Sustainability Report 2019





# On the path towards long-term sustainability

# About this report

# GRI 102-49 GRI 102-50 GRI 102-51 GRI 102-52

# Report overview

This report marks QAFAC's ninth sustainability report and highlights our economic, environmental and social performance as well as our efforts to drive sustainable development through our business operations. In line with our previous sustainability reports, this report discloses our sustainability performance for one calendar year from 1 January 2019 to 31 December 2019. It should be noted that our last sustainability report covered our sustainability performance from 1 January 2018 to 31 December 2018.

# Reporting framework

This report has been prepared in accordance with the GRI Standards: Core option. GRI Standards are one of the most renowned standards for sustainability reporting. This report also referenced other guidelines such as the Sustainability Accounting Standards Board (SASB) Oil and Gas Sector Standard, the International Petroleum industry Environmental Conservation Association (IPIECA) and Qatar Stock Exchange Environmental Social and Governance Guidance (IQ).

Furthermore, this report highlights our contribution to local and international sustainability agendas, wherever relevant and applicable: namely the United Nations Sustainable Development Goals (UN SDGs) and the Qatar National Vision 2030 (QNV).

# Information covered

This report covers information related to the management approach and performance on the issues that are most material to our business and our stakeholders. For more details on our material and other important topics identified in 2019, please refer to page 25.

In addition, this report covers initiatives undertaken in 2019 that help improve our performance on the material issues as well as includes interviews with some of our people to showcase the contribution of our people to the success and sustainability of our business.

# Reporting topic boundaries

TITL

The general reporting boundaries for this report's data and information is based on our operations in Qatar including our head office, methanol plant, utilities plant, and MTBE plant. The sales and shipping of our products in not included in our reporting boundary

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as we do not have operational control over these aspects, and they are handled by Qatar Chemical and Petrochemical Marketing and Distribution Company Q.P.J.S.C. (Muntajat). Contractors' and suppliers' data are also not included in this report unless otherwise stated.

# Data collection and reporting approach

This report conforms to the Reporting Principles defined by GRI as we understand that they are fundamental to achieving high quality sustainability reporting. The data and information disclosed in this Report were collected from relevant functional groups and teams as per the data requirements of the GRI Standards. We have clearly defined our data collection approach, calculation methodologies, proxies and assumptions, if any, wherever relevant in the report. Any global tools, methodologies or standards used for any information have also been disclosed, including a GRI content index on pages 92-95. We also ensured that that the data reported for 2019 is comparable to previous reporting periods.

The data and information presented in this report has gone through an interactive review process to catch any potential inaccuracies and ensure reliability, with an external consultant conducting a limited logic and context-based review. The report has been developed in a way that caters to the various users of the report.

# Feedback and suggestions

The opinions of our stakeholders are important to us; we welcome any feedback on this report. Please contact us with any questions or suggestions using the following channels:

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His Highness **Sheikh Hamad Bin Khalifa Al Thani** Father Emir



# 01 INTRODUCTION

- Chairman Foreword
- Chief Executive Officer Foreword
- Key Achievements and Highlights



# **Chairman Foreword**



As a contributor to Qatari society and economy, I am proud of the commitment we have at QAFAC towards sustainable long-term growth; we are dedicated to creating shared value for all our stakeholders. Our focus on producing environmentally friendly products – primarily Methanol and MTBE demonstrates that we are actively working to contribute to sustainable development in alignment with Qatar's National Vision (QNV) 2030 and the United Nation's Sustainable Development Goals.

Our success has been possible through adoption of a corporate management approach based on the principle of Operational Excellence. We have introduced numerous initiatives over the years, constantly increasing the efficiency of our operations, demonstrating solid financial performance and reducing our impact on the environment.

I am pleased with our achievements at QAFAC across the primary sustainability pillars of economy, environment and society. In 2019, we completed our planned turnaround whilst maintaining safe and reliable operations. We did not have any fatalities or lost time injuries among our employees and contractors. Our internal audit function performs regular audits on our occupational health and safety management system and reports on performance to the Audit and Risk Committee - a subcommittee of the QAFAC Board of Directors.

Along with our focus on health and safety, we also dedicate a lot of effort to environmental protection. 2019, marks the seventh consecutive year in which we did not have any reportable hydrocarbon spills. During the reporting period, we also recycled

49% of the wastewater we generated and reused inside the plant.

We place great emphasis on managing our workforce and providing them with growth and learning opportunities. In 2019, we completed 33,162 hours of training for our employees. As part of our diversity efforts, we also promote female employment that is considered a predominant challenge faced in the petrochemical industry. In 2019, our workforce comprised of 8.1% females, and 1% in senior management positions.

As we look ahead, we know that our success as a responsible company depends on our ability to effectively respond to all risks and opportunities facing QAFAC and the industry. By staying focused on our goals, we are confident that we will continue to improve our performance and meet future challenges.

Finally, I would like to thank the leadership team at QAFAC, board members, all our employees and business partners for their commitment, efforts, and contributions to our business in 2019.

# Mohammed Nasser Al-Hajri Chairman of the Board



# **Chief Executive Officer Foreword**



I am delighted to present the ninth sustainability report of QAFAC – a Methanol and MTBE leading producer headquartered in the State of Qatar. This report provides a transparent form of communication with our stakeholders on our sustainability performance and our sustainability journey progress.

Despite the global petrochemical industry facing volatile oil prices and geopolitical trade disputes that affected the oil and gas demand in 2019 we remained resilient. We achieved an annual production for Methanol and MTBE 932,331 tons and 578,080 tons respectively which is result of our continuous efforts to conduct reliability assessment of our plant operations, which led to the achievement of 98.3% reliability in 2019 exceeding the 96% target set for the year.

2019, was a transformative year for QAFAC as we updated our mission, vision, values and strategy to better suit our business objectives and align us with global trends to achieve sustainable growth and competitiveness in the petrochemical sector. Our refreshed strategy lays emphasis on preparing for long-term sustainability by setting six main objectives:

- Sustain top quartile health and safety performance
- Strive for excellence in environmental protection
- · Focus on talent management, Qatarization and succession planning
- Boost digitalization to become 'reference' in our industry
- Strengthen stakeholder alignment
- Support regulations impacting our products

We implemented various controls and programs to support us in Looking ahead, we are keen to continue our sustainability journey in upholding the highest health and safety standards. Our Health, the coming years and improve our performance to support the State Safety, Security and Environment (HSSE) principles and Life Saving of Qatar in meeting its sustainability objectives in line with the Qatar Rules provide a foundation for protecting our employees and National Vision 2030 and Goals of the Environmental Sustainability contractors against life threatening injuries, illnesses and life-Strategy. threatening hazards. In 2019, we launched a new HSSE induction I invite you to read this report and learn more about QAFAC's video for new personnel to ensure everyone is fully informed about sustainability journey as we continue on our ambition to create value QAFAC's health and safety practices and is aware of their work and for all our stakeholders. responsibilities. As a testimony to the utmost efforts we dedicated to developing a robust HSSE management system and culture, we participated in the Royal Society for the Prevention of Accidents (RoSPA) UK award competition, and we are proud to mention that Khalid Sultan Al-Kuwari we won the prestigious RoSPA Gold Award. Other testimonies of our commitment to 'Zero Injury' aspiration are our accomplishment of **Chief Executive Officer** the significant milestone of 15 million safe working hours without Qatar Fuel Additives Company any lost time injuries (LTI) as well as not suffering from any heat



stress incident over eight years.

As an operator in the petrochemical industry, we recognize our role in minimizing our environmental footprint and striving for excellence in environmental protection. We have always looked for innovative ways to reduce our impact on the environment; the commissioning of our Carbon Dioxide Recovery Unit in 2014 was one of the many solutions we introduced to our operations. In 2019, we commissioned another project that we are pleased about - our Selective Non-Catalytic Reduction (SNCR) unit at our Methanol plant reformer. Our SNCR led us to meeting our NOx limit in line with the Ministry of Municipality and Environment requirements. In 2019, we also initiated the implementation of our Energy Management System in line with ISO 50001 to meet our objective of reducing our energy consumption.

We comprehend that employees are central to the success of our business and long-term sustainability. In 2019, we had 332 employees working at QAFAC - 27.7% of which are Qataris. Our commitment to driving Qatarization is evident with our Nationalization Policy – which was updated during the reporting period. The policy reflects our obligation to driving Oatarization through the educational and training support we offer to Qatari nationals, in addition to the assistance provided to employees who wish to continue their education in areas that are consistent with their career development plans. Our policy entails Qatari employees' rights to scholarship opportunities at national and international educational institutions. Our ambitions of a high performing organization guides our efforts at QAFAC to provide concrete workforce and diversity management practices that deem essential to our success. Our diversity policy sets our direction of being an equal opportunity employer, fostering diversity and building an inclusive corporate culture where employees can reach their potential regardless of gender or ethnicity.

In addition to our employees, we have a responsibility to give back to our community. Our contributions to the local community have been guided by our internal Corporate Social Responsibility (CSR) policy since 2015 prioritizing the initiatives that provide the vital support to the local Qatari community.

# Key achievements and highlights

USD 531,604,000 economic value generated	Turnaround successfully completed	<b>13.67 GJ/ton</b> production achieved energy intensity	<b>49%</b> of generated wastewater was recycled and discharged to our Green Belt.	<b>5,451</b> Non-Occupational visits to QAFAC clinic like BMI check, life style change suggestions etc.	27.7% Qatarization of our workforce achieved
578,080 MT of MTBE produced	Zero Lost Time Accidents achieved during turnaround	Selective Non- Catalytic Reduction (SNCR) Unit commissioned to meet NO <sub>x</sub> limits	<b>2,735 tons</b> of waste generated	Zero heat stress incidents were faced	<b>33,162</b> training hours completed by our employees
932,331 MT of Methanol produced	<b>100%</b> quality adherence of our produced MTBE and Methanol	Greenhouse Gas (GHG) Accounting and Reporting (A&R) program initiated to ensure accuracy of GHG emissions reported	Zero reportable hydrocarbon spill for seven consecutive years	Zero fatalities of our employees and contractors	<b>332</b> permanent and temporary employees total workforce
QAFAC Strategy refreshed	62% of suppliers are locally based	<b>0.67 ton CO<sub>2</sub>e/ton</b> of production achieved GHG intensity	RoSPA Gold Award winner	Zero tier 1 and tier 2 process safety incidents occurred	<b>90%</b> Employee engagement level of satisfaction achieved
<b>20 years</b> safe and reliable production	USD 7.8 million spent on local supplier	<b>162 MMSCM</b> flared off-spec gases	<b>15 million</b> Safe Work Hours achieved for our employees and contractors	<b>14</b> fire safety exercises were completed against a target of 12	<b>2</b> females and 4 males were hired as employees

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- QAFAC Profile
- Memberships and Associations
- Value Chain
- Governance
- Strategic Direction
- Sustainability Management





# **QAFAC** Profile

Qatar Fuel Additives Company, popularly known as QAFAC, is an outcome of the far-sighted strategic plan of the State of Qatar to diversify its petrochemical base and expand its downstream industries. QAFAC - headquartered in the State of Qatar - aims to optimize the utilization of the State of Qatar's vast hydrocarbon resources through producing and exporting Methanol and Methyl-Tertiary-Butyl-Ether (MTBE). QAFAC was incorporated in 1991 as a

50%

15%

(IQ)

(IOLLC)

20%

15%

(OMEC)

(LCYMEC)

# **Our Shareholders**

# Industries Qatar (IQ)

A limited liability company registered and incorporated in the state of Qatar as a Qatari Shareholding Company (Q.S.C.C).In 2003, Qatar Petroleum(QP) transferred the entire shareholding in QAFAC to IQ. QP is a state owned corporation responsible for developing and distributing Qatar's oil and Gas reservoir and promoting downstream industries in the State.

## International Octane LLC (IOLLC)

A member of the OUTCO Group of Companies, which has interested in civil engineering, manufacturing, hotels, real estate, and other fields, both in the UAE and Global y. IOLLC was established to develop business opportunities in the rapidly growing MTBE and methanol markets worldwide.

**Our Journey** 





A wholly owned subsidiary of Overseas Petroleum and Investment Corporation, which in turn is beneficially owned by the Chinese Petroleum Corporation (CPC) of Taiwan. CPC is the state-owned supplier of oil and refined petroleum products for the Taiwanese market and is involved in exploration, refining, storage and distribution of oil and natural gas, as well as in the manufacture of petrochemical raw materials. CPC is Taiwan's largest manufacturing enterprise.

# LCY Middle East Corp. (LCYMEC)

A wholly owned subsidiary of LCY Investments Corp. (LCY), which is in turn a wholly owned subsidiary of the Lee Chang Yung Group of Taiwan, one of the major suppliers of petrochemical products including methanol, formaldehyde, ethyl acetate, isopropyl alcohol and acetone. Over the previous decade, LCY diversified into production of high-value-added products such as synthetic rubber, copper foil, and electronic-grade fine chemicals.



# **Memberships and Associations**



## The Royal Society for the Prevention of Accidents (RoSPA)

RoSPA is a registered British charity established in 1916 with the objective of saving lives and preventing accidents that can cause life-changing injuries.



# Methanol Institute (MI)

Methanol Institute is a global trade association for the methanol industry representing the world's leading methanol producers, distributors and technology companies. The mission of the Methanol Institute is to serve and provide cost-effective value to its membership.



# The Gulf Petrochemicals and **Chemicals Association (GPCA)**

GPCA represents the downstream hydrocarbon industry in the Arabian Gulf. The association manages six working committees – Plastics, Supply Chain, Fertilizers, International Trade, Research and Innovation, and Responsible Care – and organizes six world-class events each year.



# **Asian Clean Fuels Association** (ACFA)

ACFA is a non-profit organization established in 2000 and works closely with fuel policymakers, regulators and stakeholders in the fuel industry to promote and advance the use of cleaner transport fuels based on principles of sound science, cost efficiency and sustainability of the environment.



## Mary Kay O'Connor Process Safety Center (MKOPSC)

The center's mission is to promote safety as second nature in industry around the world with goals to prevent future incidents. In addition, the Center develops safer processes, equipment, procedures and management strategies to minimize losses within the processing industry.



## The European Petrochemical Association (EPCA)

EPCA is Europe's primary business network for the global petrochemical community. EPCA programs continuously inform members on a full range of topics, shaping the sustainable development of the global petrochemical industry.

# Value Chain

QAFAC is an integrated facility, where input materials from Qatar Petroleum (QP) and the Qatar Fertiliser Company (QAFCO) are transformed into Methanol and MTBE, and then shipped from site to our customers around the world.



Note: This diagram is for illustrative purposes only and does not necessarily reflect the exact layout of the plant or shape and design of the equipment

# Governance

At QAFAC, we cognize the importance of transparency and accountability in performing our activities to promote good substantive outcomes. Thus, we realise the importance of having a good Corporate Governance that provides our stakeholders a transparent understanding of our operations and endorses achieving long-term strategic objectives and targets, financial stability and business integrity.

The Board of Directors (BoD) is the ultimate governing body that provides oversight over our executive management and supports them in setting policies. The BoD includes inside directors – members who are typically major shareholders and executive management - and independent directors to ensure the representation of shareholder interests as well as bring objective views. Currently, QAFAC's Board of Directors is comprised of the Chairman, Vice

# **Organizational structure**

Chairman QAFAC's Chief Executive Officer (CEO) and five other directors. The chairman heads the BoD's meetings and ensures that a culture of openness and transparency is maintained.

To ensure risk management, governance and internal control process are operating effectively, QAFAC has a dedicated internal audit manager that provides independent assurance of these function and reports directly to the CEO and subsequently Board of Directors. In addition, the legal manager also reports directly to the CEO to warrant conformance to all legal requirements and obligations.







Sheikh Thani Bin Thamer Al-Thani Vice-Chairman, (IQ)

\*Note: The leadership team is up to date as of December 2020.









Mohammed Nasser Al-Hajri Chairman, (IQ)







Abdulaziz Khalil Al-Meer Director, (IQ)



Tariq Baker Director, (IOLLC)

Khalifa Al-Sowaidi **Chief Administration Officer** 



Khalid Al-Mannai Chief Corporate Officer

# **Risk management**

## GRI 102-11

We continuously strive to reduce the uncertainty against the achievement of our objectives, business strategy and plans and operational effectiveness. Thus, we established a comprehensive Enterprise Risk Management (ERM) framework based on ISO 31000:2009 and follow a four-step management process – Plan, Do, Check, Act for the control and continuous improvement of processes. We have eight principal risk categories applicable to QAFAC through which we manage and mitigate risks effectively; these are strategic and reputation risk, operational risk, HSSE risk, energy performance risk, financial risk, IT risk, legal risk and human resources risk.

# Ethical Culture

# GRI 102-16 GRI 102-17

We are committed to responsible business conduct and uphold the highest ethical values. Our Code of Ethics and Conflict of Interest Policy provide clear guidance to all employees on what it means to

# QAFAC Enterprise Risk Management objectives



Risk Level	Risk Score	Escalation Level
Critical	16-25	Senior Management/Audit and Risk Committee (Reporting to the
Significant	12-15	Board)
Moderate	8-10	Risk Management Committee/Senior Management
Low	4-6	
Insignificant	1-3	Department Manager/(Risk OWNer)

act ethically, professionally, and with integrity. Our Code of Ethics and Conflict of Interest Policy cover a wide range of topics including antibribery, conflict of interest, fraud, corruption, and compliance. Each year, our employees are required to make a Code of Ethical Conduct Declaration, indicating that they have read and clearly understood the code, and whether they have any actual or potential conflicts of interest.

Furthermore, we always strive to promote a culture of open, transparent communication on any issues or incidents faced by any employees as a part of their association or work with QAFAC. We have rigorous reporting mechanisms to report any incidents of misconduct and corresponding corrective actions to ensure any such complaints are addressed in a timely and effective manner.

In 2019, we did not record any cases

of corruption or ethical violations.

# **Strategic Direction**

We achieved significant milestones over the last two decades of commencing our operations across different areas such as production, operational excellence, safety and contribution to local communities. However, we realize many shifts are occurring due to the various global trends impacting the petrochemical industry. As a result, we comprehend that it is critical to review and refresh our corporate strategy to maintain our profitability and sustainability while delivering value in line with the Qatar National Vision 2030. In 2019, we launched project 'Advance' to undergo a proactive refresh of our strategy the next 5 years and ultimately define an inspiring and motivating strategy, vision, mission and values that consider pertinent external factors such as, changes in the petrochemical market dynamics, potential changes in shareholder structure as a result of Joint Venture (JV) agreements, and QP's strategies.

Our project was implemented over a 3-phase approach consisting of strategic foundation, strategy formulation and strategy roll-out. As part of the approach for refreshing the strategy, one-on-one meetings were held with all department heads as well as external

# Key trends in the petrochemical sector

## GRI 102-16

	Trend	Highlights
	Differentiation through operational excellence and cost optimization	Rate of chemical demand grow Number of chemical industries <b>Operational/commercial exc</b>
C	Demand shift to Asia and developing markets	<b>Chemical demand in develop</b> China and others to account for
	Movement towards 'Green'	Multiple <b>environment related</b> favor of environment friendly pr
	Changes in energy and Transportation markets	Continued growth of fossil fuels terms of negative impact on ga
	State/IOC participation in chemicals	IOCs and state-influenced comp Chemicals and new geographie
	Digital Innovation	Advances in digital tech will to a <b>Capabilities,</b> as well as offer w

entities like Muntajat and QP in order to gather feedback and align the thought processes of all stakeholders. Furthermore, two off-site meetings were undertaken; the first one focused on QAFAC's vision and mission, whereas, the second one was dedicated for our values. Our final refreshed vision, mission, values and strategy underwent an approval from our Chief Executive Officer (CEO) and Board of Directors. Thereafter, roll-out of our strategy to familiarize our internal and external stakeholders was completed.

