

alba



Aluminium
for the world



Alba 2016 Sustainability Report

Moving towards a more sustainable future





**His Royal Highness
Prince Khalifa bin Salman
Al Khalifa**

The Prime Minister of
the Kingdom of Bahrain



**His Majesty King
Hamad bin Isa
Al Khalifa**

The King of the
Kingdom of Bahrain



**His Royal Highness
Prince Salman
bin Hamad Al Khalifa**

The Crown Prince,
Deputy Supreme Commander
and First Deputy Prime Minister
of the Kingdom of Bahrain

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Alba – aiming for a better tomorrow.

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MESSAGE FROM THE CEO

Dear stakeholders,

I am very pleased to present our inaugural Sustainability Report. Whilst this is our first report, it does not mean that we have not previously been proactive in progressing our sustainability goals. We adopted a new approach in our safety culture in 2012 with a main emphasis on the personal ownership of safety, working safely as a condition of employment and that all work related injuries and illnesses are preventable. These have progressed over the years to encompass environmental and social goals so that we have now reached a level of maturity to report on our sustainability performance in 2016. Despite the economic challenges we have experienced in recent years, we have continued progress on our sustainability objectives.

Safety continues to be a cornerstone of Alba's success. During 2016, we commenced a number of health and safety initiatives as well as programmes which included celebrating World Day for Safety and Health at Work with an emphasis on workplace stress, marking International Labour Day with a Family Day event, our 'Safety Convoy' initiative and held special awareness sessions on site throughout the year with a primary focus on areas and activities which are considered to have a potential significant risk.

We conducted a hydration survey and continue to educate our employees on the importance of staying hydrated and the risks associated with heat stress. These programmes focussed on our overarching safety goal of achieving a zero accident workplace. During 2016, we saw a three-fold increase in the amount of training hours and most importantly, a reduction in both our Lost Time Injury (LTI) and Lost Time Injury Frequency Rate (LITFR).

Our environmental performance during 2016 saw a reduction in both our energy and greenhouse gas emission intensities as well as a further decrease of our total fluoride emissions. We had no significant spills or significant environmental incidents, whilst our open green space known as the 'Her Royal Highness Princess Sabeeka Oasis' continues to provide our employees much enjoyment.

Our employees remain our driving force and are ultimately responsible for achieving the Company's goals. Our investment in the education and professional development of our people has continued during 2016 and I am particularly proud that we have again exceeded the industry benchmark of 5% training hours (as a percentage of total employee hours).

We are also wholly committed to our wide range of stakeholders, with three key groups being Alba employees, our local community and Alba shareholders, including the Government of Bahrain.

Alba has a strong relationship with the Bahraini community. In 2016 we continued to directly fund and support a range of community services, infrastructure projects in the local area as well as provide regular sponsorships and financial support for local and regional football teams. We understand the need to engage effectively with our local community on an ongoing basis and as such, we will be improving our stakeholder engagement processes and have commenced this process by preparing a Stakeholder Engagement Plan for the existing operation and the Line 6 Expansion Project.

Our commitment to our shareholders can be demonstrated by the Corporate Governance Framework that we have developed. Risk management is an integral part of our business operations. We have a formalised programme to identify potential risks and develop appropriate controls to either eliminate them and/or reduce them to a manageable level. We will continue to act with integrity and as a global corporate citizen; this 2016 Sustainability Report is just one example. Alba is investing in its future, with the Line 6 Expansion Project well underway wherein the First Hot Metal is scheduled for early 2019. Despite the challenging world market for aluminium, we have sustained our financial performance with a full year net income of USD 129 million resulting from a record-breaking production total of 971,420 metric tonnes. This generated total sales of USD 1.781 billion for 2016.

I am very optimistic going forward into 2017, although I acknowledge that we still need to progress along our road to achieving our sustainability goals. We will continue to set stretch targets for ourselves along our continuous improvement path. I therefore share our 2016 Sustainability Report, our first report, with you and welcome your feedback.

Warm Regards,



Tim Murray
Chief Executive Officer
Aluminium Bahrain B.S.C.



“Safety continues to be a cornerstone of Alba’s success. During 2016, we commenced a number of health and safety initiatives and held special awareness sessions on site with a primary focus on areas and activities which are considered to have a potential significant risk.”

ABOUT THIS REPORT

This is the first public sustainability report for Aluminium Bahrain B.S.C (referred to in this Report as 'Alba') and includes all our operations and activities located in the Kingdom of Bahrain for the period 1 January 2016 to 31 December 2016, unless otherwise noted. We will be producing a public sustainability report annually from this year onwards.

This Report relates to our existing facilities located in Bahrain which includes our five production potlines, four power stations, three carbon plants, two cast houses and four desalination plants, coke calciner plant, and a marine terminal with jetty facility. We have prepared this Report to communicate our environmental, health and safety, governance and social performance to our stakeholders.

As this is our first sustainability report there are no changes to the scope, nor any restatements of information to be disclosed.

For anyone wishing to use the information presented in this Report for the purposes of industry reporting, benchmarking and/or to derive any conclusions from the data presented, you should contact us for additional verification and context. Our contact details are provided at the rear of this Report.

Whilst every endeavour has been made to ensure that the data presented in this Report is accurate, independent external assurance was not undertaken. External assurance may be considered by Alba for future sustainability reports.

GLOBAL REPORTING INITIATIVE (GRI)

The Global Reporting Initiative (GRI) is an international independent organisation that helps businesses, governments and other organisations understand and communicate the impact of business on critical sustainability issues such as climate change, human rights, corruption and many others. The GRI Sustainability Reporting Guidelines (the Guidelines) offer Reporting Principles, Standard Disclosures and an Implementation Manual for the preparation of sustainability reports by organisations, regardless of their size, sector or location.

The Guidelines offer two options for an organisation to prepare its sustainability report 'in accordance' with the Guidelines. The two options are Core and Comprehensive. These options designate the content to be included for the report to be prepared 'in accordance' with the Guidelines.

This Report has been prepared in accordance with the *GRI Standards: Core Option* (G4 Guidelines).

GRI PRINCIPLES

The GRI has established principles for defining report content and are divided into two groups – principles for defining report content and principles for defining report quality. These guide decisions made by Alba in determining the content of this report based on our significant activities and impacts, and the interests of our stakeholders. The principles also provide guidance on ensuring the quality of information presented in this Report.

The principles are: Stakeholder inclusiveness, sustainability context, materiality, completeness, balance, comparability, accuracy, timeliness, clarity and reliability. We have considered each of these principles during the preparation of this report, and followed GRI implementation guidance for them as required.

MATERIALITY ASSESSMENT

In accordance with the GRI G4 Guidelines, Alba is required to identify our material aspects, which aims to identify and prioritise sustainability related aspects that are relevant to our short-term economic performance, stakeholder expectations, regulatory obligations, values, policies and strategies as well as those factors critical for enabling success for the organisation.

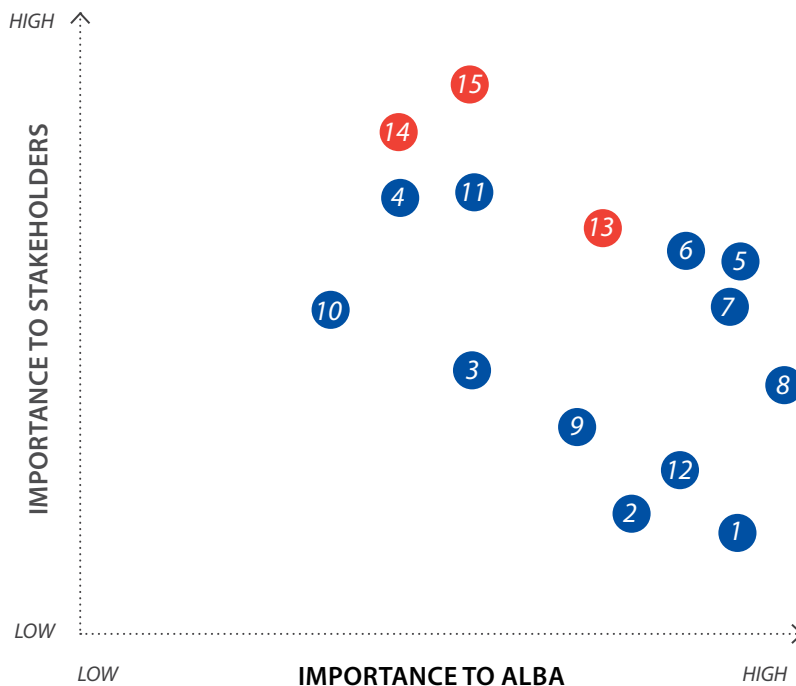
Using the suite of aspect category types as specified by GRI, including those additional category types and indicators specified in the Mining and Metals Sector Supplement, approximately forty representatives from our senior management team considered whether each category was material (that is, significant to the organisation), or of high interest to external stakeholders, or both. We ensured that there was representation from each business

function and department throughout Alba, including production, procurement, the Office of the CEO, finance, marketing, Health, Safety and Environment, public relations, security and human resources. The methodology used was based on the *GRI Process for Defining Reporting Content* (Summary). Respondents were asked to complete a questionnaire and provide rationale where relevant as to why each material aspect category were selected.

An independent consultant then consolidated the information received from the senior management team and determined and prioritised the material aspect categories based on these results. The most applicable specific indicator (or indicators) were selected based

on availability of data and relevance to the organisation. A summary of the results was then reviewed by representatives of our senior management team and the identified material aspects endorsed and approved. The results of this materiality assessment are presented in the figure below.

Alba 2016 sustainability material aspects



Material aspects

- 1. Economic performance
- 2. Market presence
- 3. Materials consumption
- 4. Energy use
- 5. Emissions to air
- 6. Effluents and waste
- 7. Labour, employment and management
- 8. Occupational health and safety

9. Training and education

- 10. Local communities
- 11. Anti-corruption
- 12. Emergency preparedness

Specific stakeholder concerns

- 13. Compliance
- 14. Human rights
- 15. Diversity & equal opportunity

SCOPE AND ASPECT BOUNDARIES

The results from the materiality assessment process were the primary inputs for defining the scope and aspect boundaries of this Report. The aspect boundaries are the same for each material aspect identified (refer figure above) in that they are restricted to the physical boundary of our facility. Whilst other non-material aspects such as community relations may have a boundary external to the physical boundary of the facility, defining scope for the purposes of GRI applies only to material aspects. This collective aspect boundary is also consistent with the overall scope of this Report. We are of the opinion that the material aspects we have identified together with the standard disclosures provide a report scope that is appropriate to the nature and scale of our activities.

GRI CONTENT INDEX

This report is complemented by a GRI content index which indicates the specific location(s) in the Report where our performance against each General Standard Disclosure has been discussed as well as those indicators relevant to our material issues identified in the materiality assessment.

The GRI Content Index is provided at the rear of this Report.

FEEDBACK

We welcome any comments or enquiries about this Report, or in regards to our sustainability reporting process. Please email us at IR@alba.com.bh with your suggestions. You can also write to us or call, using the contact information provided at the rear of this Report.

No significant spills



An increase of two per cent in our total production to 971,420 tonnes

Total metal sales of USD 1.781 billion

A reduction in both our Lost Time Injury (LTI) and Lost Time Injury Frequency Rate (LITFR)



The Line 6 Expansion Project remains on schedule for commissioning in January 2019

A reduction in both our energy and greenhouse gas emission intensities

A decrease of five per cent in our total fluoride emissions intensity

2016 HIGHLIGHTS

Whilst 2016 has been a challenging year in the current economic environment for aluminium, we have seen some significant highlights at Alba – the details of which are discussed throughout this Report. Some of our most significant highlights for the year include the following:



No fatalities

No fines or prosecutions received



A three-fold increase in the amount of training hours

An increase in the volume of process wastes recycled

No significant environmental incidents

Number of plant safety inspections increased by ten per cent



No reported incidents of discrimination based on gender



No community complaints received



WELCOME TO

alba

Aluminium
for the world

Alba is Bahrain's national aluminium smelter and one of the world's largest single-site smelters.



OUR OPERATIONS

COMPANY OVERVIEW

Aluminium Bahrain B.S.C ('Alba') is Bahrain's national aluminium producer and one of the world's largest single-site smelters. When our Line 6 Expansion Project is commissioned and fully operational in early 2019, we will become the largest single-site aluminium smelter in the world.

