

20 SUSTAINABILITY 20 REPORT



ABOUT THIS REPORT

This sustainability report (SR) provides reporting on the Company's environmental, social and governance performance. The Company last issued a formal annual sustainability report in 2016, while using KPI dashboards and other internal reports to track its sustainability performance and provide information to its stakeholders in the intervening period.

As the Company's stakeholders has grown in recent years, the Company has decided to resume its sustainability reporting through a formal annual report. Qatalum is committed to the circulation of an Annual Sustainability Report on its webpage that will be available to the general public.

Our Approach

Sustainable Aluminium

Sustainability requires solutions that meet the needs of the present without compromising the ability of future generations to meet their needs. The environmental challenges that the planet is now facing, such as climate change, loss of biodiversity, desertification, diminution of resources, pollution and pandemics, among others, have established the need for a new paradigm for human civilization. Sustainable industrial practices are required to support the health and wellbeing of the planet and to provide the opportunity for future generations to flourish.

Aluminium, as a material and an industry, has an important role in creating this sustainable future of opportunities. Strong, lightweight and highly recyclable, the use of aluminium contributes to lower energy costs and carbon emissions in a variety of applications in the modern world.

However, the process in which aluminium is produced has an environmental footprint that must be carefully managed. The Company's is committed to finding sustainable ways of producing aluminium and to minimize that environmental impact by maximizing production efficiency and effectively reducing, reusing and recovering process wastes.

Qatar National Vision

Qatar's National Vision aims that – by 2030 – Qatar becomes an advanced society capable of sustaining its development and providing a high standard of living for its people. Qatar's National Vision defines the long-term goals for the country and provides a framework in which national strategies and implementation plans can be developed.

The Company ensure that its goals are in alignment with Qatar National Vision 2030 and makes multi-faceted contributions in ever greater aspects of Qatar's development. The key points of alignment of the Company's sustainability framework and the four (4) pillars of Qatar National Vision 2030 as shown in the following figure:



Figure 1. Four Pillars of Qatar National Vision 2030

GOVERNANCE

The Qatalum Board of Directors (BoD) is the Company's highest governance body with its members appointed by the Company's shareholders based on their knowledge, expertise and leadership competencies.

No. Board of Directors by Gender

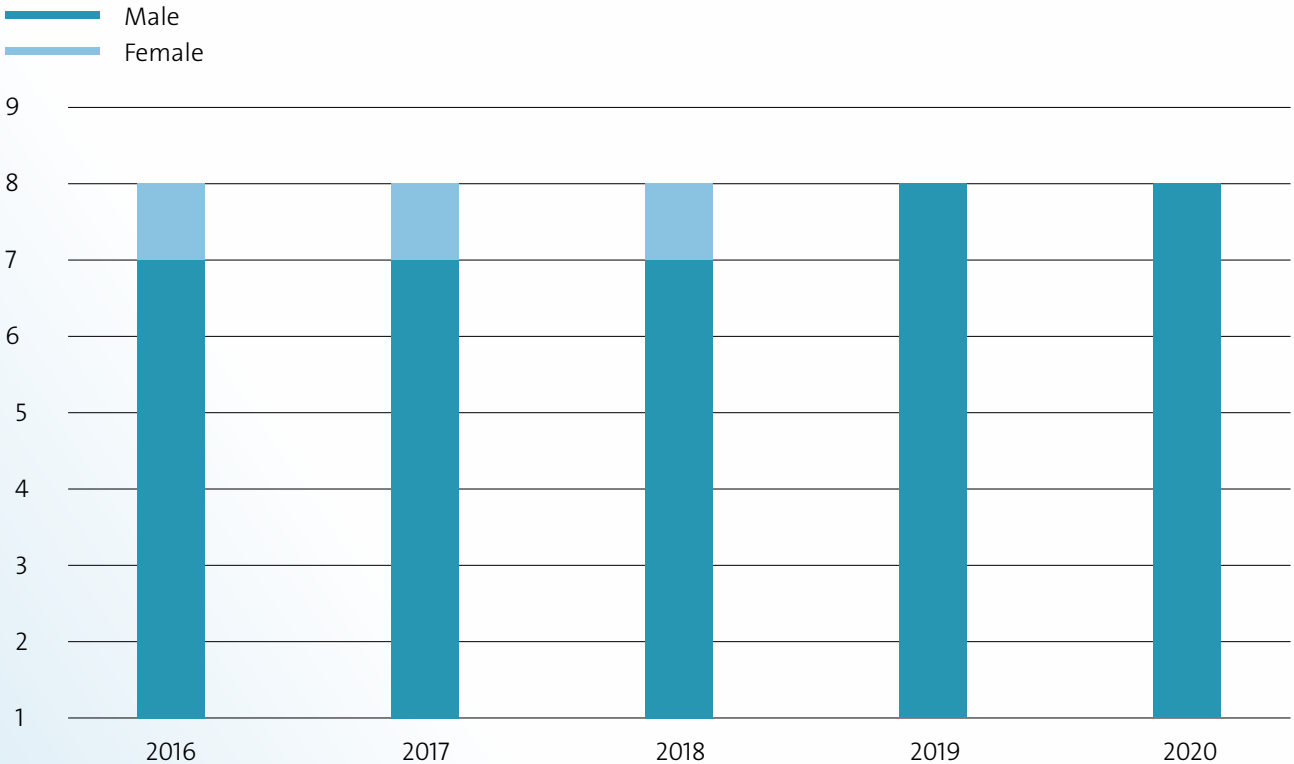


Figure 2. Number of Board of Directors

Board of Directors breakdown by age group

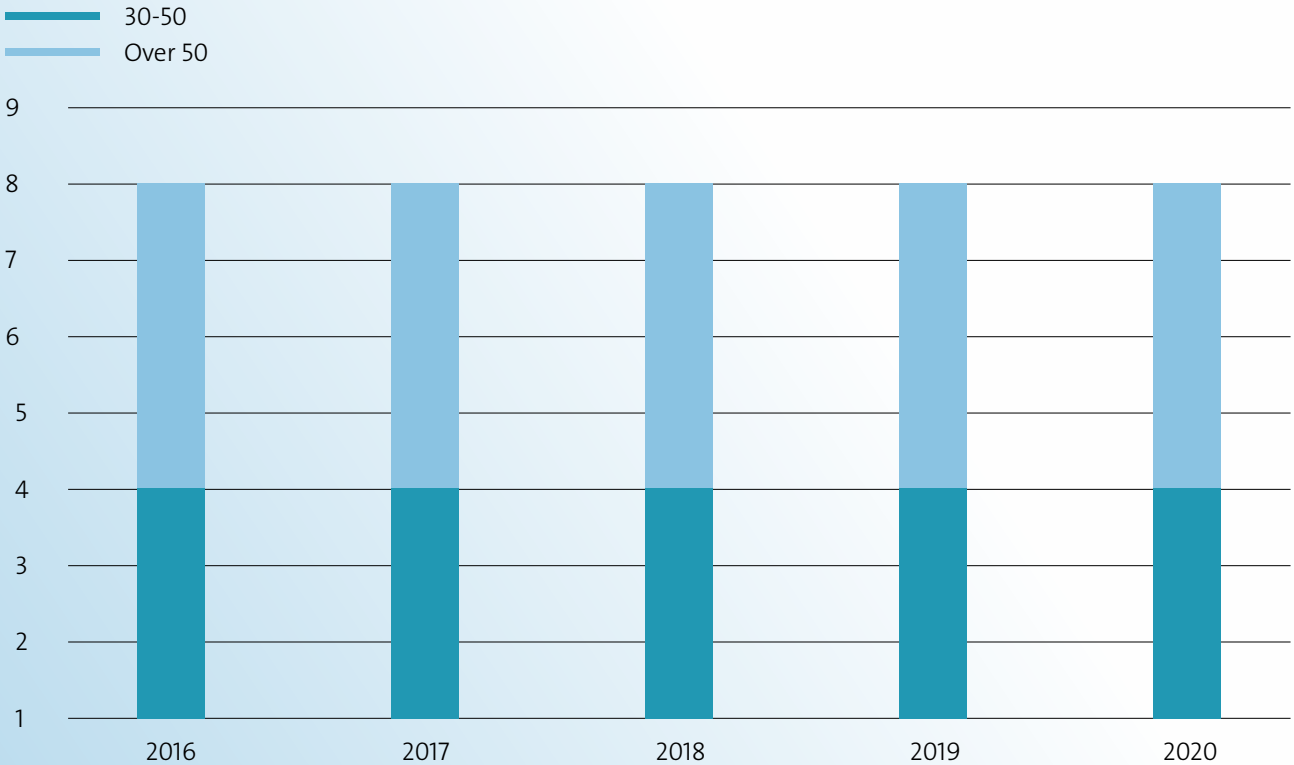


Figure 3. No. of BoD by age group

Corporate Governance Practices

The Company’s Board of Directors meets at least once each quarterly to discuss a variety of issues, which always includes Health, Safety, Security and Environment (HSSE) issues, governance and management matters, as well as economic risk and opportunities review. On annual basis, the Board undertakes an in-depth review of Corporate Social Responsibility (CSR), Compliance, Enterprise Risk Management (ERM) and audit planning.