Our updated vision, mission, values and strategy shape the way we rightfully conduct our business through ensuring economic profitability and safeguarding our social and environmental vitality. The updated corporate strategy considers our internal strengths and capabilities to produce high quality Methanol and MTBE by optimizing production volume and plant reliability whilst preparing us to embark on future endeavours through potential sustainable growth in the petrochemical industry.

th relative to GDP slowing in all major regions; maturing, particularly in developed economies **cellence becoming key value drivers** 

**ping markets has surpassed developed markets;** - - 800/0 of petrochemical demand for the next 5 years

**d regulatory constraints and mandates** being introduced in products — e.g. bio-fuels, renewable chemicals

s and gasoline demand until late 20's; a fundamental shift in asoline demand / fuel additives expected post —2030-35

banies to **continue to move further downstream** into es to capture additional margin

enable **operational and commercial excellence** wide range of **cost optimization opportunities** 



# **Sustainability Management**

We are committed to transparently communicating our sustainability performance related to economic, environmental and social aspects to all our stakeholders. We recognize that disclosing our impacts to our stakeholders supports us in maintaining our accountability and being a conscious member of the community.

# Stakeholder engagement

GRI 102-42 GRI 102-43 GRI 102-46

We are committed to effective, meaningful and informed stakeholder engagement to achieve sustainable development and remain relevant. Our stakeholder engagement process involves identifying and prioritizing key stakeholder groups that substantially can impact or be impacted by our business decisions, activities and operations. The table below disclosed a list of all our key stakeholder groups and the different channels of engagement that we have used to communicate with them.

# GRI 102-40 GRI 102-42 GRI 102-43 GRI 102-44 GRI 102-46

Stakeholder	Key Concerns	Channels of Engagement
State of Qatar and Regulatory Bodies	<ul> <li>QNV 2030</li> <li>Development of national talent</li> <li>Qatarization</li> <li>Compliance with regulations</li> </ul>	<ul> <li>Meetings with government entities</li> <li>Partnerships with government entities</li> <li>Conferences and exhibitions</li> <li>Performance reports to regulatory bodies</li> <li>Annual sustainability report</li> </ul>
Shareholders	<ul> <li>Maintenance of safe and reliable operations</li> <li>Process efficiency</li> <li>Financial returns</li> <li>Reputation</li> <li>Participation in local economic and social development</li> </ul>	<ul> <li>Quarterly meetings</li> <li>Annual interviews and shareholder market presentations</li> <li>Board and ExCom meetings</li> <li>Sponsorship collaborations</li> <li>Liaison offices</li> <li>Annual sustainability report</li> </ul>
Local community	<ul> <li>Responsible business practices</li> <li>Minimal environmental impacts</li> <li>Employment opportunities</li> <li>Safe operations</li> <li>Development of national talent</li> </ul>	<ul> <li>Interaction with employees and their families</li> <li>Educational awareness sessions</li> <li>Public reports</li> <li>Career fairs</li> </ul>
Employees	<ul> <li>Health and safety</li> <li>Competitive pay and benefits</li> <li>Continuous career development</li> <li>Open and transparent</li> <li>Communications</li> <li>Supportive</li> <li>Management</li> </ul>	<ul> <li>HSSE Newsletter</li> <li>Regular departmental/team meetings</li> <li>Employee satisfaction surveys</li> <li>Town hall meetings with top management</li> <li>Email communications</li> <li>QAFAC Newsletter</li> <li>Annual sustainability report</li> </ul>
Media	<ul><li>Transparency</li><li>Health and safety</li></ul>	<ul> <li>Strategic global media engagement program</li> <li>Press releases and press conferences</li> <li>Interviews and meetings</li> <li>Social media platforms</li> </ul>
Customers and Muntajat	<ul> <li>Reliable, timely supplies of Methanol and MTBE</li> <li>Supply chain management</li> <li>Service excellence</li> <li>Quality products</li> </ul>	<ul> <li>Contracts and agreements</li> <li>Monthly meetings with Muntajat</li> <li>Conference and exhibitions</li> <li>Customer feedback surveys</li> <li>Memberships in industry associations</li> </ul>
Contractors and suppliers	<ul><li>Fair contract bidding/awarding</li><li>Timely payments</li><li>Good working conditions</li></ul>	<ul> <li>Contractual arrangements and bidding</li> <li>Conferences and exhibitions</li> <li>Third-party endorsement</li> <li>Medical screening for contractors</li> </ul>
Non-Governmental Organizations	<ul><li> Responsive communications</li><li> Support to local NGOs</li></ul>	<ul><li> Presentations/Briefings</li><li> Meetings</li></ul>

# Materiality



We annually perform a materiality assessment to determine which relevant topics are sufficiently important that it is essential to report on them. We considered a combination of internal and external factors when assessing whether the topics are material. The Materiality Principle is key to determining the contents of a sustainability report and also ensuring the quality of the report. Our materiality assessment followed a 4-step approach.

- 1 Review our context: We performed a review of our material topics in the previous reporting period and considered feedback from stakeholders. The findings from our review contributed to the next step in our approach.
- 4 Validate material topics: Subsequent to the analysis of the Think
  2 Identify relevant topics: In this step, we aim to identify a list of relevant topics that merit inclusion in the sustainability report because they can reasonably be considered important for reflecting our economic, environmental, and social impacts, or influencing the decisions of stakeholder.
  4 Validate material topics: Subsequent to the analysis of the Think Tank results, we shared a list of the identified material topics with our top management to validate and sign-off on the results. The validation step ensures that the Global Reporting Initiative's (GRI) principles of 'completeness' and 'stakeholder inclusiveness' are applied to conclude the final list of material topics defining the report content.

We conducted a desk review of multiple sustainability frameworks and agendas as well as international and regional peers in the

# QAFAC's Materiality matrix

# GRI 102-46



# Aligning our priorities

As a responsible corporation, we are keen to demonstrate our commitment and contribution to endorse sustainable development in line with national and international frameworks. We place particular importance to the United Nations Sustainable Development Goals (UN SDG), Qatar National Vision 2030 (QNV 2030) and Qatar Stock Exchange Guidance on ESG Reporting (QSE). chemical sector. Some of the sustainability frameworks we reviewed were Sustainability Accounting Standards Board (SASB), Qatar Stock Exchange (QSE), and the Global Reporting Initiative Oil and Gas Supplement.

As a result, we identified 19 relevant topics that cover economic, social and environmental aspects.

3 Prioritize relevant topics: After the identification of 19 relevant topics, we used a virtual collaborative platform known as Think Tank to facilitate the engagement with internal stakeholders across QAFAC's departments and ultimately prioritize the topics in line with QAFAC's significant economic, environmental and social impacts as well as the degree to which the topic would influence the decisions of stakeholders.

The results of the materiality assessment are shown below.

Importance to QAFAC

The table below outlines the alignment of our sustainability topics and contributions to UN SDGs, QNV 2030 and QSE. Detailed information on QAFAC's contributions to the sustainability frameworks are available in the respective chapters.

GRI 102-46 GRI 102-47						
Material topics	QAFAC's contribution	Relevant UN SDG	QNV 2030	QSE		
Product responsibility and innovation	As a producer of Methanol and MTBE, we perform rigorous quality checks on our products prior to transportation and conduct impact assessments on our products to provide material safety data sheets with our products and ensure the health and safety of our customers.	9 meret annen Bernerster Sector annen Sector	Economic development, Social development, Environmental development	QSE E 2, S 14		
Qatarization	To promote Qatarization, we updated our nationalization policy. In 2019, we achieved 27.7% Qatarization of our workforce and 80% Qatarization of our senior management.	8 merenan	Social development	QSE S 20		
Emergency preparedness	We updated our emergency response pre-plans and ensured that all emergency elements as well as social, environmental and health and safety considerations were included. In 2019, we performed 14 Health, Safety, Security & Environmental exercises against a target of 12 and conducted two additional exercises to measure emergency response preparedness for the turnaround.	-	Social development			
Operational and financial growth	We continue to make significant economic contributions through our direct economic value generated and the payments we make to employees, providers of capital and government. Our total revenue in 2019 was USD 531 million.	8 Intervention 1 Intervention	Economic development	-		
Reliability and process safety	We have a rigorous framework for process safety management with several committees to oversee performance and world-class procedures and processes. Our AMAN program established a solid foundation towards achieving major and sustainable improvements in our HSSE culture and performance. In 2019, we did not have any tier 1 and tier 2 process safety incidents.	3 MORENCE MARKEN AND AND AND AND AND AND AND AND AND AND	Social development	QSE S 14		
Human rights and labour standards	We ensure that all our employees and contractors are treated fairly and all their rights are preserved. We always listen to our employees perform regular audits on our contractors' premises to ensure compliance with human rights.	16 rate area on the area of th	Social development	QSE S 16, 17, 18		
Air emissions	We invest in various controls and initiatives to ensure the reduction of our emissions. In 2019, we are proud to mention that both our NOx and SOx emissions decreased in 2019 by 37% and 19% respectively in comparison to 2018. Our performance improvement is a result of undertaking various initiatives at QAFAC – most prominently installation of Selective Non-catalytic Reduction (SNCR) Unit at our Methanol Reformer.	3 severate -// 12 severate interaction 14 severate interaction 15 severate -//	Environmental development	_		

# GRI 102-46 GRI 102-47

Occupational health and safety	Our goal is to ensure 'Zero Harm' for all our employees, contractors, visitors, customers, and shareholders and ensure a hazard free and safe working environment with zero injuries and zero fatalities. We maintain the 'Bill of Safety Rights and Duties' as well as our occupational health and safety management system. We are proud to have accomplished a significant milestone of 15 million safe working hours without any lost time injuries (LTI) over eight years.	3 mendelse 	Social development	QSE S 14, 15
Learning and development	We are committed to the development of our employees. In 2019, we implemented a training system - Success Factor - that automates our entire training and development process, including the ability to assign training programs to employees based on their specific learning and development needs, monitor employees' training hours and their compliance with training materials. Our employees completed 33,162 hours of training during the reporting period.	5 filmer	Social development	QSE 5 13
GHG emissions	We are committed to tracking and reducing our GHG emissions through our various initiatives – most prominently our Carbon Dioxide Recovery Unit. In 2019, we started our journey to implement a world-class Greenhouse Gas (GHG) Accounting and Reporting (A&R) program to ensure highest accuracy of reported GHG emissions.	3 seriesters -//+ 12 containing containing approximation 13 series approximation 13 series approximation 13 series approximation 13 series approximation 14 series 15 series approximation 15 series approximation 15 series approximation 15 series approximation 15 series approximation 15 series approximation 16 series approximation 17 series approximation 18 series approximation 18 series approximation 19 series approximation approximat	Environmental development	QSE E 5
Waste management	Our production processes do not generate significant volumes of hazardous and non-hazardous waste, as our operations are natural gas based. Nevertheless, we aim to reduce waste generation wherever possible, which is mostly focused on domestic sources where we continue to establish best waste management practices. We have programs in place to safely handle chemical waste and reduce waste generation through recycling.	3 senses 	Environmental development	QSE E 9
Sustainability in supply chain	We are committed to advancing the principles and practices of social and environmental responsibility along the value chain through our procurement policy, which is communicated internally and externally and prioritizes contractors and suppliers who have high social, environmental and economic standards, and local goods and services. In 2019, we spent 53% of our supplier budget on local suppliers.	8 ENDER MARK	Social development, Economic development	QSE S 22
Employee engagement, attraction and retention	We are governed by a set of policies to manage our employee attraction, retention and engagement. In 2019, our turnover rate was 3%.	3 MERECAN →→→→ 10 PREFET = →→→→ 5 MER ● 5 MERE ● 8 MERECANA 8 MERECANA • • • • • • • • • •	Social development	QSE S 10, 11, 12

GRI 102-46 GR	I 102-47				
Diversity and equal opportunity	We are proud to be an equal opportunity employer. We are committed to fostering diversity and building an inclusive corporate culture where employees can reach their potential regardless of gender or ethnicity. As a result, we promote equal employment, training and career development opportunities for women and seek to help address the challenge of youth unemployment through the different initiatives we've put in place. In 2019, employees between the age of 18-30 made up 13% of our workforce and females made up 8%.	5 mar Statestation Statestat	Social development	QSE S 19	
Energy management	We follow detailed processes to optimize energy consumption at our plants and ensure that we manage our energy efficiently. For instance, we conduct steam balance and our specific gas consumption regularly. We also initiated a project in 2019 to implement an energy management system (EnMS) in line with ISO 50001.	7     Stream And Stream And S	Environmental development	QSE E3, 4, 6, 7	PA
Community engagement and investment	As a Qatari company, we strive to continuously contribute to the Qatari society. We are committed to supporting development programs with benefits that are based on the needs of communities, improve quality of life, and create a sustainable future.	-	Social development	QSE S 22	
Water stewardship	We are committed to managing our water consumption. We monitor our water consumption and wastewater generated and share quarterly reports with the Ministry of Municipality and Environment (MME) as part of their requirements for our consent to operate permit. To further manage our wastewater, we are establishing a near zero liquid discharge (NZLD) plant, where we aim to recycle 85% of our process wastewater. This treated wastewater will be used in our demineralized plant. Installation of NZLD project will reduce discharge of process wastewater and will reduce intake of fresh water from KAHRMAA (Local Electricity and Water Production Company)	12 seven Reserve Reser	Environmental development	QSE E 8	



TK-2201

# 03

# SUSTAINABLE GROWTH

- Operational Reliability and Efficiency
- Product Responsibility
- Financial Value
- Sustainable Supply Chain

Material Topic	Alignment to GRI	Alignment to UN SDGs	Alignment to QSE	Alignment to QNV 2030
Product responsibility and innovation	GRI 416, GRI 417	9 Katter kenteta Andre activization Andre activizat	QSE E 2, S 14	Economic development, Social development, Environmental development
Operational and financial growth	GRI 201	5 CONFE	-	Economic development
Sustainability in supply chain	GRI 204, GRI 308, GRI 414	8 RECENT RINK AND RECONSERVENT	QSE S 22	Social development, Economic development, Environmental development



The global petrochemical industry in 2019 faced volatile oil prices and geopolitical trade disputes that affected the global oil and gas demand, with Brent oil prices traded at an average of USD 64 per barrel that presented a decrease of USD 7 in comparison to 2018<sup>1</sup>.

The global challenges faced in oil prices volatility were augmented by national challenges, in particular the blockade of the State of Qatar by its neighbouring countries. These growing challenges do not undermine the forecasted growing demand for the energy sector, as indicated in the increased production of crude oil in Qatar with over 622,000 barrels per day of crude oil in 2019, around 2% increase from 2018, with an estimated oil reserve of 25.7 billion barrels that are mostly offshore oil fields<sup>2</sup>.

While demand for Methanol is expected to increase in the upcoming years owing to its wide variety of end-user applications, we remained resilient, withstanding price competition and focusing on increasing our operational efficiency and reliability, enhancing the quality of our products and improving our financial performance.

As a testimony of our leadership's commitment to sustainable growth, we launched the Project 'Advance' in 2019 to undergo proactive strategy refresh for the next 5 years. Various strategic priorities were defined to optimize our production volumes for MeOH and MTBE and achieve business excellence to improve efficiency and quality, while delivering value in line with the Qatar National Vision 2030.

Key Achievements and Highlights



Along with our strategic transformation, we cognize the key role controls and management systems play in upholding operational excellence and growth. Thus, we maintain an ISO 9001 quality management system certified by an external auditor. Our quality management system enables us to identify, measure, control and improve our various core business processes to ultimately achieve process efficiency, support profitability and ensure the development of a quality-driven culture. In addition, our quality management system endorses us to deliver products which consistently achieve customer satisfaction.

Furthermore, we established multiple key performance indicators (KPIs) to track our financial performance, plant reliability, maintenance, production, product quality, and customer satisfaction. We have also set targets for some of our KPIs to warrant excellent business performance and sustainable growth specifically through our Operational Excellence Program (OE). The Program reinforces our leadership position in the industry, and transforms working procedures through the introduction of world-class tools and practices that increase performance, efficiency and reliability through state-of-the-art operations and equipment, continuous performance monitoring and management, in addition to fostering a culture of innovation, ownership, accountability, and self-improvement at all levels of the organization.

The OE program was launched in 2015 with the aim of achieving

# Did you know

The Methanol market is expected to grow in the upcoming years due to the rapidly increasing demand in Methanol. It is expected to register a compound annual growth rate of 5% during 2020-2025. However, a factor that might hinder the growth of Methanol market is the negative health impacts.

Methanol Market - Growth, Trends, and Forecast Report (2020-2025) operational excellence in the production, maintenance, and supply chain departments through the continual analysis and improvements of our plants' main operations. The program also entails a performance monitoring system to track our production performance. Further information on our performance monitoring system is provided in three operational reliability and efficiency section of the chapter.

A pertinent factor that supports QAFAC achieve its desired outcomes is the effective communication and engagement with employees that has deemed essential in the success of QAFAC over the past years. Our leadership believes in communicating QAFAC's core values, commitments and challenges to all its employees in an effort to improve employees' satisfaction and commitment towards the company's mission and vision. Most recently, the CEO chaired several events to communicate key messages to employees, one of which was the newly updated corporate strategy where the management communicated QAFAC's new vision, mission and strategic direction towards financial and production targets for the next 5 years. The executive management have also chaired several events including committee meetings and symposiums to effectively communicate QAFAC's production and financial performance and future targets.

This section outlines our performance during the reporting period on economic performance, indirect economic impact, procurement

Our corporate alignment to our sustainable growth priorities



during the year

practices, customer satisfaction, customer health and safety,
efficient and reliable operations, supplier environmental and social
assessments. These material topics have been aligned with the GRI
standards on which this report has been based on. The selected
material topics have also been broadly correlated to the UN SDGs,
QNV 2030 and QSE ESG Guidance to show the contribution of our
activities and initiatives to sustainable development globally and
locally.

	Did you know	
Employ indicate workpla product employ <b>Source</b>	ree engagement increases productivity as ed in Gallup's 2016 survey from 82,000 aces in 73 countries that showed a 20% hi tivity rate for organizations in the top quart ree engagement. <b>: Harvard Business Review</b>	gher ile for
ol and MTB	E recognized for our reliability and the	
nd MTBE		
Deliver wh	at we promise. Clear objectives	
us improve	ment in all dimensions	$\Big)$
Methanol a	nd MTBE	$\Big)$
nd reliabili	ty in the most economical way	$\Big)$
operation	s, project execution and support functions	$\Big)$
telligence v es and alter	vith support of Qatar Petroleum and Muntajat native production route for Methanol	-
ze/de-bott	leneck the plant within current constraints	$\Big)$

# **Operational Reliability and Efficiency**

Globally, a structural shift towards responsible production has been noticed, where companies are aligning their efforts to increase profitability in a sustainable and responsible manner. Several petrochemical companies are searching for the most innovative ways to improve their productivity with higher production rates at the lowest cost, less numbers of unexpected shutdowns, and safe operation through maintaining high plant availability and reliability, improving efficiency of operations and boosting digitalization.