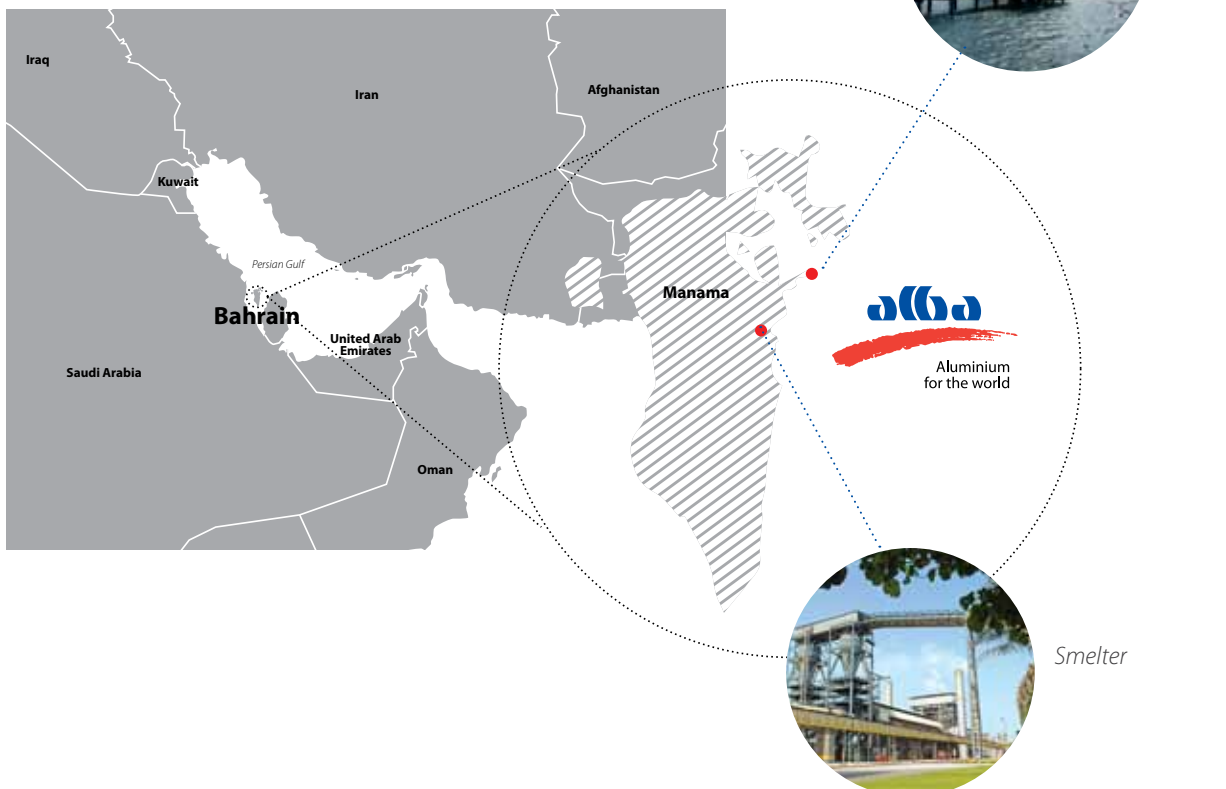
We commenced operations in 1971 as the first aluminium smelter in the Middle East region with its development encouraged by the Kingdom of Bahrain to assist in diversifying the national economy. This year we produced over 971,420 tonnes of the highest grade aluminium (>99.80% purity) which ranks us among the top ten aluminium producers in the world. We are considered a 'tier one' smelter – one of the lowest cost producers of aluminium, due to our access to reliable and low-cost local natural gas production.

Alba is a dual listed Company on both the Bahrain Bourse and London Stock Exchange. Our main shareholders are the Bahrain Mumtalakat Holding Company (69.38%), the SABIC Industrial Investment Company (20.62%) and the remaining ten per cent is held by the general public.

OUR SITE

Our plant currently consists of five potlines, four power stations providing a total capacity of over 2.2 Gigawatts (GW), three carbon plants, two cast houses, a desalination plant, a calciner plant and a marine terminal with jetty facility.

As our production capacity has increased over the past 40 years, so too has the scale and breadth of our facilities. We now occupy over 1.2 square kilometres of land in the Askar Industrial Area, approximately 15 kilometres south of Manama. In our history we have undergone five major expansions in 1981, 1989, 1992, 1996 and 2005 resulting in a facility producing nearly one million tonnes of aluminium per annum. The coke calciner plant was commissioned in 2001 and is capable of producing up to 550,000 tonnes of coke per annum. We currently consume approximately 370,000 tonnes of this coke, whilst the remaining amount is sold to other smelters in the region.



PRODUCTS PRODUCED

We manufacture seven different product types and shapes. These include extrusion ingots (billets), rolling ingots (slabs), properzi ingots, foundry T-bars, foundry ingots, standard ingots, and liquid (molten) aluminium.



Commodity Ingots

Ingots are re-melted and cast into a variety of end products. Our ingots represented approximately 12 per cent of Alba's 2016 production.



Extrusion Billets

Extrusion billets are supplied to a variety of customers in the transportation, building products and automotive sectors. They are used in manufacturing components for residential and commercial buildings, such as windows, door panels and shower enclosures. Extrusion billets represented approximately 34 per cent of Alba's 2016 production.



Foundry Alloys

Foundry alloys are typically used in the automotive industry for the manufacture of automotive wheels, truck hubs and gasoline pump fittings. These alloys represented approximately 12 per cent of Alba's 2016 production.



Rolling Slabs

These are extensively used in the packaging, transport and building sectors. Rolling slabs are also used to produce food cookware and drinking cans. In 2016, rolling slabs represented approximately 11 per cent of our total production.



Liquid Metal

This product type consists of molten aluminium that is sold in the liquid state and then made into final products by the customer. This product is exclusively sold locally due to the logistical constraints of transporting molten metals and in 2016 represented approximately 30 per cent of our total production.

Billets are sold to aluminium extruders who use the versatile properties of aluminium alloys to create profiles in all shapes and sizes mainly used in building applications, such as window frames and structural components. Slabs are cast in rolling mills to produce foil stock which is re-rolled into household foil or packaging material used mainly in food or pharmaceutical industries.

Other types of slabs are rolled into plates or sheets for usage in the general engineering and building industries. Foundry alloys are used by automotive components manufacturers to cast wheels and engine blocks.

OUR SALES

As of 31 December 2016, Alba had a market capitalisation of USD 1.2 Billion. Approximately 50 per cent of our output is supplied to the downstream aluminium industry within Bahrain, with the other 50 per cent exported to regional and international customers in the Middle East, Europe, Asia, Africa, and North America.

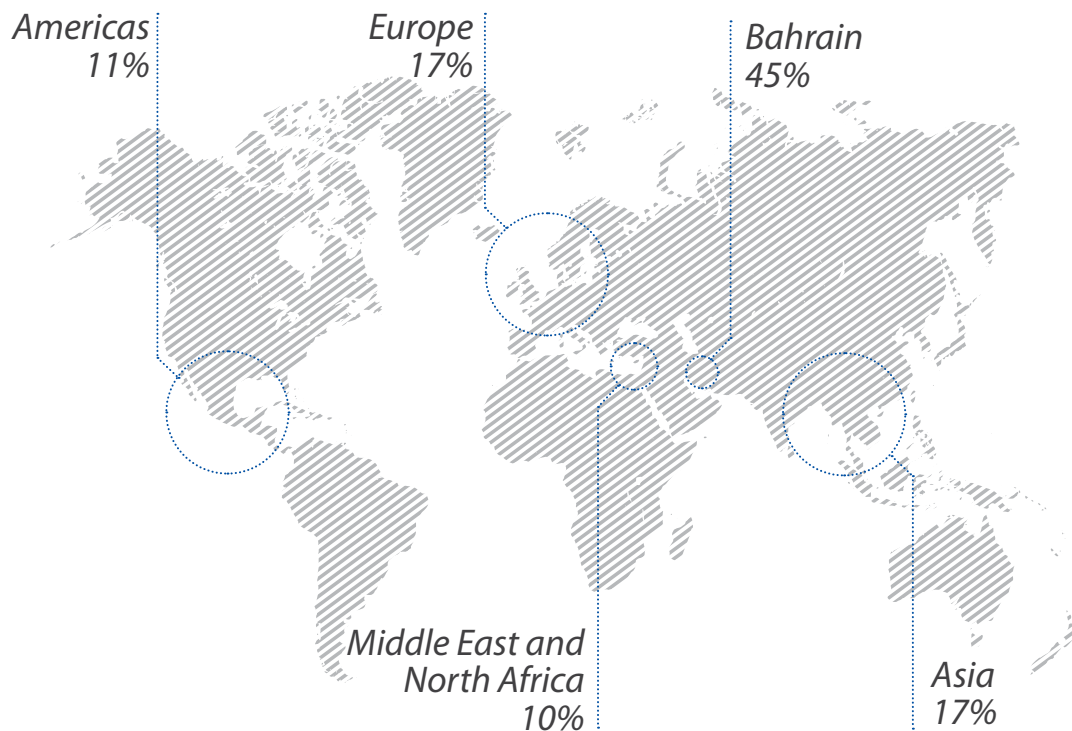
Our local Bahraini clients include Garmco and Midal Group, whilst our largest clients include

Alupco in the Kingdom of Saudi Arabia, the Hero MotoCorp Limited in India, the largest manufacturer of motorcycles in the world; Capral Australia, a major manufacturer of building products in Australasia; Ronal and Maxion Wheels in Europe and North America. Molten metal is primarily used to manufacture rods and cables. A summary of our metal sales for 2016 is provided in the Financial Performance section of this Report with additional details provided in our **2016 Annual Report**.

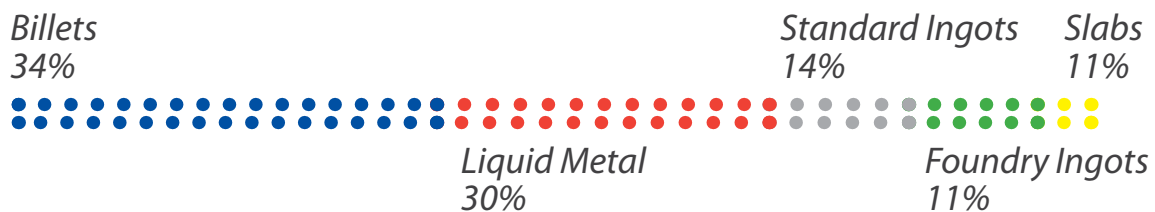
PRODUCTS AND SALES

By Region

Alba exports to more than 25 countries around the world.



By Product Line



THE LINE 6 EXPANSION PROJECT

We are currently constructing the Line 6 Expansion Project, our sixth potline, which will make us the world's largest single-site aluminium smelter. Expected to begin production in January 2019, this expansion will boost annual production by 540,000 metric tonnes, bringing the total production to approximately 1.5 million metric tonnes per year. The total project cost will be approximately USD 3 billion and consist of 424 pots with 212 pots in each of the two pot rooms, making it the largest smelter expansion project in the world today. Financial advisory support for the project has been provided by J.P Morgan, the Gulf International Bank (GIB) and the National Bank of Bahrain (NBB).

The total length of the Line 6 Expansion Project will be 1,350 metres and it will be 125 metres wide. In order to meet the additional energy requirements for Line 6, another power station will be constructed to provide a further 1,792 megawatts (MW) of capacity. The Combined Cycle Gas Turbine Power Plant will have an efficiency of 54%. General Electric (GE) will provide three 9HA gas turbines, three steam turbines and three high recovery steam generators (HRSGs) for the project. When commissioned, Power Station #5 will be one of the most efficient power stations in the world.

OUR ECONOMIC IMPORTANCE

Alba and aluminium are both very significant to the Kingdom of Bahrain and its people. At present the aluminium sector accounts for approximately ten per cent of the country's Gross Domestic Product (GDP) and comprised approximately 65 per cent of all non-oil exports in 2016. This is an important consideration for the Bahrain economy as it seeks to diversify away from the oil and gas sector. Strategic support from the Bahraini Government has assisted Alba in developing a cost competitive environment with operating costs approximately 20 per cent less than many other Gulf Cooperation Council (GCC) nations.

Bahrain has developed a dedicated aluminium 'hub' for downstream manufacturers who can access our liquid and casted aluminium with negligible transportation costs involved. This 'hub' has now begun to attract international

manufacturers also, with several Asian aluminium product manufacturers now operating in Bahrain.

Our indirect economic benefits in the broader region (Middle East and Northern Africa (MENA)) are significant, with up to 64 per cent of our products destined each year for manufacturers in the MENA Region.

A summary of our financial performance is presented in the 'Financial Performance' section of this Report, whilst our **2016 Annual Report** provides an in-depth discussion and presentation of our financial performance for this year.

SECURITY

Ensuring the ongoing security of our site is of significant importance to us, as is the security of our assets and products. Equally, we are committed to safeguarding our employees, contractors and equipment so that they remain safe and free from the threat of any prohibited or dangerous items. *Our Security System and Visitors Control Code of Practice* outlines the procedures for our security personnel to conduct personnel and vehicle searches, the provisioning of access badges, the undertaking of visitor tours and site patrols, the licencing requirements for on-site driving, the investigation of potential on site criminal activities such as theft and fraud, and the protection of data and management of potential on-site disturbances.

Due to the significant health and safety hazards associated with our pot rooms and cast houses, there are several items that are strictly forbidden to enter these areas. Our security personnel are responsible for the strict control of these items which include cigarette lighters, cans, bottles, aerosols, other metal containers and jewellery. As discussed later in this Report, our security personnel have received human rights training which includes routine refresher sessions.



BANGOR
OSLO

AP/EE



The marine terminal includes our jetty facility, calciner and desalination plants.

EMERGENCY PREPAREDNESS

We acknowledge that there is always the potential for an emergency situation or incident to occur on our site. Our Emergency Preparedness Plan provides clear guidance to all our employees on site on the procedures to follow during any emergency situation such as a fire, gas or oil leak, molten metal spill, chemical explosion, electrical fault or serious issues relating to ships and other vessels. We have an Emergency Communication Centre within our Security Control room that provides for central command and deployment of services in the event of any emergency, and for site-wide events considered as a crisis or disaster, a separate Incident Command Centre is also available.

Responsibility and accountability for emergency preparedness has been allocated to various personnel on site, including the SHE Manager, Fire Superintendent, Fire Incident Controller and Team Leader. As part of our emergency preparedness and response programme we undertake regular drills and training for a variety of potential emergency scenarios, including regular evacuation drills for all employees and contractors. The SHE department runs regular inspections on all fire equipment in order to ensure preparedness. The fire and security team is well trained to respond to emergencies within the plant in addition to being vigilant for internal as well as external security threats.

We have a specific *Environmental Emergency Response Plan* established to effectively manage environmental emergencies which can include the malfunction or unplanned cessation or bypass of pollution abatement equipment.

