that returned to work after maternal leave	100	100	100		
Parental leave - Male employees	-	-	-		

Alba provides different kinds of granted leave (maternity leave, feeding hours and birth of a child leave) to its employees as follows:



female employees took maternity leave

Maternity leave Female 7 Feeding hours Female 22 Birth of a child leave Male 91



HEALTH AND WELLBEING

TYPE OF GRANTED LEAVE

Alba takes a holistic approach to promoting health and wellness. This starts with providing a safe working environment and extends to promoting healthy lifestyles. A particularly popular event that promotes health and wellbeing is the Ramadan Sports Tournament, a friendly competition and teambuilding event within and between different Alba departments.

Alba provides the best experience and services (free of charge) to its Employees and their families through Alba Club SPC (a subsidiary entity of Alba in Bahrain). The Club goal is to keep enhance the health and wellbeing of its members.

As well as taking a proactive approach to wellness and health, Alba's Health Care Center is regarded as one of the most advanced medical facilities of any industrial organisation in Bahrain.

New Hires and Attrition

We strive to hire and develop the best talent to contribute to our future. Our hiring practices currently target a diversified mix of ages, and we are working to bring more gender parity into hiring through various programs aimed at women's empowerment.

After COVID-19-related disruption in 2020, our turnover rate in 2021

was reduced significantly from 5.8% to 2.3%.

All Alba's full-time employees (100%) (permanent and temporary contract) are covered for primary health insurance. Through Group Life Insurance and Personal Accident Insurance Policy, Alba staff are covered for Death (any Cause), Permanent Total and Partial Disability, Terminal Illness, Passive War Risks and Repatriation of the body for. Group Medical Insurance covers all Alba staff for Inpatient & day Care, Outpatient, Treatment Abroad during business trips and holidays, Dental, Optical and accidents. Alba's contractor workers (901) are covered by the Company's Health and Safety Management System.

	2019	2020	2021
Total number of employees who left the organization	95	181	71
Norkforce Turnover Rate (%)	3%	5.77%	2.26%
BY GENDER			
Total number of employees who left the organization (female)	4	8	7
Total number of employees who left the organization (male)	91	173	64
BY AGE			
Total number of employees who left the organization (18-30)	36	17	13
Total number of employees who left the organization (31-50)	37	92	33
Total number of employees who left the organization (51 and above)	22	72	25
BY JOB CATEGORY			
Total number of employees who left the organization (Senior Management)	5	4	1
Total number of employees who left the organization (Middle Management)	23	72	23
Total number of employees who left the organization (non-management)	67	105	47
BY REGION			
Total number of employees who left the organization (Asia)	26	41	27
Total number of employees who left the organization (Europe)	3	3	0
Total number of employees who left the organization (MENA)	66	137	44

83	97	104
4	2	2
79	95	102
56	58	89
27	36	14
-	3	1
-	-	1
14	23	5
69	74	98
15	20	5
2	5	1
66	72	98
3,181	3,130	3,135
-	-	-
3,181	3,130	3,135
	4 79 56 27 - 14 69 15 2 66	4 2 79 95 56 58 27 36 - 3 14 23 69 74 15 20 2 5 66 72



Human Rights

RELEVANT UN SDGS





Alba is committed to conducting our business in an ethical way, respecting and safeguarding human rights in every way possible. Our commitments extend far beyond basic human rights. We actively affirm the UN Guiding Principles on Business and Human Rights and the Universal Declaration of Human Rights in our Code of Conduct. This code, which applies to all Alba employees and representatives, also outlines our commitment to

respecting beliefs and religious practices for people of all faiths.

Senior leadership has undergone a due diligence process to prevent human rights violations, with several HR procedures established to deal with any infringements on such rights. These include disciplinary procedures, grievance procedures, and the Alba Committee procedure, among others. ESIA reports, Integrity Line case reviews, internal interviews and labour union engagements have identified no violations or grievances related to human rights in 2021.

In 2021, 1,128 hours of Human Rights training (more than double versus 2020) were delivered to 39 employees to raise their awareness about Human Rights' policies and procedures. This included participation in ESG Training courses like 'Employee Relations' course as well as "Legal protection for Bahraini Women" and "Women's Right and Equal Pay" courses which were conducted by the National Institution for Human Rights (NIHR), etc. In 2021, the percentage of employees who have attended training in Human Rights' Policies and Procedures is 1.2%.

The Company is looking to adopt in 2022-2023 an evaluation system for its suppliers (major contractors) to assess their practices and policies relating to Human Rights.

EMPLOYEE TRAINING ON HUMAN RIGHTS POLICIES OR PROCEDURES

	2019	2020	2021
Number of employees attending human rights policies or procedures training	14	153	39
Number of hours of training on human rights policies or procedures training	256	501	1,128

THE TRAINING COURSES COVERING ESG TOPICS FOCUSED ON SPECIFIC SUBJECTS AS FOLLOWS:



Local Community Investment and Development

Alba aims to make an unselfish contribution to wider society. Central to this are our community investment and development endeavors. Our approach focuses on empowering local communities and nationalization by creating meaningful job opportunities, enhancing local development and community investment.

Nationalization

We are deeply committed to the employment and development of the local Bahraini workforce. This includes utilizing local suppliers and partners whenever feasible in all aspects of our operations. We give priority to local and national companies and organizations when vetting potential suppliers and partners, and to Bahraini nationals when recruiting for new positions. However, we do recruit expatriates when suitably qualified Bahrainis are not available for positions that need to be filled in a timely manner.

Alba aims to inspire and prepare young nationals to succeed, whether or not they work directly with us. We conduct and support projects such as INJAZ Bahrain and Tamkeen to train future leaders from Bahrain to meet the challenges and opportunities that the country will face in the years ahead, as well as to compete and succeed in a global context.

In 2021, Alba maintained a nationalization rate of 84%, vastly exceeding the national goal of 25% set out in the Kingdom of Bahrain's Economic Vision 2030. This is the third year in a row that we have achieved this incredibly high rate.

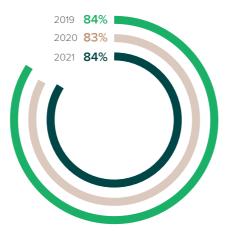
NUMBER OF NATIONAL WORKFORCE



NUMBER OF WORKFORCE EXPATRIATES



PERCENTAGE OF NATIONALS IN THE TOTAL WORKFORCE



84%
Nationalization Rate

Community Investment

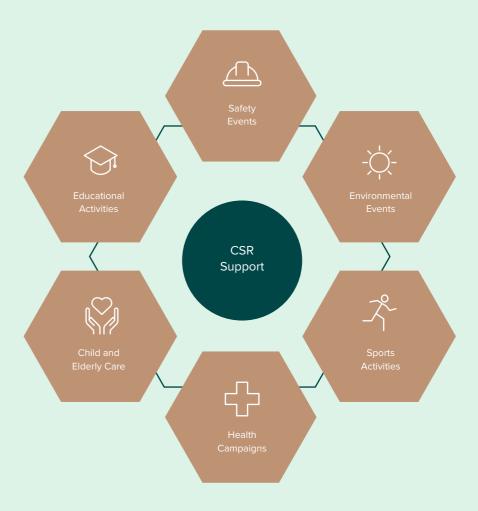
RELEVANT UN SDGS



Alba is committed to community investment in many areas across a wide range of events, activities, and campaigns.

COMMUNITY INVESTMENT (BD)		
		% of pre-tax profits (BD)
2019	758,363	13.6%
2020	4,435,866	44.2%
2021	762,383	0.2%

Our community investment initiatives aim to address the specific regional and cultural, social, and environmental needs of our local communities. All our initiatives are in line with the National Vision 2030 of the Kingdom of Bahrain. Our CSR support will be provided in the following areas:





Business Ethics and Responsible Sourcing

Sound governance is implicit in our values, culture, processes, policies and organisational outputs. We have a strong culture of entrenched values, which form the cornerstone of our behavior towards stakeholders and against which we measure practices and activities to assess the characteristics of good governance.

All employees are required to conduct themselves with integrity and in a way that is consistent with our vision and values to promote trust. Our standards and policies are set in accordance with national and international standards and requirements to ensure we are adhering to the highest ethical

standards. We place strong consideration on our supply chain too, expecting high levels of social and environmental compliance to ensure that we conduct responsible resourcing. The company was not a participant in any legal actions in respect to anticompetitive behaviors, violations of

anti-trust and monopoly legislations.

We successfully implemented a number of governance and management initiatives in 2021. Our Titan cost-saving program achieved % of savings against its targets, and we made further savings from our Good Suggestions Scheme.

We also introduced a number of continuous improvement projects in the year. The main focus was on the development and implementation of a regulatory compliance framework, which includes new policies and a review of existing compliance-related policies.

NEW AND REVISED POLICIES IN 2021 INCLUDED:



We also carried a comprehensive risk assessment in our HR and PR departments

Board of Directors

ESG issues are front and center in all aspects of Alba's business model, most notably being integrated into all our business functions at the CEO level and among the Board of Directors. Alba's experienced Board takes ESG compliance very seriously. Such matters are discussed in detail with each of the Committees overseen by the executive team.

Alba's Board Committees are composed as follows:

- Corporate Governance matters are addressed by the Board Audit Committee (BAC) and the Nomination, Remuneration and Corporate Committee (NRCGC)
- Safety is addressed by the BAC, NRCGC and Executive Committee (ExCom)
- Economic matters are addressed by the ExCom and BAC, as well as the CEO and other chief officers.

Each Committee conducts their own performance evaluation. Additionally, members of the Board will be expected to complete the Board Appraisal and Self-Assessment form for 2021 at the official Board meeting in February 2022.

All positions on the Board are occupied by non-executive members. The female representation on the Board currently stands at 20%.

The Board of Directors delegates ESG authority to the CEO and Executive Management, who in turn cascade ESG governance to employees. In late 2021, Alba officially created an ESG department, which is currently led by an Acting ESG Manager who reports to the Director SHE and the CEO.

Board of Directors' remuneration fees are fixed and are approved by the shareholders during the AGM.

The Board has approved the renaming of the Executive Committee to the Executive and ESG Committee, effective 12 May 2022. ESG Updates have been discussed previously at all committees and Board.