A successful and safe plant is one that performs well without failure or unplanned interruptions. At QAFAC, we understand that poor plant availability and reliability causes uncertainty among our customers that ultimately affects our bottom line. Maintaining high plant availability and reliability is a critical component in our business decision making and lies at the heart of our company.

We manage consistent operations across our businesses through the introduction of technology and a combination of rigorous systems and procedures that help us in monitoring our assets and avoiding preventable failures. We have also set specific initiatives to align to the highest standards in operational activities that helps us sustain high Methanol and MTBE plant availability and reliability at 100% in the most economical ways. For example, we have implemented an approach to risk-based inspection, which provides for dynamic and planned inspection and maintenance activity that enable us to keep a firm grip on operational risks, as such, mitigating the risks of any unplanned shutdown of our operations.

We also follow internal procedures when conducting equipment reliability assessments on par with Mechanical Integrity and Quality Assurance (MIQA) Manual that applies to both static and rotary equipment, focusing on installing, maintaining and improving assets as per the specifications of the equipment design basis. Typically, a comprehensive set of sub procedures guides our alignment with the MIQA manual in managing process management safety critical equipment and associated tasks that can be viewed in real-time by our reliability department using our SAP system. Our major achievement in 2019 was establishing a MIQA committee comprising of all QAFAC's function Heads who meet every two months to discuss progress on the committee's KPIs.

We also aim to increase our production margins through rigorous planning of plant shutdown and equipment downtime. During the 2-month planned shutdown (turnaround) undertaken in 2019, we evaluated the aspired levels of productions and assessed how these are achieved through the implementation of effective measures and efficient equipment. As a result of those inspections, we replace several major equipment such as the waste heat boiler imported from Germany. We also assessed when the next inspection cycle is due based on our evaluation of all equipment. The results are expected to be announced by 2021.

To ensure our strategic initiatives are communicated across the entirety of QAFAC, we held a critique meeting, chaired by the Chief Operations Officer and attended by key employees and senior managers, in order to evaluate our production procedures, operations, and the required areas of improvements.

Moreover, last year we introduced an Operator Training Simulator (OTS) to drive significant benefits for the plant operation. The OTS objective is to impart skills for process operators utilising state of the art dynamic simulator for our Methanol and MTBE processes. The feature of the OTS includes that all the upset conditions in the plant can be simulated close to real plant operation.

In addition, we annually conduct Methanol and MTBE plants' reliability assessments to compare our performance against previous targets and set future targets to continuously improve our plant reliability. In 2019, our plants achieved 98.3% reliability (in terms of probability of the plant operating for a specified period without failure), exceeding the 96% target established for the year and slightly decreasing comparing to 2018. This decrease is due to a 2-day extension of the turnaround as a consequence of detecting a high axial displacement of the turbine rotor when injecting high-pressure steam into the turbine stream at the startup of our operations. This is an expected hurdle that oil and gas companies face as a result of a sudden change of load after initiating the planned turnaround.



O QAFAC's TA (turnaround) Meeting in 2019

To continue achieving our production and gross profit targets, we strive to improve the efficiency across our operations by ensuring major projects are executed within the budgeted time and cost

Reliability performance indicator	2016	2017	2018	2019 (Achieved)	Actual Target
Plant availability and reliability (%)	99	100	100	98.30%	96%

to achieve a 10% reduction in our controllable costs by 2023. Our objective is in line with QP's guidance that encourages the automation of time-consuming processes and deploying cost saving measures. Additionally, we plan to undertake benchmarking studies against best practices on cost of operations in particular regarding maintenance and procurement that will support us in identifying improvement areas to implement across our operations. Furthermore, we have also established specific key performance indicators (i.e. equipment efficiency, consumption rates and quality adherence) for measuring and managing our manufacturing productivity, which is the efficiency of our operations, project execution and support functions.

As a result of our reliability and efficiency efforts, our Methanol production reached 932,331 MT in 2019 (design capacity of 3,000 MT/day of US Federal Grade AA Methanol), which is a 105% increase from planned production target. There was a slight decrease

KPIs		2016	2017	2018	2019	Target
Overall equipment efficiency (OEE) (%)		N/A	96	98.7	93.6	96
Consumption rate	Butane	0.74	0.75	0.74	0.75	0.765
	Methanol	0.359	0.358	0.359	0.361	0.362
Quality adherence (%)		100	100	100	100	100

KPIs	2016	2017	2018	2019	Target
Methanol production (tons)	903,767	1,067,020	1,091,340	932,331	932,331
MTBE production (tons)	664,835	674,982	698,211	578,080	609,808
Pentane exports to QP (tons)	11,195	12,288	11,433	8,715	10,977
Gross margin Methanol (USD/ton)	56	129	187	63	93
Gross margin MTBE (USD/ton)	172	168	187	157	100.4

## Our Production Performance



by almost 14.5%, compared to 2018 due to the turnaround that lasted two months and supply limitations of natural gas from QP. Our MTBE production was 578,080 MT in 2019 (design capacity of approximately 1,830 MT of MTBE/day), a decrease of approximately 17% compared to 2018 due to plant turnaround which lasted about 51.7 days with a two day delay due to QAFCO H<sub>2</sub> supply, utility handover, and Butamer acidization. At QAFAC, we realize that digitalization also plays a key role in driving operational excellence and cost optimization, thus, as part of our strategic initiatives we intend to boost digitalization to become a reference in our industry, leading the State of Qatar and the international industry towards cutting-edge digital solutions.

Our current digitalization is demonstrated in our internal management system that supports us in tracking our production performance. Daily and monthly production dashboard meetings form the core of our operational management at our Methanol and



MTBE plants, the dashboards help us track and review performance improvements at all operational levels and enable us to initiate improvement actions wherever necessary. They also provide a basis for face-to-face discussions about performance, which is valuable for creating a mindset of continuous improvement. Clear and accessible production information also enables us to set and monitor performance against targets.

We have also implemented Advanced Process Control (APC) at the MTBE plant, which help us in reducing the energy and butane consumption, as well as enhancing production volume by reducing fluctuations affecting plant operation. Since the three major controllers were put into operation in 2016, benefits have ensued in terms of smoother plant operation, reduction of process deviation alarms, improvement in production, and steam savings.

Moving forward, our digitalization efforts are planned to span across multiple functions including production, maintenance, procurement, health and safety and the rest of our departments, through task automations, wearables that involve devices, such as smart watches, that can be used by QAFAC's employees to share and view company data.

In addition to our planned adoption of the Internet of Things (IOT) that has the ability to transform any device into a smart solution through a simple internet connectivity for the sole purpose of efficiency of operations. For example, we plan to connect our products with our data monitoring system to transmit the product's performance data in real-time.



# Successful completion of our scheduled turnaround

As part of QAFAC's business plans, turnarounds are planned for the scheduled maintenance of equipment which are under continuous operation for long durations and catalyst replacement works. The primary goal of the scheduled maintenance is to prevent equipment failure before it actually occurs ensuring the reliability and efficiency of our operations.

We completed all our major works successfully ensuring that our Turnaround works were carried out based on the Shutdown plants can run reliability and efficiently in the future. However, Notifications available in the SAP system created by the we encounter delays in the shutdown duration for our MTBE and Operation, Inspection and Maintenance departments. Work Methanol plants. The total delays averaged at 2.74 days and were scope preparations and discussions for the 2019 turnaround due to several unexpected complications that occurred in both our started since 2015 to ensure smooth completion and success MTBE and Methanol plants. of the turnaround. In order to be able to measure turnaround performance and success, our management set up the following Despite the delays we faced, we are proud to mention that key performance indicators: Zero lost time accidents (LTA), finish we have completed the turnaround with most of our key on schedule, cost of turnaround should be within the budget, zero performance indicators achieved; Had no LTA, achieved 100% fires, 100% HSSE induction, 15% permit to work (PTW) audits, HSSE induction, remained within the budget for turnaround zero vehicle related violations and 25 behavioral based safety cost, completed 2161 audits of PTWs and had a total of 127 BBS (BBS) observations per week. observations.

The major works carried out during the turnaround were:

- Waste Heat Boilers (WHB) replacement .
- Convection coil E01 B & E03 tubes replacement
- . Sub Headers 5 Nos replacement
- Turbine Casing & Expansion Bellow replacement
- Compressor Stator & Rotor upgrade
- Low-pressure and high-pressure compressor refurbishment . Reformer End Row upgrade
- Isolation valve installation for seawater isolation .
- . Oleflex Heater Convection coil Robotic cleaning
- All 3 inner screen replacement for reactor .
- . Regeneration Gas Scrubbing project tie-in
- Katamax Trays and Packing replacement



- Compressor rotor refurbishment
- . Boiler Super Heater coils
- Sea Water Sump & Travelling screen refurbishment
- 33KV Power reliability project execution
- Programmable Logic Controller (PLC) revamp project execution



# **Product Responsibility**

At QAFAC, we produce two primary petrochemical products -Methanol and MTBE from our production plants. Our Methanol plant produces Methanol from natural gas supplied by Qatar Petroleum (QP). The natural gas is reacted with steam in the reformer unit to produce synthesis gas which is converted through the methanol

**Our Products** 

# **Methanol**

# **Characteristics:**

A clear, colorless, water soluble, readily biodegradable and flammable liquid with a characteristic odor.

# Manufactured from:

Wood, petroleum, naphtha and natural gas. **Applications:** 

Plastics, adhesives, reins, glues, LCD TV, computer screens, silicons, wind-shield, water fluid, propane, furniture, carpeting, plywood subfloors, vaccines and other pharmaceuticals.

Our MTBE plant uses butane - supplied by QP to convert butane through an isomerization reaction to isobutane. The latter then undergoes a dehydrogenation process to produce isobutene which is essential for MTBE synthesis. The isobutene is reacted with the Methanol - produced at our Methanol plant to produce MTBE - a colorless flammable liquid used to replace lead in gasoline.

Both Methanol and MTBE are essential raw materials that have numerous industrial and commercial applications and are prevalent in our daily lives. As such, we realize our significant responsibility to maintain the highest standards of quality, health, safety and environment of our products to mitigate their potential negative impacts on our people and customer at any point during production, storage, transportation and end-use.

Throughout the production process, we factor various elements to ensure the production of high-quality methanol safely, starting from the selection of suitable coal gasifiers, to optimizing the process conditions including monitoring and controlling the temperature and

# QAFAC's Methanol Production Process



synthesis reaction to Methanol. To refine Methanol to 99.9% purity. we then send the Methanol stream containing unreacted and uncondensed gases to the distillation section of our Methanol Plant. The pure Methanol is then either sold or used for the production of MTBE at our MTBE plant.

# **MTBE**

## **Characteristics:**

Colorless flammable and clean-burning liquid.

## Manufactured from: Methanol

# Applications:

A fuel additive in motor gasoline to reduce the tail gas pollution generated by motor vehicles, such as volatile organic compounds (VOC) and particulate matter (PM), which in turn improves air quality due to more complete combustion.

pressure in the production process to achieve high conversion and quality of our products. Furthermore, we have rigorous processes and controls to ensure the production of our products is done safely. For instance, our products are stored above-ground in tank farms to avoid hazards related with static discharge that are prevalent in other types of storages. Also, all our pipes and valves are labelled, and the direction of flow is indicated. For more details about our health and safety practices at our plants, please refer to the Reliable and safe operations chapter on page 56.

In line with our efforts to demonstrate product responsibility excellence, our products undergo a comprehensive quality check in line with our ISO 9001 quality management system. We also performed environmental, health and safety impact assessments of our products, identified associated hazards and various controls for exposure, accidental release, first aid among others. The assessments

are critical for mitigating our health, safety and environmental impacts and protecting our people and customers throughout the process of handling, storing and transporting our products.

As additional measures to ensure the protection of all our people and safety impacts of products within the reporting period. customers, we have respective material safety data sheets (MSDS) conforming to the United Nations Globally Harmonized System of Nevertheless, we comprehend that part of our product stewardship Classification and Labelling of Chemicals (GHS) available for both extends to warranting a seamless transportation process to our Methanol and MTBE. Conformance to GHS provides a systemic customers, meeting their deadlines and ultimately ensuring customer approach to informing users about the potential hazards by using satisfaction. Therefore, we coordinate with Qatar Chemical and standard symbols and phrases that are easily understood by users. Petrochemical Marketing and Distribution Company Q.P.I.C (Muntajat) Our MSDS for Methanol and MTBE are available to anyone handling, to manage our products' marketing, sales, distribution and associated transporting or using our products as well as publicly available on activities in line with our exclusive rights agreement. Muntajat is a our website. Our MSDS contains various safety information to help state-owned company established in 2012 to serve as the exclusive with the identification of the product, its hazards and some controls marketer, distributor, and seller of over 16 million metric tons measures including dedicated emergency hotlines. They specifically of downstream products, including QAFAC's methanol and MTBE depict the physical and chemical properties to be aware of when products. handling and storing our products, identify potential hazards and first In addition, as part of our strategic initiatives we intend to collaborate aid measures, including correct measures to implement if methanol with Muntajat to further develop both our MTBE and Methanol or MBTE contacted the eyes or skin, inhaled or digested as well as market knowledge encompassing market conditions projections and indicate firefighting measures in case of fire resulting from QAFAC's future market trends. This will support us in reaching our aspirations products. of becoming a reference leader in the market.

Main components of QAFAC's Material Safety Data Sheet





As a result of our comprehensive practices to manage the quality, health, safety and environmental impacts of our products, we are proud to state that we did not face any incidents of non-compliance with regulations and voluntary codes concerning the health and

We are also planning to develop technical and market intelligence with the support of QP and Muntajat through exploring market potential of prioritizing brownfield expansions for Methanol derivatives such as Methyl methacrylate (MMA) and Acetic Acid. We are keen on investing in this initiative due to brownfield expansion's environmental mitigation and cost efficiency as we would purchase or lease existing facilities opposed to the critical economic and environmental costs that would be incurred in building a new facility. From a product responsibility aspect, we are eager to invest in MMA specifically because of its positive impact on the environment and high recyclability.

# Did you know

Methyl methacrylate (MMA) is widely used in the automotive and construction industries. MMA is considered as an environmentally friendly product due to the product's positive impact on the environment, as it is characterized by high recyclability.

## Source: Independent Commodity Intelligent Services

# Commissioning of the new MTBE pipeline

The objective of this project was to provide a safe reliable transfer system for MTBE product from existing QAFAC storage tanks to QP refinery by installing a dedicated MTBE pipeline, transfer pumps at QAFAC, MTBE Tank at QP refinery, blending pumps at QP refinery and integrating it with existing blending system at QP refinery.

Methyl Tertiary Butyl Ether (MTBE) is a product manufactured by Qatar Fuel Additive Company (QAFAC) which Qatar Petroleum (QP) Refinery uses to blend it with gasoline in order to enhance the desired properties of gasoline. Presently, MTBE is being transported from QAFAC to QP Refinery through Tankers. Even though MTBE demand increased, the supply is limited to 1800-2000 bbl/day due to the limited number of Tankers per day (8 tankers per day, each having a capacity of 250 bbl approximately). QP Refinery envisages MTBE demand will increase further to 7700 bbl/day based on future Gasoline specification. Therefore, QP intends to build a new pipeline between QP Refinery and QAFAC and new MTBE Storage Tanks at QP Refinery and integrate it with the existing gasoline blending facilities.

This project pre commissioning activities were completed in Dec 2019 and commissioning activities are currently progress and expected to complete by end of January 2020.



# **Financial Value**

# GRI 102-45 GRI 201-1

As the global petrochemical industry has been impacted by the oil and gas price fluctuations we have also faced some some challenges due to the political complications in the region. These challenges reminded us that it is imperative to remain resilient to these rapid disruptions in our industry by continuously identifying and improving our processes and technology infrastructure to remain profitable in the market and to meet stakeholder expectations.

We understand the pivotal need to track and manage our finacial performance by annually preparing and reporting our financial performance as per the International Financial Reporting Standards (IFRS), issued by the International Accounting Standards Board (IASB). Our annual financial statements are independently assured by an external auditor - PricewaterhouseCoopers (PwC).

Within QAFAC, our Chief Financial Officer (CFO) oversees the financial control and reporting, ensures adequate controls are in place and oversees that the Finance division is in line with our internal financial control framework that was developed in alignment with leading practices, such as The Committee of Sponsoring Organizations of the Treadway Commission (COSO) Internal Control Framework. The framework pertains elements of operational effectiveness and efficiency, financial reporting reliability and compliance with applicable laws and regulations.

These components work to establish the foundation for sound internal control within the company through directed leadership, shared values and a culture that emphasizes accountability for control. The various risks facing the company are identified and assessed routinely at all levels and within all functions in the organization. Control activities and other mechanisms are proactively designed to address and mitigate the significant risks. Information critical to identifying risks and meeting business objectives is communicated through established channels across the company. The entire system of internal control is monitored continuously, and problems are addressed timely.

Our Economic Contribution (USD)							
KPIs	2016	2017	2018	2019			
Direct Economic Value Generated							
Revenues	506,231,000	671,683,000	777,856,000	531,604,000			
Economic Value Distributed							
Operating Costs	336,594,000	415,857,000	456,696,000	378,651,000			
Employee wages and benefits	54,875,000	58,472,000	64,575,000	69,684,000			
Payments to providers of capital	30,640,000	64,300,000	91,150,000	31,000,000			
Payments to government(s)	30,640,000	64,300,000	91,150,000	31,000,000			
Community investment	315,000	307,000	307,000	29,000			
Economic Value Retained (Economic Value Generated-Economic Value Distributed)	53,167,000	68,447,000	73,978,000	15,295,300			

Furthermore, we maintain a cost optimization policy to govern our financial performance metrics, targets and practices, and serve as a direction for the finance division. The policy is approved by the CFO, who also provides further direction towards the required financial performance targets – including revenue, operating profits, liabilities and expenses. This is followed by specific departmental key performance indicators, established by the CFO.

On annual basis, budgets are developed by the Finance Department and approved by the Chief Financial Officer in line with our cost optimization policy. On a monthly and quarterly basis, budgeting meetings are held concerning internal stakeholders to ensure compliance with budgets set at the beginning of the financial year. Deviations in budgets are discussed and analyzed to identify measures to balance them or obtain adequate approvals.

We also track our budgets, forecasts, taxes, cash flow and investments using our finance management system – which is an integrated software solution that plays a strategic role in measuring and monitoring our financial activities and ultimately assists our management in making informed strategic decisions that impacts the entirety of QAFAC.

# Did you know

Methanol (CH<sub>3</sub>OH) is a liquid chemical used in thousands of everyday products, including plastics, paints, cosmetics and fuels. Methanol is also an energy resource used in the marine, automotive, and electricity sectors, and an emerging renewable energy resource.

# Source: Methanol Institute

QAFAC strives to continuously create and distribute economic value in our value chain as it is an important indicator of our organizational performance and signifies our economic sustainability, potential for growth and impact on the socio-economic environment in which we operate. During 2019, we have noticed a slight decrease by 32% in our consolidated revenues, reaching a total of approximately USD 532 million. Moving forward, we have set a reasonable target to achieve USD 493 million in revenues by 2020, considering the impact of oil prices and the unprecedented challenging situation the world is facing.

Nonetheless, we aspire to augment our contributions to the local community setting a target of USD million 229 in community investments by 2020 to support a thriving socio-economic development in Qatar.

Some of the initiatives we have recently implemented include enhancing cost synergies with QP system comprising of identifying potential synergies with the procurement department, in particular embarking on cost optimization through cross-affiliate and bulk purchase programs that has the ability to reduce costs incurred.