We have developed and implemented a series of *Department Continuity Plans (DCP)* which would be immediately enacted if any crisis or disaster situation were to occur. These plans provide a structured document detailing the recovery actions to be performed and the resources required for each departmental area in the event of a disruption or disaster. They also provide direction on engagement with government stakeholders and the local community in the event of a crisis or disaster occurring on site.





We undertake regular drills and training for a variety of potential emergency scenarios.

GOVERNANCE

OUR APPROACH

Alba is committed to sound corporate governance principles in order to achieve our Company goals and values.

How we do business, and with whom, is as important as what we do as a business. We comply with all relevant local and international laws and regulations and conform to internationally recognised standards for safety, health and environment and conduct our activities to the very highest achievable levels.

We have adopted, and are committed to the ongoing implementation of both the *Corporate Governance Code of the Kingdom of Bahrain* (the Code) which was issued in March 2010 by the Ministry of Industry and Commerce, and the *Corporate Governance Module* (the Module) of the Central Bank of Bahrain (issued in July 2011, as amended). The principles governing these frameworks are:

- The Company shall be headed by an effective, collegial and informed Board;
- The Directors and officers shall have full loyalty to the Company;
- The Board shall have rigorous controls for financial audit and reporting, internal control, and compliance with law;
- The Company shall have rigorous procedures for appointment, training and evaluation of the Board;
- The Company shall remunerate Directors fairly and responsibly;
- The Board shall establish a clear and efficient management structure;
- The Company shall communicate with shareholders, encourage their participation, and respect their rights; and,
- The Company shall disclose its corporate governance practices.

We proactively engage with the Bahraini Government and nearby communities with the understanding that different stakeholders can have different expectations and requirements which need to be balanced with our goals, targets and values. This may cover a wide range of areas, including economic, environmental and social expectations, and in the event of any inconsistency between Alba policies and

standards and the laws where we operate, we will comply with the higher standard.

BOARD OF DIRECTORS

Our Board of Directors maintains effective oversight of the Company by regularly monitoring key business activities and providing directives to management. The Board has ten Directors, all of whom are external to the Company's management. The Board operates in accordance with the laws of the Kingdom of Bahrain, including the *Commercial Companies Law* (as amended), the *Memorandum and Articles of Association of the Company*, its own Board Charter and the Company's *Levels of Authority* document.

The Board of Directors has three sub-committees. The Board Audit Committee carries out the Board's audit functions in accordance with its Charter, and also has responsibilities for risk and corporate governance. It has six members, each of whom has a financial and/or audit background. The Nomination and Remuneration Committee carries out the Board's nominating and remuneration functions in accordance with the Charter. It has three members, all of whom are external directors. The Board Executive Committee is responsible for assisting the Board in fulfilling its oversight responsibility with respect to strategic initiatives and projects, and business and operational plans in accordance with its Charter. Relevant members of management attend Board and sub-committee meetings.

The Board and its three standing sub-committees conduct annual self-evaluations and assessments using questionnaires and a discussion of gaps and areas of improvement. The results of the assessments by the sub-committees are reported to the Board. A Director's handbook consisting of key documents and other content on Directors' responsibilities serves as a reference guide for incumbent Directors and to facilitate orientation of new Directors. The Board conducts an annual review of Directors' independence, applying the classification criteria and guidance from the Central Bank of Bahrain and from the Code.



The Board has presented a comprehensive annual *Corporate Governance Report* at each Shareholders Meeting since March 2011. This report, (also available on our website), sets out our compliance with the Code and with the additional guidelines, along with explanations for areas of non-application and required disclosures.

More information on our Board and its responsibilities is available in our **2016 Annual Report**.

CODE OF CONDUCT

A Board approved *Code of Conduct*, consistent with leading international codes of ethics, sets out required ethical conduct for all employees and representatives of the Company. It was re-launched during 2015 by the Board and Executive team through a comprehensive communication and training programme. Our *Code of Conduct* addresses respect and non-harassment; fair treatment and equal opportunity; safety, health and environment; substance abuse; corporate social responsibility; respect for the law, (covering also compliance with anti-money laundering laws and competition laws); community and political relations; conflict of interest; bribery and corruption; gifts and entertainment; asset protection; accurate reporting; insider trading; confidentiality; and intellectual property.

Compliance with the *Code of Conduct* is monitored by Alba's Integrity Task Force, which comprises the Chief Internal Auditor and Risk Officer. Additionally, we have an independently

operated confidential hotline and reporting system, '*IntegrityLine*', that provides for reporting in multiple languages by phone and intranet 24 hours a day, every day. In 2016, we had 15 concerns related to potential breaches of our *Code of Conduct* reported through our IntegrityLine confidential hotline service.

The *Code of Conduct* requires employees who have responsibilities for supervision of others to:

- Promote and encourage compliance and ethics by their own example;
- Make sure that those who report to them understand this the *Code of Conduct*;
- Enforce the *Code of Conduct* consistently by holding employees accountable for exhibiting the proper behaviours, and reporting any breaches of the code; and,
- Support employees who, in good faith, raise questions or concerns by (i) encouraging employees to report concerns, (ii) addressing concerns that are raised and (iii) ensuring that employees who raise concerns are not subject to retaliation.

Additional information on our *Code of Conduct* and our corporate governance processes is available in our **2016 Annual Report**.

ANTI-BRIBERY AND CORRUPTION

Corruption is any abuse of an official position for personal gain. Bribery is a form of corruption, and is the offering, giving, receiving or soliciting of any item of value to improperly influence the actions or decisions of an employee or other person with official duties. Activities involving bribery, corruption, money laundering, payment of secret commissions, and the exercise of improper influence are strictly prohibited under our *Code of Conduct*.

As an organisation we will not engage in bribery or corruption in any form. This includes payments made to officials to secure or speed up routine legal government actions, such as issuing permits, visas or releasing goods held in customs, unless these payments are made in accordance with an official pricing list of the government department. Using positions of importance to influence business decisions for professional and/or personal gains as well as obtaining financial and/or non-financial benefit from deceptive or illegal activities will not be tolerated under any circumstances.

Any instances of bribery or attempted bribery are to be reported to line managers, and to the Chief Internal Auditor and Risk Officer. This also includes any known or potential bribery involving third parties acting on behalf of Alba to contravene any of the above. Any Alba employee found guilty of not complying with anti-bribery and anti-corruption laws or our *Code of Conduct* may face disciplinary action, up to and including termination.

As of the end of 2016, we have trained 2,309 employees so far in our anti-corruption policies and procedures, which represents approximately 88 percent of our entire workforce. We have had no confirmed incidents of corruption in recent years.

HUMAN RIGHTS

Alba affirms the principles contained in the United Nations Universal Declaration of Human Rights. Our *Code of Conduct* sets out the principles and framework for which all employees must conduct themselves.

We respect the beliefs and religious practices of people of all faiths. It is the responsibility of each employee to honour and respect the right of others to practice their religious beliefs in freedom. Interference with these rights and freedoms is a violation of the Bahraini law and of our *Code of Conduct*.

To avoid human rights violations through our security arrangements, we provide training for security personnel and continue to conduct periodic human rights analysis of our security operations. In 2016, 52 security personnel employed directly by Alba received formal training (either specific or 'refresher') in our human rights policy (our *Code of Conduct*) and procedures. In addition, eight external contractor personnel from security organisations outside of Alba have also received training in the human rights policy and procedures.

We work with our suppliers and contractors and other business partners to promote human rights, to honour and respect the rights of others, and in turn avoid adverse human rights impacts. Alba is committed to the elimination of all forms of forced and compulsory labour, and the abolition of child labour abuse. Where relevant, we monitor our suppliers' compliance with our general principles for the services provided to Alba.

We have had no reported cases of human rights breaches in recent years.

SAFETY, HEALTH AND ENVIRONMENT POLICY

In 2014, we developed and implemented across our site a formal safety, health and environment (SHE) policy to provide an overarching framework within which we identify, manage and minimise our significant SHE risks.

Alba and its senior management are committed to continually improve the environment in and around Alba, and protect the safety and health of its staff, contractors and visitors. As a consequence, Alba requires all those members to adhere to workplace safety and strive toward zero harm.



Our employees receive training on Alba's anti-corruption policies and procedures.

To this end, Alba has established SHE as a key performance area in its strategic plan, and in order to achieve this we will:

- Comply with all relevant SHE legal requirements, internal standards and other requirements.
- Ensure that our activities are carried out following the best practicable means for resources conservation, pollution prevention and protection of workforce and property.
- Ensure SHE consideration as part of all Company's decisions respecting planning for growth, development and operations.
- Identify, assess and manage the SHE risks associated with our activities, following hierarchy of control.
- Ensure plant, equipment and substances are safe and without risk to health and environment.
- Provide, monitor and maintain a safe plant and systems of work, by implementing the safety, occupational health, and environment management systems.
- Enhance SHE culture through continuous awareness, training and consultation programmes and ensure that everyone works for Alba is competent and aware of SHE issues relevant to his/her responsibilities.
- Make this policy publicly available to all, and communicated with all relevant affected and interested parties on the SHE performance of the Company.
- Undertake regular review of the efficiency and effectiveness of our SHE management systems.
- Provide adequate resources, to facilitate the fulfilment of Alba's SHE responsibilities.

We consider the precautionary principle during the assessment of environmental aspects for any process including new construction, processes, practices and services by identifying and assessing the environmental risks of such activities and implementing mitigation measures as required.

SHE MANAGEMENT SYSTEM

The key framework to support the implementation of the SHE Policy and our vision and values is the Alba SHE management system, which is independently certified against the international standards ISO14001 (2015) and OHSAS18001. Our quality management system is also independently certified to ISO9001 (2015). The SHE management system has been developed and implemented across our organisation to enable us to comply with all applicable safety, health and environmental legal requirements and to effectively manage the significant safety, health and environmental risks and impacts from our operations, activities, products and services.

Our management system facilitates the mitigation of our significant SHE risks and over time continually improves our sustainability performance through the development of improvement plans and initiatives. It also provides for appropriate human and financial resources to undertake these improvement plans including the provision of training and awareness for all employees and contractors. We manage change through our SHE management system and assess and monitor the competency and performance of our contractors. All SHE-related incidents are reported, assessed and closed-out through the management system. An audit and inspection programme provides regular assurance that the framework is operating appropriately to our scope of activities and our significant SHE risks. The SHE management system is reviewed by representatives of senior management on an annual basis and modifications made as required.

RISK MANAGEMENT

We have developed and implemented an *Enterprise Risk Management* (ERM) framework. This ERM framework enables the Board and senior management to effectively manage uncertainty across the organisation. The ERM acts as the overarching framework for risk management and as aligned with other frameworks such as that used by the SHE Department. Our risk framework is consistent with the international risk standard ISO 31000 (2009).

Risks are identified and assessed as one of four types: strategic (such as capital availability, market and competitive influences, governance and reputation), financial (such as availability of credit, foreign exchange rates and commodity pricing), operational (such as health, and safety, productivity, technology and personnel) and compliance (with laws, regulations and standards). In our risk identification process we consider both threats and opportunities for each type of risk and evaluate the likelihood and consequence for both inherent and residual risk.

Our ERM framework provides direction on risk identification and evaluation techniques, an impact and severity assessment methodology and evaluation system. It also provides direction on specific accountabilities for identification, evaluation, monitoring and measurement and maintenance of the risk assessment database. The Chief Internal Auditor and Risk Officer reports directly to the Board Audit Committee and Board of Directors on changes to the organisational risk profile. Our overall risk 'appetite' is determined by the Board of Directors and this is informed by the ERM process whilst individual risk tolerances are also determined by the Board in consultation with management.

INTERNAL AUDIT

The role of the Internal Audit function is to ensure that our activities are conducted according to the highest standards by providing an independent and objective assurance function. The Internal Audit Department has been established by the Board of Directors and its activities and assurance programme determined and monitored by the Board's Audit Committee. To ensure independence, the Chief Internal Auditor and Risk Officer reports directly to the Board Audit Committee Chairman and has direct and unrestricted access to senior management and the Board.

The internal audit programme includes a review of the design and operating effectiveness of internal control systems, information systems and governance processes, to determine their ability to provide accurate, reliable and timely receipt of significant financial, managerial

and operating information. The programme comprises compliance reviews, best practice reviews, audits and special investigations.

Assignments are determined by a risk-based multi-year and annual internal audit plan covering key controls. The audit plan, budget and methodologies are approved and monitored by the Board Audit Committee. On a quarterly basis, the Board Audit Committee reviews and discusses the internal audit findings, recommendations and agreed management actions, as well as progress made against prior audit findings. Additional private meetings are held between the Board Audit Committee Chairman and the Chief Internal Auditor and Risk Officer.

The Internal Audit function adheres to the Code of Ethics and the international professional standards published by the Institute of Internal Auditors as well as relevant guidelines issued by Bahraini regulators. Expected behaviours and competencies for our internal auditors are set out in the *Alba Internal Auditor Standards and Procedures Handbook*.

MEMBERSHIPS AND AFFILIATIONS

Alba is an active member and participant in a number of industry associations and continues to provide support and involvement during 2016. Some of our key memberships and affiliations include The Aluminium Association, the Arab Forum of Environment and Development (AFED), the International Safety Council, the Royal Society for the Prevention of Accidents (ROSPA), the American Chamber of Commerce Bahrain, the Gulf Aluminium Council and the International Aluminium Institute (IAI).





We remain focussed on increasing the representation of women in our business and achieving a better balance of gender in the short-term.

FINANCIAL PERFORMANCE

FINANCIAL HIGHLIGHTS

In 2016 our metal sales totalled USD 1,781 million which represents a ten percent decrease year on year (YoY) over 2015, whilst our production volume for the year totalled 971,420 metric tonnes, a two per cent increase from 2015. Our earnings before interest, tax, depreciation and amortisation (EBITDA) for 2016 was USD 327 million reflecting the ongoing benefits of the cost reduction programme of Project Titan which was implemented in 2015.