The Board and Board committees evaluate their performance by means of an annual self-assessment, which measures the performance of the group and adherence to its mandate as well as identifying areas for improvement.

Several systems help the Company to ensure transparency, accountability and good governance. Employees are required to complete a conflict of interest statement annually, which is then assessed by a competent internal team. The Company conducts pre-selection audits of contractors focused on working welfare, which includes payment of salaries, housing conditions and eating facilities.

Qatalum’s internal audit function provides independent assurance that the Company’s internal control processes – which ensure the Company’s compliance with applicable laws, rules, regulations, and procedures – are operating effectively.

Transparency (Fines and Penalties)

No fines or penalties were received and processed by Qatalum for 2020.

Description	2016	2017	2018	2019	2020
Total number of non-monetary sanctions	0	0	0	0	0
Total monetary value of significant fines (QAR)	0	0	0	0	0

Table 4. Fines and Penalties

ENVIRONMENT



Energy and Climate Change

The process of producing aluminium from alumina is energy intensive and requires a constant supply of electrical energy. The Company operates a captive power plant which was built in tandem with the smelter to meet its power requirements. The Company’s power plant is a combined cycle plant using gas and steam turbines. The primary contributor of GHG emissions by the Company, approximately 70-75%, stems from the combustion of natural gas supplied by Qatar Petroleum (QP) for the power plant’s gas turbines. Other significant GHG sources include (1) all other natural gas combustion (anode baking plant and casthouse furnaces); (2) process sources from consumption of carbon containing raw materials (coke, pitch, net anode) (3) per fluorocarbon (PFCs) emissions from the potlines due to anode effect .

The Company currently reports GHG emissions as “Scope 1” and “Scope 2” emissions. Scope 1 emissions are direct GHG emissions from sources that are owned or controlled by Qatalum. These include the following:

- 01

Natural gas combustion for captive power production
- 02

Fuel combustion in furnaces
- 03

Coke Calcination
- 04

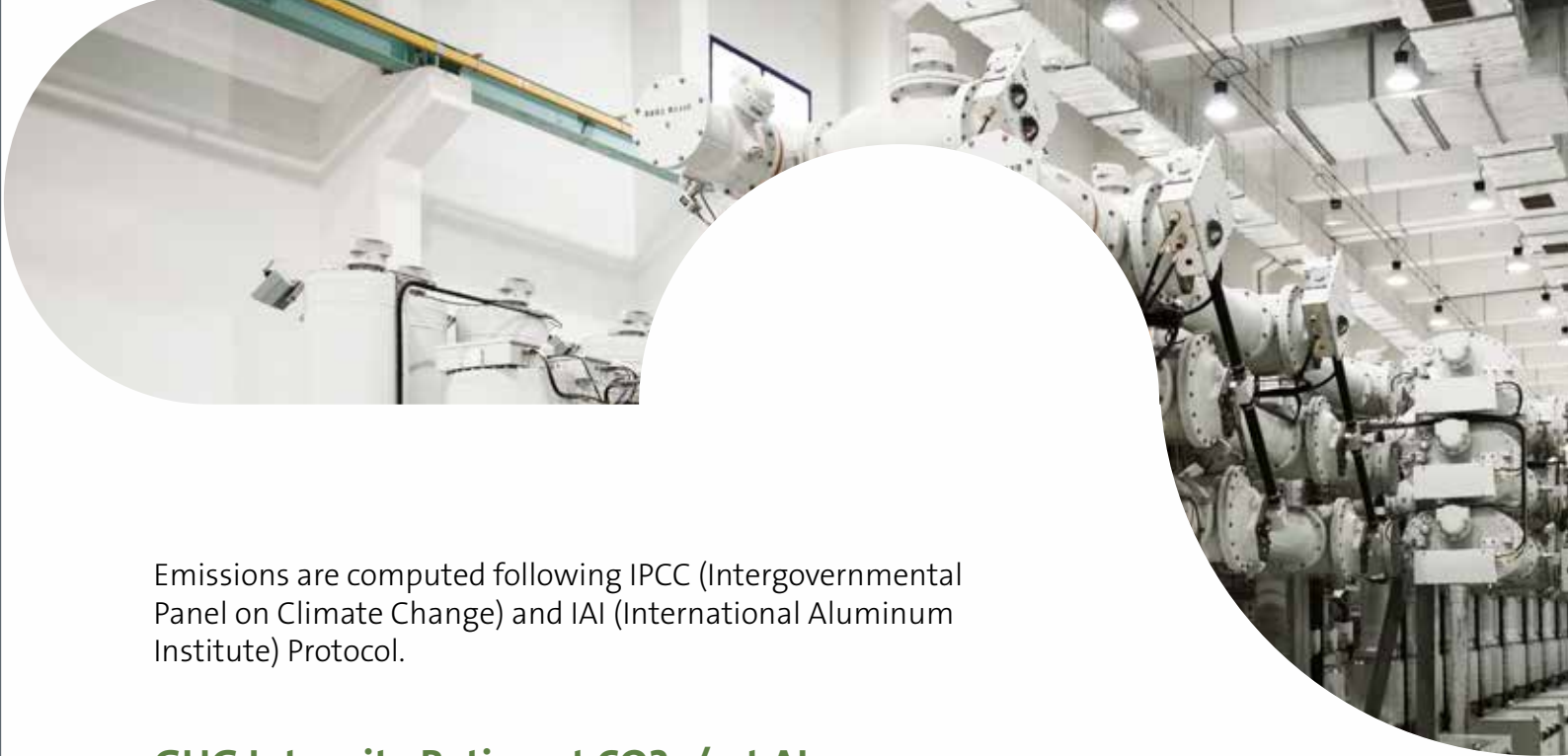
Anode production
- 05

Anode consumption
- 06

PFC emissions

Scope 2 emissions account for GHG emissions from the consumption of imported/ purchased electricity, heat or steam.

Anode Effect – is a process upset condition of an aluminium electrolysis cell due to little alumina dissolved in the electrolyte. The anode effect is accompanied by a release of CF4 and C2F6.
p 62 International Aluminum Institute (IAI) Al Sector GHG Protocol October 2006.



Emissions are computed following IPCC (Intergovernmental Panel on Climate Change) and IAI (International Aluminum Institute) Protocol.