# Sustainable Supply Chain

Supply chain management is crucial to maximize customer value In 2019, we spent a total of USD 39.87 million on procured goods, and achieve sustainable competitive advantage. We recognize that products and services – approximately 63% on contractors, whereas our purchasing and contracting decisions can have great potential the remaining 37% is on suppliers. environmental, social and economic impacts. Therefore, we are In regard to our spending on suppliers and contractors, we focus committed to advancing the principles and practices of social and our efforts at QAFAC to endorse local procurement as part of our environmental responsibility along the value chain through our sustainable supply chain agenda. We are proud of our contribution procurement policy, which is communicated internally and externally to local economic growth in line with our procurement policy and prioritizes the following criteria when making procurement and guidelines which emphasize preference for Qatari companies decisions: and offer individuals who are nationals of the State of Qatar Contractors and suppliers who have high social, environmental or companies that are controlled by such individuals. In fact, a and economic standards and practices. preference to these individuals and companies is given if the cost Local goods and services to encourage local economic of similar works or services does not exceed a margin of more than development and enhance local skills and expertise. 10% of the cost of similar works or services offered by otherwise available non-Qatari nationals or companies that are controlled by To ensure our purchased products and services are selected non-Qataris. In 2019, we spent a total of USD 7.8 million on local thoroughly to provide a means to measure and control contractor and suppliers – accounting to 53% of total supplier contribution.

supplier performance and ultimately drive sustainable supply chain, we have a supplier performance evaluation procedure that provides For optimal results in sustaining our supply chain, we ensure that a systematic methodology for supplier and contractor evaluation and all materials, parts and equipment are available when needed and re-evaluation. Our suppliers and contractors are assessed based on we work with our suppliers to ensure we achieve the best possible their technical and commercial capabilities, ISO certifications, such as value; hence, in 2017, we started the Ta'win Synergy Development ISO 9001, ISO 14001 and ISO 45001, and their business relationships Program in collaboration with Q-Chem, Qatalum, QAFCO, Qatar Steel with Qatari companies in the oil and gas industry. Suppliers and and QAPCO. The program is aimed at creating sourcing synergies to contractors are awarded based on DIFOTIC criteria that evaluates the reduce costs by focusing on large aggregate orders across companies ability of a supplier or contractor to deliver in full, on-time and within for preferential pricing, for example, in the procurement of health targeted specifications. In 2019, we had a total of 76 suppliers. and safety equipment and health insurance packages. This effort has involved mapping procurement spend, identifying areas with the We continued our efforts in automating our procurement practices potential for savings, creating topic specific task forces, and launching through the vendor categorization system created in 2018. Ever since pilot projects.

its implementation, the system has resulted in noticeable reductions in purchasing costs and risk mitigations in the supply chain.





Procurement contributions							
	2016	2017	2018	2019			
Percentage of spending on locally based contractors and suppliers (%)	74%	72%	75%	85%			
Percentage of locally based suppliers (%)	61%	61%	61%	51%			



# **04** ENVIRONMENTAL STEWARDSHIP

- Environmental Leadership
- Direct and Indirect Energy
- GHG and Air Emissions
- Water and Wastewater
- Hazardous and Non-hazardous Waste

Material Topic	Alignment to GRI	Alignment to UN SDGs	Alignment to QSE	Alignment to QNV 2030
Energy	GRI 302	7 STRUMENT     8 EXCUT WILL AND EXCUT STATE     12 EXPANSE EXCUT STATE     13 EXACT STATE       9 Excut state     10 EXCUT STATE     13 EXACT STATE     13 EXACT STATE	QSE E3, 4, 6	
Greenhouse Gas (GHG) emissions	GRI 305	3 Otherstein -We II Converter II S or	QSE E5	
Air emissions	GRI 305	3 differentiation 12 differentiation 14 liferentiation 15 differentiation 15 differentiat	-	Social development
Water stewardship	GRI 303, GRI 306	6 CLUB KRIT CONSISTING BARRANDE BARRAND	QSE E8	
Waste management	GRI 306	3 data Analasian -W	QSE E9	



Climate Change is the defining issue of our time and its impacts are global in scope and unprecedented in scale. As a producer of Methanol and MTBE, we, at QAFAC, recognize that we have a responsibility to mitigate our environmental footprint and support the national and international efforts in fighting climate change.

Our environmental efforts endorse international environmental frameworks - of which the State of Qatar is a signatory - such as the Paris agreement of the United Nations Framework Convention on Climate Change (UNFCC), Kyoto protocol, Doha amendment, United Nations Sustainable Development Goals (UN SDG), and

guidelines from the International Petroleum Industry Environmental Conservation Association.

Moreover, we support the State of Qatar in meeting provisions of the Environmental Development pillar of the Qatar National Vision 2030, the objectives of the Second National Development Strategy (2018-2022), and goals of the Environmental Sustainability Strategy.

This section discloses our environmental journey in 2019 and highlights our performance on energy management, greenhouse gas emissions, air emissions, water and waste management.



# **Environmental Leadership**

Leadership commitment is crucial to protecting the environment meet them are set. Assessments of our compliance with present and mitigating the environmental footprint. Correspondingly, we, regulations are also reviewed with mitigation plans developed to at QAFAC, embedded environmental excellence into our missions, ensure and maintain compliance. values and strategy. Furthermore, we maintain a Quality, Health, In addition, we believe in comprehensive planning as it helps in Safety and Environmental (QHSE) policy that governs our practices on creating strong systems and processes for all of our operations. environmental protection and demonstrate leadership's commitment Our Environmental Management System (EMS) encompasses to building a culture that drives environmental protection. all the environmental policies and procedures that govern our Along with our strategy and QHSE policy, we realise the importance environmental processes and provides a structured approach to all major environmental issues. Our leadership emphasizes that it is the responsibility of every QAFAC employee to fully understand and follow our environmental policies. We achieved certification of our EMS as per ISO 14001 in 2005 and maintained it to date, demonstrating our continued high quality and commitment towards protecting the environment.

of having governing bodies to support and drive environmental protection. Hence, we, have level 1 and level 2 HSSE committees headed by the CEO and COO respectively that conduct meetings every two months as well as a level 3 HSSE departmental committee that meets regularly. All three of our HSSE committees include environmental aspects on their meeting agenda related to emissions, energy, water and waste. Some of the main meeting items are updates on our environmental performance, progress on our current environmental initiatives and communications on any changes in environmental regulations.

We are also part of the MIC Environmental sub-committee which convenes quarterly and includes members from the heads of environment from all industries located in MIC as well as QP head of environment and QP corporate. During the meetings, environmental KPIs and parameters for the MIC community are reviewed, and flaring reports, and environmental incidents are discussed. The sub-committee is also responsible for carrying-out environmental studies for the MIC community such as seawater discharge modelling, air capacity modelling and air-shed modelling.

Furthermore, we conduct management review meetings twice Our leadership comprehends that enhancing our environmental a year. In these meetings, we perform a thorough review of all performance is a continuous journey and thus, endorses various parameters that must be tracked and monitored as per our consent initiatives every year to further integrate environmental excellence to operate and local environmental regulations. During the meetings, into our organization and culture. new environmental regulations are discussed and action plans to

Our corporate alignment to our environmental priorities





In line with the philosophy behind our EMS, we have established strong auditing programs and routines, including: an EMS internal audit, conducted annually; third-party surveillance audits, conducted annually; and third-party re-certification audits, conducted every three years.

Furthermore, our leadership cognizes the importance of having aware and knowledgeable employees in order to further embed and drive environmental excellence. Thus, we regularly conduct environmental awareness sessions to our employees. Our environmental sessions cover topics such as environmental pollution, QAFAC consent to operate, environmental monitoring, global environmental concerns, environmental laws of Qatar, and waste management.

Responsibility: We care deeply for the environment and all the communities we impact

Key enablers to our long-term sustainability: Strive for excellence in environmental protection

# **Direct and Indirect Energy**

# GRI 302-1

As a Methanol and MTBE producer, our operations can be energy intensive and consume copious amounts of energy. Hence, we cognize that it is our responsibility to manage our energy consumption and subsequently mitigate our environmental footprint.

We believe that an enterprise wide energy management program will guide our practices on energy management and assist us in further reducing our energy consumption, thus, we initiated a project in 2019 to implement an energy management system (EnMS) in line with ISO 50001. Our project is expected to conclude in 2021 and aims to help us with our commitment to the efficient, effective and economical management of our energy use and consumption. As part of our energy management system project, we are set to establish an energy policy - that governs our everyday practices – identify energy performance indicators, significant energy uses and energy baseline, as well as, set energy targets and objectives. Our energy policy is expected to be set in place in 2020 and will provide overarching commitment to energy management and its key principles.

Currently, we follow detailed processes to optimize energy consumption at our plants and ensure that we manage our energy efficiently. For instance, we conduct steam balance and our specific gas consumption regularly. Specific gas consumption is the amount of total feed gas and fuel gas consumed per amount of product produced.

Fuel gas makes up 96% of our energy consumption at QAFAC, whereas the remaining 4% is from electricity supplied by Qatar General Electricity and Water Corporation (KAHRAMAA). For our



Main potential commitments in our energy management policy



GRI 302-3

fuel gas, we primarily burn it to produce steam to operate our mechanical equipment. In 2019, our total energy consumption was 13% lower than the previous year due to turnaround; our plants were shut down for approximately 60 days.

We also measure our energy intensity as it provides a more representative comparison of our energy consumption by normalizing it against our production. During the reporting period, our energy intensity was 13.67 GJ per ton of production - 3% higher than the previous year. This can be attributed to the fact that our production decreased in 2019 due to turnaround, but our energy consumption was maintained as part of our maintenance process.



Energy	intensity (GJ	/ton of proc	Juction)	
16 14	14.13 D	13.59	13.23	13.67
12	2016	2017	2018	2019

# **GHG and Air Emissions**

## GRI 305-1 GRI 305-2 GRI 305-4 GRI 305-7

As an operator in an energy intensive industry, we realise that the energy we consume results in producing greenhouse gas (GHG) emissions and air emissions - such as sulphur dioxide, oxides of nitrogen and particulate matter. Moreover, we realize that our processes require a degree of flaring and emissions to ensure the safety and reliability of our operations. Therefore, we invest in various controls and initiatives to ensure the reduction of our emissions and flaring wherever possible, compliance with the requirements of the Ministry of Municipality and Environment (MME) on the license to operate, and alignment with Qatar Petroleum's (QP) flaring reduction strategy.

Our performance on GHG and air emissions as well as flaring is continuously tracked with set KPIs such as GHG intensity, total scope 1 and scope 2 GHG emissions, and NO<sub>2</sub> and SO<sub>2</sub> emissions. To ensure better monitoring, tracking and verification of our data, we have dashboard system that is connected to our Distributed Control System (DCS). This allows real-time data monitoring and reporting. Furthermore, we prepare a quarterly report that includes regulatory emission limits and our performance trends on GHG emissions, air emissions, and flaring. The report is shared with our COO and subsequently to MME to meet the requirements of our license to operate.

In addition, our Carbon Dioxide Recovery unit (CDR) which was commissioned in 2014, effectively reduces GHG emissions by capturing carbon dioxide and converting it through our production processes to Methanol. In 2019, we successfully captured 149,451 tons of carbon dioxide and converted it into Methanol.

We reduced both our scope 1 and scope 2 emissions by 13% and 15% respectively in comparison to the previous reporting period. However, our GHG intensity increased by 24% compared to 2018. This is due to the fact that our production decreased in 2019 as a result of turnaround. GHG intensity is calculated as the total GHG compared to the total amount of production. Hence, it normalizes GHG emissions against production. In the future, we aim to further reduce our GHG emissions and mitigate our environmental footprint. As for our air emissions, we are continuously looking for opportunities to reduce our environmental footprint; we are implementing several environmental projects and conducting multiple studies.

In 2019, we are proud to mention that both our  $NO_v$  and  $SO_v$ emissions decreased in 2019 by 37% and 19% respectively in comparison to 2018. Our performance improvement is a result of undertaking various initiatives at QAFAC – most prominently installation of Selective Non-catalytic Reduction (SNCR) Unit at our Methanol Reformer.

# GRI 102-48



# Greenhouse Gas (GHG) Accounting and Reporting (A&R) program

In 2019, we started our journey to implement a world-class Greenhouse Gas (GHG) Accounting and Reporting (A&R) program to ensure highest accuracy of reported GHG emissions. Presently, Qatar Petroleum (QP) is the GHG Controller and the "Competent Authority" (CA) in Qatar. We are adopting QP's approved Accounting and Reporting Procedure for GHG Emissions and will follow EU-Guidelines MRR 2012 for CO, and IPCC-Guidelines for CH4 and N2O.

Values for direct scope 1 carbon emissions are revised in our current report based on AR reporting because we were deducting CO<sub>2</sub> recovered (from our CDR plant) and reused within our process from CO<sub>2</sub> emissions in our previous calculations. Also we

incorporated Global Warming Potential (GWP) for CH4 and N20 in our revised calculations.

Going forward, in 2020 and 2021, we will have a comprehensive program to enhance our GHG accounting, reporting and verification by;

- Implementing flow meter calibration and maintenance program to eliminate uncertainty of the major fuel streams
- Installing missing pressure and temperature transmitters on major combustion equipment fuel streams to compensate for fuel flow
- Installing low range flow meter in the common flare header Developing a plan for Certification of QAFAC Lab to EN ISO 17025







# Selective Non-Catalytic Reduction (SNCR) system

We commissioned a selective non-catalytic reduction (SNCR) system in 2019 as part of our efforts to meet the Ministry of Municipality and Environment (MME)'s directive to meet NO, limits of 125 mg/Nm<sup>3</sup>. The process involves the injection of a 19% ammonia solution to the high temperature flue gas exiting from the Methanol steam reformer. Ammonia injection is



GHG intensity (ton CO<sub>2</sub>e/ton of production)



monitored and controlled so as to limit the ammonia in flue gas to less than 5 PPM, which is the limit specified by MME. We are proud to mention that our SNCR system achieved 50% reduction in NO<sub>x</sub> emissions at the reformer from an average of 240 mg/</sub>Nm<sup>3</sup> to around 110-125 mg/Nm<sup>3</sup> in 2019.

# Leak Detection and Repair Program (LDAR)

We initiated the third round of our Leak Detection and Repair (LDAR) program in 2019 following QP guidelines and in accordance with US EPA Method 21. The LDAR program is the system of procedures a facility utilizes to locate and repair leaking components, including valves, pumps, connectors, compressors, and agitators, in order to minimize the emission of fugitive volatile organic compounds (VOCs) and hazardous air pollutants (HAPs). In 2019, the program identified 110,334 potential leaking sources at QAFAC - 5,678 sources were not accessible and 104,656 were accessible sources. Accessible sources were monitored and quantified by using thermo-scientific toxic vapor analyzer (TVA) and non-accessible sources were scanned using a FLIR optical gas imaging (OGI) camera. Out of the 104,656 accessible sources, there were 935 registered leaks which

correspond to an emission of 0.89% from all monitored sources. We are pleased to mention that we achieved total savings 24,727 kg/year from our LDAR program.



In regard to managing flaring effectively, we have put in place an action plan to minimize our flaring over the years in alignment to the QP mandate set in 2018 on all its downstream industries. In addition, we installed three flow meter and composition analyzers on our flare headers - Methanol flare flow header, MTBE flare flow header and combined flare flow header - to ensure accuracy of our data tracking and allow real-time monitoring of our flaring through our dashboard system.

Although we had various controls in place, our off-spec flaring has increased by 2% in 2019 in comparison to 2018 due to the flaring of unproductive gas during shutdown for the preparation of turnaround and the restart of our plants after the completion of turnaround. However, we undertook steps to reduce our flaring in the future by initiating our Regenerate Gas Scrubbing (RGS) project in 2019. The RGS project aims to treat and recover the regeneration gas used at the Oleflex unit of the MTBE plant, which will be used as fuel in the fuel network. The project will be commissioned by second quarter of 2021 and its benefits include the reduction in flaring of regenerate net gas, saving of equivalent natural gas due to reduced resource consumption as well as minimization of waste due to reusing the gas as fuel. With equal production levels of MTBE, the natural gas saving potential amounts to 2,450 MT per month, while flaring is expected to decrease by as much as 70% compared to current levels. Thus, we are hopeful that once our RGS project is commissioned in 2021, we will decrease our flaring drastically.

Furthermore, we are planning to use approximately 50% of our Pressure Swing Adsorption (PSA) tail gas in the fuel network along with the RGS outlet gas. This project is also planned to be commissioned in the second quarter of 2021 along with the RGS unit





# Water and Wastewater

GRI 303-1 GRI 303-2 GRI 303-3 GRI 303-4

The State of Qatar, where QAFAC primarily operates, is one of the few countries classified as suffering from extremely high-water stress. Until very recently, the State of Qatar only had three days' supply in reserve from potable water, which is created through desalination plants<sup>1</sup>. Consequently, the Ministry of Municipality and Environment (MME) in Qatar set up objectives to minimize wastewater discharge and maximize the efficient use of water to preserve the country's resources and urged industries to meet these objectives.

At QAFAC, water is mainly used for two purposes: generating steam for process requirements and driving mechanical equipment as well as non-contact cooling. Our primary sources of water are purchased water from KAHRAMAA or self-generated from our Carbon Dioxide Recovery (CDR) plant. In 2019, our purchased water accounted for approximately 62% of our total freshwater consumption, whereas, the remaining 38% was from our company generated freshwater.

As part of our efforts to manage our water, we monitor our water consumption and wastewater generated and share guarterly reports with the Ministry of Municipality and Environment (MME) as part of their requirements for our consent to operate.

Moreover, water consumption is one of key performance indicators that is monitored as part of our corporate scorecard and reviewed against objectives and targets at our bi-annual management review meetings.

As a result of water consumption, wastewater is discharged from our operations. Our wastewater is classified into four different types: oily wastewater, process wastewater, demineralized wastewater and sanitary wastewater. In 2019, we discharged a total of 509,569 m<sup>3</sup> of wastewater. However, approximately 49% of the wastewater we generated in 2019 was recycled and discharged to our Green Belt.



1 https://www.sciencemaq.org/sites/default/files/Qatar advertorial.pdf

## GRI 303-5

During the reporting period, we discharged 7.5% less wastewater in comparison with the previous year. This is mainly due to the fact that we had a turnaround year and our plant operations were shut down for approximately 60 days.

To further manage our wastewater – in essence, oily wastewater, process wastewater and demineralized wastewater, we are establishing a near zero liquid discharge (NZLD) plant, which will have systems in place to upgrade wastewater to potable water grade

The plant is expected be operational by end of 2023 and recover 85% of our wastewater so that it can be utilized as make-up water to our demineralized water plant. The remaining 15% - mainly brine water – will be rejected to sea. In addition to our NZLD, our Carbon Dioxide Recovery (CDR) plant helps recycling recovered water vapor from flue gases making up 13% of our total freshwater consumption in 2019.



# Hazardous and Non-hazardous Waste

GRI 306-1 GRI 306-2 GRI 306-3 GRI 306-4 GRI 306-5

Our operations result in the generation of hazardous and nonhazardous waste which can cause adverse environmental impacts unless managed responsibly. Thus, we recognize that properly managing our waste is crucial for enhancing environmental protection in line with the Qatar National Vision 2030.

At QAFAC, our hazardous waste primarily comprises of spent catalysts, spent resin, spent salt, oily sludge, activated carbon and spent oil filters. Whereas, domestic waste, and electronic waste (electronic waste is completely recycled) makes up most of our nonhazardous waste.