Executives, Directors, and Managers are entitled to receive bonuses determined by performance in relation to the following areas, each of which accounts for 25% of total bonuses:



Safety



Profitability



Production

Individual Performance

Corporate Governance Guidelines. which were approved by the Board in 2015. Compliance with the Code is monitored by the Board Nomination. Remuneration and Corporate Governance Committee through regular updates by the Corporate Governance Officer and Corporate Governance related reviews by Internal Audit.

ACTIONS UNDERTAKEN TO

GOVERNANCE CODE

COMPLY WITH 2018 CORPORATE

Alba is committed to implementing

- on par with leading international codes of ethics to set-out the required ethical conduct for all Alba's employees and representatives

A Board approved Code of Conduct

the Corporate Governance Code of the Kingdom of Bahrain of the Company – was launched (the "MOICT Code") and the by the Executive team through a Corporate Governance Module comprehensive communication (the "CBB Module"). We seek, and training program. Compliance where applicable, to exceed the with the Code is monitored by our minimum requirements set by Integrity Task Force, which reports the MOICT Code and the CBB directly to the Board Audit Committee Module as well as implement through the Chief Internal Auditor, who acts as the Chairman of the Task additional recommendations in line with international best practices. Force. Monitoring tools include an Alba operates in line with a set of independently operated confidential hotline along with a reporting system

> Alba also has a Corporate Governance Officer, as per the requirement of the Code, to ensure that the policies and procedures applied at Alba are in accordance with the regulatory and legal requirements of the Corporate Governance Code of 2018. In 2021, the following policies were updated or introduced following approval from our Board of Directors:

in multiple languages by phone and

internet 24-hours a day and every day.

- Fraud Reporting and Investigation Policy (new section added for assessment of Integrity Line Reports)
- Internal Audit Standards and Procedures (updated)
- Anti-Money Laundering and Combating the Financing of Terrorism Policy (this new policy ensures that Alba prohibits and actively prevents money laundering and the financing of terrorism by deploying the highest operating standards to guarantee that its activities are undertaken within the legal parameters)
- Anti-Bribery and Corruption Policy (new policy to govern Alba's business activities in a transparent and ethical way)
- Key Persons Dealing Policy (updated)

For more info. please click on the QR code for 2021 Corporate Governance Report



EXECUTIVES, DIRECTORS AND MANAGERS' BONUSES ARE DETERMINED BASED ON THE COMPANY'S PERFORMANCE IN RELATION TO:

Individual Performance



4 25%

BOARD OF DIRECTORS 2019 2020 2021 Percentage of Board seats occupied by independent directors 60% 40% 40% Percentage of non-executive members of the Board of Directors 100% 100% 100% 420,000 Remuneration for Directors (BD) 210,000 210.000 **BOARD OF DIRECTORS BREAKDOWN BY GENDER**

2019 2020 2021 Male Female Total

BOARD OF DIRECTORS BREAKDOWN BY AGE

	2019	2020	2021
Under 30	none	none	none
30-50	2	3	3
Over 50	8	7	7

	2019	2020	2021
Total number for training hours delivered to board members		As a result of the prevalent pandemic, 2020 was an exceptional year. Alba's Board	Alba's Board of Directors did not travel for any training in 2021 (one director registered for a training
Average number of training hours delivered to board members (hrs/board member)		of Directors did not travel for any training in 2020.	program but opted not to attend
Total number of performance evaluations conducted for the board	Each Committee conducted its own performance evaluation. In addition, members of the Board have filled out the Board Appraisal	Each Committee conducted its own performance evaluation. In addition, members of the Board have filled out the Board Appraisal	Each Committee (three in total) conducted a performance evaluation
Board's performance evaluation result	and Self- Assessment form for 2019 at the Board Meeting held in February 2020	and Self- Assessment form for 2020 at the Board Meeting in to be held in February 2021	The Board performed an Appraisal and Self- Assessment in February 2022

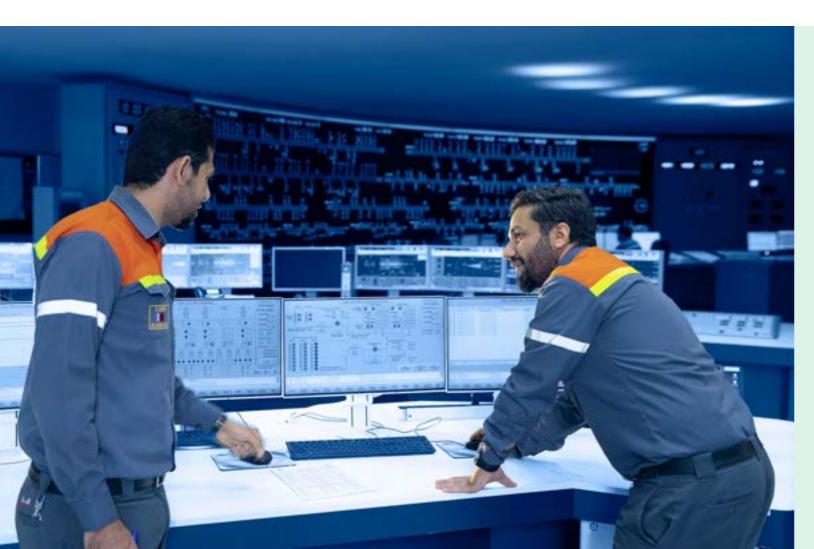
2019	2020	2021
		2021
30,000	30,000	60,000
NA	NA	NA
180,000	180,000	360,000
210,000	210,000	420,000
	NA 180,000	NA NA 180,000 180,000

The functions of the Board are those established by the Corporate Governance Code 2018 and the Commercial Companies' Law of the Kingdom of Bahrain, as well as the Memorandum and Articles of Association of the Company (the "Articles"). The Board's duties, as per the updated Board Charter on 27 September 2020, include but are not limited to:

- Setting and monitoring Alba's overall business strategy and business plan;
- Ensuring that the operations run smoothly to achieve the Company's objectives and that they do not conflict with the applicable laws and regulations;
- Preparing financial statements that accurately disclose the Company's financial position;
- Monitoring management performance;
- Convening and preparing the agenda for shareholders' meetings;

- Monitoring conflicts of interest and preventing abusive relatedparty transactions;
- Assuring equitable treatment of shareholders, including minority shareholders:
- Exercising all powers and performing necessary acts for the management of the Company in conformity with its objectives, within the bounds of the Law, the Articles of Association, and resolutions of the General Meetings;
- Establishing key Company policies;
- Determining the remuneration for Directors, subject to the approval of the shareholders' Annual General Meeting, taking into consideration the provision of Article 188 of the Commercial Companies' Law;
- Setting the Management structure; appointing or removing key/ senior executives and employees, determining their duties, setting their remuneration and incentive

- programmes, (ensuring that these are aligned with the long-terms interests of the Company and shareholders), and overseeing succession planning;
- Forming Executive, Audit and other Committees, appointing their members and specifying their powers, as well as ensuring a formal board nomination and election process;
- Ensuring the integrity of the Company's accounting and financial reporting systems, and that appropriate systems of control are in place, particularly for risk management, financial and operational control as well as compliance with the law and relevant standards; and
- Approving matters reserved to the Board in the 'Levels of Authority' document reviewed by the Board from time to time.





BOARD AUDIT COMMITTEE

The Board Audit Committee consists of four Board Directors, half of whom are independent, and all Directors are non-executive Directors. The members of the Board Audit Committee during 2021 were: Mr. Yousif A. Tagi (the Chairman of BAC who is independent), Mrs. Suha Karzoon, Shaikh Isa bin Khalid Al Khalifa, Mr. Iyad Al Garawi, Mr. Ahmed M. Al Khamis (who is not a Board Director but a representative of the shareholder, Sabic Industrial Investments Company, and reappointed in April 2020 as an expert member) and Dr. Ahmed Al Balooshi (who is not a Board Director but was reappointed in April 2020 as an expert member). In 2021, the Board Audit Committee met seven times.



NOMINATION, REMUNERATION AND CORPORATE GOVERNANCE COMMITTEE (NRCGC)

The Nomination, Remuneration and Corporate Governance Committee consists of three Directors: the Chairman of the Board, Shaikh Daij Bin Salman Bin Daij Al Khalifa (who chairs this Committee) and who is independent, and two other Directors: Mrs. Rasha Sabkar and Mr. Ahmed Al Duriaan. The committee is required to meet at least four times a year and/or when necessary. In 2021, the Nomination, Remuneration & Corporate Governance Committee met four times.



Business Ethics

RELEVANT UN SDGS







Standards and guidelines for ethics and integrity are outlined in our Code of Conduct, which is designed to ensure that all Alba employees and representatives conduct their business with the highest standards of integrity and personal conduct. This section of the Code was built on strong values of trust, respect, transparency, and integrity to ensure that our business is safe, ethical, professional, environmentally sustainable, and socially responsible.

Every two years, we revisit, reevaluate, then relaunch the Code of Conduct and Alba's confidential reporting system, known as the "Integrity Line." The latest review took place in 2021.

SUPPLEMENTARY ACTIVITIES INCLUDED:



Distribution of Code of Conduct booklets in English or Arabic (hard copies)



Quizzes

Posters



Employee signatures as proof of receipt of the Code, and of their

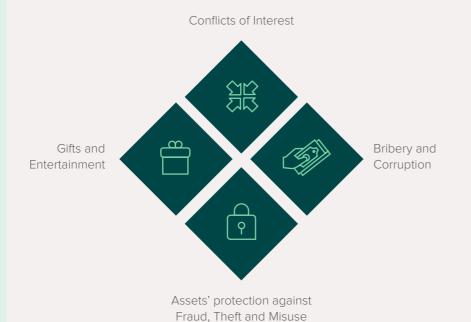
commitment to comply



Presentation slide-packs in English and Arabic, together with talking points for managers



Code of Conduct Video featuring Alba's CEO and employees (also made available on the internet and intranet) ALBA'S CODE OF CONDUCT CURRENTLY COVERS ALL COMMON ASPECTS OF AN ETHICS PROGRAM, WITH A FOCUS ON ETHICAL BUSINESS, WHICH COVERS:



Risk Management

Our Enterprise Risk Management
Framework has been used as a
high-level risk assessment regarding
corruption risks within Alba and with
stakeholders, and within the entire
Aluminium industry. There are several
areas in this industry that can be prone
to corruption if not monitored, including
artificial price-setting for customers
in collusion with competitors, and
artificially setting costs for major raw
materials. There is also potential for
major conflicts of interest, including
kickbacks in the form of awarding
unfairly won service contracts.