GHG Intensity Ratio, mt CO2e/mt Al

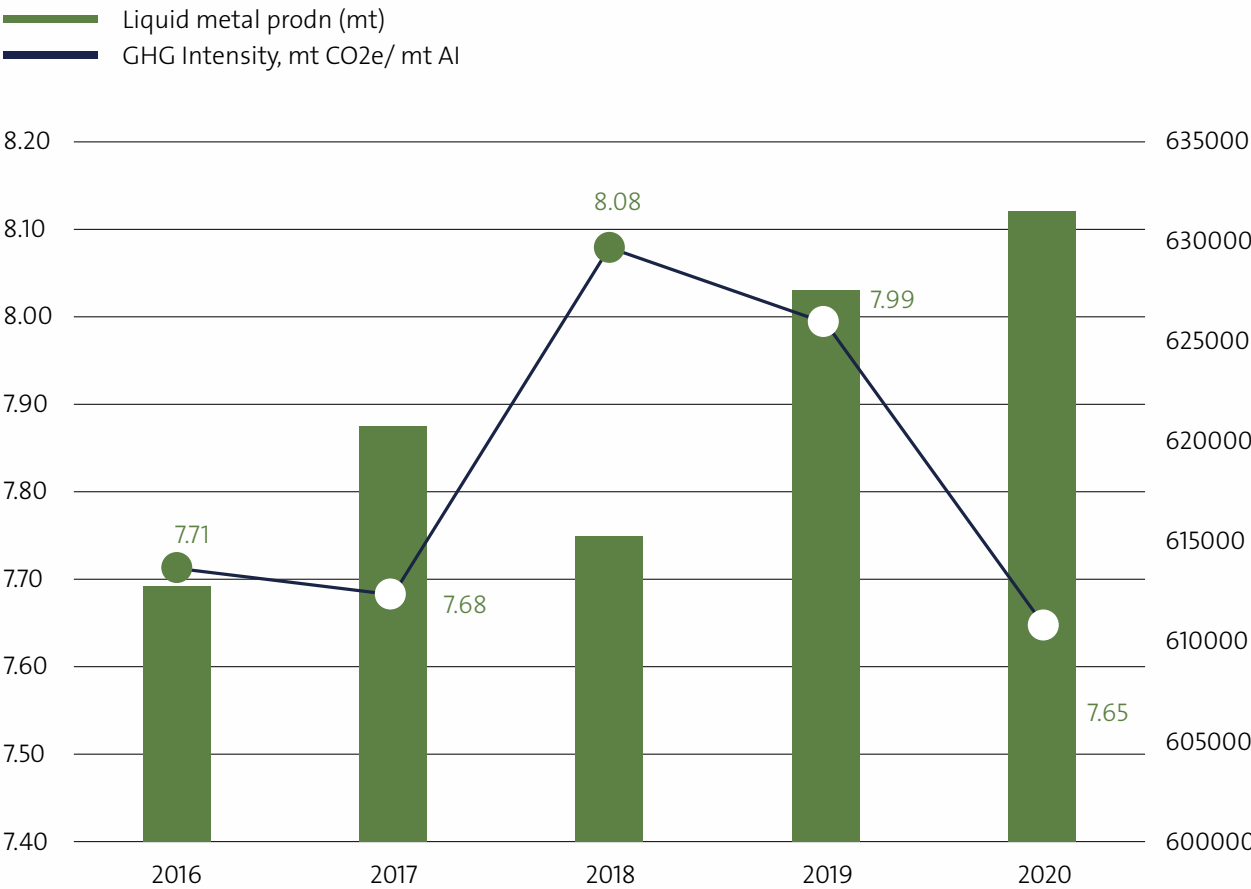


Figure 4. GHG intensity ratio (mt Co2e/mt Al).
Important Note: 2016 figure corrected as per correction made on indirect GHG emission reported.

A peak on the GHG intensity ratio in 2018 can be observed in the graph above which can be attributed to the power outage event and its relative consequences in the smelting process i.e. re-starting of pot cells.

The GHG intensity ratio dropped in 2020 following a verification audit by the 3rd party certifying body engaged by Qatar Energy (formerly Qatar Petroleum) in which the GWP (Global Warming Potential) factors and methodology were revisited and updated accordingly.

GHG Reduction

As part of its efforts to reduce emissions and align with the IPCC directive on the need to combat climate change, Management established annual key performance indicators (KPIs) for GHG.

Where a deviation from a KPI is detected, the stakeholder is expected to use QPS tools to address the issue and CARRA - corrective and preventive action.

Specific actions has been taken to reduce GHG which include project to install an advance gas path system in its Power Plant in addition to process optimizations in Carbon plant and Reduction plants and increase scrap recycling to satisfy the short term plan. Also, Qatalum is looking for sustainable improvement as a long term strategy exploring the feasibility of solar power generation as well as the proven best available technologies (BAT).

The initial projections for these efforts is as per below table:

Description	2022	2023	2024	2025	2026
C Footprint (Scope 1 & 2), mt CO2e/mt Al	7.65	7.57	7.46	7.57	7.51

Table 1. GHG Reduction Projection (Short Term Plan)

World Aluminium recently circulated its annual data pooling results for 2020. Qatalum remains among the top performing primary Aluminium smelters in terms of technology energy utilization as shown in below graphs fig. 1.0-3.0.

- IPCC – Intergovernmental Panel on Climate Change
- QPS – Qatalum Production System



2020 IAI Energy Survey

Primary Aluminium Smelting - Electrical Energy Consumption (DC)
All Technologies

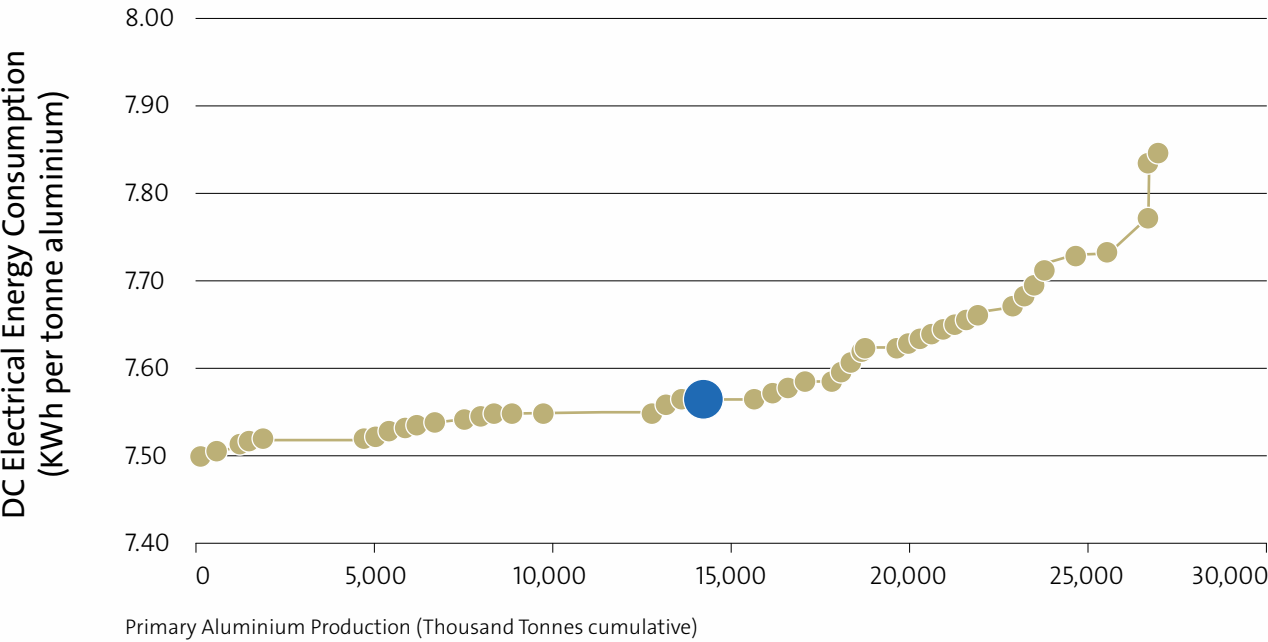


Figure 6. IAI Benchmarking on Primary Al Smelting – EEC (Electrical Energy Consumption)

A potential reduction is anticipated from the current baseline of 13.6 EEC/mt Al in relation to improvement plans on technology on the cathode side.

2020 IAI Energy Survey

Primary Aluminium Smelting - Net Anode Consumption All Technologies

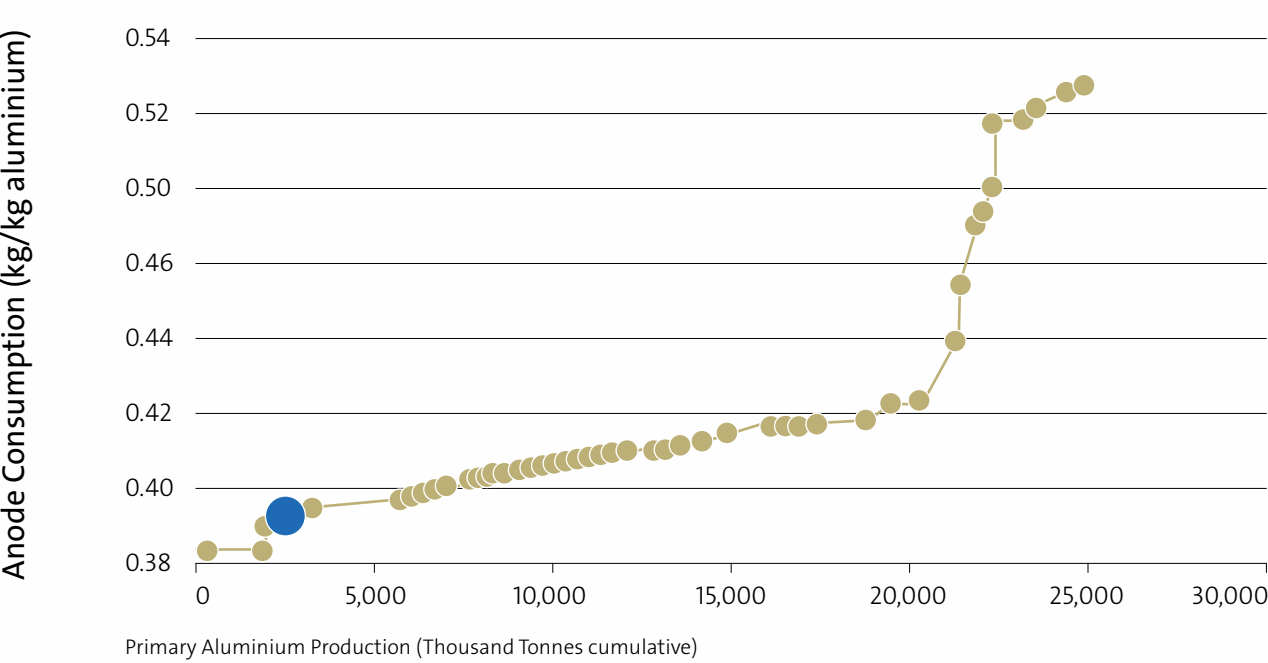


Figure 7. IAI Benchmarking on Primary Al Smelting – Net Anode Consumption



Environmental Management

The Company is ISO 14001:2015 certified and has recently received its renewed ISO 14001:2015 certification valid until 05 August 2024.