METAL SALES	EBITDA	NET PROFIT	FREE CASH FLOW
USD 1,781 million	USD 327 million	USD 129 million	USD 204 million
2015: USD 1,993 million	2015: USD 401 million	2015: USD 159 million	2015: USD 332 million

Alba reported Total Sales of USD 1.781 billion in 2016 versus USD 2.039 billion in 2015, down by 13% year on year (YoY) due to the double dip of London Metals Exchange (LME) and premium prices. Net Income stood at USD 128.7 million in 2016 compared to USD 159.5 million in 2015 - down by 19% YoY. We managed to perform against all odds to boost overall margins and deliver strong cash flows amidst volatile market conditions. The average aluminium price throughout 2016 was USD 1,604 per metric tonne (mt) a reduction from an average of USD 1,663 per mt throughout 2015. (London Metals Exchange (LME)).

OPTIMISING COSTS

In February 2014, a two year programme known as Project Titan was launched with an objective to reach a cash-cost saving of USD 150 per mt run rate by 1 January 2016 (USD 135 million of run rate savings per year assuming production of 900,000mt). This represented an ambitious target considering that it followed shortly on from the annualised savings of USD 240 million delivered under the 2012/2013 STAR programme. Although it was a cost saving initiative, Titan aimed to drive revenue growth, increase throughput and boost profitability. Sponsored by Alba CEO Tim Murray with a steering committee comprising Alba's Chief Experience Officers (CXOs), Directors and Alba Unions, the Project was championed by all department managers with every Alba employee being a key and vital contributor.

Ultimately, savings of USD148/mt by December 31, 2015 were achieved against the USD150/mt target.

In February 2016, Phase II of Project Titan was initiated to partially offset the decline in all-in-aluminium prices (London Metals Exchange (LME)) and physical premiums) with an aim to reduce cash costs by USD 100/mt of aluminium and step-up its production capacity to 1,000,000mt per annum by end of 2017. By the end of 2016, we managed to secure savings of USD 78/mt.

INVESTING FOR THE FUTURE

The Line 6 Expansion Project is a demonstration of Alba's commitment to the future which will have a far-reaching impact for both the Company and the economy of Bahrain.

Construction is currently on schedule with an estimated completion date of January 2019 and with first hot metal scheduled after the commissioning phase. The Line 6 Expansion Project will have a peak workforce of approximately 10,000 construction personnel. The construction project will provide a substantial benefit to the local Bahraini economy through employment and the procurement of goods, services and contractor support. The Line 6 Expansion Project is discussed in various locations throughout this Report.



ECONOMIC CONTRIBUTION

We provide direct economic contributions through various means to the Bahrain economy, including:

- Employee wages and salaries;
- Contributions to the Bahraini Social Insurance Organisation and the Alba Savings Benefit Scheme;
- Cost of shares allocated to the Employees' Stock Incentive Plan;
- Payments to suppliers and service providers;
- Training;
- Indirect benefits in the form of housing and education;
- Royalties paid to the Government of the Kingdom of Bahrain;
- Community contributions, sponsorships and other community investment initiatives; and,
- Lease costs.

The costs of these contributions represent approximately fourteen per cent of total cost of sales. In addition to direct contributions Alba also generates other benefits, such as the Albaskan Scheme, where the Company has issued guarantees to financial institutions in the Kingdom of Bahrain in relation to the mortgage loans of its employees, and the leaving indemnity scheme for departing employees. Further information on our economic contributions is provided in our **2016 Annual Report**.





At Alba, our employees are our most important assets.

OUR PEOPLE

We value our people at Alba and we are driven towards the elimination of injuries and ensuring that everyone returns home safely each day. We are also committed to the health and safety of our contractors and the public.

Our approach to health and safety focuses on eliminating any potential scenarios for a fatality to occur, and secondly ensuring that controls are in place to prevent any significant incident. We have diligent and experienced leadership across the organisation which contributes to our safety culture on site. They accept accountability for health and safety across Alba and through their everyday behaviour, and set the example for the rest of our team. We require our employees to stop work if they believe the task is unsafe and we consistently encourage our employees to report all incidents and near misses, no matter how insignificant they may appear.

We are also driven to building a sense of well-being, community and purpose amongst our workforce and ensure that all individuals have opportunities to progress their career. We have a dedicated human resources department to support our workforce. In addition to strictly following the Bahraini Labour Law for all aspects related to remuneration and working conditions, we also provide a number of benefits to employees that are considered well above standard provisions for the industry in our region.

EMPLOYMENT

We aim to recruit locally for the Alba workforce and for contractor personnel wherever possible. As of December 31, 2016 Alba employs 2,634 full time personnel of which 85 per cent are Bahraini, whilst 59 per cent of our senior management team are local. We engaged approximately 350 contractor personnel on a temporary basis throughout 2016.

Of our total workforce 96 per cent are male. Alba is committed to increasing our female workforce over time through female-specific recruitment campaigns and providing greater opportunities for existing female employees. Some of these opportunities for female employees include alternate career paths and greater flexibility in working arrangements.

Not only do we ensure our human resources strategies target the recruitment of persons with leadership capability and expertise, we are also steadfast in ensuring our existing workforce have the opportunity for career advancement. Career advancement is facilitated through the prioritisation of existing Alba candidates in the recruitment process for all roles and through training opportunities. Our employment data for 2016 relating to new and departing employees is presented in the table below.

Employee new hires and turnover 2016

		Employee new hires (#)		Employee turnover (#)	
TOTAL		16	0.6%	311	11.8%
Gender	Male	16	0.6%	294	11.1%
	Female	0	0.0%	17	0.7%
Age Group	Under 30	1	0.0%	16	0.6%
	30-49	1	0.0%	83	3.2%
	Over 50	14	0.5%	212	8.0%

We acknowledge and respect the right of all our employees to have representation of their choice, including labour Unions. We follow Legislative Decree (33) 2002 for Trade Unions and subsequent amendments and Bahrain Labour Law 2012 for all industrial relation issues. The proportion of our workforce which is currently covered by collective bargaining agreements is significant, with 98 per cent of employees covered under such an agreement.

EMPLOYEE BENEFITS

Our entry level wages for both men and women are significantly greater than the national average, with both our male and female employees on a Grade 4 minimum wage earning 2.9 times the national minimum wage.

In addition to the provision of a salary, our employees are offered many other benefits depending on their position description, job tasks and level. Some of our employees are paid

extra amounts to compensate for overtime work and shift work, and some are also paid an additional component or 'allowance' if their work duties involve hazardous and adverse conditions. We provide medical insurance as well as an annual bonus component. Life insurance is also provided for some of our employees. A mandatory three per cent contribution is made by Alba for all employees to the Social Insurance Organisation (SIO).

For all employees we provide a meal subsidy, a laundry facility, free membership to our Alba club, a transportation facility, and for Bahraini nationals, a Company contribution to the Alba Saving and Benefit scheme is also paid. A number of financial loan facilities are available for employees for welfare, computers and housing. We also offer support to our employees in times of difficulty including compassionate leave and support with funeral costs and planning.

We acknowledge particular cultural and family events through the provision of marriage and child birth gifts, Ramadan basket, school bag gifts, women's day gifts and other benefits.

SAFETY

The health and safety of our employees and the community is an inherently critical aspect of our business. Regardless of the area of the organisation in which they work, or the type of work they undertake, we strive to create an operating environment that is free from harm. We acknowledge that there are a number of significant health and safety risks which can be hazardous and have the potential to cause serious injury or a fatality. These include, but are not limited to thermal stress, the storage and handling of molten metal, potential chemical and vapour exposure, heavy lifting and manual handling, vehicles, electrical and electromagnetic hazards.

Safety has become a key priority in our day-to-day operations in order to achieve a 'zero injuries' work environment, and in recent years, we have made significant improvements. Reduced Lost Time Injuries (LTIs) as well as overall safety performance indicate the success of our commitment to safety.

Our core values are based upon Alba's three 'Zero Accident Principles':

1. Ownership of safety is everyone's responsibility
2. Working safely is a condition of employment
3. All work related injuries and illnesses are preventable.

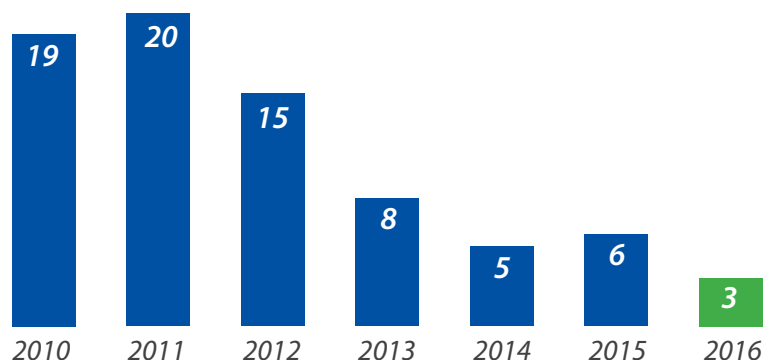
We believe that working together as one team will help us achieve our ultimate objective of zero injuries.

We recognise the importance of reporting all incidents and near misses as a learning exercise so as to inform our risk assessments, our training and awareness initiatives, and to adopt more appropriate controls. We are working towards a culture of reporting, investigation, openness and transparency, without fear of blame or retribution and therefore encourage all employees, contractors and visitors to report all incidents and near misses.

In 2016, fewer people were injured at Alba than in previous years. Our lost time injury frequency rate (LTIFR), which includes data for both employees and contractors, was 0.08 which is the lowest rate recorded. This represents a reduction of 50 per cent compared to year 2015. Whilst this reduction is a continued step in the right direction, injuries are still occurring which is unacceptable to us, and the only statistic we can truly be proud of is zero injuries. We are working tirelessly in improving our safety culture across our site in an effort to ensure that one day we no longer have injuries occurring on site.

The total number of Lost Time Injuries (LTIs)¹ that occurred during 2016 was three, which is down from six during 2015. Our Total Recordable Injury Frequency Rate (TRIFR) was 1.47 (employees and contractors combined), whilst our absenteeism rate² increased slightly from 2.78 in 2015 to 2.91 in 2016. Our Occupational Disease Frequency Rate (ODFR), Lost Day Frequency Rate (LDFR), and absenteeism rate is presented in the table below.

Lost Time Injuries (number per year)



Health and safety metrics 2016	Employees	Contractors	Total
Lost Time Injury Frequency Rate (LTIFR)	0.12	0.00	0.08
Total Recordable Injury Frequency Rate (TRIFR)	1.73	0.97	1.47
Occupational Disease Frequency Rate (ODFR)	0.31	0.00	0.21
Lost Day Frequency Rate (LDFR)	7.81	0.00	5.17
Absenteeism rate	2.91	not available	2.91

Despite the excellent work undertaken to date, ongoing improvement is paramount as we strive to become the safest industrial facility in the Gulf region. We have remained fatality-free for four years now, after a tragic period between 2010 and 2012 when five employees lost their lives on site. In response to this unacceptable outcome, Alba has put safety as the first and single priority in the way we manage our business, but our work is not yet done as we strive to have zero injuries. Our work over the past four years in improving the safety culture on site is highlighted in the wide range of safety awareness campaigns we have successfully implemented. These are discussed further in the case study on page 33.

We have been acknowledged for our recent efforts in safety through the receipt of several

awards. These have included:

- British Safety Council International Safety Award (2014, 2015 and 2016);
- The Royal Society for the Prevention of Accidents (RoSPA) Occupational Health & Safety Awards (Gold) (2014, 2015 and 2016);
- National Safety Council Rising Stars of Safety Award (2014);
- British Safety Council Health and Safety Champion Award (2015);
- National Safety Council Occupational Excellence Achievement Award (2014, 2015 and 2016);
- 2015 Significant Improvement Award (2015); and,
- 2014 Gulf Aluminium Council Health and Safety Award (First Place) (2014).

¹Alba defines a Lost Time Injury (LTI) as any work related injury or illness that results in the employee or contractor not returning to the next scheduled shift on the next working day.

²Alba defines its absenteeism rate as the number of work days lost due to absence (not including scheduled leave) divided by the average number of employees on site multiplied by the number of days per month, then multiplied by 100 to obtain a percentage rate.



IN FOCUS - Our drive towards leading safety behaviour

One of the best methods to continually drive a long-term improvement in health and safety culture on site is through the direct involvement of employees and to encourage and recognise leadership. Our first safety principle is 'Ownership of Safety is Everyone's Responsibility' and as a result, we implemented a number of initiatives throughout 2016, which has resulted in an increase in the level of safety ownership and culture within Alba.

In 2016 we held a plant-wide SHE week called the 'Safety Convoy', which was held under the patronage of Alba's Chairman of the Board of Directors, Shaikh Daij Bin Salman Bin Daij Al Khalifa. During the five days of the campaign we held programmes designed to specifically engage employees. In addition, each day of the campaign was held with a different theme and included topics such as Green Energy, Home Safety, Road Safety and Electricity Safety. The focus was on ensuring our employees have the right attitude towards safety as well as to make safety an essential aspect of living responsibly. It also emphasised the importance of working together with colleagues on safety matters.

Throughout the year we also held special awareness sessions across the site with a focus on those areas and activities with potentially significant safety risks. We reviewed high potential near miss incidents with our employees such as falling tools, dislocation of anode clamps, molten metal spillage and potential forklift failure. Awareness sessions were delivered on the pre-heating of tools,

vehicle movements in pot rooms, the correct use of PPE, the safe use of power tools and lifting tackle, and the importance of good housekeeping. We also provided specific tanker driver training with a focus on physical inspections of their vehicles and filling points.