To manage our waste responsibly, we have five waste management contractors that are responsible for the handling, transportation and disposal of different types of waste: hazardous waste, general waste, electronic waste, incinerable waste and medical waste. Furthermore, we set key performance indicators and targets at departmental and executive levels to ensure continuous improvement. They are tracked through our dashboarding system and reported guarterly as part of our consent to operate requirements to MME.

During the reporting period, we generated more than as much waste as we did in the previous year due to turnaround. In fact, we produced a total of 2,735 tons of waste in 2019 - approximately 51% of the waste we generated was non-hazardous, whereas, the remaining 49% was hazardous waste. However, with proper planning, execution and coordination, hazardous and non-hazardous waste disposal was carried out smoothly. We primarily dispose of our waste through landfilling, incineration and recycling.

In 2019, approximately 92% of the waste we generated was eventually landfilled – 46% of the landfilled waste was hazardous waste that was initially treated at MIC hazardous waste treatment center then landfilled, whereas the remaining 54% was domestic non-hazardous waste that was directly landfilled. In addition, 4.5% of our waste is sent for incineration at the Boom Waste Treatment Company.

We are proud to mention that the remaining 3% of our waste is currently recycled and exported outside of Qatar. Through our Recyclable Waste Management Program, we aim to increase that percentage in coming years. In 2020, we are planning to enhance our Recyclable Waste Management Program by placing color-coded recyclable waste bins in the buildings for collection of empty plastic water bottles, aluminium cans and paper. Moreover, recyclable waste will be regularly collected and will be stored in respective 240 L storage bins placed outside the buildings. An approved contractor will collect recyclable waste on call basis depending upon generation. The contractor will hand over recyclable waste to recycling facilities for recycling of plastic, aluminium, paper and submit monthly reports to QAFAC.

In 2019, a lot of our waste - both hazardous and non-hazardous was generated during turnaround. In essence, 891 tons and 1,732 m<sup>3</sup> of non-hazardous waste were generated, whereas, 5,381 drums and 34,600 litres of hazardous waste were generated.

During turnaround, we have standby vehicles around the clock for immediate disposal of non-hazardous waste from sites to an approved landfill outside MIC. A waste management contractor patrolled the area throughout the day and night and ensured the removal of all non-hazardous waste from the site regularly to avoid accumulation.

Apart from the waste we inevitably generate, our operations can lead to the unfortunate incidents of hydrocarbon spills. Thus, it is our responsibility to ensure the prevention of hydrocarbon spills. We are pleased to state that we did not have any reportable spill incidents for over seven consecutive years. At QAFAC, we will continue with our commitment to protect the environment and mitigate our environmental footprint through our responsible practices.

# Hazardous and non-hazardous waste trend at QAFAC (ton)



Note: The data for previous years was updated as typographical errors were discovered in historical calculations.

# Total waste by disposal method (ton)



Note: The data for previous years was updated as typographical errors were discovered in historical calculations.



# **05** RELIABLE AND SAFE OPERATIONS

- Health and Safety Leadership
- Occupational Health and Safety
- Reliability and Process Safety
- Emergency Preparedness

Material Topic	Alignment to GRI	Alignment to UN SDGs	Alignment to QSE	Alignment to QNV 2030
Occupational health and safety	GRI 403	3 GOOD HEALTH 	QSE S14, 15	
Reliability and process safety	GRI OG13	3 GOOD HEALTING 	-	Social
Emergency preparedness	-	-	-	development
Human rights and labour practices	GRI 412	16 FIRST AND STREAM	QSE S16, 17, 18	



The health and safety of our people as well as the safety of our operations are our top priority. At QAFAC, we uphold the highest standards of reliability, health and safety in line with international frameworks and standards published such as the Environment, Health and Safety (EHS) Program of the Organisation for Economic Co-operation and Development (OECD), the Occupational Safety and Health Convention and its accompanying Recommendation by the International Labour Organization (ILO) and the safety standards of the American Petroleum Institute (API).

We also align our workplace reliability, health and safety with the provisions under the Qatar Labour Law, the policies of the National

# Key Performance Highlights



Committee of Occupational Health and Safety within the Ministry of Administrative Development, Labour and Social Affairs, and the social development pillar of the Qatar National Vision 2030.

This section outlines our performance during the reporting period on occupational health and safety, reliability and process safety and emergency preparedness. Our approach to managing our performance on these topics is disclosed in line with the Global Reporting Initiative.

 $(\mathbf{V})$ 

# Completed turnaround

safely and successfully without any LTI

working hours by our employees and contractors Zero

heat stress incidents for eight consecutive years

Zero fatalities during the reporting period

# **Health and Safety Leadership**

# GRI 403-4 GRI 403-7

Our leadership is committed to providing a reliable, safe and healthy work environment to our workers - both employees and contractors. We firmly believe that all work-related injuries and illnesses are preventable. We design and manage our health, safety, and process safety programs with the goal of achieving a zero-injury and zero-release workplace year after year. Accordingly, we embedded health, safety and reliability into our organizational governing framework - vision, mission, values, and corporate strategy - to emphasize their paramount importance and ensure that every person is committed to maintaining a hazard-free and safe working environment, Furthermore, we maintain our Quality, Health, Safety and Environment (QHSE) policy, which ties together our approach to health and safety into a clearly written and easily accessible document that guides all employees and contractors.

We recognize that health and safety require leadership engagement - which includes members from various petrochemical companies and commitment. Thus, we conduct bimonthly level-1 and from the Gulf Cooperation Council countries. The purpose of the level-2 health and safety meetings headed by the Chief Executive committee is to have quarterly meetings to improve the process Officer (CEO) and Chief Operating Officer (COO) respectively, with safety manage system and share best practices as well as process representatives from all departments at QAFAC. Moreover, each QAFAC department has its own safety committee, which is headed targets and objectives are set and reviews to achieve them are by the respective department's manager and conducts exclusive conducted in the subsequent year. meetings to discuss important safety topics such as key safety Furthermore, as members in the steering committee and technical incidents, major projects with health and safety concerns and current advisory committee to the O'Conner Process Safety Center, we health and safety performance. We also contribute to embedding sponsor and contribute to the cost of research projects in the State health, safety and reliability into everyday practices by having of Qatar related to process safety as well as provide advise and a management of change committee and a quality assurance technical support to the students conducting the research. We committee, which contribute to embedding health, safety and perform quarterly meetings to review progress on the research reliability into everyday practices. In addition, we maintain a Process projects, and provide feedback. Safety Management (PSM), central committee specifically to oversee process safety matters.

Our corporate alignment to our health and safety priorities



Along with our internal committees, we are part of several Qatar Petroleum (QP), and Mesaieed Industrial City (MIC) health and safety committees. These committees include other members from the oil and gas value chain in the State of Qatar, which provides valuable insight to all members and assists them in their commitments to various requirements.

Our leadership also recognizes that as a leading provider of MTBE and Methanol, we have a responsibility of impelling health, safety and reliability on the industry level. Hence, we are an active member in the Gulf Petrochemicals and Chemicals Association (GPCA) and a sponsor of the Mary Kay O'Connor Process Safety Center of Texas A&M at Qatar, where we have active members in the steering committee and technical committee of this center. As a member in GPCA, we are part of the GPCA process safety taskforce committee safety practices from the members. As part of the committee, annual

# Being recognized for our reliability

Maintaining the highest HSSE standard

Safety: We ensure safety in everything we do

Approach to winning in the market: maintaining high plant availability and reliability

Key enablers to our long-term sustainability: sustaining top quartile health and safety performance

## GRI 403-4 GRI 403-5

We also participated in multiple international conferences and programs to provide insight on our process safety. In 2019, we participated as speakers at the Qatar Process Safety Symposium, which is organized in collaboration with Texas A&M university and the State of Qatar. We also participated at the QP Process Safety Symposium and presented our process safety program at QAFAC.

Along with our memberships and committees, we have various controls, procedures and programs to support us in upholding the highest health, safety and reliability standards. At QAFAC, we created QAFAC's HSSE principles as an additional commitment to our HSSE excellence. The HSSE principles provide an HSSE platform and foundation for all systems and activities at QAFAC. Along with our HSSE principles, our leadership established QAFAC's Life Saving Rules to provide behavioral directives on protecting personnel against life threatening injuries, illnesses and life-threatening hazards. The consequence of breaking such rules wilfully is considered a very serious act potentially leading up to employment termination as a part of disciplinary action. Any infringement of Life Saving Rules is

also treated as a high potential incident and is subject to a detailed investigation adopting root cause analysis. Life Saving Rules are instilled into our employees and contractors from their first day at the job and we place great emphasis on providing health and safety related training and education. In 2019, we launched a new HSSE induction video for new personnel - both employees and contractors who are coming to QAFAC premises for the first time to ensure all personnel are fully informed about the organization and are aware of their work and responsibilities. The induction video gives a brief updated summary about QAFAC's sustainability goals, Life Saving Rules, permits and HSSE rules and procedures. Moreover, the video also highlights all emergency protocols and procedure as emergency situations are crucial in the plant premises.

Our goal is to build and sustain a positive safety culture, hence, we provide our employees with internal and external trainings covering a diverse range of topics to drive their awareness. In 2019, we provided our employees with more than 14,333 hours of HSSE internal and external training hours. Specifically, 318 hours







were dedicated to our leadership and covered an introduction to health and safety terms including factors influencing health and safety, construction hazards and controls, and incident and accident reporting.

We additionally conduct awareness sessions and campaigns to instil the health and safety culture at QAFAC. During turnaround, we launched different awareness campaigns related to noise, radiation, vibration, slips and trips, and importance of drinking water.

With the aim of translating our commitments into measurable insights, our leadership established multiple key performance indicators (KPI) and set targets to ensure continual improvement of our health, safety and reliability performance. Total Recordable

Training Name	Туре	Description	Total Hours
ERT Training	Internal	Build the capacity of emergency responders and improve their preparedness, technical skills, making better coordination while performing emergency management and response effectively.	1,152
Confined Space Entry Program	Internal	Provide the necessary knowledge of the hazards for working in confined spaces, safe use of tools and equipment, control of hazards and understanding the emergency procedure.	620
Permit To Work (Basic)	Internal	Explain the purpose of permits to work within QAFAC and what type of high risk activities may require them, roles and responsibilities of PTW key personnel and explain Job Hazard Analysis (JHA).	1,896
Permit To Work (Refresher)	Internal	Refresh the knowledge and understanding of the Permit to Work system in QAFAC and responsibilities when issuing and receiving permits.	70
Authorized Gas Tester (AGT)	External	Understand QAFAC procedure requirements, recognize hazards and gases, pre – entry requirements, safe working codes of practices, be certified as an Authorized Gas Tester for confined space and conduct effective gas testing.	248
HSSE Leadership	External	Focus on teaching the essential elements of safety principles and get the knowledge and skills required to manage day-to-day health and safety with confidence.	318
Hydrogen Sulfide and Breathing Apparatus (BA)	External	Gain the required knowledge and understanding of the particular hazards and properties of H <sub>2</sub> S, and appropriate emergency response actions to take should an H <sub>2</sub> S related incident arise. Also provide participants greater awareness and profound understanding for the practical use of BA especially for all personnel who are at risk from H <sub>2</sub> S and other toxic gas or for employees who may need to work in an immediately dangerous to life or health atmospheres.	84
Safety induction (DVD) Employees/Trainee	Internal	Provide new employees with an overview of QAFAC work health, safety and environment principles, emergency response and QAFAC Lifesaving rules that will encourage them to work more safely.	30
Safety induction (DVD) Contractors	Internal	Provide new contractors/vendors with an overview of QAFAC work health, safety and environment principles, emergency response and QAFAC Lifesaving rules that will encourage them to work more safely.	9,646
Fire Marshall	Internal	Provide employees with the necessary training required to be a qualified fire Marshal. It will educate them about their duties and understanding of fire hazards and fire safety arrangements, and what is the emergency evacuation procedure.	20
Industrial Hygiene	Internal	Understand the concept and apply knowledge on industrial hygiene and occupational health. Introduce the basic principles of occupational health and hygiene and recognize the types of chemical and physical agents and hazardous substances dangerous to health. Identify how to assess, monitor and control these hazardous substances.	45
Basic First Aid	Internal	Equip the learner with the knowledge, practical skills and understanding required to provide appropriate first-aid treatment in the workplace.	288

# Total number of health and safety internal and external training hours in 2019

Year 2019	13,767			566		
13,-	400	13,600	13,800	14,000	14,200	14,400
			Hours o	f training		
		• 1	nternal	<ul> <li>External</li> </ul>		

## GRI 403-4 GRI 403-7

Case Frequency (TRCF), Lost Time Injury Frequency (LTIF) and Process Safety Total Incident Rate (PSTIR) are the three primary KPIs tracked and monitored by top management with a zero-target set for all three. To ease the tracking and monitoring of our HSSE performance and ensure targets are met, our leadership established performance information dashboards at the executive level that provide monthly performance information, and thus, help to improve decision making in key areas of performance in regard to health and safety. As a result, monthly dashboard meetings are conducted by leadership to review and verify performance, in addition to regular Permit to Work (PTW) audits to ensure compliance with our Occupational Health and Safety System and identify areas of improvement.

As a result of our exemplary HSSE performance in 2019, we participated in the Royal Society for the Prevention of Accidents (RoSPA) UK award competition, and we are proud to mention that we won the prestigious RoSPA Silver Award. This achievement is a testimony to the utmost efforts we dedicated during AMAN program in developing a robust HSSE management system and culture

we expect of our employees and contractors. We maintained our dedicated Contractor Safety Board - which we established in 2018 to visibly demonstrate our collaborative management commitment and encourage QAFAC and contractor employee involvement in contractor safety performance improvement. The Board constitutes industry best practice within the local industry and community and helps to develop a contractor safety improvement strategy and action plans, based on findings from monitoring and reviewing contractor safety performance. Members include senior management from QAFAC and our leading contractors. In 2019, we held our biannual contactor board meetings on 7th of February 2019 and 19th of September 2019 at Dana Club. The first meeting was chaired by our CEO, whilst the latter was presided by our COO. During the meetings, our HSSE department presented our HSSE statistics including key incidents that occurred during the turnaround in 2019 and key learning opportunities from these incidents, main achievements with outstanding control of risk and very low levels of error, harm and loss.

# GRI 403-4 GRI 403-7

We also work closely with our contractors to meet our safety requirements and make no distinction between the standards of turnaround, and areas of improvement in safety performance in general. A reward and recognition ceremony was conducted at the end of the our September's meeting, at which the contractor for the best HSSE performance during turnaround was recognized and presented its best practices. Some of the main takeaways from their presentation was having centralized reporting to top management, awarding employees that show HSSE excellence, holding team building events, ensuring employee welfare, carrying-out HSSE campaigns, and conducting toolbox talk meetings and monthly HSSE meetings.

That all people working with QAFAC conform to our health and safety standards. The procedure also establishes actions for visiting



and 31st of October 2019 for a peer review. The key objective of this review was to assess QAFAC's compliance with GPCA's seven codes pertaining to CAER (Community Awareness and Emergency Response), Distribution, Product Stewardship, Security, Health & Safety, Process Safety and Environmental Protection. The GPCA team reviewed QAFAC's practices with reference to these codes and presented their findings to the QAFAC senior management during a closing meeting.



contractor accommodations and conducting contractor audits at the pre-tendering stage for all contractors working at our facilities. We also conduct audits on two randomly selected contractors and produce a contractor audit report annually.

We also have a comprehensive contractor management program governed by a dedicated procedure that provide instructions to include HSE clauses in our tenders and health and safety aspects as part of the technical evaluation of all submitted proposals to ensure that all people working with QAFAC conform to our health and safety standards. The procedure also establishes actions for visiting contractor accommodations and conducting contractor audits at the pre-tendering stage for all contractors working at our facilities. We also conduct audits on two randomly selected contractors and produce a contractor audit report annually.



# **Occupational Health and Safety**

GRI 403-1 GRI 403-2 GRI 403-4 GRI 403-7 GRI 403-9

At QAFAC, the health and safety of our employees and contractors is a top priority. Our goal is to ensure 'Zero Harm' for all our employees, contractors, visitors, customers, and shareholders and ensure a hazard free and safe working environment with zero injuries and zero fatalities. We maintain the 'Bill of Safety Rights and Duties' as well as our occupational health and safety management system. both of which guarantee effective actions and preventive measures are taken for the continual improvement of occupational health and safety. We also conduct regular audits on our occupational health and safety management system with the purpose of affirming sound implementation; we perform annual internal and external audits as part of our integrated management system. Our internal audit function is co-sourced with an external service provider and reports to the Audit and Risk Committee – which is a subcommittee of the OAFAC Board of Directors.

As part of our effort to uphold the highest safety standards, identify hazards and manage associated risks, we implemented a comprehensive Hazard Identification and Risk Analysis (HIRA)

- Bill of safety rights and duties
- Every QAFAC team member has the right and duty to:
- Work safely and ensure that all members of their team work safely.
- Report any unsafe act, unsafe condition, near miss or
- Equip with and use the proper safety equipment.
- practices and conditions.
- Ensure mandatory safety trainings related to their role are completed.
- STOP any work which could be unsafe.
- Follow QAFAC Life Saving Rules.

process complemented by a well-established risk database. Risk analyses are reviewed periodically by our risk owners, and dynamic risk assessment hierarchy of controls is applied consistently with more emphasis and weight given to elimination, substitution and engineering control measures. For instance, in order to eliminate any additional risks, all manufacturing work is completed off-site and only the partial assembly and installation is done at QAFAC.

We cognize that despite our HIRA process, our workers may identify some additional hazards on site. Thus, we encourage all workers to report unsafe conditions and acts through our HSSE observations program. In 2019, we had a total of 2,383 HSSE observations recorded – 517 by employees and 1,866 by contractors. On average, we had 199 observations per month compared to 105 in 2018. Along with our HSSE observations program, we conducted daily meetings with our contractor safety officers to discuss HSSE concerns, safety focus areas, planned work and any other safety-related issues that may need attention.

On December 30th, 2019, we are proud to have accomplished a significant milestone of 15 million safe working hours without any lost time injuries (LTI) over eight years, which is a testimony to our world-class safety and our commitment to the philosophy that there is no job so important that cannot be done safely. We still recognize that safety excellence is a continuous process and there is always room for improvement. In 2019, we had three cases of total recordable injuries involving restricted work and medical treatmentone for an employee and two for contractors. Depending on the injury sustained, the worker was either referred to a specialist or treated at our QAFAC first aid unit. Incident reports were filed for all three recordable injuries, a potential root cause was identified and actions to eliminate the potential root cause were also implemented. Due to all three incidents being minor and potential root causes being evident, no detailed root cause analysis was recommended nor performed.

# GRI 403-3 GRI 403-4 GRI 403-6 GRI 403-7

During the reporting period, we completed a total of approximately 3.5 million working hours by our employees and contractors. 81% of our man-hours were attributed to contractors due to the additional support required for successful completion of the 2019 turnaround. This planned turnaround also led to the significant increase observed in the contractor working hours from 2018 to 2019.

As for our occupational health in specific, we have a comprehensive Heat Stress Management Program with well-defined safe work principles and practices to manage and control heat stress related incidents through the summer months. One of the key elements of the program is the flag system which is an easily identifiable and highly visible means of quickly communicating heat index. Similar to a traffic light red indicates danger and stopping work; orange demonstrates caution and regularly resting and hydrating; whilst green designates safety and continuation of work normally.