2020 IAI Casting Energy Survey

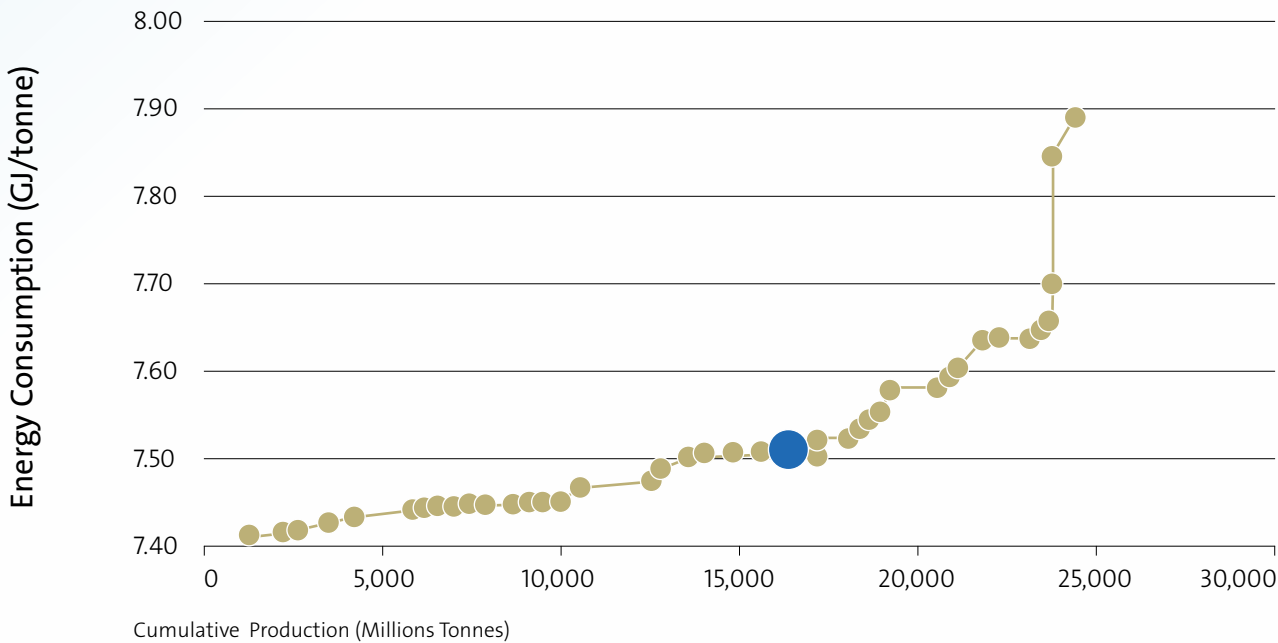


Figure 8. IAI Benchmarking on Casting Energy



Figure 9. ISO 14001:2015 certificate (Environmental Management System) recently issued to Qatalum by Bureau Veritas

Consent to Operate Compliance

For 2020, the Company compliance with its CtO (Consent to Operate) is 97.7%. All non-compliances have been reported and are being actioned towards full compliance.

During 2020, many of the activities related to monitoring (e.g. water sampling, stack emissions monitoring, noise monitoring, roof emissions monitoring) were suspended due to Covid-19 restrictions.

The above mentioned activities were gradually resumed from October 2020 onwards.

The outstanding items to reach full CtO compliance are flagged with actions underway.



Spill and Remediation

There were zero major spills reported to the Ministry of Municipality and Environment in 2020. Internally, spills are reported through the Qatalum Incident Synergi reporting system and trigger an RCA and CAPA process.

Description	2016	2017	2018	2019	2020
Total number of significant spills (> one barrel)	1	0	0	0	0
Volume of spills (Liters)	1,500	0	0	0	0

Table 2. Yearly record of no. of spill and volumes form 2016-2020

Water

The material risk identified in terms of fresh water use pertains to the disruption of volume of supply from Kharamaa impacting supply to the operational areas. Internal risk identified is the loss of adequate fire water pressure and process water pressure and flow to production areas. The risk related to seawater is the change in quality or non-compliance to effluent limits of the seawater outfall discharge to the sea. To mitigate these identified risks, several redundancy measures, control and actions to be undertaken are detailed in the enterprise risk register maintained by the port and utilities department.

There was a 19% increase in freshwater purchased by Qatalum over the last two years due to series of GRP pipelines ruptures at various point locations including water fire lines, process water lines, potable water lines. The Company has developed and long-term rectification plan and a local contractor is engaged to promptly respond to incidents.

Total water withdrawal by source	2016	2017	2018	2019	2020
Freshwater purchased (m³)	638,224	611,341	577,762	667,162	703,694
Seawater (m³)	135,716,930	138,315,237	135,368,849	127,881,395	131,355,340
Total Water consumption (m³)	136,355,154	138,926,578	135,946,611	128,548,557	132,059,034
Water intensity, (m³/mt Al)	222.56	223.84	220.97	204.90	209.16

Table 3. Water source volume and water intensity based on annual liquid metal production

• Kharamaa – state owned entity which handles the generation and distribution of water supply to consumers.
• GRP – Glass Reinforced Pipes



Water intensity, m³/mt Al

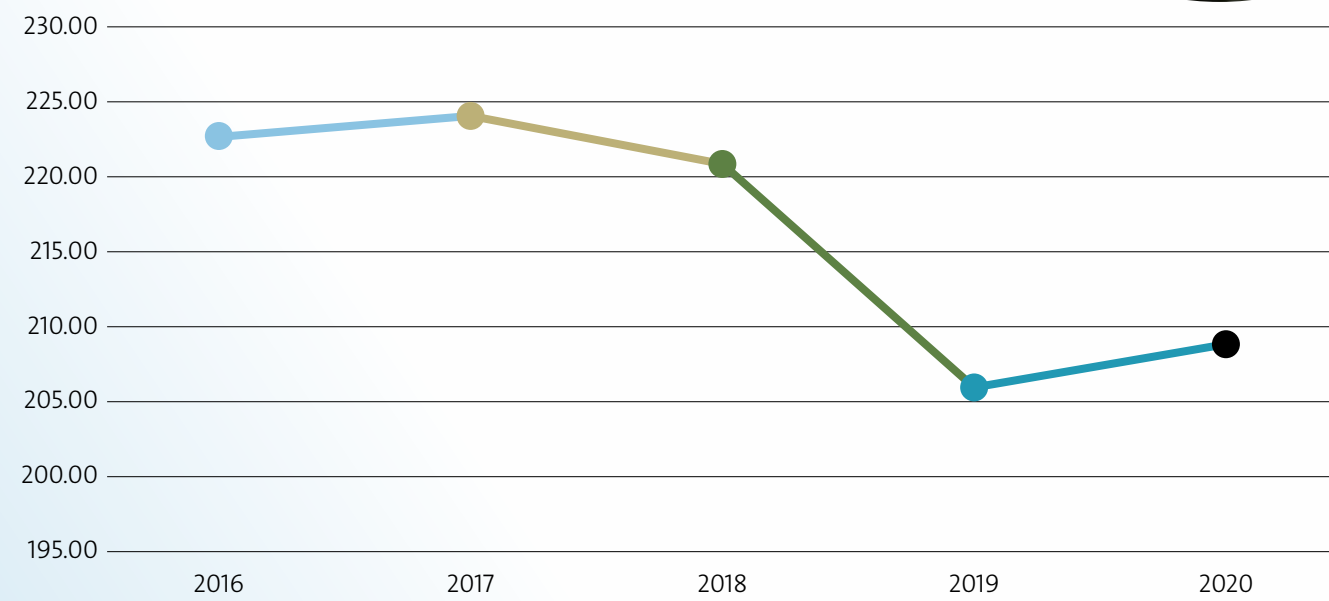


Figure 11. Qatalum water intensity (m³/mt Al)

Waste Management

In 2020, Qatalum focused on finding uses for process wastes and minimizing landfill. The major focus area was on sending Spent Pot Lining (SPL) to the cement industry for recycling/ reuse of the material to avoid landfill disposal. Qatalum did not landfill any SPL in 2020 and even since start of generation of this waste.

