كفاك
QAFAC

شركة قطر للإضافات البترولية المحدودة
Qatar Fuel Additives Company Limited

BUILDING A SAFETY CULTURE, TOGETHER

Sustainability Report 2016

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His Highness
Sheikh Hamad Bin Khalifa Al-Thani
The Father Emir

His Highness
Sheikh Tamim Bin Hamad Al-Thani
The Emir of State of Qatar

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About This Report

Welcome to QAFAC's 2016 sustainability report. It is an invitation to share with you our achievements, successes, challenges and progress on our journey to sustainability and overall excellence.

This report covers the period 1 January to 31 December 2016. This report has been prepared in accordance with the GRI Standards: Core option, and has successfully completed the GRI's Materiality Disclosure Service. To view the GRI content index, please refer to Annex 2.

Based on our sustainability framework, this report is structured around and focuses on those issues that are most material to our business and our stakeholders. Throughout this report, we include employee interviews to provide a personal touch and reflect what sustainability means to QAFAC's most valued resource – our people. We have also compiled all definitions that are commonly used throughout the report in the glossary section at the end.

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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2016 Success Stories

99%
MTBE plant reliability level

93%
Overall reliability level

74%
Spending on local suppliers and contractors

8.5m
man-hours without LTA exceeded

Process safety management
program phase 1 completed

Business excellence
department inaugurated

SAP® center of expertise inaugurated

29%
Qatarization

Operational excellence
program wave 3 completed

Chairman's Foreword

There is no doubt that the year 2016 has presented its challenges associated with lower-than-average oil prices and unplanned shutdowns. Nonetheless, QAFAC and its staff have maintained a disciplined approach to managing risks, and have taken every opportunity to strengthen the business. We have moved forward diligently with our cost optimization, operational and business excellence and process safety management programs.

In 2016, we began to realize the benefits of synergies with other Industries Qatar (IQ) companies within Mesaieed Industrial City (MIC). Continuing to collaborate with our upstream and downstream partners is an area of great opportunity and one which we are committed to developing further in 2017.

I am very proud of our health and safety performance in 2016. We reached 8.5 million man-hours without a lost-time accident (LTA).

As a dynamic business driven by success, we recognize the need to deliver world-class performance. Given that we operate in a rapidly changing business environment, we see great opportunity in embracing and adapting to change. In 2016, we redefined our vision to represent the direction for the years ahead and released our new corporate strategy, highlighting our commitments and goals moving forward. In line with our new vision, we strive to be first quartile leaders in methanol and MTBE production. Our approach to achieving this vision is guided by the goals of our strategy in four specific areas: operational excellence, growth, value for all stakeholders, and team.

"As a dynamic business driven by success, we recognize the need to deliver world-class performance."

As a contributor to Qatari society and economy, we are committed to creating shared value for all our stakeholders. Our focus on producing environmentally friendly products such as methanol and MTBE align with Qatar's National Vision (QNV) 2030 and sustainable development plans, all of which have been embedded in QAFAC's new vision and strategy.

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.

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 2016.

Abdulaziz J. Al Muftah
Chairman of the Board

Chief Executive Officer's (CEO) Foreword

It is with great pleasure as QAFAC's incoming CEO to have the chance to present QAFAC's sixth annual sustainability report. Through this report, we communicate QAFAC's sustainability journey and demonstrate our commitment to the environment and socio-economic development of Qatar.

It has been a pivotal year for QAFAC, due to the significant challenges brought about by lower-than-average oil prices to the unplanned shutdowns in both our MTBE and methanol plants at the beginning of the year. Nonetheless, QAFAC pulled through this difficult year to emerge with an encouraging net profit, and meeting or exceeding our goals.

2016 has also been a year of change and transformation for QAFAC. Under our new vision and strategy, we have focused on implementing programs to improve the cost effectiveness and continued reliability, safety and efficiency of our operations. Given the current economic climate, focusing our efforts on improving performance across all areas of our business, building synergies, and maximizing production will enable us to emerge as a stronger company. The establishment of our Business Excellence department in 2016 has been a key enabler to implementing our cost optimization program and realizing efficiencies across our business functions.