As measures for communicating the heat index under our flag system, we display the appropriate flag around our plant corresponding to the current heat index and severity of the outcomes. We also have multiple alert systems in place such as the plant public address and general announcement (PAGA) system, radio communications and SMS messages to mobile phones. All our employees and contractors are aware of the controls that need to be followed for each flag color through our regularly distributed heat index cards.

In addition to our flag system, our nurses perform fatigue checks routinely as part of our Heat Stress Management Program. In 2019, 3,358 fatigue assessments were carried out by QAFAC occupational health nurses during various on-site activities to check the efficacy of the control measures at site. We also initiated a heat illness awareness campaign by distributing information via e-mail to all QAFAC employees, displaying various posters and brochures at designated locations, and imparting training to all employees and contractors. Furthermore, provisions on having shaded work areas

# Flag system and heat stress index

Severity	Flag system color	Heat Index	Heat Syndrome	Controls
Extreme Danger		>54	Heat stroke or sunstroke imminent	All work would normally stop unless extreme control measures are taken
Danger		39-53	Sunstroke, heat cramps, or heat exhaustion likely, heat stroke possible with prolonged exposure and physical activity	For heat index of 39-49: work under shade For heat index 50-53: work at height/ ladders would normally stop. Extreme controls must be taken
Extreme Caution		32-38	Sunstroke, heat cramps or heat exhaustion possible with prolonged exposure and physical activity	No working alone
Caution		27-31	Fatigue possible with prolonged exposure and physical activity	Continuous visual monitoring of workers in direct sun and heavy work

# Safety performance statistics

Indicator	2016	2017	2018	2019
Number of employee fatalities	0	0	0	0
Number of contractor fatalities	0	0	0	0
Employee lost time injuries	0	0	0	0
Contractor lost time injuries	0	0	0	0
Employee total recordable injuries	0	0	0	1
Contractor total recordable injuries	1	1	1	2
Employee occupational illnesses	0	0	0	0

## GRI 403-9

and limited work times are in place to ensure that no heat stress cases are faced. We also implemented a 'no water, no work' rule at all sites that requires all workers - both employees and contractors to have water with them to stay hydrated and avoid heat stress.

As a result of our continuous efforts, we are pleased to mention that in the past eight years we have not suffered any heat stress incident, which is a positive performance given that our people work in conditions where long heat waves are common.

Along with our comprehensive Heat Stress Management Program, we have a first aid unit that is available around the clock with gualified nurses at QAFAC. In 2019, a total of 5,451 medical checkups were conducted including a vaccination campaign. However, vaccination was at the discretion of the employees. We also have regular weekly and monthly inspections of QAFAC plants and contractor facilities to ensure hygiene and well-being of the places.





# Completing QAFAC turnaround with zero lost time injuries

As part of our business plan, we roughly conduct a turnaround every four to five years. A turnaround is a planned period of regeneration in a plant during which an entire part of the operation is off lined whilst plants are inspected and revamped. Turnarounds provide an essential opportunity for various maintenance issues to be resolved because they cannot be addressed while the plant is operational. The primary goal of scheduled maintenance is to prevent equipment failure before it actually occurs. A turnaround can test an organization's health and safety practices as it involves a high density of high-risk activities in a short window and constrained work site. Moreover, there are a lot of people working simultaneously on many different parts of the installations, and they only have a relatively short amount of time to complete their work.

During the reporting period, we had our planned turnaround in liaise with the shutdown safety theme 'Come to QAFAC safely, work in QAFAC safely and go back from QAFAC safely' from 27<sup>th</sup> of February till 24<sup>th</sup> of April 2019 with more than 1.8 million working hours spent on maintenance activities by our own employees and contractors.

As part of our efforts to ensure the safe completion of our turnaround with no lost time injuries, we started our planning process and identified most of the major jobs to be completed during turnaround. We conducted turnaround meetings on different levels to discuss the strategy and scope finalization; nine management meeting and 19 operational level meetings were conducted during the planning stage. During the planning stage, we also undertook a rigorous contractor selection process to ensure that skilled and appropriate contractors are chosen. After contractor selection, we trained our contractors and employees on various aspects to guarantee they are prepared for performing the turnaround work correctly and effectively.

In the execution stage of our turnaround, we emphasized on working safely by implementing several controls. We reviewed 141 critical activities of job hazard analysis (JHA) jointly with our contractors. A JHA is a technique to identify the dangers of specific tasks in order to reduce the risk of injury to workers. All employees and contractors were briefed about the completed JHA before starting the job.

Another critical control measure is the issuance of permits to work (PTW) which are permit forms that consist of a checklist to ensure that all hazards, control measures, work procedures and general safe work requirements are identified, documented, reviewed and understood by the worker involved with the work activities. During the turnaround in 2019, a total of 14,560 permits to work (PTW) were issued.

In addition to our JHA and PTW, we implemented other preventive measures for specific activities that can pose high risk. For example, confined space activities were prominent in our 2019 turnaround. They are considered high risk because they can lead to death or serious injury unless handled correctly. In confined space activities, workers can suffer from lack of oxygen, lack of natural light, or hot working conditions increasing body heat. Thus, we prepared a record of all confined spaces and categorized them based on the risk involved. A rescue plan with appropriate emergency resources was also prepared based on the risk category. For high risk confined spaces, a rescue team with specialized equipment was also mobilized at work locations.

For any emergency incident, whether related to confined spaces or not there was an emergency station set up in both MTBE and Methanol plants, which was equipped with rescue equipment and resources to respond in no time. Furthermore, our HSSE team trained some contractors to assist them in any emergency handling.

In the end, we are proud to mention that the turnaround was completed safely and successfully without any LTI. A ceremony, attended by QAFAC and contract senior management, was arranged to acknowledge and appreciate the attention and detail given to safety during turnaround and final work completion.







Lateef Abbas HSE In-Charge (Contractor) DESCON Engineering

# What was your involvement in the reward and recognition program for contractor workers in 2019?

I was the day shift safety lead assigned to ensure the implementation of HSSE procedures. I was responsible to raise awareness among employees to work safely, encouraging them to follow safe work practices and build a positive safety culture to complete turnaround without any injury and incident. I was also engaged in the development of the HSE award and recognition program and the selection criteria to identify and recognize safe workers.

# What are the main objectives and activities of the reward and recognition program for contractor workers?

The main objective of HSSE award and recognition program was to enhance the awareness of workers to work safely, build positive safety culture and stimulate their interest and enthusiasm for active participation in different HSSE initiatives and activities.

# What are the criteria followed by QAFAC to award contractors under the reward and recognition program?

The evaluation of contractors was based on worker's safety knowledge, behavior towards safety, contractor contribution in building positive safety culture, compliance of personal protective equipment (PPE), knowledge of hazards involved in their work and how to mitigate them, on-site verification of implementation of control measures, and usage of the right tools.

## What is the process followed to evalu and recognition program?

On-site monitoring of activities and interviews by QAFAC safety team and leadership team is undertaken in which they observe and select the safe worker among different work crews.

# Please provide an example of performance excellence demonstrated by the contractors awarded in 2019 that differentiates them from other workers.

During site safety visit, a confined space entry (CSE) attendant working at top elevation of a reformer was observed with excellent knowledge and compliance of Work At Height (WAH) and CSE work. He had good knowledge of the activity going on inside the reformer including hazards and controls and verified the availability of a permit to work, job hazard analysis, rescue plan, Work At Height (WAH) and CSE training prior to authorization to enter the confined space. He was also well aware of his roles and responsibilities as a CSE attendant and had good knowledge of emergency response and the use of radio in case of an emergency. The CSE attendant also confirmed the use of required PPE and rescue arrangements as per the permit to work, job safety analysis and rescue plan.



## What is the process followed to evaluate which contractor should be awarded under the reward

# **Reliability and Process Safety**

As a producer of Methanol and MTBE, we realise the consequences of process safety incidents on employees, the society and environment. As such, we cognize our responsibility to operate our plant safely and reliably. We maintain a Process Safety Management (PSM) central committee specifically to oversee process safety matters, chaired by the CEO, which comprises of QAFAC top management and meets bimonthly to critically review the progress made on process safety and provides a platform for making highlevel decisions. The committee helps to establish process safety guidelines, recommend process safety training for site personnel and audit the performance in all of the essential elements of Process Safety Management to ultimately ensure continual improvement in the process safety system and performance.

Furthermore, we are members in QP's process safety committee founded in 2018 - under the QP Risk Management Forum. As part of this committee which meets every two months, we discuss Process Safety Management and any directives from QP related to it. We also set annual targets, review Process Safety Management implementation and discuss any significant process safety incidents, its causes, outcomes and lessons learnt.

We also maintain an integrated HSSE and PSM procedure and process safety information management procedure to provide a directive to manage PSM implementation. Furthermore, we have a Process Hazard Analysis (PHA) overarching standard and sub-procedures - that provide comprehensive requirements for implementing our process hazard analysis program. Our PHA program encompasses several techniques to evaluate and control hazards and risk levels respective to process operations to assess the suitability and effectiveness of existing safety barriers, and to help determine whether additional barriers or risk mitigation measures are needed.

We also have a Mechanical Integrity and Quality Assurance (MIQA) manual that guides our practices in managing process Safety Critical Equipment (SCE) and associated critical tasks. SCE are equipment, controls or systems whose malfunction or failure would cause or contribute substantially to the release of a hazardous material or energy or whose proper operation is required to mitigate the consequences of such release. Furthermore, we follow the OHSA 1910.119 Management of Highly Hazardous Chemicals model to analyse our safety practices, identify gaps, and implement recommended process safety improvements that would help us achieve excellence in HSSE practices. This standard defines the minimum requirements that must be in place to ensure deficiencies are adequately addressed. Such deficiencies can lead to unacceptable risks to safety, health and the environment or losses of assets and/ or production.

In conjunction, we retain a PSM system audit procedure and full suite of protocols that ensure the tracking and monitoring of our process safety requirements. In general, the main recurring hazard for a hydrocarbon facility is associated with Loss of Primary Containment (LOPC) and threat of fire. To manage these risks there are complex integrity inspection regimes - including leak detection and repair, and vessel and pipe integrity inspection, fire and gas detection systems to enhance fire prevention, and regular housekeeping.

In addition to our PSM system audit procedure, we maintain several programs that support us in upholding excellence in reliability and process safety. Our Behavioral-Based Safety (BBS) program drives the overall safety culture at QAFAC by motivating employees to work safely, correcting unsafe acts and behaviors, encouraging employees on safer ways to do a job and finding ways to improve the safety system and culture within the organisation. In fact, we



have a dedicated Behavioral Based Safety Observations procedure in place that creates a systematic approach to address unsafe acts in the workplace. A BBS observation is an observation conducted by a company executive, a manager, a section head, an engineer or supervisor, preferable accompanied by a peer, one level below him, or an HSSE resource, to a predetermined location where personnel are engaged in work activity. The observer will conduct a BBS observation of a personnel carrying out a task and will engage with a person/personnel regarding safe or unsafe acts, practices or conditions. These could be planned or unplanned. In 2019, we created a mobile-supported BBS form in addition to our original PC-accessible BBS form to ease the reporting process of any safety observations from all our employees.

In 2019, we observed 433 safe acts in comparison to 130 unsafe acts. As for our Process Safety Management program -



**HSSE Engineer** 

AMAN program laid a solid foundation towards achieving major and sustainable improvements in QAFAC HSE culture and performance. The program embedded a risk-based approach to process safety and built a consistent risk culture and mindset across QAFAC. Furthermore, the program supported the establishment of an effective organizational learning process. As part of the program, we maintain a competency matrix on PSM elements to warrant that all employees possess the necessary knowledge to conduct their work.

## How do you think AMAN program influenced QAFAC's employees during turnaround in 2019?

Our PSM governance structure and risk based PSM model were key elements in achieving a successful turnaround with zero LTIs and zero reportable spill incidents. In addition, the emergency response manual and set of sub-procedures that were developed as part of the last phase of our AMAN program were critical in responding to emergencies during turnaround and guaranteeing the safety of employees, contractors and our plants.

## How will the completed turnaround help improve process safety in the future?

Turnaround helps conduct the activities necessary to keep the plant running safely, reliably, and as efficiently as possible.





known as AMAN, it was established in 2014 to lay a solid foundation towards achieving major and sustainable improvements in QAFAC's HSSE culture and performance - particularly in the area of Process Safety Management. The program was founded on the belief that all injuries, occupational illnesses, process safety, workplace safety, and environmental incidents are preventable. The last phase of our AMAN program concluded in 2018 but the outcomes of the 3-year program are evident in our safety performance for the reporting period. In 2019, we are proud to mention that we achieved 15 million safe working hours for our employees and contractors.

Although we had two process safety incidents in 2019, they were both tier 3 incidents and did not have any major losses or impacts. However, we conducted a detailed analysis and identified the causes and preventive measures.

## What is the impact of AMAN program on QAFAC's safety culture after its completion?



# **Emergency Preparedness**

Having an effective framework for emergency management is an integral part of protecting our employees, contractors, the environment, and our business operations from external factors such as natural disasters, or incidents resulting from internal business activities such as spills. We seek to mitigate our risks wherever possible and ensure that we can respond to them effectively through our dynamic emergency response plans. Whenever there are major changes in work processes or equipment, we update our emergency plans or develop new ones to retain our state of readiness to respond to any critical situation. During the reporting period, we updated our emergency response plans and ensured that all emergency elements as well as social, environmental and health and safety considerations were included. This means being in a state of readiness to respond to any critical situation.

To further endorse our emergency response, we are members in several relevant committees. We are part of QP's emergency preparedness committee, which provides mutual aid assistance for emergencies that affect any industries in Mesaieed Industrial City (MIC). The committee quarterly discusses all aspects related to emergency response at MIC facilities and community area and shares lessons learnt from incidents. As members in the committee, we are required to share with MIC response central forum information about resources, equipment and fire engines to ensure readiness of all members in case of an emergency. Along with our membership in QP's emergency preparedness committee, we are members of the MIC Emergency Response Forum. The forum meets quarterly to strategically plan for emergency response within the MIC community and industrial areas.

In addition to the aid assistance for emergencies provided by MIC and QP, we recognize the key role of having skilled emergency responders at QAFAC to manage incidents. In 2019, we performed 14 fire safety exercises against a target of 12 and conducted two additional exercises to measure emergency response preparedness for the turnaround. We also train our Fire and Safety Operators (FSO) and Emergency Response Team (ERT) - that comprises of auxiliary members from the operations and maintenance departments to ensure that we respond effectively to any emergency. All personnel supporting in emergency response are required to attend a minimum of one training per month to guarantee they meet the required standard set by QP. We also have a crisis management team - which is headed by the CEO and includes members of top management – that assembles in case of tier two or tier three emergency incidents. To further intensify our efforts to respond effectively to any emergency, we, at QAFAC, have a dedicated fire-station, first aid unit, and three emergency response vehicles - two fire engines and one ambulance to ensure emergency preparedness. In addition, by the end of 2020, our QAFAC Support Services Amenities (QSSA) project is expected to be completed and ready for hand-over and pre-start up. The project will encompass an extension of the fire water network with a provision of extra hydrants, and new buildings housing a brand-new lab as well as the Security, HSE and Fire departments teams.

At our plants, we have toxic and combustible gas detectors strategically placed throughout our plants to ensure the detection of any leaks. These detectors are permanent fixtures across QAFAC linked to the fire panel at our fire station and are inspected in line with our maintenance schedule. If any of the detectors is activated, the panel will indicate the exact location of the activated detector so that our fire-fighting team can respond effectively. We also have cameras on site that enable any of the emergency responders to see the area that needs support and comprehend the emergency faster. In addition, we have manual call points throughout the plants that any person can activate manually. The activation of these points will send an alert directly to the control room to assist with any emergencies and provide the needed support to mitigate the situation. Along with the manual call points, all operators and technician carry radios with distinct red button that can be pressed to alert control room personnel of an emergency.

As part of our extensive measures for emergency preparedness, we do not only confine our emergency controls to our plants but also extend them to our buildings nearby our plants. We have gas detectors at our buildings which are inspected quarterly by an external third party to ensure their functionality. In 2019, a thirdparty contractor conducted quarterly inspections and tests on our gas detectors in compliance with National Fire Alarm and Signalling Code 72 (NFPA 72) as per contractual agreements and manufacturer's recommendations.

Due to our excellent emergency response management, we handled the two confined space emergency response cases we faced during the reporting period in line with or procedures and our workers did not sustain any injuries or harm. Subsequent to these incidents, we conducted detailed analysis of the incidents identified causes, immediate actions, preventive actions, and lessons learnt. We share these incidents with all our workers to avoid their reoccurrence and raise our workers' awareness on emergency preparedness.





# Tier II emergency exercise conducted at QAFAC with mutual aid from MIC

A jointly planned Tier II Emergency exercise was conducted on 10<sup>th</sup> of September 2019, between QAFAC and MIC.

The primary objective of the exercise was to test the mutual aid response for Tier II emergency, and to identify areas for improvement. The joint exercises serve to enhance and strengthen the mutual aid relationship between MIC and QAFAC and is critically important to sustain and enhance emergency response readiness.

The emergency exercise required the simulation of isolation and containment of a Process Gas leak, as well as the extinguishment of a process gas fire by using available firefighting equipment and resources.



From the performed emergency exercise, some areas of improvement were identified such as restrictions on emergency safety communication channel, dedicated focal points for fire, security and ambulance, and clearly established emergency zones.

As a result, key recommendations were provided including the development of a back-up arrangement in case any ERT members are not available, checking the hotline in the control room daily to ensure integrity, controlling and managing vehicle position at incident sites, and having fire-resistant security uniform.

# 06

# WORKFORCE AND COMMUNITY ENGAGEMENT

- Workforce Leadership
- Workforce Management and Diversity
- Employee Attraction and Retention
- Qatarization
- Supporting Our Community
- Local Communities Contribution

Material Topic	Alignment to GRI	Alignment to UN SDGs	Alignment to QSE	Alignment to QNV 2030
Employee engagement, attraction and retention	GRI 404	3 CONFIGNATION 	QSE S 10, 11, 12	
Qatarization	GRI 202	8 Intervention	QSE S 20	Human
Diversity and equal opportunity	GRI 405	5 titlear 5 titlear	QSE S 19	Development
Learning and development	GRI 404	10 REALES E 5 FORAT 5 FORAT 6 FORAT 8 RESULTION OF 8 RESULTION 8 RESULTION 8 RESULTION 10 REALES 10 REALES	QSE S 13	
Community engagement and investment	-	-	QSE S 22	Social Development



Our people - the human capital - are our most important asset; and any plans to move our business forward must start there. With the update of our corporate strategy in 2019, we made acknowledgement of employees' worth as an integral part of our values. This acknowledgement is imperative to QAFAC as our success is only achieved through employees' strength, commitment and dedication, where each individual brings in unique set of skills, knowledge, perspectives and experiences that collectively help us achieve our vision and goals.

We take pride in being one of the leading employers in Qatar and continue to be an employer of choice by recruiting and retaining exceptional talent, promoting Qatarization and supporting gender diversity.

Critical to the success of both our people and the State of Qatar are the employment practices we adopt, as directed by QNV 2030 that propels oil and gas companies to contribute to the development of human resources and the economic capacities throughout Qatar. At QAFAC, we strive to improve our productivity and the economic growth of the nation by offering increased employment opportunities in compliance with Qatar's Labor Law and Ministry of Administrative Development, Labour and Social Affairs that outlines the relationship we must have with our employees, to ensure we comply with the minimum rights that ought to be offered to QAFAC's employees.