For Carbon powder, an improvement project was commenced to develop a solution for the internal recycling of carbon powder. The solution has the capability to address recycling of new carbon powder production. Legacy stockpiles of carbon powder by-products have been stored in the laydown areas. The stock piles have been offered to the market while also being regularly removed to the MIC Hazwaste treatment centre (MIC-HWTC) for treatment and landfill. This legacy carbon waste by-product is projected to be completely cleared from the laydown areas by 4th quarter of 2021.

Other industrial wastes (non-hazardous) like general waste and wood waste are disposed at the MIC municipal landfill. Other universal wastes (e.g. e-waste, used oil, busted bulbs, used tires, used batteries) are disposed at their respected downstream 3rd-party accredited treater or recycler (e.g. MIC Hazwaste Treatment Centre, Boom Waste Treatment Company, Al-Haya Waste Treatment Company, GeoGreen Shield, Doha Plastic, Al-Suwaidi Paper Recycling Company, etc.).

Total Waste Generated

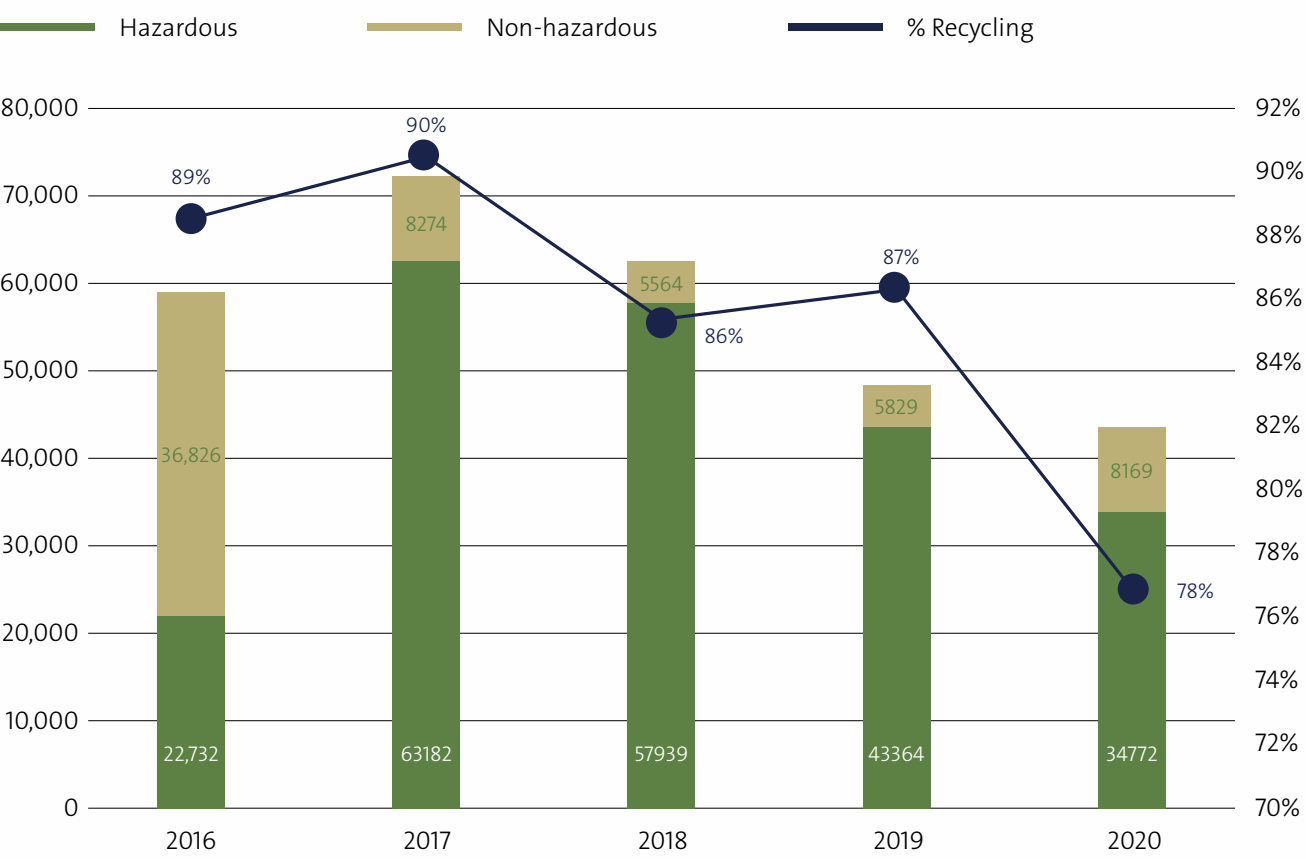


Figure 12. Total Waste Generated and % Waste Recycling

Emissions to Air

Qatalum is monitoring stack emissions to ensure compliance with its consent to operate. At end of each quarter, the emissions values of the different parameters - from criteria pollutants and hydrogen fluoride, signature pollutant of Qatalum - is included in the quarterly report submission to the regulator.

In 2020, MIC/HSE Environment Section launched the airshed capacity and management study. This study details the migration of criteria pollutants, individual and collective from the different MIC industries. The Company is one of the stakeholders of this study. Lead by MIC HSE Environment Department, all MIC companies are expected to work collectively on the management of the Mesaieed airshed. This starts with the implementation of various air quality and meteorological stations across the airshed boundary. The Company is responsible for the management of ambient air quality monitoring station (AAQMS) that is currently located in the community area, to detect Hydrogen Fluoride (HF), which is the air pollutant that is unique to Qatalum. The project is expected to become part of the MIC Airshed program from 2022 onwards.

Qatalum is an active member of the MIC (Mesaieed Industrial City) Environment sub-committee team.