For those employees demonstrating a wilful disregard for our safety rules we may apply a reduction to their annual performance bonus. Conversely, and perhaps more importantly, we acknowledge those employees who demonstrate a commitment to our safety culture and illustrate leadership and mentor their peers through an incentive-based programme.

Going beyond our boundaries and workers we actively educate our local community on safety issues that relate to daily life through targeted campaigns. As a leading organisation in the Kingdom of Bahrain, we view this as one way to give back to our community. The child safety awareness campaign 'Make the Right Choice for your Child – Booster Seats' was held in April 2016. The campaign launch was held as a community event at one of the largest malls in Bahrain in co-ordination with representatives of the General Directorate of Traffic. Visiting families were educated about the importance of the correct use of booster seats for children for the age group of four to eight years. The families were also given free booster seats along with a demonstration on how to use them correctly.

Our significant increase during 2016 in training hours and training attendances, combined with a reduction in our LTI cases and LTIFR show that we are on the right track. Recently we have seen a notable increase in the amount of time spent on improving our safety culture throughout site with an average of 30 toolbox talks, five safety audits and inspections and over 20 'Time Out' submissions each month.

OCCUPATIONAL HEALTH

As important as safety is to our employees and contractors, the health and wellbeing of our employees and contractors is just as important. A healthy workforce, both physically and mentally leads to a more focussed and productive work place, which translates to an improved safety culture and better workplace for all. We have identified several focus areas that we must take an active approach in managing and ensuring that our employees are aware of the importance of these areas to their personal safety and wellbeing not only on site, but for their livelihood.

HEAT STRESS

Heat stress is a major concern related to occupational health in the Gulf region, and especially at Alba. This is because of the extreme heat and humidity during summer in Bahrain combined with the high temperature operating environment of a smelting facility. Heat stress occurs when the body's means of controlling its internal temperature begins to fail. Air temperature, radiant temperature, wind, work rate, humidity and work clothing are all contributing factors that can cause heat stress.

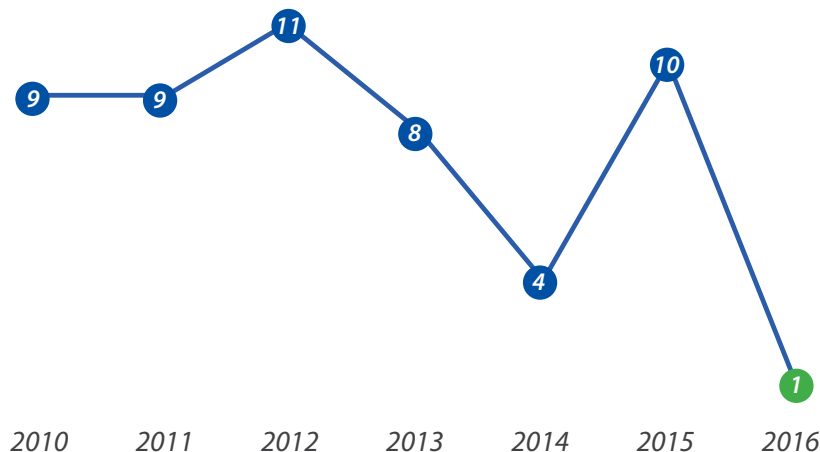
We consider ourselves to be a regional leader in the management of heat stress. Our internal management standard of heat stress complies with both the national standards and recognised leading practice international standards and incorporates the use of the Wet Bulb Globe Temperature (WBGT) index.

The WBGT is an indicator used to measure the effect of heat stress on the human body. It takes into account four contributing environmental factors: the ambient temperature, the radiant temperature, humidity and air speed. It provides the recommended amount of water to be consumed by employees every hour as well as the period of rest to be taken every hour. The WBGT index is measured four times a day and communicated to all supervisors via different communication channels such as emails, display screens throughout the site as well as via the WhatsApp application.

HYDRATION

During the 2016 summer period our industrial hygiene section conducted a 'hydration survey' to observe our employees' readiness for work at the start of their shifts in different departments. Urine samples were obtained from random employees to test hydration levels. Results indicated that a high percentage of our personnel (56 per cent) were dehydrated at the commencement of their shifts. This prompted us to undertake a special initiative to increase awareness on dehydration and the risks relating to heat exhaustion and how to reduce them. An extensive campaign encouraging employees to drink water at the beginning of their shift and during work hours was held throughout the plant. As a result of this awareness campaign, we experienced a significant decrease in the number of heat exhaustion cases with just one case reported during 2016 as compared with ten during 2015.

Number of heat exhaustion cases





HYDROGEN FLUORIDE PERSONAL EXPOSURE SURVEY

Due to the nature of the smelting industry, hydrogen fluoride (HF) and particulates are emitted throughout various processes which involve metal production, transfer and casting. We have introduced a structured and systematic procedure to ensure that employees and contractors exposed to such health hazards are not exposed to concentrations that may lead to acute or chronic occupational illness.

Hydrogen fluoride and total particulate personal exposure monitoring is undertaken annually for each of the reduction lines as well as the cast houses. Recent results of personal exposure conducted in the reduction lines during 2016 confirmed that our potentially affected employees receive less than 30% of the exposure levels established both nationally and internationally as permissible (10 mg/m³ for the total particulate and 2.5 mg/m³ for HF) before any use of personal respiratory protective equipment. Our strict enforcement of the mandatory use of respiratory protective equipment at all times in the reduction lines ensures that our employees are exposed to levels significantly lower than those low levels already present.

Similarly, a biological fluoride survey was conducted for reduction line employees and contractors. The survey, aimed at verifying the effectiveness of the respiratory protective equipment used, demonstrated the importance of this equipment and also evaluated the work practices related to correct use, maintenance and storage of this equipment. Extensive awareness sessions on HF were conducted for all relevant operational departments throughout the year. These sessions increased

awareness and knowledge about the health hazards and their consequences, improved the correct use of personal protective equipment and ensured our employees appreciate the need to reduce HF hazards.

MEDICAL SURVEILLANCE

In addition to our hydrogen fluoride monitoring programme, our medical surveillance programme extends for relevant employees to mercury. We also undertake periodic audiometric testing for those employees working in high frequency areas and areas where noise levels typically exceed 85dB(A).

As part of the pre-employment process, we conduct a baseline medical assessment for all new local and ex-patriate employees prior to their commencement. We build upon this medical baseline through periodic medical assessments every two years for operational employees and every four years for administrative personnel. We also conduct medical assessments for vocational trainees and persons involved in on-the-job training programmes.



IN FOCUS – Improving the health and well-being of our employees

As a world leading aluminium smelter, Alba considers the health and well-being of its employees, their families and neighbouring communities to be critical to our ongoing success. This is demonstrated by our Alba Health Care Centre which has been certified by the National Health Regulatory Authority. Our medical staff is highly trained and as a result, the facility is visited regularly by medical and nursing students from universities and colleges to gain knowledge related to good occupational health practices. There is a total of seventeen medical staff employed in the health care centre with an average of 13,668 walk-in patients per year.

Our health care centre provides general practice medical services and also has an in-house pharmacy, biological testing laboratory, x-ray and a range of other services. Importantly, the Alba Health Care Centre provides 24 hour Emergency Medical Services (EMS) for our employees and to the community in proximity to the smelter. Furthermore, the centre provides basic first aid and medical assistance to walk-in patients from neighbouring companies and residents.

Our highly qualified medical staff conducts and participates in a range of health training and advisory services for the Company including the use of PPE, rehabilitation, general health and safety awareness and EMS response for Alba employees and contractors. The health care centre is fully integrated within Alba and regularly collaborates with other departments including safety, employee services, and

security to provide comprehensive support on a wide array of topics, such as hygiene inspections of the on-site catering services. We also conduct regular blood donation campaigns.

With a sizeable operations team and an upcoming peak construction workforce for Line 6 Expansion Project in excess of 10,000 employees, we take our commitment to communicable disease prevention and management seriously. We have been audited by the Public Health Department for effective notification and control of communicable diseases. Our medical centre provides all necessary vaccinations for all employees, including tetanus, diphtheria, hepatitis A & B, meningitis and vaccines for the Hajj pilgrimage and the seasonal influenza vaccine.

THE ALBA CLUB

Our Alba Club includes a gym and fitness facility as well as swimming pools, lounges, indoor sports courts and even a ten pin bowling complex, which is available for use by our full time employees. Located off site, in Riffa – Buhair, approximately four kilometres north of our site, the club holds regular sporting events and organises team competitions and tournaments as well as providing support services relating to sports health and wellbeing. One of the highlights of each year is the Ramadan Sports Season. For one month at the Alba Club, we held a ten team basketball competition and a 19 team football competition.

On April 28, we celebrated the World Day for Safety and Health at Work by holding walk-in gatherings for employees at all Alba gates at the beginning of the day. Alba Executives and management distributed flyers related to this year's theme 'Workplace Stress: A Collective Challenge', which focussed on current global trends on work-related stress and its overall impact. We also conducted two employee wellbeing campaigns during 2016, both relating to weight loss and improving diet. *Metafit* was a weight loss programme initiated by the Alba Club and is an ongoing programme designed to encourage our Club members reduce their weight over time. *The Biggest Loser*, which is inspired by the popular television programme format was an initiative held in both 2015 and 2016, which provided a target-based weight loss challenge for participants.

WORKING DURING RAMADAN

We recognise the difficulties in working safely in the hot summer months, especially during the Holy month of Ramadan, which requires employees to work under fasting conditions. Management believes in taking extra efforts to support employees during these challenging times and engage in activities that seek to combat such health and safety difficulties. This year, our Ramadan Challenge aimed to raise awareness levels on health and safety habits during Ramadan and the importance of preserving energy during the day while fasting. Safety visits were held by Alba Executives and management, pre-and-post Iftar, in order to boost the employees' morale and ensure that they continue to work safely.

DIVERSITY AND INCLUSION

All employees and contractors are expected to demonstrate behaviours that support diversity and create a collaborative and inclusive work environment. We are confident our workplace has a healthy level of respect, transparency and tolerance, however we remain focused on becoming an even more inclusive and diverse workplace, increasing the representation of women in our business and achieving a better balance of gender in the short-term. Whilst the number of women currently employed at Alba is comparable to most of our peers in the industrial sector operating within the GCC region, we are keen to further increase the proportion of female employees.

We are also committed to developing a more diverse leadership team over time. This will involve mentoring and developing more Bahrainis to ensure they have the capabilities and experience to become our most senior leaders (see Case Study on page 39). As reported earlier, our senior management team constitutes approximately 59 per cent of local Bahraini professionals and Alba is committed to increasing this percentage in the years ahead.

Alba's commitment to a workplace free from discrimination is underpinned by our *Code of Conduct*. Our policy is to provide equal employment opportunity in conformance with all applicable laws and regulations to individuals who are qualified to perform a

particular job. We seek to administer our personnel policies, programmes and practices in a non-discriminatory manner in all aspects of the employment relationship, including recruitment, hiring, work assignment, promotion, transfer, termination, benefits and salary administration and selection for training. Our employees are Alba's greatest assets and therefore all decisions that directly affect an employee's employment status will be fair and equitable.

The *Code of Conduct* states that advancement will be on the basis of merit and performance. Clear and consistent criteria are applied to candidates for vacant posts and the most capable are promoted.

Based on a review of information received via *IntegrityLine*, in 2016, there were no confirmed incidents of discrimination based on race, colour, gender, religion, political opinion, national extraction or social origin.

TRAINING AND DEVELOPMENT

The quality of employees and their development through training and education are major factors in ensuring the sustainability of our business.

Executive and senior management development is a critical part of our leadership strategy, and numerous programmes have been developed and delivered to management candidates with skills for future growth within Alba. Our training modules include Leadership Practices, '360' Feedback Process, advanced public speaking and advanced leadership.

Training courses are available for all employees and illustrate our commitment to improving the competencies of all our staff. Our courses address competency areas such as supervisory management, employee relationships, leadership and influence, change management, problem solving and decision making as well as various team building training modules.

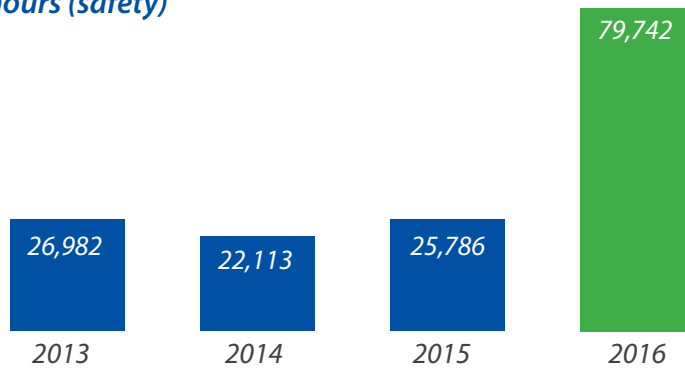
We regularly undertake specialised training programmes in safety, health and environment which include accident investigation, job safety analysis and planned job observation, risk assessment, permit to work and working

at height. Operational and maintenance staff also receive periodic refresher training in competencies tailored to their roles to ensure they keep up their craft job skills. A training needs analysis is performed every year for each department to ensure that our training efforts are targeted to those departments and individuals in most need.

In 2016, we provided 379,201 hours of training to our employees, which equates to an average of 140 hours for each male employee and 252 hours for each female employee.

We also sponsor a number of employees each year in their tertiary education, in particular providing potential future executives with support in obtaining their Masters in Business Administration (MBA). We are a major sponsor of, and participant in, *inJaz Bahrain*, a non-profit organisation that aims at educating and inspiring young Bahrainis to develop their skills (see Case Study on page 39), and the *Crown Prince International Scholarship Programme* (CPISP), which encourages Bahrain's brightest and most talented youth to realise their potential and emerge as future leaders.