We also aspire to further safeguard our employees' rights through complying with additional international frameworks, such as the International Labour Organization (ILO) and the United Nations that both highlight the importance of treating employees fairly, promoting trust, respect, empowerment and supporting them progress to drive a sustainable business that supports talent acquisition and reduces turnover rate.

The aforementioned elements are entrenched in our Ethical Code of Conduct and HR policy - that clearly portrays how we safeguard our employees' rights and the mission, values and norms of behaviors we wish to foster. The Code includes the required behaviors that employees need to adopt including respect, teamwork, lovalty, confidentiality, communication and health and safety practices. All new joiners are required to understand and attest to reading the Code of Conduct, as well as, on annual basis all employees are required to read the Code again and submit an attestation of understanding the Code.

QAFAC's Disciplinary Committee regularly reviews any noncompliance with the Code and decides on the appropriate disciplinary action to implement in accordance with our established disciplinary procedures Our newly adopted values govern how we conduct our business and manage our human capital that need to be deeply entrenched into employee behaviors; however, changing

Key Achievements and Highlights





behaviors is challenging and requires a multi-dimensional approach. the company. During our annual value ambassadors' meetings, In that sense, we intend to implement various initiatives to instill our improvement areas are discussed to ensure everyone is engaged core values through leadership role modelling, events, rewards and and on par with the new values. We will reiterate our values in the talent acquisition and development. events we carry out and newsletters to collaboratively advance on the adoption of QAFAC's values.

Our leadership are considered employees' role models whose adoption of the values set an example for QAFAC's employees to adopt similar behavior demonstrated in doing the right thing, implementing safety measures, promoting trust, respect and empowerment, continuously improving processes and operating in a sustainable and socially responsible manner that are constantly exemplified through collaborative discussions with employees.

These collaborative discussions are conducted during townhall The selected material topics have also been broadly correlated to the meetings and events chaired by the leadership, where 'Value UN SDGs, QNV 2030 and QSE ESG Guidance to show the contribution Ambassadors' from each department have been selected in 2019 to of our activities and initiatives to sustainable development globally ensure QAFAC's values are being comprehended and followed across and locally.

Alignment of a High Performing Organization aspects to QAFAC's vision, mission, values and strategy



This chapter outlines our performance during the reporting period on employee engagement, attraction and retention, Qatarization, diversity and equal opportunity, learning and development and community engagement and investment. These material topics have been aligned with QAFAC's corporate strategy – as outlined below and the GRI standards on which this report has been based on.

# Workforce Leadership

The commitment of our leadership plays an imperative role in setting the values to promote trust, respect, empowerment and teamwork and creating policies to establish expectations and provide guidance on how to consistently manage our workplace practices – from recruitment and retention, diversity, Qatarization to capability development towards boosting a high performing organization.

We maintain our Employee Relations Policy to govern employee practices and ensure transparent set of expectations from employees and their rights to equal opportunity, protection against discrimination and mandating fair treatment for all.

To safeguard employees against unfair treatment, we tailored an employee grievance mechanism to support them raise issues or complaints, these issues range from unjust treatment over the course of their employment and unethical recruitment, workplace discrimination, sexual harassment, concerns about wages. We follow a progressive problem resolution procedure as portrayed in the Personnel Policy Manual, managed by the HR department. The problem resolution procedure is initiated once an employee raises the issue with their direct manager, if the issue is not resolved, the employee will escalate the issue with the department head. At QAFAC, most of our issues are resolved at this level, nevertheless, employees have the liberty to further escalate the issue with the HR manager or CEO, which is considered as the final level of the problem resolution procedure. In this level, we provide employees with the option of anonymously raising an issue without any potential negative repercussions, through emails or letters. During the year, QAFAC did not report any problems or concerns from employees.

In 2019, we revised our training and nationalization policies for continuous improvement of our workforce performance. Our training policy entails the effective collaboration between employees and managers to build a continuous progressive culture, where an employee is expected to seek learning opportunities and a manager is expected to instruct, motivate and identify employee learning needs. We have set specific eligibility criteria and budgets for external training programs that will be renewed on an annual basis to support our employees reach their aspirations and support the growth of QAFAC's leaders and employees.

In addition, our nationalization policy has been updated in 2019 in line with QNV 2030 that prioritizes the increased and diversified participation of Qataris in the workforce through the incentives we develop to attract Qatari talent. The policy reflects our commitment to driving Qatarization through the educational and training support we offer to Qatari nationals, in addition to the assistance provided to employees who wish to continue their education in areas that are consistent with their career development plans. Our policy entails Qatari employees' rights to scholarship opportunities at national and international educational institutions.

To continuously monitor the progress against our strategic objectives and corporate initiatives at the workplace, our leadership established organization and departmental wide key performance indicators On quarterly basis, our leadership hold performance progress review meetings to discuss the training and progression reports that includes, the training hours provided, the percentage of development programs, the rate of knowledge transfer and any behavioral issues that were noticed.

We implemented and initiated our corporate intranet in 2018 -Manarah2 – which is a comprehensive application that features a suite of tools to effectively enhance communication and collaboration, improve business processes while serving as a centralized hub of information and ultimately promote a social culture.

Along with our management systems, we offer our employees self-service tools – such as SAP Fiori, a mobile app for accessing SAP applications, such as Apply Leave, Approve Leave, Access Pay Slips, Approve Shopping Carts, Employee Lookup and Team Calendar.



To assist our leadership oversee talent management activities, we have multiple committees such as the Employee Management Committee. This committee is chaired by our Chief Administration Officer (CAO) to implement a structured communication process with employees to discuss employee-related conditions, for example, targets, work hours and wages to ensure alignment with our workplace management targets. Furthermore, we have a policies and procedures committee represented across QAFAC's departments, the committee is responsible for reviewing and updating our policies that are then shared with the CEO for approval.

We also have in place an Ethics Committee governed by our Chief Audit Executive responsible for ensuring our employees comply with our ethical standards and Code of Conduct and provides clear guidance on what it means to act ethically, professionally, and with integrity and covers a wide range of topics related to anti-bribery, conflict of interest, fraud, corruption, and compliance. Each year, we track if any cases of corruption or ethical violations have occurred across our workforce and we require all our employees to sign a Code of Ethical Conduct Declaration on yearly basis, indicating that they have read and clearly understood the code and report whether they are aware of any actual or potential conflicts of interest at QAFAC. We also establish clear departments responsible for our workplace management practices, including the Human Resources (HR) Department Stemming from our HR Department, we have several divisions to help us effectively guide our employee practices – including Personnel Administration, Compensation and Benefits, Training and Nationalization and Government Affairs.

Personnel Administration fosters the recruitment process of identifying, selecting and onboarding of new hires as governed by our Chief Administration Officer (CAO), to ensure the effective and efficient administration of employee's daily HR requirements, as well as, guide and assist employees in understanding and implementing our HR policies and procedures. The Personnel Administrations Division is primarily responsible for the recruitment and placement of new hires, reviewing the benefits and entitlement for employees, the coordination of medical insurance program, maintaining the integrity of data monitoring system (SAP), consolidation of annual compensation review and updating schemes accordingly, benchmarking activities, business travel management and trip finance including coordination with accredited travel agencies.

The Policy and Compensation division is responsible for employee's performance reviews, that follows a set of KPIs that employees are required to achieve – such as embedding the core values and safety aspects.

The performance review is initiated by a self-appraisal form completed by each employee through our Performance management system (PMS). This form is then shared with the department manager to provide their appraisal, after which, it will be cascaded to several approval ladder until it reaches the CEO.

The results of the performance review will identify employee's performance in relation to a 1-5 rating system, each rating corresponds with a specific merit increase. The division is responsible for ensuring that each employee receives the correct salary increase based on their final rating.

Furthermore, the Personnel Administration is responsible for preserving the integrity of the salary structures, this includes ensuring employees do not exceed the salary range for their adjusted employment grade. However, if such incident occurs, the department will follow the Salary Top-Up Policy that supports employees receive their rightful adjusted salary without exceeding the allowed salary for their role – including a compensatoryapproach, such as, a bonus.

On monthly basis the department submits periodical reports to executive management team and quarterly reports to the Board of Directors.

Whereas, the Training and Nationalization Division fosters our employees leadership programs, trainings and awareness sessions to develop their behavioral and technical competences.

The Division is responsible for increasing the participation of Qataris in the workforce through incentive programs to attract Qatari talent, in addition to, Qatari-led development programs to improve the skillset of our national workforce through training support and education scholarship opportunities provided to employees who wish to continue their education in areas that are consistent with their career development plans. The newly joined Qataris are supported along their career path by following Personal Development Plans (PDP), which present a detailed set of qualifications tailored specifically to match the career preferences and goals that need to be fulfilled to reach the target jobs.

In line with the required competencies at QAFAC, the Division supports us in developing and maintaining a highly skilled and diverse workforce, through internal and external training programs to advance employees' knowledge base, as well as, support them with their leadership development aspirations.

The Training and Nationalization Division coordinates with our Performance Management Division in an effort to monitor and manage developee's (Qatari Nationals) performance through reviewing competencies, salary and employee goals that should be linked to our overall strategy. The Performance Management Division identifies any gaps in current competencies and how to elevate those in collaboration with the Training Division. We provide further details on our performance management process under the 'workforce attraction and retention' section of this chapter.

Our leadership are keen on attending conferences and events that foster our workforce management practices and seek continuous improvements. Throughout the year, our leadership attended the Compensation and Benefits Management event that covered the latest developments in total rewards, where HR leaders and experts shared best practices and thought leadership on all aspects of Total Rewards, including compensation, benefits, performance management, pay equity and reward.

Other events attended by the leadership included Leading Manpower Organization and Succession Planning, Introductory Career Advisory Course and Advanced Strategic and Human Resources Development.



# **Workforce Management and Diversity**

GRI 102-8 GRI 102-41 GRI 405-1 GRI 406-1

Our ambitions of a high performing organization guides our efforts at QAFAC to provide concrete workforce and diversity management practices that deem essential to our success, in particular with the existing competitive hiring market that inevitably mandates the development of policies to protect employees, maintain a diverse workplace, offer competitive benefits and ensure the satisfaction of our employees.

Through Our Employee Relations Policy, we provide direction on employee management related practices and maintain transparent set of expectations and rights for all our employees including equal opportunities for all, protecting workers from discrimination and mandating fair treatment of our workforce. The policy includes interdependent set of policies including work schedule policy and diversity policy.

Our work schedule policy is in line with Qatar's Labor Law that is segregated into two types, firstly the general shift that includes 8-hours of work over a consecutive period of 5-days a week and the shift schedule that includes three shift for a period of 8 hours over a consecutive period of 6-days a week This policy is implemented across the year except during the Holy Month of Ramadan, where working hours are reduced to 5 hours for 5-days a week, additional time worked is compensated using the overtime rates.

Our diversity policy sets our direction of being an equal opportunity employer, fostering diversity and building an inclusive corporate culture where employees can reach their potential regardless of gender or ethnicity. The policy dictates our efforts at promoting equal employment during the recruitment phase, training and career



# Workforce by nationality



development opportunities for women and seek to help address the challenge of youth unemployment through the different initiatives we have put in place.

Our Personnel Administration division manages and monitors workforce performance data to ensure we progress and align with our corporate goals. The division also handles many other vital functions such as talent acquisition, onboarding, employee relations, labor law compliance, record keeping, compensation and handling specific performance issues.

In addition, we realize that effective human resource management is driven by functional measurement and monitoring of our workforce metrics. Hence, we have a robust system - such as SAP

# Did vou know

Globally, only 15% of the O&G workforce are women. It is predicted that equal employment improves the global economy, if all countries close the gender gaps by 2025, worldwide GDP would increase by USD 12 trillion.

McKinsey& Company (2015): How advancing women's equality can add \$12 trillion to global growth.



Workforce breakdown by employment level



Senior management Middle management Staff

# GRI 102-8 GRI 405-1

Fiori, a mobile app for accessing SAP applications, including leave applications, Pay Slips, Employee Lookup and Team Calendar. In addition to Manarah2 application that features tools to effectively enhance communication and collaboration and improve business processes.

Personnel Administration also has exclusive access to SAP Human Capital Management (HCM) Module which maintains employee data management – including salaries, grades and personal details. The system serves as the main source in coming up with manpower demographics, reports and employee-related performance trends.

As part of our diversity efforts, we also promote female employment that is considered a predominant challenge faced in the oil and gas At QAFAC, we employ 332 permanent and temporary employees. industry. In 2019, our workforce comprised of 8.1% females, and 1% in senior management positions. Moving forward, we aim to Almost 90% of our employees are present at our Mesaieed Plant at Mesaieed Industrial City (MIC), where the largest part of our business introduce several benefits to increase the representation of females operations is located, and 10% of our employees work at our head in the workforce.





Mona Refaei

CAO Secretary loined OAFAC in 2007

# What do you most like about working at QAFAC?

I joined QAFAC since 2007 and ever since I have been utterly proud to be part of QAFAC's family.

door policy fostered by my direct manager made my job much easier.

skills.

## Please discuss the Administration Department's role during the 2019 turnaround:

The Administration Department is responsible to support technical workers perform their job. As such, we played a pivotal role in QAFAC's turnaround. We facilitated employees' transportation, work hours and overtime to ensure a seamless turnaround in 2019.

## How does QAFAC support its female workforce?

As a female employee I have noticed the benefits that QAFAC provides us with to satisfy and continually engage us. For example, female employees are given 50 paid maternity leaves with an additional 2-hour leaves for 2 consecutive years to support all new mothers find a balance between work and their personal lives. One can insinuate the successful initiatives that QAFAC employs through our year-on-year increase in the number of female employees.

office in Doha. Our employees in the HR department are distributed in both MIC and Doha office.

We are committed to fostering diversity and building an inclusive corporate culture where employees can reach their full potential regardless of gender or ethnicity. A testimony of our efforts is demonstrated in our workforce that comprises of diverse age groups, with each individual brining in a different set of experience, knowledge and proficiency.

- QAFAC provided me with the opportunity to grow on a personal and professional level through the diverse learning and development programs that are annually conducted. The autonomy and open-
- On a personal level, having to coordinate with different departments across QAFAC and communicate with people from diverse backgrounds drastically improved my interpersonal and communication

# **Employee Attraction and Retention**

GRI 401-2 GRI 405-1

Talent management is the strategic and overarching process of attracting and hiring the right talent to help them grow and reach their aspirations. It is implemented to improve the competencies of all employees through evaluating talent system elements - including talent acquisition, development, engagement, retention and talent exit management - to identify talent gaps resulting in either acquiring a new pool of talent or developing current employees' skills to satisfy company needs.

At QAFAC, we are governed by a set of policies to manage our employee attraction and retention. One such policy is our Recruitment, Placement and Selection Policy that highlights our commitment to attract and retain a diverse workforce. During the year, we revamped Talent and Career Progression Policy in line with our Recruitment Policy to ensure the right talent for the right job is welcomed on board.

We are also guided by our Employee Relations Policy and Allowances and Benefits Policy, that govern our workplace practices and guide our activities at QAFAC in relation to recognizing, valuing and rewarding our workforce.

Through our Employee Relations Policy, we provide direction on employee management related practices and maintain transparent set of expectations and rights for all our employees including equal opportunities for all, protecting workers from discrimination and mandating fair treatment of our workforce. The policy also includes end of service policy.

Our Training Policy depicts the training programs, materials and hours required during the year based on QAFAC's objectives. Whereas our end of service policy provides employees with a bonus-scheme calculated based on the years of service - a one-month salary for the appreciation for all their efforts during their employment at QAFAC.

To integrate all the key areas of the talent management procedure, we record and track the recruitment, development, and performance of employees and candidates. We also ensure our employees are provided with the right training programs to ensure constant learning and engagement, in an effort to satisfy and retain employees. To further improve our talent management procedure, we intend to embark on a best practice journey to define, prioritize and implement the most suitable initiatives across our talent system elements based on potential impact and implementation feasibility.

We also track our employee satisfaction through annual satisfaction surveys distributed among all our employees to understand whether our procedures, initiatives, benefits and plans provide employees with the intended results. The survey helps unlock deep employee experience insights that will help improve employee retention, boost performance, and nurture QAFAC's culture. Our survey is conducted every 2 years and provides QAFAC's management with insights on employees' perspectives on our culture and working environment.

In 2019, employee engagement survey covered QAFAC's employees with questions structured around employee engagement and employee enablement areas.

At QAFAC, we implement a comprehensive approach to the way we conduct our attraction and retention procedures that includes the entirety of QAFAC departments where each department identifies the required talent pool to meet its departmental objectives and KPIs. That are then liaised with the HR department to requests the job description for the required position oversee the required attraction and retention procedures, in line with QAFAC's strategic objectives.

During the year, we successfully attracted six high-caliber employees

GRI 401-2

Our new employee hires comprised of employees between the ages of 18-40, which further illustrates our efforts towards fostering a youthful workforce.

We also implement programs to foster a youthful organization, such as our annual participation in various career fairs to support fresh graduates enter the labor market by placing them in full-time employment positions at QAFAC. Our proactive participation in career fairs attracted over 152 resumes to our human capital database and successfully attracted 2 female employees to join our workforce in 2019.

Additionally, we implement a graduate engineering program, which was first introduced in 2015. Through this two-year program, freshly graduated engineers from Qatari universities can join QAFAC and rotate across maintenance and production functions, learning from the finest minds and using cutting-edge technologies. This initiative is not exclusive to Qatari nationals, but applicants must be born and raised in Qatar. Upon completion, graduates may be asked to join QAFAC as permanent employees.

It is as equally important to retain our current employees, as our main priority is to ensure our employees are happy through fostering personal career goals, rewarding good work and listening to their opinions and concerns. We take pride in being the employer of choice that can be noticed in the low turnover rates across our

Programs to improve employee retention





organization of only 3% for the second consecutive year that reflects our success at providing employees with the rewards and benefits they require that ultimately improves their satisfaction and content of being part of QAFAC. Most of our employee turnover is amongst the 51-60 years age group that can be related to the retirement age of our employees at QAFAC.

Our programs to improve employee's retention include benefits provided to employees, training and career development programs, engagement activities, Annual Long Service Awards and others.

# Did you know

The most unemployed age groups are the ones between the ages of 16 - 24 years, due to the challenging transition from education to the labor market.

**U.S Bureau of Labor Statistics** 



# GRI 401-1

The benefits we provide our employees include an optimum health insurance coverage. We recently partnered with a leading medical insurance provider offering Group Health Insurance and Group Life and Personal Accident Insurance for all QAFAC employees. An employee orientation program was organized by the Administration Department in 2019 in which employees were apprised on the medical benefits provided by QAFAC as well as the accredited hospitals/clinics available at Doha and the required forms to be completed for any insurance claims. Employees were also provided with the insurance coverage from to iterate the insurance agreement, coverage conditions and policy definitions.

In line with the programs to improve employee retention, we provide training, diplomas and graduation programs that are governed by our training policy that stresses on our continuous progressive culture to support all our employees seek internal and external trainings.