Other Significant Emissions

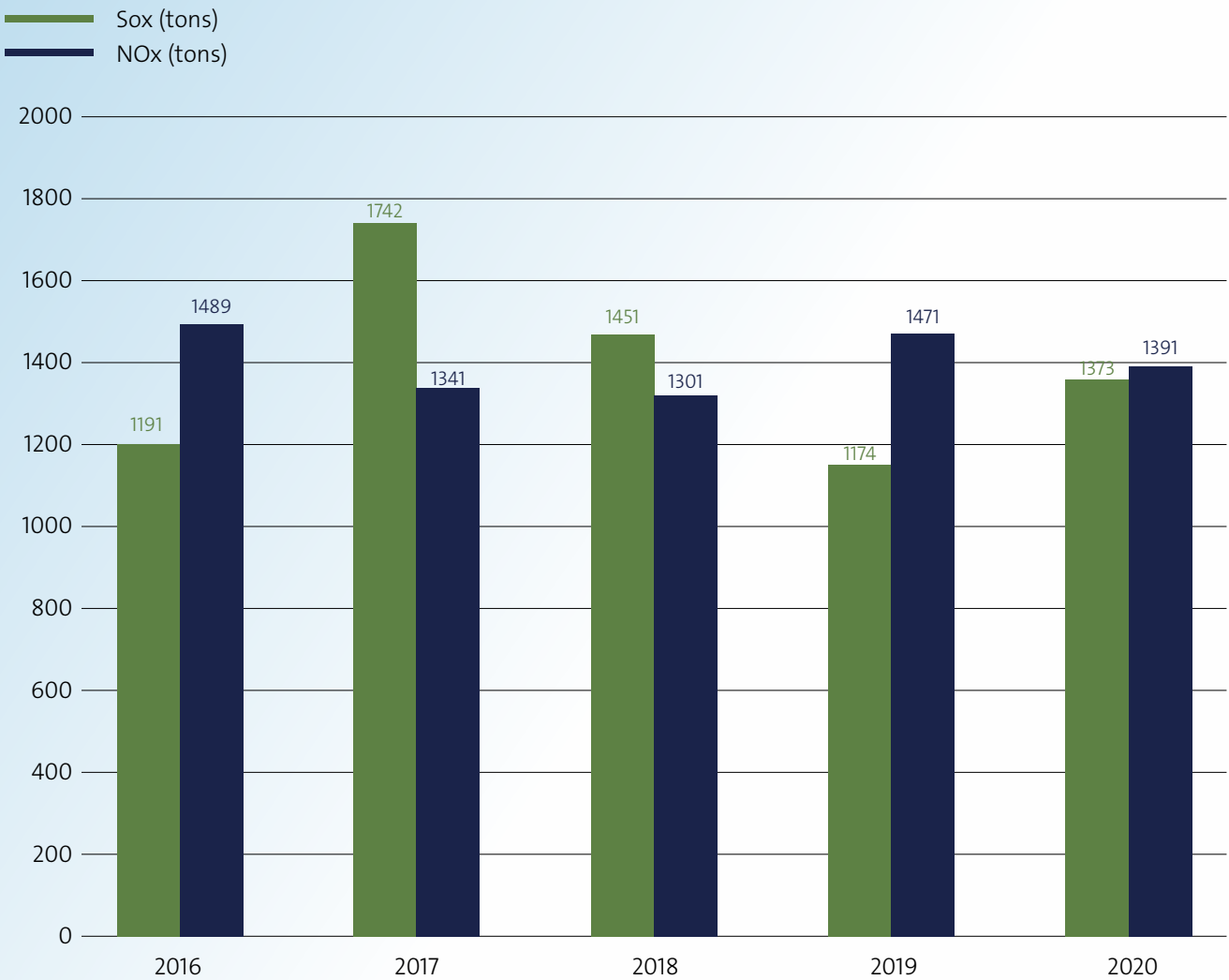


Figure 13. mass emission figures of NOx and SO2 from 2016-2020.

Ecosystem and biodiversity

The main project the Company is focused on is the development of a bird sanctuary in lieu of the registered IUCN bird sanctuary between the causeway and the sewage treatment plant in Mesaieed which was affected during project construction phase.

In 2018-2019, an initial plan was formed to develop or enhance an area just outside the perimeter fence along the boundary of potline 1 towards the MIC gate no. 2. However, this area was dismissed in view of the intensive groundwork study required considering its proximity to primary industries, parallel to the utilities corridor, and primary road.

An alternative site was identified within the boundary of the Qatalum power plant in tandem with a project to enhance utilization of irrigation water in the area. The project is under evaluation and will be consulted to regulatory, both MIC and Ministry of Environment, as warranted by CtO.



Photo 4. An artificial pond shall be constructed provided with dedicated water supply line into the planned bird sanctuary project.





SOCIAL

Human Rights and community impact

Safety Forums

The Company provides an opportunity for worker to have a voice with respect to their working conditions at Qatalum. There is a regular consultative forum called Joint HSE Committee meeting attended by Contractors and Qatalum top management. Within Qatalum, there is a Safety Delegate Forum made up of representatives from the Company’s employees that meet to discuss HSE issues among others issues.



Photo 5. One of the Joint HSE Committee meetings held in Al Reem Club.

Whistleblowing

Qatalum Internal Audit manages a confidential whistleblowing line (phone/email) where employees can report code of conduct violations or other issues. Reports can be made confidential. Internal Audit Department reports to the Board Audit Committee.

Women

The percentage of women in Qatalum’s workforce is 3.3% as of 2020. Amongst senior staff the percentage of women in Qatalum is 6 %.

Description	2016	2017	2018	2019	2020
Number of employees (total active)	1228	1191	1138	1137	1059
% share of women	3.4	3.5	3.6	3.6	3.3

Table 5. Qatalum No. of Employees and % share of women

Engagement

During the pre-Covid phase, Qatalum had a regular town hall meeting hosted by the Chief Executive Officer. It included a management presentation and an open forum for employees to ask questions.




Photo 6. CEO’s Town Hall Address – July 2019.


Relative to community impact, Qatalum is an active member of the MIC (Mesaieed Industrial City) Environment sub-committee team where issues and complaints from the community come to attention and discussed for actions.

Employee Health and Wellbeing


Qatalum’s communication department keeps employees and their families abreast on health matters and well-being




Prevention Tips for Family
(September 21, 2020) COVID-19 Guidelines and Prevention Tips for Family
[Read More](#)



Stop Smoking Program Led By Tobacco Control Center at HMC
(May 31, 2020) Qatalum employees will be provided with health and medical advice. [Read More](#)



Liver Cancer Awareness Month
(July 23, 2020) In efforts to raise awareness about liver cancer amongst its employees, Qatalum is collaborating with Qatar Cancer Society as part of its CSR program. [Rad More](#)



World Cancer Awareness Day
(February 26, 2020) As part of our CSR initiatives we are partner with a country wide campaign. [Read More](#)

Responsible Supply Chain

The raw material import of Qatalum are sourced through part-owner Hydro. Below tables shows the yearly total of shipping activities for incoming raw materials and outgoing products.

Type of Activity	Material Description	2016	2017	2018	2019	2020
Incoming raw material	Alumina	24	26	28	31	27
	Coke	13	12	12	14	14
	Pitch	8	7	8	8	7
Outgoing product	Ingot and Foundry alloys	64	65	66	64	65

Table 6. No. of shipments made for incoming raw material and outgoing products

Hydro’s sustainability practices include a supplier code of conduct covering business practices, human rights, working conditions and environmental specification.

Qatalum’s supply chain group also conducts CSR (Corporate Social Responsibility) screenings, and regular audit of contractors and suppliers for compliance against Qatalum’s CSR requirements and the rules and regulations of the state. The audit checks cover housing conditions, monthly salaries, other benefits including paid leave and free access to or an allowance for food and transport, due compensation of overtime and employees not having secondary employers.

Description	2016	2017	2018	2019	2020
Number of suppliers subject to assessments for impacts on society	36	-	45	35	23
Number of suppliers identified as having significant actual and potential negative impacts on society.	N/A	-	N/A	N/A	N/A
Significant actual and potential negative impacts on society identified in the supply chain.	4	-	5	11	1
Percentage of suppliers identified as having significant actual and potential negative impacts on society with which improvements were agreed upon as a result of assessment.	11%	-	11%	31%	4%
Percentage of suppliers identified as having significant actual and potential negative impacts on society with which relationships were terminated as a result of assessment	0	-	0	0	0

Community investments and social programs

Several projects and engagements with community like the Qatar Diabetes association, Elderly Empowerment and Care Center (Ehsan), activities during the National Sports Day etc.



Photo 7. Corporate Social Responsibility project where Qatalum supports elderly empowerment and care.



Qatalum Participates in the National Sports Day Celebrations
(February 13, 2020) Qatalum celebrated Qatar National Sports Day on Tuesday, 11 February, 2020, at Al Reem Club from 8am to 1pm with a fun filled day dedicated to sporting activities. [Read More](#)

Photo 8. Qatalum’s regular program and participation during the National Sports Day.

Description	2016	2017	2018	2019	2020
Total value of community investments (USD)	650,000	100,000	80,000	94,000	150,000

Table 6. Community Investment

Health and Safety

In response to unprecedented Covid-19 pandemic, Qatalum put in place measures to limit the spread of the virus among its employees and contracted workers. Measures included work-from-home, virtual meetings, social distancing and alignment with the QP Pandemic directives for the Energy Sector as well as the State’s pandemic protocols. Other essential programs like the heat stress management during the summer season were still carried out and were aligned with the Covid restrictions.

General News 2020

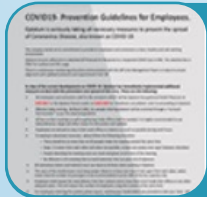


COVID-19 Updates on 30 December 2020
(December 31, 2020) Latest update on Coronavirus in Qatar. [Read More](#)



COVID-19 case reported at Qatalum 30.12.2020
(December 30, 2020) Number of confirmed cases, Number of recovered cases and suspected cases in the Plant. [Read More](#)

Photo 9. Qatalum Intranet Media News with regular update on Covid-19



COVID-19 Prevention Guidelines for Employees.
(March 18, 2020) Qatalum is seriously taking all necessary measures to prevent the spread of Coronavirus Disease, also known as COVID-19. [Read More](#)

Photo 10. Qatalum Intranet Media News raising awareness to employees on COVID-19 prevention.



2020 Heat Stress Awareness
(May 10, 2020) Working in a hot environment like Qatalum, can be very challenging for all of us in Qatar’s hot summer months. [Read More](#)

Photo 11. Qatalum Intranet Media News on Heat Stress Awareness 2020 program

In November 2020, HSSE launched the “No 1 Gets Hurt” Campaign as part of Qatalum’s commitment towards safe operations at the workplace. The campaign’s objective is to prevent traffic incidents inside the plant premises and promote safe traffic practices generally.