Total training hours (safety)



IN FOCUS – Engaging local talent

As a leading employer of Bahrainis, Alba truly believes that the professional development of our staff is the foundation to the successful nationalisation of the Alba workforce. We have a dedicated programme of identifying Bahraini high school and university graduates

who have suitable attributes for employment at Alba. Every year Alba, participates at a Career Expo event organised at national level. Additionally we organise our own Career Expo at the major educational institutes of Bahrain. We have a philosophy of promoting from within the organisation to nurture continuous development of local talent. One of the key drivers behind this growth has been the commitment of our Training Department to providing Bahraini nationals with meaningful training opportunities that help build successful careers and at the same time meeting our goal of operational and technical excellence. Two key initiatives of our training programme are called Mentorship and Field Specialist.

The *Mentorship initiative* is a vocational training programme that aims to train new graduates entering our workforce. It is a modular training programme that includes both theoretical and practical inputs. This training programme utilises local talents from within Alba to provide

on-the-job-training to the trainees. These experienced Alba mentors have been identified as technical experts in their particular field of study and provide site focused job-specific training.

The *Field Specialist* initiative identifies individual personnel to be developed as a field specialist, based on their performance, qualifications and capability. These identified field specialists are fast tracked through their training programmes to enhance their required knowledge, skills and understanding. The training programmes are both internal and external. The external training also includes training provided by vendors for particular operational areas or specific equipment. This training also comprises some train-the-trainer elements. After completing the vendor training, the field specialists are then assigned to train other groups of Alba employees.

Alba's overall engagement of local talent, such as through the Mentorship and Field Specialist initiatives, focus on meeting our internal skill needs whilst also supporting the broader skills development of our workforce, which together helps to achieve our vision and mission.



IN FOCUS – Developing the future generations of leaders at Alba

Leadership development has been one of the most important elements on the training strategy at Alba in recent years.

In 2016, the focus of management development training modules has capitalised

on our in-house expertise. The Executive Management team has delivered a series of training workshops on various topics such as leadership, team work, alignment and strategic planning.

Strengthening the quality of Bahrainisation at all levels is achieved via an intensive programme called the Training Development Programme (TDP). Selected Bahraini employees with high potential are identified and then trained to become future leaders, taking up higher management positions. Currently, a total of 84 employees are undergoing different targeted TDP courses for higher management positions.

The increased focus on leadership training is demonstrated by an almost ten-fold increase in training hours between 2013 and 2016. An important aspect of our leadership development is the MBA programme, the objective of which is the overall professional development of Bahrainis. A number of employees have been selected to pursue their Masters of Business Administration (MBA). In 2016, 34 of these employees graduated with an MBA, 14 employees will graduate in 2017 and seven employees will graduate in 2018.

Additional leadership initiatives include:

- Leadership and Influence - Based on General Colin Powell Leadership Style
- Workshop on "High Impact Leadership".
- High Performance Leadership Training
- Industrial and Employee Relationship
- Supervisory Management Development
- Public Speaking.

An example of the success of our leadership training is Mr. Fuad A. Hussain, an employee from the Calciner & Marine plant. He joined Alba in 1992 as Grade-6 Operator in the Power Operation Department. Today, he heads the Calciner & Marine Operations & Maintenance business unit as its Manager, responsible for 123 employees. Mr Hussain was offered a position in the TDP after gaining promotion to Supervisor in the Desalination plant in 2004. His career development growth was fast-tracked after identifying his management potential.



Our on-site vegetable garden is approximately two hectares in area and contains many types of vegetables and Bahraini local fruit trees.



ENVIRONMENT

We are one of the world's largest single aluminium producers and generate over 971,000 metric tonnes of aluminium product each year. As a result of this breakthrough production, our consumption of raw materials is also significant. During 2016, we used over 1,786,000 tonnes of alumina, approximately 540,000 tonnes of anode blocks and over 18,800 tonnes of aluminium fluoride (AlF₃). The substantial volumes of these raw materials, combined with the high energy requirements of the aluminium smelting process means that our inherent impact on the environment is significant.

Through our SHE Management System, we have identified our major environmental impacts and aspects, developed controls to manage and mitigate these potential impacts and implemented improvement plans and initiatives across the site. We monitor and measure our environmental performance to ensure that our inherent environmental risks are mitigated and any adverse impacts on the environment from our activities are minimised.

We are a member of the Industrial Environmental Network Committee consisting of members from the major industries in Bahrain wherein the objective is to discuss and share latest environmental developments in each company, national developments that could affect the companies as well as various challenges and opportunities.

We also participate in national workshops on the environment including the Strategic Approach to International Chemicals Management (SAICM) and Naturally Occurring Radioactive Materials, arranged by the Supreme Council of Environment, both of which highlight environmental health.

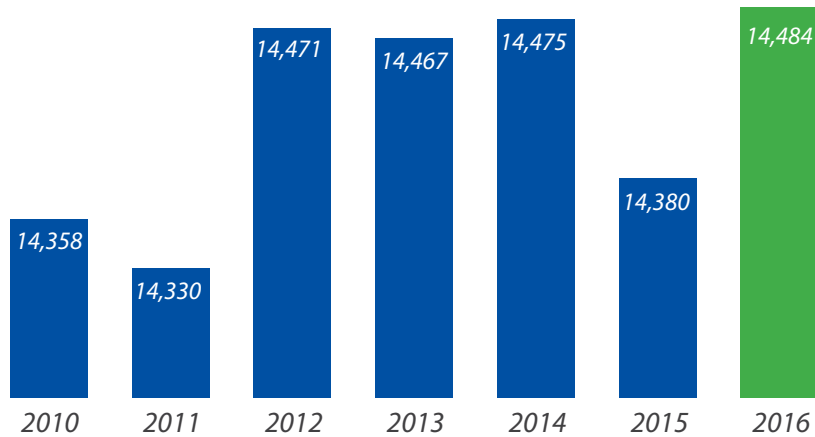


ENERGY

We currently have four power stations on site which provide a capacity of over 2.2 Gigawatts of reliable electricity to meet the energy requirements for our operations. We are connected to the national electricity grid and can export or import electricity if this is required. In 2016, we exported 111,519 megawatt hours (MWh) of electricity and imported 114,959 MWh of electricity. During 2016, our natural gas-fired power stations generated 14,260,269 MWh of electricity using 129 petajoules (PJ) of natural gas for the use by Alba. A fifth power station is currently under construction and will provide the additional 858 megawatts for the Line 6 Expansion Project once full production is fully ramped-up by mid-2019.

Our energy intensity³ in 2016 was 14.48 kilowatt hours per kilogram of aluminium produced (kWh/kg Al), a marginal increase up from 14.38 kWh/kg Al in 2015. Our average energy intensity since 2010 is 14.42 kWh/kg Al which demonstrates the ongoing efficiency of our facility as it is below the generally accepted global average of 15 kWh/kg Al for what is considered an efficient aluminium smelter.

³ Alba defines its energy intensity as the energy used in the pot lines and pot line auxiliary functions divided by the total hot metal produced (tonnes).

Energy used (kWh) per kg Al

We are consistently seeking opportunities to improve the overall energy efficiency of both the power station facilities and our production plant. In order to maximise the availability of energy from the natural gas we use to generate power, we utilise the waste heat generated in the gas turbines. Known as combined cycle technology, the exhaust gases are used in turn to generate steam in boilers for the production of additional electricity via steam turbines.

With the Line 6 Expansion Project currently under construction, maximising energy efficiency has been an inherent and integrated component of the design and construction process. In February 2016, Alba announced a partnership with Emirates Global Aluminium (EGA) to implement an ultra-efficient proprietary smelting technology into the Line 6 Project. Known as *DX+ Ultra*, this technology allows for a lower voltage requirement combined with higher amperage which in turn will provide a lower energy cost per tonne of aluminium.

DX+ Ultra also allows enhancements to the overall design of the cell to enable shorter pot-to-pot distance which in turn translates into lower construction and operating costs; therefore higher production per building surface area. *DX+ Ultra* cells are designed to operate at above 440 kA with specific energy consumption of less than or equal to 12.5 kWh/kg Al, making it the most efficient cell technology in the world today.

The new power station (Power Station 5: H Class Technology) will consist of three gas turbines and three steam turbines and will be one of the most efficient power stations in the world. It will also be the largest power station in the Kingdom of Bahrain.



As of December 2016, earthworks were nearing completion for the Line 6 Expansion Project.



IN FOCUS – Continually improving our energy efficiency

Alba is Bahrain's single largest consumer of electricity and as a single-site operation, one of the largest electricity users in the Gulf region. It makes both economic and environmental sense to reduce our overall energy consumption as best we can, without sacrificing our ability to produce high-grade aluminium products nor jeopardise the reliability of our energy supply in any way.

We have a number of ongoing energy efficiency improvements targeted towards our energy intensive equipment. We are regularly migrating our existing systems to the latest upgrades available for the gas turbines in Power Station 3 and 4 to ensure ongoing improvements in efficiency, reliability and output. We are constantly replacing worn or faulty equipment with new and more efficient technology. Our technical specialists are constantly reviewing the applicability and potential efficiency benefits from third-party providers throughout the world, as well as learning from our industry peers on how to better manage efficiency and energy load.

Some of our larger scale energy efficiency initiatives include:

- Installation of fogging systems for the cooling gas turbine inlet air intake;
- Using slotted anodes;
- Increase of stub hole depths;
- Increasing anode size;
- Elimination of natural gas for pot pre-heating;
- Upgrading existing pot control systems;

- Piloting 'dry start-up' of pots; and,
- Installation of current compensation loops to improve magnetic balance of pots.

We are confident that we will achieve an eight megawatt (8MW) savings from our potlines in 2017 as a result of these initiatives plus an additional 4MW savings from our auxiliary systems.

Project Tesla, another project that compliments Project Titan (refer page 26), comprises a five year energy optimisation project that aims at reducing our overall energy consumption by five per cent, which will equate to an annual cost saving of approximately USD 30 million. Project Tesla has five key focus areas where specific teams will be assembled and tasked to reduced overall energy consumption and in turn increase our energy efficiency. These five areas are:

- 1 - Increase power station efficiency
- 2 - Reduce aluminium pot-specific energy consumption
- 3 - Identify sources of excessive or improper use of compressed air
- 4 - Reduce specific gas consumption at the kiln and cast house operations
- 5 - Reduce energy consumption for auxiliary functions.

In addition, we have a number of process improvement initiatives under our Six Sigma programme that also support these five focus areas. The identification and implementation of efficiency initiatives has not been restricted to our plant area, but has also included our administrative and ancillary buildings. In these areas we have made modifications to air conditioner settings, reduced the overall number of overhead lights and where possible have converted existing fluorescent lights with significantly more efficient light emitting diode (LED) technology.

AIR EMISSIONS

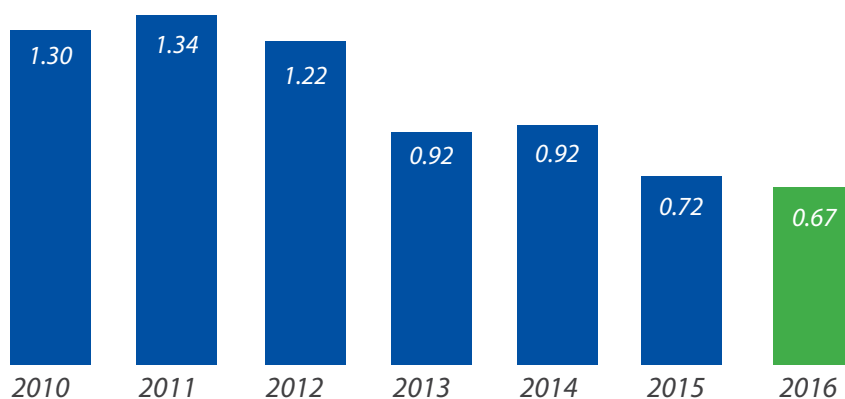
Our primary activity of smelting aluminium in one of the world's largest smelters results in the release of gases and particulate matter into the atmosphere. Alba is regulated by discharge licences and associated concentration criteria determined and administrated by the Bahraini Supreme Council of Environment. We are consistently assessing our emissions profile and identifying opportunities to minimise our overall emissions profiles. Importantly we recognise the importance of protecting human and ecological health and also need to understand our contribution to the overall air shed of Bahrain and the surrounding region.

Fluoride emissions are one of our most significant discharges to atmosphere and are controlled by minimising fugitive emissions from the reduction cells and through the scrubbing of fluoride in Fume Treatment Plants (FTPs) and Gas Treatment Centres (GTCs). Recovered fluoride is also recycled back into the production process. We have implemented a continuous monitoring system which utilises leading practice laser optic devices in selected areas to enable the immediate intervention of operations if an abnormality is detected. Manual emissions sampling is also undertaken monthly and quarterly by a dedicated environmental monitoring group for the measurement and analysis of the required environmental parameters, following international approved standards and practices. Samples of these tests are audited by the Supreme Council of Environment – the environmental regulator in the Kingdom of Bahrain.