Safeguarding against potential corruption is a major priority for Alba and all premiums and discounts provided to individual customers are subject to a rigorous review and approval process from the Board. The full procedure is outlined in our Levels of Authority document, which is available to all employees in all departments. We have also improved monitoring procedures for major raw material costs and major contracts to minimize the possibility for corruption in these areas, including a multi-sourcing strategy for major raw materials that improves transparency and exhibits non-competitive transactions.

In 2021, there were zero incidents of corruption at Alba. We are constantly working on combating corruption, anti-competition behaviours, bribery, and money laundering in line with international standards as part of our current compliance project.



TOTAL NUMBER AND PERCENTAGE OF OPERATIONS ASSESSED FOR RISKS RELATED TO CORRUPTION AND THE SIGNIFICANT RISKS IDENTIFIED

	2019	2020	2021
Total number and percentage of operations assessed for risks related to corruption	Although there have not been any cases of corruption in recent years, the risk is inherent in the industry in which Alba operates. A high-level risk assessment has been carried out in this area as part of Alba's 'Enterprise Risk Management' Framework. All operations (100%) considered (Head Office plus 3 regional offices).	Same as in 2019	Same as in 2019
Percentage of employees trained on anti-corruption	100%	100%	100%
Percentage of business units analyzed for risks related to corruption.	as above. All operations (100%) considered (Head Office plus 4 regional offices).	Assessment for Anti-corruption is assessed under Ethics Risk Assessment	Assessment for Anti-corruption is assessed under Ethics Risk Assessment

The Board Audit Committee reviews all Policies pertaining to Anti-Corruption for the Board's approvals. Once the Board approves such policies, then these are rolled-out to Alba employees via internal communications channels.

ANTI-CORRUPTION

	2019	2020	2021
Total number and nature of confirmed incidents of corruption	-	-	-
Total number of confirmed incidents in which employees were dismissed or disciplined for corruption	-	-	-
Total number of confirmed incidents when contracts with business partners were terminated or not renewed due to violations related to corruption	-	-	-
Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations (BD)	-	-	-

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Compliance

At the highest governance level, the board has ultimate responsibility for monitoring that Alba is operating as a responsible organisation. The Board ensures compliance with the correct requirements for the issuing of securities by:

- Preventing market abuse
- Preventing insider trading
- Disclosing required obligations
- Disseminating price sensitive information

Compliance monitoring regarding legal and regulatory requirements is the responsibility of the Board Audit Committee.

As a publicly listed company,
Alba is required to follow several
governance codes including the
Corporate Governance Code
of the Kingdom of Bahrain (the
'MOICT Code') and the Central
Bank of Bahrain's (CBB) Corporate
Governance Module published
under the Capital Markets
section of the CBB Rulebook.
Alba ensures compliance with
these codes by publishing boardapproved Corporate Governance

Guidance. We ensure that all reporting requirements mandated by the MOICT and CBB Code of Conduct are strictly followed and implemented.

Any areas of our business that are involved in importing and exporting goods are compliant with the regulations of relevant countries involved, including applicable international trade controls. In addition to legal requirements, we also follow the requirements of organizations such as the ASI and IFC.

Our new Anti-Money Laundering and Combating the Financing of Terrorism (AML / CFT) policy complies with the following regulations of Bahrain:

...Decree Law No. 4 of 2001, with Respect to the Prevention and Prohibition of the Laundering of Money. CBB – Volume 6, Capital Markets -Market Standards -AML (Anti Money Laundering & Combating Financial Crime

Environmental Compliance

Environmental nuisance related to noise is measured within Alba for projects that are under construction as part of the management control procedure (Alba Code of Practices for Construction). Any construction contractor is obliged to measure background and workplace noise to ensure that limits stipulated in

the standards are not exceeded. Ambient noise is measured using three monitoring stations based in the smelter, three further stations at the marine and calciner, and two stations at the SPL plant against ambient noise industrial limits states in our procedures.

Responsible Sourcing

Existing major suppliers are

RELEVANT UN SDGS





Our approach to Responsible

Sourcing involves direct engagement

with suppliers. Most of our suppliers

are partners in our sustainability-

focused efforts to reduce our

overall environmental footprint.

We also aim to support the local

and Bahraini economy through

local procurement and sourcing

whenever possible. Alba screens

survey which looks at the generic

environmental elements; however,

Alba is in the process to develop

stricter environmental criteria to

be considered when screening

suppliers or raw materials, goods.

through SAP Ariba embedded

and assesses its suppliers in general





screened through pre-qualification and regular vendor audit programs that follow local and international regulations and prioritize Safety, Health, and the Environment, All major contractors are screened for their environmental and social compliance as a prerequisite to the tender process. Since the implementation of the Ariba platform in October 2020, our major and active suppliers have been required to provide information on their Safety, Health and Environmental performance and are also screened for their social compliance. This process was applied throughout 2021 and will continue so all our active suppliers have been screened in respect to ESG. The company was not a participant in any legal actions in respect to anti-competitive behaviors, violations of anti-trust and monopoly legislations.

SPENDING* ON RAW MATERIALS (MILLION BD)



*Cost of raw materials is FOB basis

Scan the QR code below to access our Sustainable Procurement Policy:



LOCAL SUPPLY

and services.

Our goal is to extend business opportunities towards local vendors and suppliers by inviting them to submit their bids in line with their area of specialisation as this will boost the overall growth in local supplier development.

Tatweer Petroleeum (Tatweer) is the sole supplier of all-natural gas which is used as fuel in the Company's power stations. Tatweer is wholly owned by the Oil and Gas Holding Company BSC© which is owned by the Government of Bahrain – which in turn owns and controls Bahrain Mumtalakat Holding Company BSC © - the Company's single-largest shareholder.

We engage local Bahraini suppliers whenever feasible to support our operational activities, thus reinforcing our commitment to the Kingdom of Bahrain's Economic Vision 2030. There has not been a significant change to the Company's supplychain during 2021.

PROPORTION OF SPENDING ON LOCAL SUPPLIERS AT SIGNIFICANT LOCATIONS OF OPERATION

	2019	2020	2021
Local Procurement (%)	53%	54%	48%
Total spending on suppliers and contractors (BD million)	120	150	280
Spending on locally-based suppliers and contractors (BD million)	63	81	136

2021 SPENDING ON RAW MATERIALS BY REGION (BD MILLION)







© 1000 (42,057,855)

> Q 700 (305,551,957)

438,827,573

Sustainable Procurement Policy

Our Sustainable Procurement Policy reflects Alba's pledge to sustainable development by employing best ethical practices. We also expect from our suppliers to follow this Policy as well as the ACOP-25 that covers SHE Management and the SOP-1.11 in the Social Performance Monitoring (SPM) document.

Our suppliers on our approved list have been made aware of Alba's Three Safety Principles, SHE Policy, as well as our Vision, Mission, and Values. Regular communications are conducted through our website, Company media channels, onsite meetings, and other initiatives led by our Corporate Communications and SHE departments.

To read more on our Sustainable Procurement Policy, please scan the QR code.





Economic Impact and Sustainable Growth

Alba's Spent Pot Lining Treatment Plant was benchmarked against sustainability-linked factors (Ecological, Social and Economic) in line with the United Nations World Commission on Environment and Development.

EVALUATION FACTOR	ALBA SPL PROCESSING AND TREATMENT BENEFIT				
ECOLOGICAL			*		
Solid /Liquid residue	No solid or liquid	residue			
Greenhouse Gas emission	Net reduction in 0	GHG emission			
Contribution to landfill	No landfill				
Technique for cyanide toxicity	Cyanide toxicity e	eliminated in thermal 72 tre	atment process		
Technique for fluoride toxicity	Fluoride toxicity e	liminated at cement plant			
SOCIETAL			000		
Technique for flammable gas hazard	Flammable gas h	azard eliminated in the the	ermal treatment process		
Worker health	No adverse effec	ts after many years of wor	ker health monitoring		
Worker Safety	Safety process plant built and operated to 73 modern industrial standards after many years of worker health monitoring				
Transport public Safety	No dangerous goods transport				
Regulatory support	International regulatory support in 11 countries				
ECONOMIC			ч		
Direct recycling cost	Competitive again	nst other options and susta	ainable		
Indirect recycling costs	Competitive again	nst other options and susta	ainable		
Corporate stakeholder values	Enhanced compliance, corporate image and global sustainability position				
End-user values proposition	Economic and en	vironmental value for cem	ent makers		
Residual financial labilities	No residual financial liabilities				
PRODUCTIVITY					
	2019	2020	2021		
Calcined Petroleum Coke Production (MT)	525,107	554,143	546,047		
Water Production	8,186,641	9,104,197	10,558,194		

GOOD SUGGESTION SCHEME 2019 2020 2021 Good suggestion submitted 52 43 7 Savings from implementing these ideas (Million US\$) 1.12 1.05 1.06

The Good Suggestion Scheme aims to promote a culture of improvement amongst employees at all levels. Through this scheme, employees engage amongst each other to initiate and generate ideas as well as initiatives which can impact the business operations. Suggested ideas are evaluated through a structured review mechanism to validate the tangible benefits and measure the process improvements in terms of quality, productivity, or cost savings. Employees are then rewarded based on the category of benefits and, the cash award ranges from a minimum of BD50 to a maximum of BD2,500.



Economic Growth & Innovation

RELEVANT UN SDGS







Our approach to economic growth and innovation is rooted in sustainability. We are committed to sustainable economic growth, environmental conservation as well as innovation that will help achieve our ESG goals.