Photo 12. At the end of the launch session of “No 1 Gets Hurt” campaign, the participants endorsed their commitment by hand prints on the wall. As part of this new campaign, billboards and posters with key messages have been set up at the Silo Area and around the plant to reinforce Qatalum’s Safety principles and beliefs

Heat Stress incidents

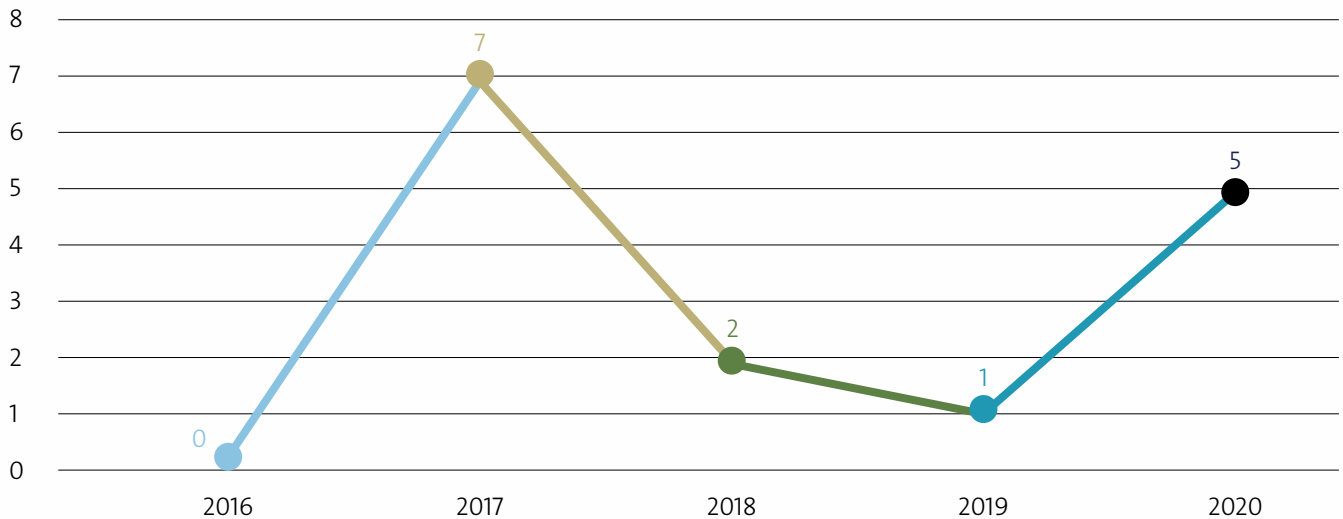


Figure 12. Heat Stress cases in Qatalum

Qatalum has renewed its ISO certification on safety management and this is valid until 01 July 2024.



Figure 13. ISO 45001:2018 certificate (Safety Management System) recently issued to Qatalum by Bureau Veritas

The following graphs showcases Qatalum’s safety performance:

Employees Lost Time Injuries rate (per million work hours)

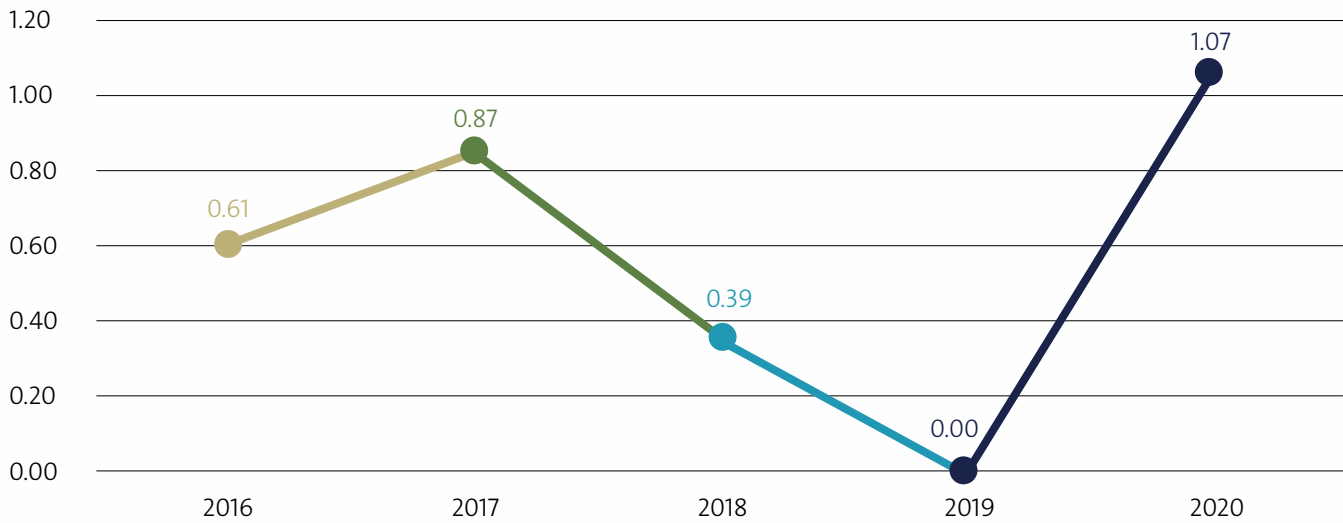


Figure 14. Employees Lost Time Injuries rate

Employees Reportable injury rate (per million work hours)

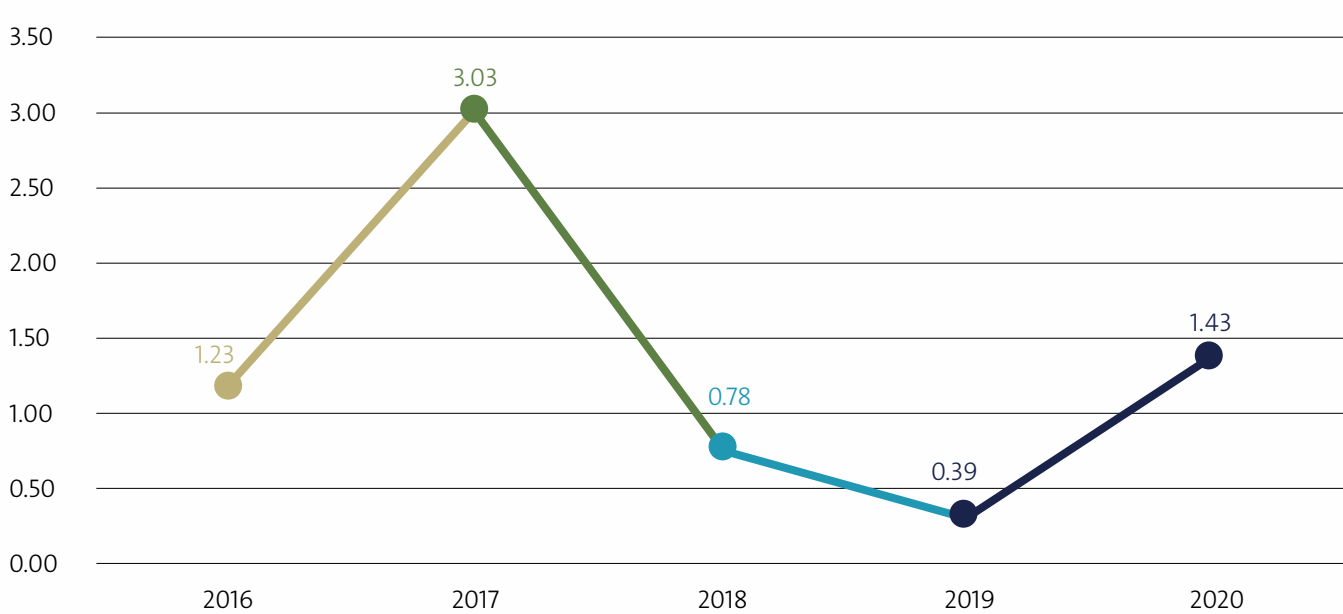


Figure 14. Employees Lost Time Injuries rate

The following graphs showcases Qatalum’s safety performance:

Contractor Lost Time Injuries rate (per million work hours)