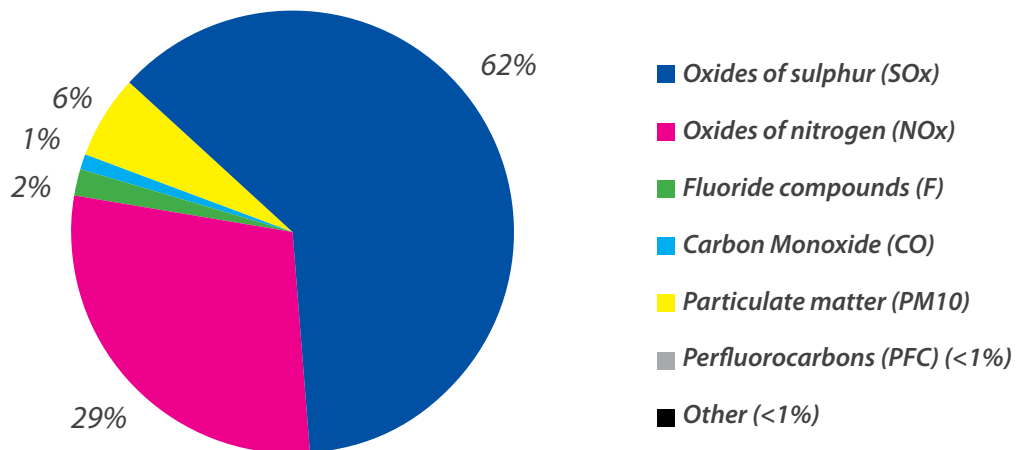
We also undertake visual environmental inspections of our potlines every month. Our fluoride emissions in 2016 totalled 646,802 kilograms (kg) which equates to 0.67 kilograms per tonne of aluminium produced, which is comparable to most of our peers internationally. This continues a consistent decreasing trend in fluoride emission intensity and illustrates the success Alba is achieving with the initiatives implemented in fluoride control and recovery.

Fluoride is not the only significant pollutant type we discharge to atmosphere. We also monitor and manage oxides of nitrogen (NO_x), oxides of sulphur (SO_x), carbon monoxide (CO), total particulate matter, perfluorocarbons (PFC) and volatile organic compounds (VOCs). We constantly are monitoring and calculating these emissions to ensure we are compliant with our environmental obligations and to ensure over time a progressive decrease in the discharge quantities. In future sustainability reports, as we commence the tracking of these emission types, we will present year on year data of our performance much in the same way as we have done in this report for fluoride. We are also progressively identifying and implementing efficiency improvements where economically feasible. Over the past 15 years, we have invested over USD 500 million in environmental protection initiatives, with most of this investment on engineering controls to virtually eliminate all dust and fugitive emissions from all production areas.

Fluoride emissions (kg) per tonne aluminium



Emissions to air by type



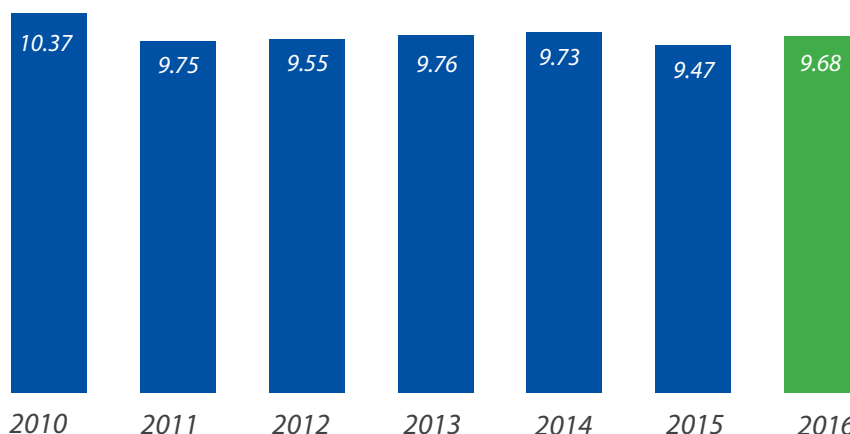
Over the past few years, we have also retrofitted many of the gas turbines within the power stations to low NOx burner technology.

Our total greenhouse gas emissions for 2016 were 9,405,346 tonnes carbon dioxide equivalent (t CO₂ eq.). Our greenhouse gas emissions intensity increased during 2016 compared with previous years. We emitted 9.68 tonnes of carbon dioxide equivalent (t CO₂ eq.) during 2016 per tonne of aluminium, which is an increase up from 9.47 t CO₂ eq. in 2015. This increase was primarily due to an increase in the emissions of PFCs that have resulted from the changes associated with the use of an increased current in the potlines and in transitioning to a new control system.

WATER

Operating in an arid environment such as Bahrain, Alba appreciates the importance of water conservation and reducing unnecessary water consumption wherever possible. Our operations rely on the consistent provision of water of a particular quality. Approximately 99 percent of all our fresh water requirements are provided via our on-site desalination plant whilst groundwater comprises the remaining one percent. The desalination plant uses sea water abstracted from an adjacent coastal location and sea water is also used as cooling water throughout the plant.

Greenhouse gas emissions (tCO₂ eq.) per tonne aluminium

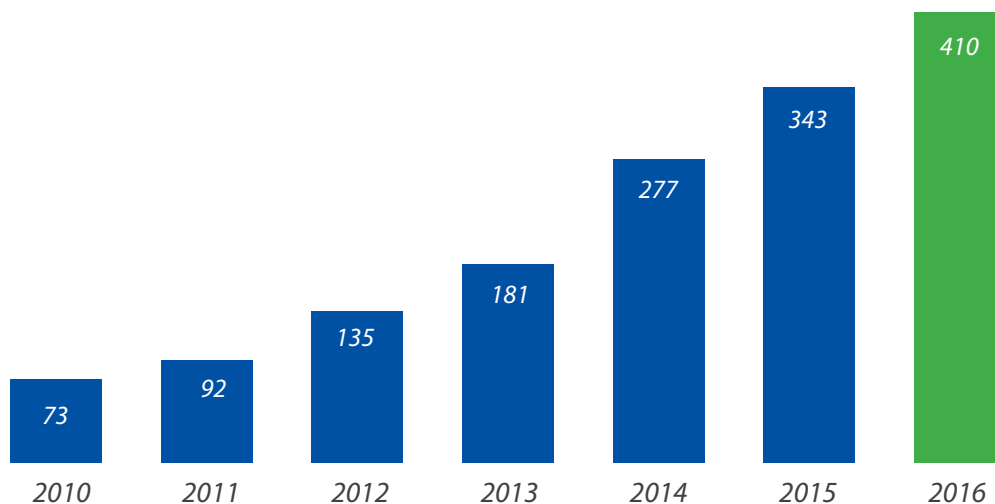


Steam generated from the calcination process is captured and used to generate potable water. Our desalination plant also provides potable water for many businesses throughout Bahrain and is distributed by the Bahrain Electricity & Water Authority. All water from our desalination plant conforms to the World Health Organisation (WHO) Guidelines for Drinking Water Quality. Our desalination plant is designed to produce approximately 430 megalitres (ML) per day with up to 85 per cent of this volume provided to the surrounding residential and industrial areas. The pH and temperature are monitored online and brine (salt) water tested every three months to ensure the quality of the water complies with the parameters as specified by the environmental authority.

In 2016, our desalination plant used 98,401 megalitres (ML) of sea water and 1,127 ML of groundwater. The amount of water we recycled during 2016 was 410 ML.

All blowdown water from cooling towers, air compressor stations and waste heat boilers is treated and reused for on-site irrigation, whilst approximately 80 percent of treated sewage water is re-used for irrigation on site. Over 150 megalitres are used each year for irrigation of the gardens throughout our site, as well as ensuring our artificial lagoon on site remains full. Our artificial lagoon is an important habitat for migratory birds, turtles and other aquatic species (refer Case Study on page 49).

Total water recycled (ML)

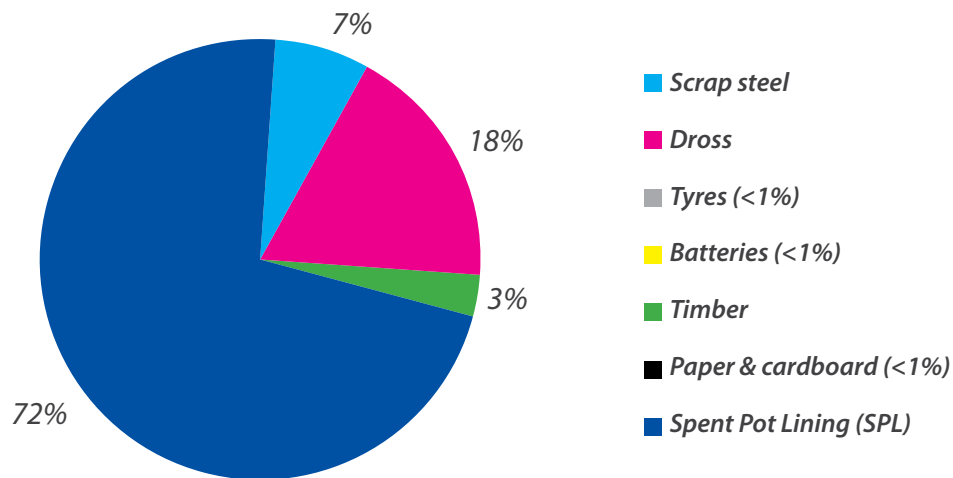


WASTE AND RECYCLING

Our smelting process and our ancillary facilities and activities all generate a variety of both solid and liquid waste types. We recycle as many waste types and as much of these wastes as we can. These waste types include steel, carbon, dross, timber, tyres and cardboard. In 2016, we generated a total of 44,818 tonnes of waste, of which 38,203 tonnes (approximately 85 percent) was recycled. Importantly, Spent Pot Lining (SPL), which is one of the more hazardous waste types we generate, is partly recycled (27,302 tonnes generated in 2016) by other industries, with the remainder disposed in a government owned industrial waste landfill dedicated for the disposal of hazardous waste.

We have acknowledged that the capacity of this existing landfill facility is diminishing at a pronounced rate and with no other viable disposal option currently available within Bahrain, we are examining other disposal options and possibilities. Options currently under investigation include the potential recycling of SPL in collaboration with other industries both locally and abroad, including the cement and steel industries. SPL is highly alkaline and therefore corrosive and also has additional chemical properties that makes long-term storage and disposal difficult. By eliminating SPL storage and the need for disposal on site, Alba has significantly reduced its overall environmental risk profile and in turn implemented a cleaner and more environmentally sound aluminium smelting process.

Solid waste recycled by type



We generate a significant volume of liquid waste as part of the smelting process as well as from our ancillary facilities and activities. Liquid wastes generated include oil, oily water, process wastes and effluent. In 2016 we generated 89,837 megalitres (ML) of liquid wastes, of which approximately 85 percent is discharged waste water from the aluminium and calciner plants. The other major wastewater discharges from the plant, which are routinely monitored include the cast house cooling water blow down (which is discharged to our lake), pit effluent, Reverse Osmosis (RO) plant reject water, and the domestic wastewater from the plant offices and cafeteria, which is treated by our sewage treatment plants, which treats the water prior to use on site for irrigation.

ENVIRONMENTAL COMPLIANCE

As part of our SHE Management System, we have identified all applicable environmental legal and other requirements and have established procedures to ensure that we comply with the obligations in our Register of Regulations. During 2016 we had four incidents where SO₂ emissions from our carbon anode baking kilns marginally exceeded above our legal emissions limit for these discharge points.

We received no environmental fines and/or prosecutions throughout 2016 and did not receive any formal community complaints relating to environment issues or incidents.

We had no significant spills to land or water during 2016.



IN FOCUS – Creating an oasis

Amidst the hot, sandy and arid environment that is typical in this part of the world, we are proud of an oasis we can call our own. Alba has developed one of the country's largest green open spaces and one of the largest such features in Bahrain. *Alba's Her Royal Highness Princess Sabeeka Oasis* was established in 2005, (inaugurated in 2009) and is a major feature of our site and something of which we are very proud. This oasis area extends 13 hectares and includes over 15,000 trees including many types of fruit trees and an artificial lake, which is one of the largest in Bahrain.

The oasis is divided into an aquatic area, a landscaped area and vegetable garden. The aquatic area cover comprises an artificial lake which is one of the largest artificial lakes in Bahrain, with an area of approximately 10,000 square metres and holds over 22,000 cubic metres of water. The lake is supplied with surplus water from the aluminium mould cooling process as well as fresh water from the calciner plant. The lake is home to a number of different terrestrial, aquatic and amphibious species – including a variety of freshwater fish, ducks, turtles and frogs. This lake provides valuable habitat for migratory birds including flamingos, hoopoes and gulls. In addition to the artificial lake, a natural lake with an area of 3,500 square metres makes up the remainder of the aquatic area of the oasis. This body of water is primarily used for irrigation. The water passes through a filtration and purification system and water in both lakes is regularly tested for metals and pH, and a waterfall and several fountains

have also been incorporated to provide better water circulation and oxygenation.

The greenery area is approximately 10 hectares in area and over 300 metres in length and contains a variety of tree and shrub species including *Sesbania*, *Cordia*, *Oleander* and *Plumeria* species, as well as hundreds of palm trees.

The vegetable garden is approximately two hectares in area and contains many types of vegetables and Bahraini local fruit trees. We have recently erected five new greenhouses in the garden and use several irrigation methods such as drip irrigation, along with the traditional method of water immersion typically used in Bahraini farms. Various types of vegetables are planted in the garden for every season including broccoli, radish, onion, strawberry, cauliflower, cabbage, eggplant, lettuce, carrot, spinach and tomato during the winter, and cucumber, squash, melon, okra, sweet potato, pomegranates, almonds and berries during summer. All fruit and vegetables grown in the garden are distributed to our employees regularly. We estimate that over 12 tonnes of produce is grown in our garden every year.

For more information on our vegetation projects, please refer to our brochure 'The Green Side of Alba' which is available here:

<http://www.albasmelter.com/investments/Environment/Documents/TheGreenSideofAlba.pdf>

We reaffirmed our commitment towards a greener Bahrain by supporting and participating in the Bahrain International Garden Show 2016 held in February at the Bahrain International Convention and Exhibition Centre. The theme for this year's show was tree care highlighting the best practices to preserve, sustain, and increase the productivity of trees. Our stand at the show, which was awarded third place for the best overall stand, highlighted our agricultural achievements on site including a showcasing of the vegetables and fruits grown in our vegetable garden.