FINANCE ACHIEVEMENTS IN 2021



- Working capital limit increased and price reductions (savings) were renegotiated with various banks
- Increased receivables' insurance coverage from US\$ 186 million as of January 2021 to US\$443 million in December 2021
- Automation of several payroll processes as well as enhanced efficiency and accuracy of output



OUR ECONOMIC GROWTH STRATEGY FOCUSES ON THE FOLLOWING FACTORS:



2021 Sustainability Report

	2019	2020	2021
Total production (metric tonnes)	1,365,005	1,548,500	1,561,222
Revenue from Aluminium sales (million BD)	1,028	1,057	1,565
Net Profit (million BD)	5	10	452
EBITDA (million BD)	115	171	615
DIRECT ECONOMIC VALUE GENERATED AND DISTRIBUTED			
	2019	2020	2021
Year to year variance	13%	3%	49%
Contribution to GDP	15%	12%	12%
DIRECT ECONOMIC VALUE GENERATED AND DISTRIBUTED	1		
	2019	2020	2021
Operating Costs (000' BD)	815,322	771,262	855,778
		· · · · · · · · · · · · · · · · · · ·	
Employee wages & benefits (000' BD)	101,276	102,033	122,718
Employee wages & benefits (000' BD) Payments to lenders (000' BD)	101,276 22,458	102,033 40,108	122,718 39,136
Payments to lenders (000' BD)	,	,	
	22,458	40,108	39,136
Payments to lenders (000' BD) Payments to government (000' BD)	22,458 2,712	40,108 3,029	39,136 3,667
Payments to lenders (000' BD) Payments to government (000' BD) Total (000' BD)	22,458 2,712 941,768	40,108 3,029 916,432	39,136 3,667 1,021,299
Payments to lenders (000' BD) Payments to government (000' BD) Total (000' BD) Taxes paid to the Kingdom of Bahrain (000' BD) Depreciation (000' BD)	22,458 2,712 941,768 NA	40,108 3,029 916,432 NA	39,136 3,667 1,021,299 NA
Payments to lenders (000' BD) Payments to government (000' BD) Total (000' BD) Taxes paid to the Kingdom of Bahrain (000' BD)	22,458 2,712 941,768 NA 80,345	40,108 3,029 916,432 NA 118,158	39,136 3,667 1,021,299 NA 122,912
Payments to lenders (000' BD) Payments to government (000' BD) Total (000' BD) Taxes paid to the Kingdom of Bahrain (000' BD) Depreciation (000' BD) Derivatives (000' BD) Others (000' BD)	22,458 2,712 941,768 NA 80,345 5,426	40,108 3,029 916,432 NA 118,158 2,734	39,136 3,667 1,021,299 NA 122,912 85
Payments to lenders (000' BD) Payments to government (000' BD) Total (000' BD) Taxes paid to the Kingdom of Bahrain (000' BD) Depreciation (000' BD) Derivatives (000' BD) Others (000' BD) Revenue (000' BD)	22,458 2,712 941,768 NA 80,345 5,426 -4,108	40,108 3,029 916,432 NA 118,158 2,734 17,083	39,136 3,667 1,021,299 NA 122,912 85 -8,988
Payments to lenders (000' BD) Payments to government (000' BD) Total (000' BD) Taxes paid to the Kingdom of Bahrain (000' BD) Depreciation (000' BD) Derivatives (000' BD) Others (000' BD) Revenue (000' BD) [reference: Note 26 (a) of 2021 Audited Financial Statements]	22,458 2,712 941,768 NA 80,345 5,426 -4,108	40,108 3,029 916,432 NA 118,158 2,734 17,083	39,136 3,667 1,021,299 NA 122,912 85 -8,988
Payments to lenders (000' BD) Payments to government (000' BD) Total (000' BD) Taxes paid to the Kingdom of Bahrain (000' BD) Depreciation (000' BD) Derivatives (000' BD) Others (000' BD) Revenue (000' BD) [reference: Note 26 (a) of 2021 Audited Financial Statements] Other Income (BD)	22,458 2,712 941,768 NA 80,345 5,426 -4,108 1,029,378	40,108 3,029 916,432 NA 118,158 2,734 17,083 1,061,423	39,136 3,667 1,021,299 NA 122,912 85 -8,988 1,584,838
Payments to lenders (000' BD) Payments to government (000' BD) Total (000' BD) Taxes paid to the Kingdom of Bahrain (000' BD) Depreciation (000' BD) Derivatives (000' BD) Others (000' BD) Revenue (000' BD) [reference: Note 26 (a) of 2021 Audited Financial Statements] Other Income (BD) Total Revenue (000' BD)	22,458 2,712 941,768 NA 80,345 5,426 -4,108 1,029,378	40,108 3,029 916,432 NA 118,158 2,734 17,083 1,061,423	39,136 3,667 1,021,299 NA 122,912 85 -8,988 1,584,838
Payments to lenders (000' BD) Payments to government (000' BD) Total (000' BD) Taxes paid to the Kingdom of Bahrain (000' BD) Depreciation (000' BD) Derivatives (000' BD)	22,458 2,712 941,768 NA 80,345 5,426 -4,108 1,029,378 -568 1,028,810	40,108 3,029 916,432 NA 118,158 2,734 17,083 1,061,423 2,739 1,064,162	39,136 3,667 1,021,299 NA 122,912 85 -8,988 1,584,838 2,340 1,587,178
Payments to lenders (000' BD) Payments to government (000' BD) Total (000' BD) Taxes paid to the Kingdom of Bahrain (000' BD) Depreciation (000' BD) Derivatives (000' BD) Others (000' BD) Revenue (000' BD) [reference: Note 26 (a) of 2021 Audited Financial Statements] Other Income (BD) Total Revenue (000' BD) Net Income (000' BD)	22,458 2,712 941,768 NA 80,345 5,426 -4,108 1,029,378 -568 1,028,810 5,379	40,108 3,029 916,432 NA 118,158 2,734 17,083 1,061,423 2,739 1,064,162 9,755	39,136 3,667 1,021,299 NA 122,912 85 -8,988 1,584,838 2,340 1,587,178 451,870

To take note of these changes in connection to Chapter 02 – Safety, Health and Environment (page 24)

Continuous Improvement

We engage with our business units to share their respective thoughts, ideas, and mechanisms to improve and innovate our systems and service offerings. Developing and implementing new products, services and projects will boost our operational efficiency all the while reducing our environmental and social impacts.

MAJOR ENGINEERING ACHIEVEMENTS IN 2021 ARE AS FOLLOWS:

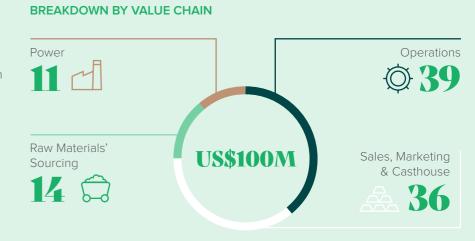
- Construction and commissioning of the Spent Pot Line Treatment Plant and handing it over to operations.
- Completion and handing over the new Procurement and Warehouse building.
- Supply, installation, and commissioning of second Batch Homogenizing Furnace Sow Caster and Saw Cutting Plant at Cast House 1 and 3 respectively.
- Completion of plant-wide Closed Circuit TV cameras for Safety and Security monitoring and surveillance of personnel on Alba premises.
- Commencement of Continuous Emission Monitoring System at Pot Lines.
- Addition of a new secondary Bath Crusher to the recently constructed Rodding 4 at Carbon 4.

- Supply, installation, and commissioning of a new Aluminium Fluoride Station, which will automate handling of large bags, sort material into silos and transport them through tankers in a safe and secure manner; thus, eliminating spills and leaks.
- Initiated replacement of highdensity Hyper-Dense Phase System fabric replacement at Reduction Line 4 which will then improve the potline's performance.
- Successful commissioning and handover of new Vacuum Ship Unloader with Alumina and Coke Silos as part of Port Upgrade Project to store and transport raw materials in view of Line 6 operational activities.

Cost Efficiency

Our new two-year cost-saving program, AL HASSALAH, was launched in 2021, to replace our previous Titan programmes. The aim of this program is to save US\$100 million by 2022 (excluding US\$10 million for one-off savings).

AL HASSALAH, an extension of the Project Titan programme, aims primarily to reduce cost, optimize every level of business processes to have an impact on the bottom line and lower the cost of production per MT.



PROJECT TITAN COST OPTIMIZATION PROJECT

	2019	2020	2021
Project Titan (US\$ Million) - Actual	29	116	70.8
Project Titan (US\$ Million) - Target	40	60	70
Operational efficiency (US\$ per tonne of Aluminium)	21.24	74.91	45.35

Customer-Focused

Being customer-driven, we strive to proactively engage with our customers to meet their requirements for end-products and bring value to their processes by producing a portfolio of Aluminium in the following categories:

 Foundry grade re-melt products (T-Ingots, 10 Kg Standard Ingots, 22.5 Kg Standard Ingots, and Properzi Bars 9.7 Kg)

- Rolling Ingots (Slabs)
- Extrusion Ingots (Billets)
- Unalloyed P1020 re-melt products (T-Ingots, 10 Kg Standard Ingots, 22.5 Kg Standard Ingots, and Sows) Liquid metal

In addition to our portfolio of products, our customer & technical team work closely with our customers to improve our business processes to meet the level of

quality of products and services. To onboard new clients, the Company undergoes a rigorous process for qualification before taking new clients. Our primary Aluminium is produced in line with various certifications the Company has in the fields of Safety, Environment, Quality and Sustainability.



1994

ISO 9001 - Quality Management system





ISO 14001 - Environment Management system





ISO 45001 - Occupational Health & Safety Management system





IATF 16949 - Automotive Quality Management System





ISO 27001 - Information Security Management





ASI - Performance Standard Certification





Ecovadis Sustainability Rating





2020 Marine Certification Specific Billet Allovs





*The year refers to when Alba has received the certification for the first time

In 2020, the Company has joined the international Carbon Disclosure Project (CDP) and has submitted its disclosure in respect to GHG emissions. The Company will receive a rating for its 2021 disclosure. The CDP report is highly recognized by the world's blue-chip investors and customers. To-date, we supply our products to over 240 customers around the world.

PRODUCT LABELLING

Finished products manufactured in Alba's plant are labelled in accordance with the requirements and international norms. The label contains Alba's trademark (Made in Bahrain), the grade of Aluminium or

alloy, and the cast number. In 2021, Alba met all applicable requirements in relation to product labelling, and no significant claims were received in connection to product labelling.