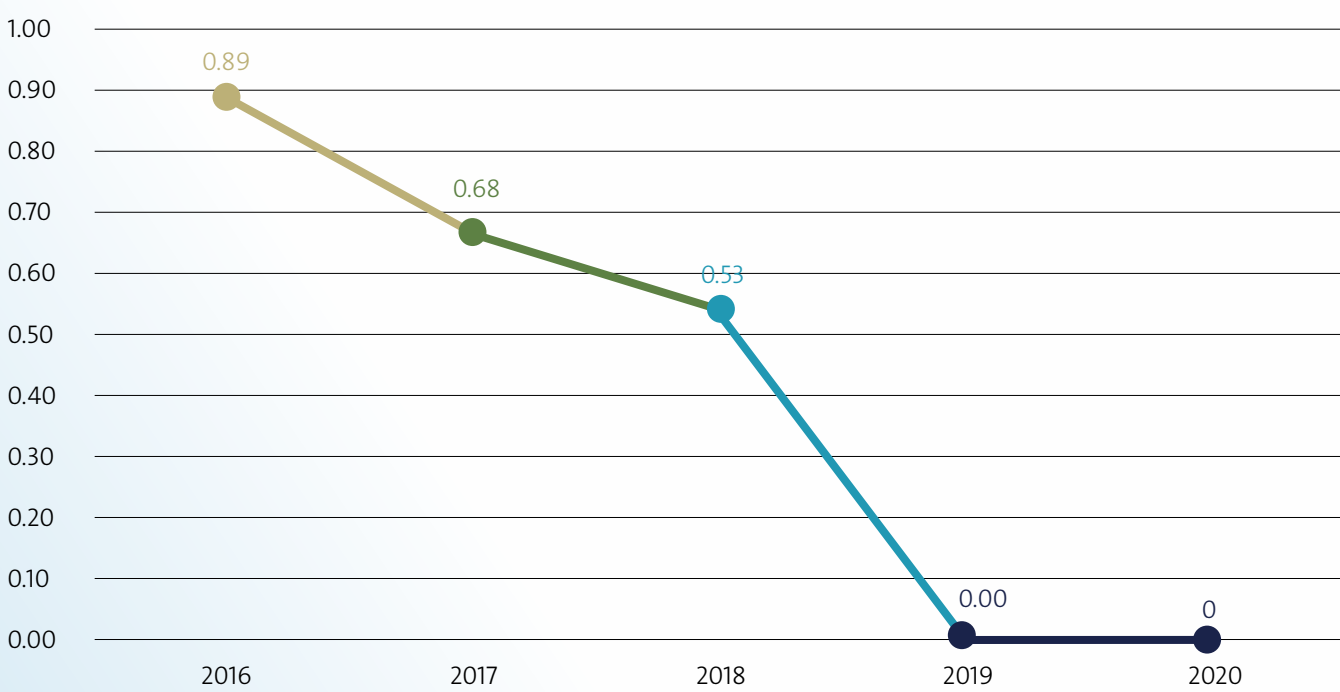


Figure 16. Contractor Lost Time Injuries rate

Contractors Reportable injury rate (per million work hours)

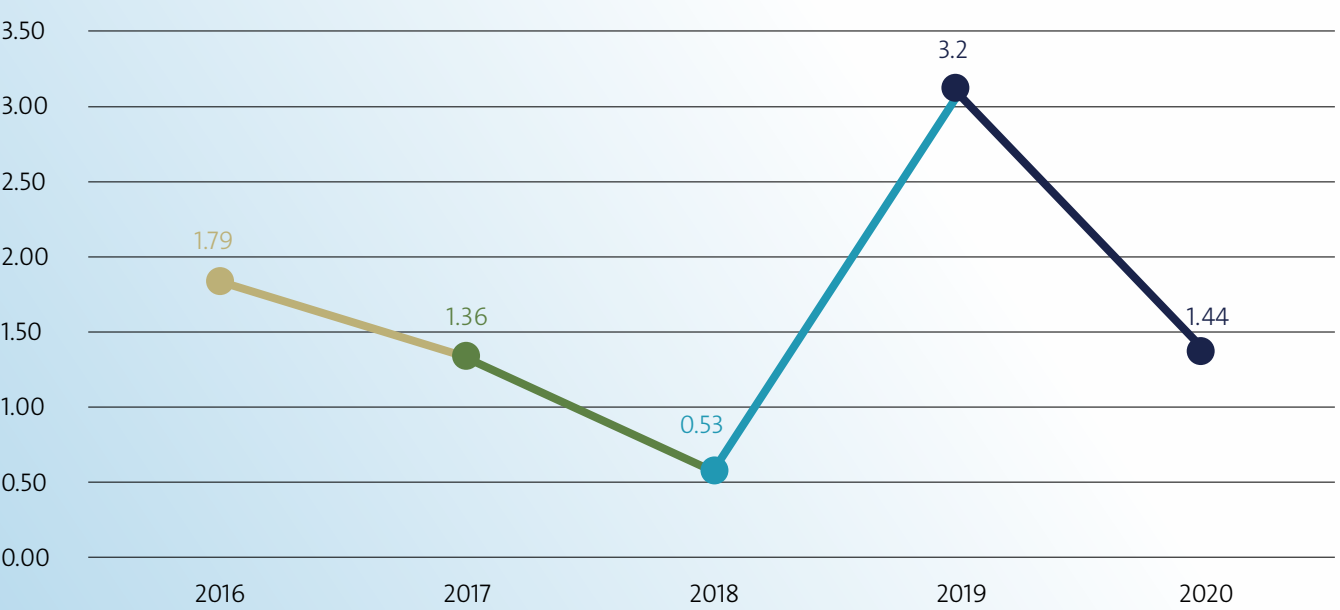


Figure 17. Contractor Reportable Time Injuries rate

Internal HSE training	2016	2017	2018	2019	2020
Number of training courses offered	75	63	59	68	52
Number of staff who attended training courses	670	5688	3557	3788	1208
Total man hours spent in training courses	12011	12983	9416	14826	6405
Amount of money saved as a result of training (QAR)	605115	291360	195760	284160	37530

Tabel 8. Internal HSE trainings

Emergency preparedness

Below table and graph show the number of emergency drills conducted in Qatalum. The graph indicates a decline in the number of exercises for 2020 since this was reduced due to Covid-19 restrictions. The table indicates the exercises conducted between the ERT and Groups/Departments and this is above and beyond the internal exercise done by the Department themselves.

Internal HSE training	2016	2017	2018	2019	2020
Number of training courses offered	22	22	22	25	6

Tabel 9. Exercises conducted between ERT (Emergency Response Team and Groups/Departments

Emergency Response Drills

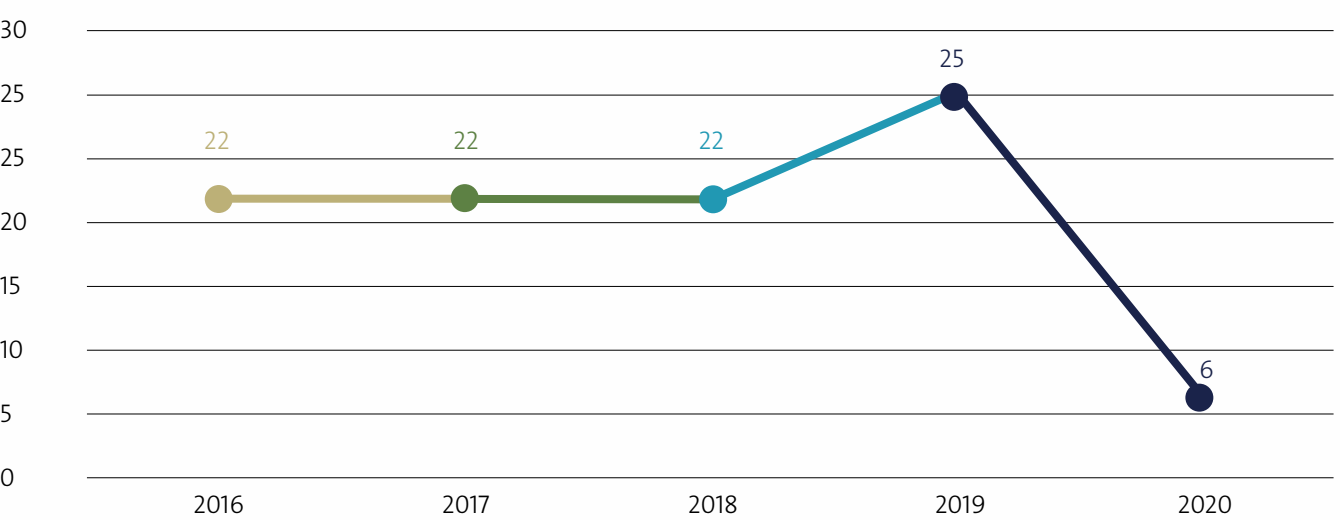


Figure 20. Emergency Response Drills in Qatalum – conducted between ERT and Departments.

Industry Associations

Qatalum is a member of the International Aluminium Institute (IAI) and the Gulf Aluminium Council (GAC) and is seeking certification by the Aluminium Stewardship Initiative.

Excellence in Performance™