Employee turnover by employment level



Employee turnover by age



# New employee hires by gender









## GRI 404-2 GRI 404-3

Our training development process starts with a training needs based on their specific learning and development needs, monitor employees' training hours and their compliance with training assessment performed by the Personal Administration Division to identify any gaps in current training initiatives and employee's skill materials. sets. Ultimately, this process results in the training objectives to As a result of our training efforts during the year, our total training bridge the gap between current and desired performance through hours increased, reaching a total of 33,162 training hours provided the development of a training program. The training programs to all QAFAC employees with a 99.9 average hours of training per are then monitored and managed by Training and Nationalization employee. The training programs focused on both technical and soft Division to ensure our employees complete their designated training skills on par with their competency development requirements.

QAFAC is presently in final stage of creating an intelligent learning platform named "Percipio" which delivers an intuitive stylish design, consumer-led experience to accelerate learning. The platform offers the choice of where, when, and how to learn while delivering highly engaging multimodal content, curated into over 2,800 learning courses.

Moving forward, we plan to implement a fully-fledged training system that automates our entire training and development process, including the ability to assign training programs to employees



A family member recommended me to visit a career fair which QAFAC was part of - providing both scholarship opportunities and employment positions for fresh graduates. I was motivated to apply for QAFAC considering the valuable services it offers and the work environment.

## How did you apply to QAFAC's graduate scholarship program?

I learnt about QAFAC's scholarship program during my visit to the career fair.

## Please describe how the scholarship helped you achieve your goals?

QAFAC's scholarship helped me in many ways, most importantly lessening the financial burden that helped me focus more on studying and learning that lead to better grades. QAFAC also tends to follow-up with students throughout their university years to ensure I am on the right path.

## What do you like most about working at QAFAC?

I mostly like QAFAC's unique work environment that enables me to successfully implement my technical knowledge. Our colleagues are friendly and supportive whom always provide useful information and learning whenever it is needed.



# **Rashid Mubarak** Al-Mesaifri

University of Huddersfield, UK Year of Graduation 2019 Speciality Mechanical Engineer



As part of our retention programs, we annually provide engagement activities for QAFAC's employees. During the year, we celebrated Qatar National Day at both our Head Office and Mesaieed Plant with a wide range of activities that invoked national pride. The celebrations at the Head Office were flagged off by our CEO through cutting a celebratory cake in the presence of the senior management and the employees, our Facilities and Support Services Manager led the celebrations at our Mesaieed Plant. This year's celebrations, which were organized by our Head of Facilities and Support Services, were well attended by our employees and contractors.

## Please describe how the career fair provided you with the opportunity to be part of

## GRI 404-2

We also appreciate and recognize the loyalty and commitment of our employees, we reward our long-lasting employees for completing five, ten, 15 and 20 years of service in our annual Long Service Awards, which falls part of our retention programs. During our reporting period we awarded a total of 127 employees. 89 of which have been working with QAFAC for 20 years, 11 have been working for 15 years and 27 employees for 5 years. This is the first time we honor that many employees in a single event. It is a clear testament of our relentless efforts to offer our employees with unlimited opportunities to build long-lasting careers at QAFAC.

Once people join QAFAC, managing our talent is essential to ensure we have the right people in the right jobs. With approximately two third of our workforce aged over forty, we need clear succession plans for all critical roles to ensure business continuity. To prepare for the retirement of a large cohort of our workforce over the coming few years, we already identified those critical roles that will be difficult to fill quickly through external hire or internal succession. We



Total cost of training (USD)



already have, and will continue to, actively identify junior personnel suitable for development in these areas and equip them with the necessary tools and knowledge for success in a given role.



Average hours of training per employee





# Qatarization

In line with QNV 2030 of achieving a 50% Qatarization of the continue their education in areas that are consistent with their career workforce, attained through increasing and diversifying the development plans. Our policy entails Qatari employees' rights to participation of Qataris in the workforce, we identify, attract and scholarship opportunities at national and international educational develop talented national workforce by promoting the professional institutions. development of the local workforce and the future intellectual capital Our Qatarization plans aim at attracting Qatari high school and of the country. We are progressing in our attainment of our goals in university students to assume posts in QAFAC through our career fairs by pursuing initiatives that give Qatari employees the opportunity to conducted on annual basis. We also continually support our nationals reach their full potential. upon their recruitment in QAFAC through the individual development plans to foster their career and professional development.

To promote Qatarization, we enhanced our nationalization policy that prioritizes the increased and diversified participation of Qataris in the workforce through the incentives we develop to attract Qatari talent. The policy reflects our commitment to driving Qatarization through the educational and training support we offer to nationals, in addition to the assistance provided to employees who wish to

![](_page_42_Figure_14.jpeg)

Number of Qatari students sponsored to study in universities and technical schools in the State of Qatar

Number of QAFAC employees supported to complete their education

QAFAC's Scholars	} ≫ hip (
Current	Сог
4 employees are pursuing graduate programs in overseas universities from University of Huddersfield and Liverpool John Moores University in Mechanical and Civil Engineering, as well as, Digital Control Systems.	5 n Sou and and
3 employees are undergoing diploma programs from Community	1 f Qa
College of Qatar and College of the North Atlantic - Qatar (CNAQ) in Mechanical Technician, Public Administration and Chemical	1 f Ma
Processing Technology.	

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An internal Qatarization Committee consists of senior management representatives and headed by our CEO, oversees the Qatarization process at QAFAC and is tasked with the development of mechanisms to support the Qatarization, Training and Development Team.

# **Opportunities**

male employees completed overseas degrees from Texas uthern University, University of Huddersfield, University of Lincoln nd University of Portsmouth in Mechanical, Chemical and Electrical nd Computer Engineering, as well as, Business and Management.

female employee completed a Chemical Engineering degree from atar University.

female employee completed a Business Administration-HR anagement Degree from CNAQ.

2 male employees completed an Electrical Engineering Technology and Chemical Processing Technology Degree from CNAQ.

## GRI 202-2

To manage and report our Qatarization metrics, our digital technologies - SAP - help us monitor, manage and report the number of national employees, national trainees and the required Qataris to be employed. The system is managed by our HR department to report progress on our Qatarization objectives.

We offer qualified, young Qatari students scholarship opportunities at national and international educational institutions, such as, diploma or graduate programs. Upon completion, Qatari students are offered an opportunity to join our workforce. In 2019, two developees were offered a full-time employment opportunity at QAFAC.

![](_page_43_Figure_3.jpeg)

In continuation to our strategy of upgrading knowledge and qualification of highflyer employees, we are currently supporting 27 Developees on Filed Development Program.

Our Qatarization initiatives have led to an increased pool of national employees constituting of 92 employees in 2019, reflecting 27.7% of our workforce, of which 80% of QAFAC's senior management positions are held by national talent.

![](_page_43_Figure_6.jpeg)

# A special farewell event to our most loyal employee

During the year, we bid farewell to one of our stalwarts - Mr. Rashid Nassib Al-Abdulla, Chief Procurement Officer (CPO), whose expertise and experience brought rich dividends to the organization during his 18 years of meritorious service. Mr. Rashid's career and remarkable personality were celebrated at a high-profile farewell party held at the Diplomatic Club on 15<sup>th</sup> December 2019.

Prior to joining QAFAC, Mr. Rashid held a number of important positions at Qatar Petroleum from 1986 to 2002. He leaves behind a legacy of outstanding success based on loyalty, dedication and hard work. As an integral part of the Executive Leadership Team of QAFAC he played a key role in the expansion plans of QAFAC and has been a valuable mentor to many successful careers, mainly due to his ability to listen, understand, inspire and motivate.

QAFAC is immensely grateful to him for the outstanding value he has created for the organization as well as for the proactive role he played in making brand QAFAC more and more accessible to all our stakeholders as well as the public at large. Mr. Rashid has always been an ardent advocate of quality Qatarization and constantly emphasized on the leadership role that young Qataris should play in the socioeconomic progress of the nation.

![](_page_43_Picture_11.jpeg)

![](_page_43_Picture_12.jpeg)

Nasser Al-Tamimi Joined QAFAC in 2019

![](_page_43_Picture_14.jpeg)

I was seeking a scholarship to complete my undergraduate studies ever since I was in high-school. My aspirations for a scholarship prompted me to visit the career fair where I learnt about QAFAC and the scholarship programs it offers.

# How did you apply to QAFAC's graduate scholarship program?

I applied for QAFAC in 2014 during the career fair. Following my graduation, QAFAC requested that I share my CV again and this is when I applied again online.

# Please describe how the scholarship helped you achieve your goals?

QAFAC's scholarship program provided me with unparalleled support. The program is designed in a way that not only provides financial support but also academic support - on annual basis, QAFAC's employees used to visit us and extend their academic knowledge and experience to help us fulfil the academic requirements pertained to each module.

# What do you like most about working at QAFAC?

What I mostly like about working at QAFAC is the open communication between employees and the support each employee is willing to lend for one another. In our industry, there is a huge difference between theoretical and practical work, therefore, QAFAC understands this difference and gives us the chance to practically implement our theoretical learning by working on-site.

![](_page_43_Picture_23.jpeg)

## How did you learn about QAFAC's graduate scholarship program?

# **Local Communities Contribution**

Organizations have a responsibility to give back to their community where social consciousness is paramount to any business conduct. Doing the right things where a company operates builds a healthy relationship with all stakeholders based on contributions made.

QAFAC plays an important role in contributing to the social development of the State of Qatar, we develop community-related programs that address local community needs, in line with QNV 2030. We strongly believe that in addition to operating responsibly and ethically, we can make a broader contribution to the local communities where we operate.

Our contributions to the local community have been guided by our internal Corporate Social Responsibility (CSR) policy since 2015 prioritizing the initiatives that provide the vital support to the local Qatari community, focusing on meeting society's needs in our four focus areas: Health, Education, Environmental awareness and Sports. Our Corporate Social Responsibility Committee screens all community activity proposals that fall under these areas, to support those programs within our assigned budget and aligned with QNV 2030 and SDGs to address the needs of all segments of society.

Community engagement and investment at QAFAC are guided by our key focus areas in Health, Education, Environmental awareness and Sports. We invested a total of USD 28,553 on community initiatives during the reporting period of which approximately 59% are focused on educational initiatives where we collaborated with local academic institutions that develop local academics talents and contribute to innovation. We support academic students through project supervision, curriculum evaluation and advise. Further to that, we cooperate directly with local educational institutions on technical issues relevant to QAFAC processes. For example, we have teamed with Texas A&M University at Qatar (TAMUQ) to study the environmental impact of residual chlorine and thermal discharges into the Arabian Gulf.

![](_page_44_Figure_5.jpeg)

Percentage of community investment by focus

We aspire to improve the knowledge of the youth in scientific research and the oil and gas industry through the mentorship programs conducted at Qatar University. In November 2019, QAFAC participated in the 'Research and Innovation Cycle 17' as a member of the evaluation committee, represented by QAFAC's Business Excellence Manager and QAFAC's MeOH and Utility Shift Engineer, other representatives from Qatargas and Qatalum also form part of the committee.

The committee evaluated the work that students had accomplished during their participation in the Al-Bairaq program through five different presentations. Al-Bairaq program is a non-traditional educational project undertaken by the Center of Advanced Materials (CAM) at Qatar University, in which students in their final grade at Qatari independent secondary schools work in teams with well renowned scientists on practical real-life scientific problems. Al-Bairaq program offers new learning techniques and employs a unique curriculum, integral with project-based learning and STEAM (Science, Technology, Engineering, Art, and Math) curriculum in order to stimulate curiosity and improve scientific knowledge. It is an integral part of Qatar's commitment towards building a knowledgebased economy by promoting innovation, entrepreneurship and applied research.

![](_page_44_Picture_8.jpeg)

As a conscious organization, QAFAC conducts various environmental protection initiatives to raise local community's awareness on waste management and the various ways one can contribute to a healthier environment. Such initiatives promote a greater sense of responsibility that can be passed to future generations.

During the year, we participated in the 'Waste Free Environment' Campaign to clean-up Al Wakra Family Beach to promote daily recycling efforts, encouraging people to ardently follow the 3R's: Reuse-Reduce- Recycle. The responsibility for sustaining our planet ultimately falls on our children, and then to theirs. Hence it is paramount that we educate our children on the importance of recycling and creating a litter-free environment. This initiative was launched by the Gulf Petrochemical and Chemical Association (GPCA) and organized by Qatar Petrochemical Company (QAPCO) and other member organizations in February 2019. More than 1,500 participants from various industries, schools as well as public and private sector companies were part of this year's beach clean-up campaign.

In line with the Human Development pillar of Qatar National Vision 2030, QAFAC continued to organize a variety of sporting activities in 2019 to support the Qatari community's health and awareness on

![](_page_44_Picture_12.jpeg)

![](_page_44_Picture_13.jpeg)

the importance of sports. During the year, we held the annual QAFAC Cricket Festival at the Mesaieed Industrial City (MIC) ground. QAFAC employees and their families attended the event in large numbers and were seen vociferously cheering for their favorite teams.

To complement QAFAC's commitment to sports, our employees and their families participated in the Qatar Sport Day during the reporting period, held on February 2019. This year we joined hands with a number of Mesaieed-based QP-affiliate companies and celebrated National Sport Day. Mr. Khalid Sultan Al-Kuwari, CEO of QAFAC, Mr. Nasser Al-Kuwari, CEO of Q-Chem and Dr. Mohammed Yousef Al-Mulla, Managing Director and CEO of QAPCO attended the day-long celebrations along with the employees and families.

Attendees were invited to actively participate in a wide range of indoor and outdoor sports and fitness activities that were organized during the day. The key attractions of the event were the football, volleyball, badminton and basketball matches, which drew large crowds, cheering in support of their respective teams. Prizes were distributed to all winners and souvenirs and gifts were handed over to all the participants who made the event a commendable success.

![](_page_44_Picture_18.jpeg)

![](_page_44_Picture_19.jpeg)

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![](_page_45_Picture_1.jpeg)

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"For the SDG Mapping Service, GRI Services reviewed that the disclosures included in the content index are appropriately mapped against the SDGs."

"For the Materiality Disclosures Service, GRI Services reviewed that the GRI content index is clearly presented and the references for Disclosures 102-40 to 102-49 align with appropriate sections in the body of the report."

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# **Glossary of abbreviations**

Abbreviations	Long Form
A&M	Texas A&M University
A&R	Accounting and Reporting
ACFA	Asian Clean Fuels Association
AEF	Alberta Envirofuels Inc
AGT	Authorized Gas Tester
APC	Advanced Process Control
API	American Petroleum Institute
AR	Accounting and Reporting
BA	Breathing Apparatus
BBS	Behavioral Based Safety
CA	Competent Authority
CAER	Community Awareness and Emergency Response
CAM	Center of Advanced Materials
CAO	Chief Administration Officer
CDR	Carbon Dioxide Recovery
CEO	Chief Executive Officer
CFO	Chief Financial Officer
CH30H	Methanol
COO	Chief Operating Officer
COSO	"The Committee of Sponsoring Organizations of the Treadway Commission"
CPC	Chinese Petroleum Corporation
СРО	Chief Procurement Officer
CSE	Confined Space Entry
CSR	Corporate Social Responsibility
CV	Curriculum Vitae
DCS	Distributed Control System
DIFOTIC	Delivered in Full and On Time, and Invoiced Correctly
EHS	Environment, Health and Safety
EMS	Environmental Management System
EPC	Engineering, Procurement and Construction
EPCA	"The European Petrochemical Association"
ERM	Enterprise Risk Management
ERT	Emergency Response Team
ESG	Environmental, Social, and Governance
FSO	Fire and Safety Operators
GDP	Gross Domestic Product
GHG	Greenhouse Gas
GHS	"Globally Harmonized System of classification and labelling of chemicals"

Abbreviations	Long Form
GJ	Giga Joule
GPCA	The Gulf Petrochemicals and Chemicals Association
GRI	Global Reporting Initiative
GWP	Global Warming Potential
HCM	Human Capital Management
HIRA	Hazard Identification and Risk Analysis
HPO	High Performance Organization
HR	Human Resources
HSE	Health, Safety, and Environment
HSSE	Health, Safety, Security and Environment
IASB	International Accounting Standards Board
IFRS	International Financial Reporting Standards
ILO	International Labour Organization
IOLLC	International Octane LLC
IOT	Internet of Things
IPIECA	International Petroleum Industry Environmental Conservation Association
IQ	Industries Qatar
ISO	International Organization for Standardization
IT	Information Technology
JHA	Job Hazard Analysis
JV	Joint Venture
KAHRAMAA	Qatar General Electricity and Water Corporation
KPI	Key Performance Indicators
L&D	Learning and Development
L.L.C	Limted Liability Company
LCYMEC	LCY Middle East Corp.
LDAR	Leak Detection and Repair
LOPC	Loss of Primary Containment
LTA	Lost-Time Accident
LTI	lost time injuries
LTIF	Lost Time Injury Frequency
MI	Methanol Institute
MIC	Mesaieed Industrial City
MIQA	"Mechanical Integrity and Quality Assurance"
MKOPSC	"Mary Kay O'Connor Process Safety Center "
MMA	Methyl methacrylate
MME	"Ministry of Municipality and Environment"

Abbreviations	Long Form
MMSCM	Million Metric Standard Cubic Meters
MRR	Monitoring and Reporting Regulation
MSDS	Material Safety Data Sheets
MT	Metric Ton
MTBE	Methyl-Tertiary-Butyl-Ether
MTPD	Metric Tons Per Day
N/A	Not Applicable (Not Available)
NFPA	National Fire Protection Association
NZLD	Near Zero Liquid Discharge
O&G	Oil and Gas
OE	Operational Excellence
OECD	Organisation for Economic Co-operation and Development
OEE	Overall Equipment Efficiency
OGI	Optical Gas Imaging
OHS	Occupational Health and Safety
OMEC	OPIC Middle East Corp.
OPIC	OPIC Middle East Corp.
OSHA	Occupational Safety and Health Administration
OTS	Operator Training Simulator
PAGA	Public Address and General Announcement
PDP	Personal Development Plans
PHS	Process Hazard Analysis
PLC	Programmable Logic Controller
PM	Particulate Matter
PMS	Performance management system
PPE	Personal Protective Equipment
PPM	Parts Per Million
PSA	Pressure Swing Adsorption
PSM	Process Safety Management
PSM	Process Safety Management
PSM	Process Safety Management
PSTIR	Process Safety Total Incident Rate
PTW	Permit To Work
Q.P.J.S.C.	Qatar Chemical and Petrochemical Marketing and Distribution Company
QAFAC	Qatar Fuel Additives Company
QAFCO	Qatar Fertiliser Company
QAPCO	Qatar Petrochemical Company
QHSE	Quality, Health, Safety and Environmental
QNV	Qatar National Vision
QP	Qatar Petroleum
QSE	Qatar Stock Exchange
QSSA	QAFAC Support Services Amenities

Abbreviations	Long Form
RGS	Regenerate Gas Scrubbing
SAP	Systems, Applications, and Products
SASB	Sustainability Accounting Standrads Board
SCE	Safety Critical Equipment
SDG	Sustainable Development Goals
SNCR	Selective Non-Catalytic Reduction
TA	Turnaround
TAMUQ	Texas A&M University at Qatar
TRCF	Total Recordable Case Frequency
TVA	Toxic Vapor Analyzer
UAE	United Arab Emirates
UK	United Kingdom
UN	United Nations
UNFCC	United Nations Framework Convention on Climate Change
UOP	Universal Oil Products
US	United States
US EPA	United States Environmental Protection Agency
USD	United States Dollar
VOC	Volatile Organic Compounds
WAH	Work At Height
WHB	Waste Heat Boilers

![](_page_48_Picture_0.jpeg)

![](_page_48_Picture_1.jpeg)

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