Customer Satisfaction

RELEVANT UN SDGS





We take every precaution to safeguard not only our product quality but also data security for our customers. Without the satisfaction of our customers, everything we do at Alba will be for nothing. That is why we strongly emphasise on quality, security, and listening to our customers to make sure we are giving them the best products and best service, always. In 2021, we have exceeded our customer satisfaction index (CSI) of 7.5 and topped 8.2.

CUSTOMER SAT	ISFACTION RATE
2019	7.5
2020	7.7
2021	8.2

Our 2021 production resulted in 99.86% of metal purity, which is almost perfect and was deemed more than satisfactory according to our customers' feedback over the course of the year. We are also pleased to report that there were zero security breaches in 2021, which is in line with previous years.

DATA SECURITY BREACHES

	2019	2020	2021
Number of data security breaches	-	-	-
Number of data security breaches involving customers'	-	-	-
personally identifiable information			

PROCESS IMPROVEMENT

Alba has implemented Quality Management Systems in all its activities to ensure smooth and efficient operations across the stages of its product life cycle:

- Analysis of customer's requirements and processes
- Improvement of an existing process and/or development of new process
- Purchase of raw materials
- Production of primary metal & calcined petroleum coke

Storage and delivery of products and finished products Alba plant follows ISO 9001 since 1994; the quality management policy sets the requirements for the Company and is supplemented by standard of operating procedures (SOPs) and guidelines which are subject to a periodic review.

The Company was certified for automotive industry IATF 16949 since 2018 and for Specific Billet Alloys and Sizes for Ships in 2020. Alba's Internal Audit team assess the processes in place through its periodic audits and identify areas for improvement. The Company aims to fully integrate quality management tools and production processes through automation in its soon-tobe-launched Industry 4.0 Project, employee motivation through Good Suggestion Scheme, and optimization of controls through Al Hassalah Programme.



APPENDIX A:

Stakeholder Engagement Map

oriented programmes and

social activities.

TAKEHOLDERS	IMPORTANCE TO ALBA	NEEDS AND EXPECTATIONS	METHODS OF ENGAGEMENT	FREQUENCY OF ENGAGEMENT
Government entities and regulators	Government entities and regulators have the control to regulate or influence Alba's operations including the Line 6 project in terms of establishing policies, granting permits or other approvals and monitoring and enforcing compliance with Bahrain laws. We recognise the importance of their terms and work to ensure compliance across the board.	 Compliance with business, safety, health and environmental laws and regulations Minimize Alba's environmental impact Be transparent and report performance and activities accurately Implement rigorous internal audit processes and controls 	 Annual performance and sustainability reporting Regular communication with ministries and regulatory bodies Infrastructure Development (such as Malkiya Beach) 	Monthly and as required
Avestors and Shareholders Bahrain Mumtalakat Holding Company, SABIC Investment Company and the general public. Bahrain Mumtalakat Holding Company and SABIC Investment Company Influence the decisions of the Company and affects the vay in which Alba operates.	Our Investors and Shareholders are the cornerstone of our sustainable growth, providing the capital necessary for maintaining business operations, as well as offering expertise and guidance. They are involved in advising on a strategic level and authorizing projects and transactions.	 Effective environmental management system Cost saving through SHE implementation SHE continuous improvement and sustainable development Profitability and Achieving operational and financial targets 	 Management Review Meetings Internal audits and inspections Performance reporting Contacting Investor Relations Department through phone, fax or email (as mentioned on website) 	Quarterly and as required
ocal Communities	As a responsible corporate citizen which aligns itself with Bahrain National Vision 2030, we hold ourselves responsible for stimulating the development and wellbeing of local communities and building long-term relationships via numerous community	 To be committed to being a socially responsible employer that offers employment opportunities to Bahrainis. Considering the Environment and Health in our constructions and operations. 	 Training Workshops (such as INJAZ Bahrain and Tamkeen for young Bahrainis, Fire Safety Training to the Indonesian Embassy) Nationalization through giving the local Bahraini workforce additional consideration in the employment process Support Local suppliers & 	Regularly and as required

CSR initiatives and volunteering

Infrastructure Development (such

as Malkiya Beach)

2021 Sustainability Report

Employees

90



the Company's decisions thereby influence the profitability of Alba, and are also directly affected by Alba's business decisions. They are considered the main assets of the company, and without them we cannot run our business.

Employees implement

- A good working environment
- Professional
- development Training and career
- Clearly defined duties, responsibilities, accountability and authority
- Timely payments

Meetings and awareness sessions

- Workshops and trainings for implementation of operational procedures (such as Training and Development Programme, MBA program, Six Sigma Green Belt Training and the FDPM Fellowship)
- "Know your HR" regular sessions
- Integrity Line to report any incidents of
- Labor union
- "Good Suggestion Scheme" online platform for employees' suggestions
- Alba's Code of Practice (ACOP) for safety
- "Shining a Light on Integrity" Code of conduct for Fair treatment and equal opportunities

Monthly and as reauired

Customers

c. 25% of Alba's output is supplied to Bahrain's downstream aluminium industry, with the remainder exported to regional and international customers in the Middle East, Europe, Far and queries presents East, South East Asia, Africa, tangible evidence of our and North America.

Alba cares about its customers, which are at the heart of our business and their satisfaction is a sign of our business health.

Zero Safe, Health and Thus, being pro-active in responding to their needs customer focused service.

- Timely execution of activities
- Environment (SHE)
- No violations to applicable SHE laws
- Quality, Responsible
- Management of customer issues
- incidents
- products
- Customer feedback forms
 - Customer complaints mechanism required
 - Website

Suppliers and contractors



Our suppliers deliver valuable, safe, and highquality services which support Alba's growth and success in alignment with our business

priorities. They are also partners in our sustainability efforts by engaging in our collaborative efforts to reduce our environmental footprint.

- Environmentally responsible workplace
- Supplier availability, capacity and capability
- Superior level of technology and focus on customer requirements
- information orders Timely payments
- Correct and timely
- Formalized tender process Supplier selections, evaluations required and audits
- Contracts and tenders
- Supplier SHE Code of Conduct
- Supplier meetings and events Product safety and quality
- information (e.g. MSDS, third party

Regularly and as

Frequently and as

certifications)

Civil Society Groups

Including Peers, Industrial Associations, NGOs, Special Interest Groups, Media, Universities and Research Institutions and Civil Society) to maintaining Alba's image

We believe that collaborating with civil society groups and contributing to their development is important in the countries where we Support industry-wide operate. Their insight and engagements reinforce our

Share technical data, sustainable growth on many different levels.

- Adopt industry best practices
- Ethical business practices
- Provision of support in raw materials supply
- initiatives knowledge and
- expertise Maintain good HSEs records
- Certificates Audits
- Enterprise Risk Management Framework
- Supplementary Environment and Social Impact Assessment (ESIA)

Yearly and as required

APPENDIX B:

Acronyms

ACC	Air-Cooled Condenser
ACOP	Albas Code of Practices
AHCC	Alba Health Care Center
ASI	Aluminium Stewardship Initiative
AWS	Amazon Web Services
BAC	Board Audit Committee
BD	Bahraini dinar
СВВ	Central Bank of Bahrain
CCTV	closed-circuit television
CEMS	Continuous Emissions Monitor-ing System
CEO	Chief Executive Officer
COVID-19	Corona virus disease
CSR	Corporate social responsibility
СХО	Chief Experience Officer
EBITDA	Earnings before interest, taxes,
	depreciation, and amortization
ECC	Emergency Communication Centre
EPRP	Emergency Preparedness and Response Plan
ERP	enterprise resource planning
ESG	Environmental, Social and Gov-ernance
ESIA	Supplementary Environment and Social Impact Assessment
EWA	Energy from Waste Association
ExCom	Executive Committee
FDPM	First Deputy Prime Minister
FTC	Federal Trade Commission
FTE	Full time employee
GDP	Gross Domestic Product
GHG	Greenhouse Gas
GJ	Gigajoule
GRI	Global Reporting Initiative
H&S	Health and safety
HR	Human Resources
HSE	Health, safety and environment
HSEMS	Safety, Health and Environment Management System
IFC	International Finance Corporation
IRS	Internal Revenue Service
ISO	International Organization for Standardization
IT	Information Technology
JSP	Job Safe Practices
KPI	Key Performance Indicator
KWh/kg Al	kilowatt-hours per kilogram of aluminium

LTI	Lost Time Injury
M3	Cubic meter
MBA	Master of Business Administra-tion
Mbar	Millibar Pressure Unit
mBDs	Million Bahrain Dinars
mL	Milliliter
MMBTU	Metric Million British Thermal Unit
MOICT	Corporate Governance Code of the Kingdom of Bahrain
MS	Microsoft Office
MT	Million Tons
MWh	megawatt-hour
NCC	Net Carbon consumption
NIHR	National Institution for Human Rights
NRCGC	Nomination, Remuneration and Corporate Committee
NSC	National Safety Council
OEM	Original Equipment Manufacturer
OHS	occupational Health, and Safety
PFC	Perfluorochemicals
PPE	Personal protective equipment
PR	Public Relations
RFQ	Request for quotation
RO	Reverse Osmosis
SAP	Systems Applications and Prod-ucts
SCE	Supreme Council for Environment
SEP	Simplified Employee Pension
SHE	Safety, health and environment
SLP	Supplier Lifecycle & Performance
SMS	Short Message Service
SOx	Sulphur oxides
SPL	Spent Pot Lining
SPM	Social Performance Monitoring
TDP	Training and Development Pro-gramme
TRIR	Total Recordable Injury Frequency Rate
UK	United Kingdom
UN SDGs	United Nations Sustainable De-velopment Goals
URL	Uniform Resource Locator
USA	United States of America
voc	Volatile Organic Compounds
WMSP	Waste Management Strategic Plan

APPENDIX C:

GRI Content Index

The references for the GRI Content in the report can be found in the table below.