Collaboration and communication are critical in improving our safety culture.

OUR STAKEHOLDERS

OUR LOCAL COMMUNITY

The Alba smelter and our associated facilities are located in the Southern Governorate of Bahrain, in the Askar Industrial Area. The Southern Governorate has the largest area, yet the smallest population of the four governorates in Bahrain (estimated to be around 250,000 persons). Our footprint in the Askar Industrial Area is approximately 1.2 square kilometres. Other heavy industries are also located in this area and there are no residential buildings situated in this industrial area.

Our nearest neighbours include the village of Askar which is approximately three kilometres to the south-west of our facility, whilst Ma'ameer village is located approximately three kilometres to the north-east. Both these village areas have populations of approximately 1,000 residents each. Riffa is approximately ten kilometres to the north of the facility and is the second largest residential area in Bahrain with a population estimated at more than 120,000.

Our employees are situated all over the Kingdom and as such we provide a bus service for all non-supervisory employees which services all main residential areas throughout Bahrain.

EXTERNAL STAKEHOLDERS AND ENGAGEMENT

As the Alba facility has been in operation since 1971, we have a long history of engagement with a range of external stakeholders. A non-exhaustive summary list of our key external stakeholders is as follows:

GOVERNMENT

- Bahrain Ministry of Industry and Commerce
- Bahrain Ministry of Labor
- Bahrain Ministry of Education
- Bahrain Ministry of Works
- Bahrain Ministry of Interior (including General Director of Traffic)
- Bahrain Electricity and Water Authority
- Bahrain Ministry of Transportation
- The Supreme Council for Environment
- Civil Aviation Authority of Bahrain
- Southern Governorate and Municipality

- Bahrain Authority for Culture and Antiquities
- Supreme Council of Women

FINANCIAL

- Central Bank of Bahrain
- Bahrain Bourse (Bahraini Stock Exchange) and shareholders
- Customers (Alba clientele)
- Bahrain Mumtalakat Holding Company
- SABIC Industrial Investment Company
- Bahrain Economic Development Board
- Bahrain Chamber of Commerce and Industry
- Arab Forum of Environment and Development (AFED)
- American Chamber of Commerce Bahrain

INDIVIDUALS

- Employees and families
- Residential areas near Alba site (including Askar, Ma'ameer and Riffa)

EDUCATION AND TRAINING

- University of Bahrain
- Bahrain Training Institute
- Bahrain Society for Training and Development

CIVIL SOCIETY

- inJaz Bahrain (a member of Junior Achievement Worldwide)
- Bahrain Management Society
- Bahrain Business Women's Society
- Tamkeen

BUSINESS AND COMMERCIAL

- National Oil and Gas Authority (NOGA)
- Bahrain Petroleum Company (Bapco)
- Bahrain International Circuit
- EPCM Contractor (Line 6 project – Bechtel)
- Technical provider Emirates Global Aluminium (EGA)
- EPC Contractor (Power Station 5 – General Electric (GE) and GAMA Consortium)
- EPC Contractor (Power Distribution Services, Line 6 project – Siemens)

INDUSTRY AND PROFESSIONAL ASSOCIATIONS

- Bahrain Occupational Health and Safety Council

- Royal Society for the Prevention of Accidents (ROSPA)
- Bahrain Society of Engineers
- Various aluminium associations (the Aluminium Association, the Gulf Aluminium Council and the International Aluminium Institute (IAI)).
- International Safety Council
- Royal Society for the Prevention of Accidents (ROSPA)

In accordance with existing Bahraini practices, our direct engagement with external stakeholders is largely focused on government authorities responsible for regulating the Alba operations. We conduct regular meetings with key authorities and also provide a range of formal and informal reports to different agencies as required by our permits and plans each year.

It is the responsibility of the governing authorities in Bahrain to engage with citizens on our operations and any new developments. In particular, we coordinate with the Supreme Council of Environment to conduct all environmental permitting consultation with the public and to address any issues or concerns that may arise with local communities. Our direct engagement with the community is therefore currently focused on the provision of community support services (for example health services) and corporate social responsibility initiatives such as sponsorships and other community investments.

We regularly release media statements about our key activities, milestones and achievements to the public through a range of local, regional and international publications as well as on our website. We also provide these press releases and other updates on our social media channels (including *Twitter*, *Facebook*, *Instagram*, *Flickr* and *Periscope*). Our press releases are provided in both Arabic and English.

As part of the environmental permitting process for approval of the Line 6 Expansion Project, a range of disclosures and consultations were made by Alba to the relevant authorities between 2010 and 2015. This included the presentation of an Environmental Scoping

Report and Environmental and Social Impact Assessment (ESIA). Facilitated by the Supreme Council of Environment, relevant community stakeholder meetings were held to present and discuss the results of the ESIA in late 2015.

As there will be substantial construction activities and several thousand workers at site for the Line 6 construction starting in 2017, we understand that we will need to further engage our nearest neighbours on the Line 6 Expansion Project. We are committed to ensuring that we engage with local communities on procedures to maximise local employment and business opportunities during the Line 6 Expansion Project. The influx of workers into the local area from elsewhere in Bahrain and regionally in the Middle East during construction will also be a topic of interest to many stakeholders. Other potential social and environmental topics of ongoing engagement with local communities and other stakeholders during construction will likely include traffic and transport, environmental conditions and community health, safety and well-being.

We have commenced a revision of our existing stakeholder engagement processes to achieve these commitments and to better align with international good business practices for large industrial facilities and major development projects. To this end, in 2017 we will prepare a Stakeholder Engagement Plan for the existing operation and the Line 6 Expansion Project. This plan will be aligned to relevant international standards for stakeholder engagement including the *International Finance Corporation (IFC) Performance Standard 1: Assessment and Management of Environmental and Social Risks and Impacts* (and the associated guidance note and handbook).



COMMUNITY SUPPORT AND INVESTMENT

Over more than 40 years in operation, the Alba smelter has been an integral part of the local community. Under our operational agreements with the Kingdom of Bahrain, we directly fund and support a range of community services in the local area, a number of which have been discussed in this Report. Our direct financial contributions to the local community during 2016 totalled approximately BD 861,000.

Our community investment activities are generally divided into three categories which are: local communities; aluminium industry; and local and national sports. We have a range of regular sponsorships such as financial support for local and regional football teams, as well as other community investments for other sporting and cultural events.

As we further expand and become the world's largest aluminium smelter, we intend to continuously improve our approach to community support and investments. This will include further formalising our current strategy to ensure it is line with expected international practices and meets both Alba's business needs and the needs of our host communities and other stakeholders. The focus of our community support and investments in the future will be on those most affected by our operations, including our nearest neighbours, resident workers and their families.



IN FOCUS – Breast cancer awareness campaign

In October 2016, Alba supported a range of activities to promote International Breast Cancer Month. Alba held a "Think Pink" walkathon on October 17 around the smelter where employees across the Company participated to demonstrate their support towards breast cancer awareness and to raise funds for diagnosis, prevention and cure.

On October 20, a health awareness session was conducted by Dr. Farah Al Nuaimy, Consultant Obstetrics & Gynaecology and Infertility at King Adullah Medical City for Alba Ladies. Subjects such as early detection, stages of breast cancer, treatment options and overall health for women were discussed.

Alba is committed to continuously improving the welfare of its employees and their families by supporting important health campaigns and raising awareness on challenging diseases such as breast cancer. Alba has been actively conducting breast cancer awareness month activities for the past five years. Alba provided gifts and free screening tests for its female employees to mark the Breast Cancer awareness month. The total cost of gifts was BD300 – presented to Bahrain Cancer Society as support, whilst the total screening tests cost was BD 900. These were coordinated with a local private hospital.



OUR SUPPLY CHAIN

Alba is committed to the safe and environmentally responsible management of our products from the purchase and use of raw materials through to the manufacture of our products and the distribution of our products throughout the world to our customers.

Our supply chain includes the supply of raw materials including alumina, coke, liquid pitch and aluminium fluoride, the storage and handling of our products and the distribution of our products to customers worldwide.

The management of our supply chain is governed by our Quality Management System (QMS) and our Environment Management System (EMS) which are in conformance with the International Standards ISO9001 (2015) and ISO14001 (2015) respectively. All of our suppliers are expected to act with integrity at all times and in accordance with our ethical positions, including our anti-bribery and anti-corruption frameworks.

Driving continual improvement is part of Alba's core business. We regularly review our policies and procedures which are amended when required to increase transparency and ensure ongoing fairness. We undertake internal and external audits regularly to monitor compliance of our suppliers with Alba policies and procedures. Using our advanced electronic document archiving system we track approvals, shipping and delivery of all materials. Alba pre-qualifies all its vendors before any ongoing business relationship is established between the two parties.

We are supportive to industries and suppliers in the Kingdom of Bahrain and in turn our policy is to support the welfare of the Kingdom of Bahrain and source manufactured or traded products within the country where commercially possible. We have entered into formal contract supply agreements with major suppliers and we promote the establishment of similar contracts for regularly required materials. All procurement is managed via a well-established competitive tendering process. Currently we engage nearly 1,500 vendors in the provision of goods and services, of which 50 per cent are local.

Some surplus raw materials are on sold to other customers including calcined coke and potable water from our desalination plant. A specific breakdown of our operating procurement expenditure for 2016 on goods and services, including major raw materials is provided in our **2016 Annual Report**.

In recent years, we have been improving our understanding of both the positive and negative impacts our supply chain has on the environment, the local economy, employee and public health and safety as well as ensuring that minimum standards on labour and human rights are achieved.

Regular customer surveys enable us to continuously improve and customise our products and services. When first engaging with new clients we have a careful evaluation of their needs in order to select the right product that is fit for their purpose. This continues to be supported by adhering to the ISO 9001 (2015) standard in production and services.

In addition we ensure compliance with the European Union REACH directives (EC1907/2006) on chemicals and their safe use, issuing relevant product data sheets. We also follow guidelines such as the Dodd-Frank Act Section 1502 concerning the ban on conflict minerals in our production.

Furthermore we provide training and technical support to a wide variety of clients for the safe and efficient use of our value-added cast house products, and share in the Alba Best Practice on Health & Safety initiatives and communications.

Our aluminium products contribute to the overall concept of sustainable development as all our products are 100 per cent recyclable and can be used and re-used in the years and decades ahead.

WORKING CLOSER WITH OUR CUSTOMERS

We are committed to and play an important role to improve customer satisfaction and strengthen business ties with the leading aluminium downstream industries and other aluminium smelters in the Gulf region by sharing knowledge, which we consider vital for future business growth opportunities.

During 2016, we held sessions with a number of our customers to seek areas of mutual cooperation, explore strategic growth opportunities and share knowledge and experience on workplace safety. In November we hosted separate delegations from Garmco, Sohar Aluminium and Kobe Steel (Japan) to focus on health, safety and environmental performance, as well as providing an overview of our quality control processes.

We also held safety-focussed discussions with Aluminium Products Company (ALUPCO) in Dammam and Jeddah, Saudi Arabia. Alba also had a strong presence at Global Aluminium Council (GAC) conferences and seminars throughout 2016 and was a key participant at the World Trade Fair and Conference, held in Dusseldorf, Germany.

PRIORITIES FOR 2017

We had some significant achievements during 2016 as we have highlighted throughout this Report, however 2017 will provide a number of challenges, opportunities and priorities for our management team.

Our number one priority for next year, and an area which will always remain a top priority is the health and safety of our employees. We will continue to deliver our safety focussed campaigns and build upon the significant increases achieved in the training provided to our employees and contractors. Although we have seen gradual improvement in the reduction of lost time injuries, one injury is still too many and we will again prioritise our safety management programme to deliver our comprehensive array of initiatives and programmes.

We acknowledge the implications that greenhouse gas emissions from energy consumption have on climate change, and we appreciate that as a significant user of energy our responsibilities in energy reduction and improving efficiencies must continue. We also acknowledge our responsibility to reduce consumption of resources wherever possible, and in 2017 we will continue to build upon the achievements made so far in reducing materials sent to landfill and to increase the amount of material we re-use or recycle. One specific environmental priority which we will continue to undertake during 2017 is our investigation into alternative options for the safe disposal of spent pot lining (SPL). The capacity of the existing landfill facility in Bahrain is diminishing at a pronounced rate and with no other viable disposal option currently available within Bahrain, we must look at other alternatives.

Management of the Line 6 Expansion Project is about to become more complex and challenging for us as we enter the construction phase. Several thousand contractor personnel will commence work in early 2017 on the physical infrastructure of the project including construction and assemblage of the potlines and Power Station #5. The workforce will be managed to minimise impacts to the community from their presence and there will be regular engagement between Alba and the community to ensure that any concerns with the construction phase and our workers are promptly and appropriately managed.

We also understand the need to engage effectively with our local community on an ongoing basis and as such, we will be revising and improving our stakeholder engagement procedures and have commenced this process by preparing a Stakeholder Engagement Plan. We acknowledge that we need to better align our community engagement and investment processes with business practices typical of large industrial facilities and major development projects, and in turn become an even better corporate citizen of the Kingdom of Bahrain.

We will also continue to produce this Report each year. Next year we will endeavour to build upon the important achievement that this Report represents by providing additional year on year trend and performance data as these become available to us and as our non-financial reporting processes mature.

*Our journey towards a more
sustainable business continues
into 2017 and well beyond.*



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Our 2016 and past Annual Reports are available at:

<http://www.albasmelter.com/IR/Publications/Pages/default.aspx>

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Printed in Bahrain.