GRI STANDARD	DISCLOSURE	PAGE NUMBER(S) AND/OR URL(S)
GRI 101: FOUNDATION 2016		
GENERAL DISCLOSURES		
GRI 102: General Disclosures 2016	Organizational profile	
	102-1: About Alba	6
	102-2: Activities, Brands, Products, and Services	6-9
	102-3: Location of Headquarter	7
	102-4: Location of Operations	6-7
	102-5: Ownership and Legal Form	6
	102-6: Markets Served (Footprint)	7
	102-7: Scale of the Organization	6-7, 22-23, 55
	102-8: Information on Employees and Other Workers	22-23, 55
	102-9: Supply Chain	8-9
	102-10: Significant Changes to the Company and its Supply Chain	"There has not been a significant change to the Company's supply-chain during 2021"
	102-11: Precautionary Principle or Approach	14, 46-51, 77
	102-12: External Initiatives	10, 21, 86-87, 89-90
	102-13: Membership of Associations	"Aluminum Stewardship Initiative (ASI), The International Committee for Study of Bauxite, Alumina & Aluminium (ICSOBA), Aluminum Extrusion Council"
	Strategy	
	102-14: Statement from CEO	4-5
	Ethics and integrity	
	102-16: Values, Principles, Standards	7, 14-20, 72
	Governance	
	102-18: Governance Structure	72-73, 75
	102-19: Delegating Authority	72
	102-22: Composition of the Highest Governance Body and its Committees	72-75
	102-23: Chair of the Highest Governance Body (CEO)	4-5
	Stakeholder engagement	
	102-40: List of Stakeholder Groups	14-18, 89-90

	102-41: Collective Bargaining Agreements	Collective Bargaining are allowed in Bahrain
	102-42: Identifying and Selecting Stakeholders	14-18, 89-90
	102-43: Approach to Stakeholder Engagement	14-18, 89-90
	102-44: Key Topics and Concerns Raised	14-18, 89-90
	Reporting practice	
	102-45 Entities Included in the Consolidated Financial Statements	All Financial information is available in Alba's Annual Report
	102-46: Defining Report Content and Topic Boundaries	3
	102-47: List of Material Topics	19
	102-48: Restatements of Information	There was restatement of information given in the previous Sustainbility Report. Do note that further GRI Disclosures have been included in 2021 Sustainability Report
	102-49: Changes in Reporting	There have been no significant changes to the report scope
	102-50: Reporting Period	3
	102-51: Date of Most Recent Report	Alba 2020 Sustainability Report
	102-52: Reporting Cycle	3
	102-53: Contact Point for Questions Regarding the Report	3
	102-54: Claims of Reporting in Accordance with the GRI Standards	3
	102-55: GRI Content Index	3, Appendix C
	102-56: External Assurance	3
GRI STANDARD	DISCLOSURE	PAGE NUMBER(S) AND/OR URL(S)
MATERIAL TOPICS		
GRI 200 ECONOMIC STANDARD	SERIES	
Economic Results		
GRI 103: Management Approach	103-1	81-84
	103-2	81-84
	103-3	81-84
GRI 201: Economic Performance	201-1	81-84
Economic Results		
GRI 103: Management Approach	103-1	54-62
	103-2	54-62
	103-3	54-62
GRI 203: Indirect Economic Impacts	203-1	21, 54-62
	203-2	54-62
Sustainable Supply Chain & Respons	sible Sourcing	
GRI 103: Management Approach	103-1	16, 71, 79-80
	103-2	16, 71, 79-80
	103-3	16, 71, 79-80
GRI 204: Procurement Practices	204-1	79-80
Compliance with Statutory & Regulat	oy Requirements & Anti-Corruption	
GRI 103: Management Approach	103-1	71, 77
	103-2	71, 77
	103-3	71, 77
GRI 205: Anti-corruption		71, 77 76-77
GRI 205: Anti-corruption Compliance with Statutory & Regulat	103-3 205-1	

	103-2	71, 77
	103-3	71, 77
GRI 206: Anti-competitive Behavior	206-1	77
GRI 300 ENVIRONMENTAL STAN	IDARDS SERIES	
Materials (Recycling)		
GRI 103: Management Approach	103-1	38-43
	103-2	38-43
	103-3	38-43
GRI 301: Materials	301-2 (Recycled Input Materials Used)	43
Climate Change		
GRI 103: Management Approach	103-1	29-32
	103-2	29-32
	103-3	29-32
GRI 302: Energy	302-1	29
	302-3	29
Water and Wastewater Managemen	nt	
GRI 103: Management Approach	103-1	35-37
	103-2	35-37
	103-3	35-37
GRI 303: Water and Effluents	303-1	36
	303-2	36
	303-3	36
	303-4	36
	303-5	36-37
Biodiversity		
GRI 103: Management Approach	103-1	44-45
	103-2	44-45
	103-3	44-45
GRI 304: Biodiversity	304-1	44-45
	304-2	44-45
	304-4	44-45
Energy Management		
GRI 103: Management Approach	103-1	29-34
	103-2	29-34
	103-3	29-34
GRI 305: Emissions	305-1	33
	305-2	33
	305-4	33
	305-7	34
Recycling and Waste Management		
GRI 103: Management Approach	103-1	38-41
	103-2	38-41
	103-3	38-41
GRI 306: Waste	306-1	38
	306-2	38-39
	306-3	38-39
	306-4	38-39
	306-5	38-39

Environmental Compliance		
GRI 103: Management Approach	103-1	25-26
	103-2	25-26
	103-3	25-26
GRI 307: Environmental Compliance	9 307-1	25-26
GRI 400 SOCIAL STANDARDS SE	RIES	
Employment		
GRI 103: Management Approach	103-1	54-69
	103-2	54-69
	103-3	54-69
GRI 401: Employment	401-1	65-66
	401-2	Permanent and temporary employees have the same benefits at Alba
	401-3	64
Occupational Health and Safety		
GRI 103: Management Approach	103-1	46-52
zo. management / pprodett	103-2	46-52
	103-3	46-52
GRI 403: Occupational	403-1	10, 16, 46-52
Health and Safety	403-2	51-52
	403-2	51-52
	403-4	
		50-52
	403-5	51-52
	403-6	63
	403-7	51
	403-8	49, 51
	403-9	48
	403-10	48
Our People (Training & Education)		
GRI 103: Management Approach	103-1	54-62
	103-2	54-62
	103-3	54-62
GRI 404: Training and Education	404-1	59
	404-2	59-60
	404-3	63
Diversity and Equal Opportunity		
GRI 103: Management Approach	103-1	61-62
	103-2	61-62
	103-3	61-62
GRI 405: Diversity nd Equal Opportunity	405-1	55
Our People (Non-Discrimination)		
GRI 103: Management Approach	103-1	61-62
	103-2	61-62
	103-3	61-62
GRI 406: Non-discrimination	406-1	61
Our People (Freedom of Associatio		·

GRI 103: Management Approach	103-1	62-63
	103-2	62-63
	103-3	62-63
GRI 407: Freedom of Association and Collective Bargaining	407-1	61-62, 64
Human Rights		
GRI 103: Management Approach	103-1	67
	103-2	67
	103-3	67
GRI 412: Human Rights Assessment	412-2	67
	412-3	67
Local Community Engagement		
GRI 103: Management Approach	103-1	68-69
	103-2	68-69
	103-3	68-69
GRI 413: Local Communities	413-1	68-69
Our Product (Metal Marketing & Prod	luct Labelling)	
GRI 103: Management Approach	103-1	3, 86
	103-2	9, 86
	103-3	86
GRI 417: Marketing & Labelling	417-1	86
	417-2	87
Technology and Operational Excelle	nce Process Improvement	
GRI 103: Management Approach	103-1	3, 87
	103-2	87
	103-3	Bespoke and under page number 87

APPENDIX D:

Basis of Reporting

REPORTING CRITERIA SUMMARY FOR SELECTED KEY PERFORMANCE INDICATORS IN OUR 2021 SUSTAINABILITY REPORTING

The purpose of this document is to outline the approach and scope used for data collection as well as explain the process of the calculation methodology for validating/verifying performance data as it is published in 2021 Sustainability Report.

SCOPE OF REPORTING

The selected 6 Key Performance Indicators cover Alba's plant/operations (including the Smelter, Calciner and Marine Plant, Power Stations, Carbon Plants and Casthouse Operations) from 1 January to 31 December of 2021.

Total Direct Energy Consumption

DEFINITION

The natural gas energy that is consumed internally both to generating electrical power and inside the smelter plants in addition to any liquid fuel (Diesel and Gasoline) used to operate the operational vehicles.

SCOPE

It covers the reporting period 1 January to 31 December 2021.

The scope of Direct Energy Consumption data covers Alba's production operations in Bahrain.

This metric is reported on the actual consumption basis.

Diesel and gasoline are used by Alba's operational vehicles while natural gas is used as the energy source in Alba's power stations to generate captive electrical power and operate the burners of cast house furnaces, anode baking kilns, and calciner kilns. The electricity is then used in different process units within the smelter.

UNITS

Gega-Jouls (GJ)

METHOD

Natural Gas purchased from Tatweer Petroleum (National operator of natural gas wells) is used to generate electrical power by using combined-cycles generators and for heating purposes. The electrical energy is then used internally to produce the Aluminium metal. A small portion of the generated electrical energy may be exported to the National Grid in some months as part of an energy exchange agreement between Alba and Electricity and Water Authority (EWA); this portion is subtracted from the total generated electrical power since it is not consumed by Alba.

In addition to the Natural Gas consumed, Diesel and Gasoline are used to operate our production vehicles, and this is accounted for and added with the direct energy.

TOTAL DIRECT ENERGY USED:

Energy from NG+(Diesel+Gasoline)-Exported Electrical Energy (1)

ENERGY FROM NATURAL GAS CONSUMPTION:

Energy from NG=NG×CF (2)

Where: NG = Natural gas consumed in Gega British Thermal Units (Gbtu)

CF = Conversion factor (1,055.1 GJ/Gbtu)

ENERGY FROM DIESEL AND GASOLINE:

Diesel + Gasoline = $(V_D \times \rho_D \times NCV_D) + (V_G \times \rho_G \times NCV_G)$ (3)

Where: $V_p = Volume$ of consumed diesel in liters

 ρ_D = Density of diesel in (kg/l)

NCV_D = Net calorific values of diesel in (GJ/Gg)

 V_c = Volume of consumed gasoline in liters

 ρ_c = Density of gasoline in (kg/l)

NCV_G = Net calorific values of gasoline in (GJ/Gg)

EXPORTED ELECTRICAL ENERGY:

Export (GJ) = Export (MWh) \times 3.6 GJ/MWh \times 1/p (4)

Where: ρ = Power station efficiency

SOURCE

The Natural Gas consumed is provided by Power Operations every month and based on the invoices received from Tatweer Petroleum.

The exported electricity is determined based on metered electrical power supplied to the Grid as recorded by our control and monitoring systems.

Diesel and Gasoline are determined from the fuel invoicing as recorded in our SAP system.

Total Indirect Energy Consumption

DEFINITION

The electrical energy that is imported from the National Grid and consumed internally within the smelter to support our operations.

SCOPE

It covers the reporting period 1 January to 31 December 2021.

The electrical power is generated by the Electricity and Water Authority (EWA) by using Natural Gas as the energy source then imported by Alba.

The energy is used by Alba for producing Aluminium. The electricity is used in the different process units within the smelter.

This metric is reported on an actual consumption basis.

UNITS

Gega-Joules (GJ)

METHOD

The figures are extracted from the control and monitoring system in units of MWh and converted to GJ as per the below formula:

Import (GJ) = Import (MWh) \times 3.6 GJ/MWh (5)

SOURCE

The imported electricity is determined based on metered electrical power imported from the National Grid as recorded by our control and monitoring system.

Environmental Investment

DEFINITION

Actual capital expenditures (CAPEX) amount spent on various projects relating to environmental conservation.

SCOPE

This scope covers projects which have been carried out only in Alba Smelter & Spent Pot Lining (SPL) Treatment Plant in Bahrain from 1 January to 31 December 2021.

UNITS

Bahrain Dinar (BD)

METHOD

Actual sum of money Alba has spent on payments relating to environmental projects.

SOURCE

All values are documented into Alba's SAP system and financial log register.

Training Hours Recorded

DEFINITION

Total Training Hours attended by Alba employees

SCOPE

Each training session attended by an employee is recorded along with its duration and other relevant details in SAP database.

UNITS

Hours

METHOD

When a training event is planned as part of the yearly Training Plan, Skills Matrix evaluation, Training Development Programs (TDPs) and Master Training Plan, it is then entered in SAP database with all relevant details including duration of the training event. When the training event takes place, the employees attending the course are then recorded in SAP database as well as other details relating to the training event.

Any course to be given during the year would be advertised along with its outline, duration, training provider and location on Intranet and the monthly Inter:Connect platform (email notification) to employees. Such notifications would provide the total training hours for which are then entered in SAP.

Post any training event, the attendance sheets for the in-house training, confirmation of attendance for the external training, screenshots for online virtual courses are used to enter the details of the attendees such as badge number, department, designation, etc.

SOURCE

Information about every course, its attendees, their departments, duration, provider, location etc. are extracted from SAP database through SAP Transaction ZHRTRN04 for reports.

Greenhouse Gas (GHG) Emissions Intensity Ratio

DEFINITION

The greenhouse gas emission intensity ratio is defined as the Total Scope 1 and 2 of Greenhouse Gas Emissions that is expressed in tonnes of CO2e per tonne of Net Finished Product.

UNITS

Tonne of Carbon dioxide equivalent per tonne of Net Finished Product (tCO2e/tAl)

METHOD

The method used for determining the tCO2e is covered under the Intergovernmental Panel for Climate Change (IPCC) and the International Aluminium Institute (IAI) GHG Protocol and Guideline which are translated in Alba internal policy and procedure under SOP 75.33 [GHG Reporting and Calculating Greenhouse Gas (GHG) Emissions] by using the latest Assessment Reports as applicable.

- 1 2006 IPCC Guidelines for National Gas Inventories, Volume 2 Energy, Chapter 2 Stationary Combustion
- 2 The Aluminium Sector Greenhouse Gas Protocol (addendum to the WRI/WBCSD Greenhouse Gas Protocol), Greenhouse Gas Emissions Monitoring and Reporting by the Aluminium Industry
- 3- The guideline requirements are stated in the Standard Operation Procedure (SOP 75.33, Reporting and Calculating

Greenhouse Gas (GHG) Emissions)

ACTIVITY DATA

Source of these emissions are as follows:

- **1** From the combustion of the natural gas as follows:
 - a. Power stations for the generation of electrical power through the combined cycle turbines

Emissions $_{\mathrm{GHG,\,Fuel}}$ = Fuel Consumption $_{\mathrm{Fuel}}$ * Emission Factor $_{\mathrm{GHG,\,Fuel}}$

Where

Emissions $_{\mathrm{GHG,\,Fuel}}=$ emissions of a given GHG by type of fuel (kg GHG)

Fuel Consumption $_{\text{Fuel}}$ = amount of fuel produced and consumed in Alba (TJ) (excluding exported electricity)

 ${\sf Emission \ Factor} \ {\sf \tiny GHG, Fuel} = {\sf default \ emission \ factor \ of \ a \ given \ GHG \ by \ type \ of \ fuel, \ kg \ gas \ /TJ}$

Specific CO2 emission = $NG \times f_1 / MP$

Specific CH4 emission = MP NG \times f₂ / MP* 28

Specific N2O emission =MP NG \times f₃ / MP * 265

WHERE:

NG = Total natural gas used in power stations, TJ

MP = Total Net Finished Production, ton aluminum per year

f1 = Emission factor CO_2 , kg/TJ = 59,360 kg/TJ

 $f2 = Emission factor CH_4$, kg/TJ = 1 kg/TJ

f3 = Emission factor N₂O, kg/TJ = 0.1 kg/TJ

2 From the consumption of carbon anodes in the Reduction Lines according to the following chemical reaction

$$E_{CO2} = [MP \times NAC \times (100 - S_a - Ash_a / 100)] \times 44/12$$

Where:

 $ECO_2 = CO_2$ emissions, tonne per year

MP = Total Net Finished Production, tonne aluminium per year

NAC = Net anode consumption, tonne per tonne aluminium

S_a = Sulphur content in baked anodes, weight %

Ash_a = Ash content in baked anodes, weight%

 $44/12 = CO_2$ Molecular Mass: Carbon Atomic Mass Ratio

3 From the emission of Perfluorocarbons (CF_4 and C_2F_6) during anode effect in the Reduction Lines

$$R_{CF4} = AEM \times S_{CF4}$$

$$R_{C2F6} = R_{CF4} \times F_{C2F6/CF4}$$

$$E_{CF4} = R_{CF4} \times MP$$

$$E_{C2F6} = R_{C2F6} \times MP$$

$$E_{CO2-eq} = (6,630 \times E_{CF4}) + (11,100 \times E_{C2F6}) / 1000$$

Where

 R_{CF4} = Emission rate for CF_4 , kg CF_4 per tonne aluminium

AEM = Anode effect minutes per cell day

 $S_{CF4} = Slope$ coefficient for CF_4 , kg CF_4 per tonne aluminium per anode effect minute per cell day

 R_{C2F6} = Emission rate for C_2F_6 , kg C_2F_6 per tonne aluminium

 $F_{C2F6/CF4}$ = Weight fraction of C_2F_6 / CF_4

MP = Net Finished Production, tonne aluminium per year

 $E_{CO2} = CO_2$ equivalent emissions, tonne per year

 $\mathsf{E}_{_{\mathsf{CF4}}}$ = Emissions of tetrafluoromethane, kg $\mathsf{CF}_{_4}$ per year

 E_{CSF6} = Emissions of hexafluoroethane, kg $C_{2}F_{6}$ per year

4 From the usage of Soda Ash (Na₂CO₃) in the electrolysis cells at the Reduction Lines $\mathbf{E}_{\text{CO2}} = \mathbf{Q}_{\text{Soda Ash}} \times \mathbf{P}_{\text{Soda Ash}} \times \mathbf{44} / \mathbf{106}$

Where:

 $E_{CO2} = CO_2$ emissions, tonne per year

 $Q_{Soda Ash} = Quantity of soda ash (Na_2CO_3) consumed, tonne soda ash per year$

 $P_{Soda Ash} = Purity of soda ash consumed, decimal fraction$

44/106 = CO₂ Molecular Mass: Na₂CO₃ Molecular Mass Ratio

5 From the combustion of Pitch Volatiles during the baking of anodes at the Kilns

$$E_{CO2} = [GA - (HW \times GA / 100) - BA - WT] \times 44 / 12$$

Where:

 $E_{CO2} = CO_2$ emissions, tonne per year

 $GA = weight of loaded green anodes = GAW / BAW \times = BA$

GAW = Green anode weight, tonne

BAW = Baked anode weight, tonne

BA = Baked anode production, tonne baked anode per year

 $H_{\rm w}$ = Hydrogen content in green anodes, weight % = 0.5

WEIGHT = Waste tar collected, tonne = $0.005 \times GA$

 $44/12 = CO_2$ molecular mass: Carbon atomic mass ratio

6- Consumption of Packing Coke during baking of anodes at the Kilns

$$E_{CO2} = [PCC \times BA \times (100 - S_{PC} - Ash_{PC} / 100) \times 44 / 12]$$

Where:

 $E_{CO2} = CO_2$ emissions, tonne per year

PCC = packing coke consumed, tonne per tonne of baked anode = 0.015

BA = Baked anode production, tonne baked anode per year

coke, weight % = 2

Ash PC = Ash content in packing coke, weight % = 2.5

 $44/12 = CO_2$ molecular mass: Carbon atomic mass ratio

7 During the calcination of Green Petroleum coke (GPC) at the Calciner Plant

 $ECO2 = [[[GC \times (100 - H20gc - Vgc - Sgc / 100)] - [(CC + UCC + DE) \times (100 - Scc / 100)]] \times 44 / 12] + [GC \times 0.035 \times (44/16)]$

Where:

 $E_{CO2} = CO_2$ emissions, tonne per year

GC = Green coke feed, tonne green coke per year

H₂O_{gg} = Humidity in green coke, weight%

V _{sc} = Volatiles in green coke, weight%

S = Sulphur content in green coke, weight%

CC = Calcined coke produced, tonne calcined coke per year

UCC = Under-calcined coke collected, tonne under-calcined coke per year

DE = Coke dust emissions, tonne coke dust per year

S_{cc} = Sulphur content in calcined coke, weight%

44/12 = CO₂ Molecular Mass: Carbon Atomic Mass Ratio

44/16 = CO₂ Molecular Mass: CH4 Molecular Mass Ratio

- 8 Combustion of diesel and gasoline used in vehicles mobile equipment:
 - a. Calculating the amount of Diesel in Liters from the monthly invoices
 - b. Calculating the amount of Gasoline in Liters from the monthly invoices.

Diesel fuel density (kg/l)	0.84
Gasoline fuel density (kg/l)	0.74
Diesel NCV (TJ/Gg)	44.30
Gasoline NCV (TJ/Gg)	43.00

Total Solid Waste Recycled

DEFINITION

Material that is no longer suitable for its original intended purpose; however, it can be recovered and repurposed for other applications/usages and rediverted from final disposal to landfill.

UNITS

Tonne of solid waste recycled (t)

METHOD

The weight of solid material is calculated and recorded based on the accumulated scrap and recycled solid waste from the measurement taken at the exit gate on monthly basis.

Scrap material is then sold to recycling contractors on a two-year contract basis.

The process waste material such as Spent Pot Lining (SPL) is transported to the treatment facility and converted to useful product which is then shipped abroad to customers. The weight of the SPL sent to the facility is counted with the Total Solid Waste Recycled.

Any other process waste such as solid bath and carbon dust that are shipped for customers for other usages is also added to the Recycled Solid Waste.

SOURCE

Scrap materials such as steel, wood, plastic, etc. are generated from the normal plant operations (Casthouse, Carbon,

Potlines) in addition to housekeeping as well as maintenance activities which are then placed in dedicated segregation skips.

SPL is generated from the de-lining of the electrolysis cells at the end of their lifecycle.

Solid bath is generated from potlines.

Carbon dust is generated from carbon processes.

· ·	·
RECYCLED WASTE	DEFINITION
SPL Steel	Steel collector bars from process of demolishing of damage carbon cathodes which part of SPL.
SPL Hazardous	Mixture of carbon, refractory bricks and silicon carbide generated during process of demolishing and rebuilt o reduction pots
Rodding Reject Material	Mixture of solid bath, scrap metal, carbon, and fine metal / bath generated during bath crushing process
Refractory Waste	Used and damaged refractory bricks from refurbishment of anode kilns or Casthouse furnaces
Used Carbon Butts	Used or damaged carbon anode butts from Rodding sections
Construction	Waste material from building, renovating, or demolishing structures and infrastructures
Carbon Dust	Small fine carbon frictions mixed with bath and steel generated from various processes in Carbon Plants
Calciner Bag House Ash	Carbon ash from calcination process of the green petroleum coke within the rotary kilns
FTP and GTC Scale	The oxidation of alumina due to the contact with hot emissions from reduction pots under high temperature and humidity resulting the formation of scale on the inside walls of GTCs & FTPs compartments and pipes
FTP and GTC Filter Bags	Damaged filter bags generated during annual or breakdown maintenance of GTCs and FTPs
Insulation Material	Mainly ceramic fiber blanket used as insulation from maintenance works of changing damage/consumed insulation material
Tree Cutting	It is mainly tree branches and grass
Un-refined Solid Sulphur	Un-Refined solid Sulphur generated from Khuff gas desulfurization plant
Other Waste	Any up normal waste
Scrap Materials (steel, wood, etc.)	These materials usually generated during housekeeping or as result from operation or maintenance works.

APPENDIX E:

Independent Assurance Statement

Independent limited assurance report to Aluminium Bahrain B.S.C ("Alba" or "the Company") on the preparation of the 2021 Sustainability Report (the "Report") for the year ended 31 December 2021, in accordance with the Global Reporting Initiative Standards: Core Option (the "GRI: Core Option") and on selected sustainability performance indicators ("KPIs") within the Report.

AN OVERVIEW OF THE SCOPE OF OUR ASSURANCE WORK:

We have been engaged by Alba to perform a limited assurance engagement on the following selected sustainability information ("Subject Matter") reported in the Alba 2021 Sustainability Report.

SELECTED SUBJECT MATTER FOR ASSURANCE

- The Company's declaration of preparing the 2021 Sustainability Report in accordance with the GRI: Core Option;
- The Company's reported performance during the given reporting period for selected key sustainability performance indicators ("KPIs") presented in the table below.

KPIS	ASSURED FIGURE FOR THE YEAR ENDED 31 DECEMBER 2021	REPORT PAGE
Total indirect energy consumption	1,149,886 GJ	Page 29
Total direct energy consumption	172,113,954 GJ	Page 29
Environmental investment	8.1 BHD million	Page 26
GHG emissions intensity ratio	7.921 tonnes of CO2e per tonne of Net Finished Product	Page 33
Total Waste Recycled	33,030 tonnes	Page 38
Total number of Training for total workforce	521,116 hours	Page 59

REPORTING CRITERIA

The above Subject Matter has been assessed against the criteria provided by the GRI: Core Option as published by the Global Reporting Initiative, supplemented by the reporting criteria shown in Appendix on pages 97 to 102 of the Report ("Reporting Criteria").

WHAT STANDARDS WE USED: BASIS OF OUR ASSURANCE WORK AND LEVEL OF ASSURANCE

We carried out limited assurance procedures over ALBA's selected Subject Matter in accordance with the International Standard on Assurance Engagements 3000 (Revised) "Assurance Engagements other than Audits or Reviews of Historical Financial Information" ("ISAE 3000") and with the International Standard on Assurance Engagements 3410 "Assurance Engagements on Greenhouse Gas Statements" ("ISAE 3410"). To achieve limited assurance, ISAE 3000 and ISAE 3410 require that we review the processes, systems and competencies used to compile the Report, on which we provide limited assurance. It does not include detailed testing for each of the KPI reported, or of the operating effectiveness of processes and internal controls.

The procedures performed in a limited assurance engagement vary in nature and timing from, and are less in extent than for, a reasonable assurance engagement. Consequently, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had a reasonable assurance engagement been performed. Consequently, our conclusion is not expressed as an audit opinion.

WHAT WE DID: KEY LIMITED ASSURANCE PROCEDURES

To form our conclusion, we undertook the following procedures:

- Interviewed management and those with operational responsibility for sustainable business performance to assess the application of the GRI: Core Option in the preparation of the Report.
- Understood, analysed, and assessed the key structures, processes, procedures, and controls relating to the preparation of the Report.
- Evaluated whether the management approach for the material sustainability issues presented in the Report are consistent with our overall knowledge and experience of sustainability management and performance at Alba.
- Assessed the completeness and accuracy of the GRI Standards content index with respect to the GRI: Core Option, including review of reasons for omission.
- Interviewed management to understand the process of identification, data collection, consolidation and reporting for each of the selected KPIs.
- Reviewed and evaluated the Reporting Criteria for measurement and reporting for each of the selected KPIs against the actual calculation performed by the Company to support the numbers of the selected KPIs disclosed in the Report.
- Agreed the selected KPIs to the Company's internal calculations and supporting documentation.
- Compared the content of the Report against the findings of the aforementioned procedures.

INHERENT LIMITATIONS

The process an organisation adopts to define, gather, and report information on its non-financial performance is not subject to the formal processes adopted for financial reporting. Therefore, data of this nature is subject to variations in definitions, collection and reporting methodology, often with no consistent, accepted external standard. This may result in non-comparable information between organisations and from year to year within an organisation as methodologies develop. To support clarity in this process,

Alba has developed a Reporting Criteria document for 2021, which defines the scope of each assured metric and the method of calculation. This is available in Appendix on pages 97 to 102 of the Report and should be read together with this report

In relation to our work performed on the selected subject matter, we note the following specific limitations:

- Our assurance procedures did not include detailed testing of IT controls of the underlying systems used by Alba to collate and report data for the sustainability metrics.
- With the exception of the KPIs shown in the table above, our testing did not include assurance of, or detailed testing of the underlying data for each of the KPI reported, or of published assertions. As such, our work does not involve procedures to verify the accuracy of the performance data or assertions published.

OUR INDEPENDENCE AND QUALITY CONTROL

In carrying out our work, we have complied with the independence and other ethical requirements of the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants (IESBA Code), which are founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour and the ethical requirements that are relevant in Bahrain. We have fulfilled our other ethical responsibilities in accordance with these requirements and the IESBA Code.

In performing our work, we applied International Standard on Quality Control 1 and accordingly maintain a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

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2021 Sustainability Report

ROLES AND RESPONSIBILITIES

Alba:

The Company is responsible for the preparation of the Sustainability Report in accordance with the GRI: Core Option and for the calculation of the selected KPIs in accordance with the Reporting Criteria. Specifically, the Company is responsible for determining sustainability objectives in relation to the sustainability performance, identifying stakeholder groups and determining material topics to be included in the Sustainability Report, ensuring that the information provided under the selected sustainability KPIs is properly prepared in accordance with Alba's calculation methodologies and confirming the measurement or evaluation of the subject matter against the applicable Reporting Criteria. Management is also responsible for establishing and maintaining appropriate performance management and internal control systems from which the reported information is derived.

Deloitte:

Our responsibility is to provide a limited level of assurance on the subject matters as defined within the scope of work above to Alba in accordance with our letter of engagement, and report thereon. In conducting our limited assurance engagement, we have complied with the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants (IESBA Code).

We confirm that we apply International Standard on Quality Control 1 and accordingly maintain a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Our work has been undertaken so that we might state to Alba those matters we are required to state to them in this limited assurance report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than Alba for our work, for this report, or for the conclusion we have formed.

CONCLUSIONS

Based on our limited assurance procedures performed and evidence obtained, subject to the limitations mentioned above, nothing has come to our attention that causes us to believe that:

- the Report has not been prepared, in all material respects, in accordance with the GRI: Core Option, and
- the selected KPIs for the year ended 31 December 2021, have not been prepared, in all material respects, in accordance with the Reporting Criteria.

Deloitte and Touche – Middle East

Deloitte & Druche,

Partner Registration No. 157 Manama, Kingdom of Bahrain

January 26, 2023