We will continue to strive to be safe, reliable and the lowest cost producer of Methanol and MTBE. While we seek to reduce our operating costs, we do not compromise on safety. Now in its second phase, our AMAN Process Safety Management (PSM) program seeks to align our safety procedures with world-class industrial practices. Through the introduction of QAFAC's Life Saving Rules, we are further internalizing a safety culture, inducing behavior change and increasing vigilance amongst all QAFAC employees and contractors. As an exemplary demonstration of our efforts, we exceeded 8.5 million man-hours without lost-time accident in 2016.

We strive to nurture the talents of our people, and by investing in their knowledge and skills, we are helping to secure our role in the future as an innovative Methanol and MTBE producer.

From the very beginning of our sustainability journey, we have made major strides in our sustainability performance, and I am proud to build upon the foundation set by the Company's prior leadership. We are an innovative company, using technologies like carbon dioxide recovery to produce cleaner energy alternatives. We also recognize we have a responsibility to help address the environmental and social challenges facing our planet. As we continue to track our performance, we gain more clarity on the efforts needed to improve and maximize benefits for all our stakeholders. Including our contribution to a cleaner planet.

Looking ahead, 2017 will be a critical planning year as we prepare for major plant turnarounds in 2019 that will ensure the safety, reliability, and efficiency of our operations.

I would like to extend my sincerest appreciation to the entire QAFAC team and to all our stakeholders for their trust and support.

Khalid Sultan Al-Kuwari
Chief Executive Officer

ABOUT QAFAC

Vision / Values

In 2016, QAFAC announced its new vision, which has been integrated across QAFAC's operations to progress towards our new goals. The new vision came from the need to adapt to external market circumstances and to adjust to changes in the feedstock supply, which have affected the economic feasibility of purely quantitative growth.

Our improved corporate strategy is underpinned by the new vision:

'By 2020, to become a world-class producer of Methanol and MTBE.'

QAFAC's new corporate strategy reflects this vision and is more performance, rather than growth, oriented.

Becoming a world-class producer means being ranked amongst the world's best by achieving the highest quality standards and operational excellence.

Corporate Profile

Qatar Fuel Additives Company Limited (QAFAC) was established in 1991 as a joint venture between Industries Qatar (IQ), OPIC Middle East Corporation (OMEC), International Octane LLC (IOLLC) and LCY Middle East Corp (LCYMEC). QAFAC started its operational activities in 1999.

Our Story

After almost 19 years in the chemical industry, our journey continues...

1991
Emiri decree issued establishing QAFAC as a company

1992
Basic Engineering Initiated (FDCI designed AEF MTBE and Celanese methanol plants in Edmonton)

1993
Chinese Petroleum Corporation and Lee Chang Yung Chemical Industry Corporation (LCY-CPC), both of Taiwan, became shareholders of QAFAC

1995
Project Licenser Agreement signed with Universal Oil Products (UOP) and Jacobs Engineering

1997
EPC contract awarded to Chiyoda

1999
Official Inauguration

2012
Signing Ceremony for Carbon Dioxide Recovery Plant

2014
Reaching 3 Million Man Hours without Lost-Time Accident (LTA)

2015
The Launching of Carbon Dioxide Recovery Plant

2016
Achieving 8.5 Million Safe Man Hours

Our Shareholders

15%

International Octane LLC (IOLLC)

IOLLC is part of the DUTCO Group of Companies that has interests in civil engineering, manufacturing, hotels, real estate and other fields both within the UAE and globally.

50%

Industries Qatar (IQ)

IQ is a limited liability company registered and incorporated in the State of Qatar as a Qatari Shareholding Company (Q.S.C). Qatar Petroleum (QP) transferred all its shares in QAFAC to IQ in 2003.

15%

LCY Middle East Corp. (LCYMEC)

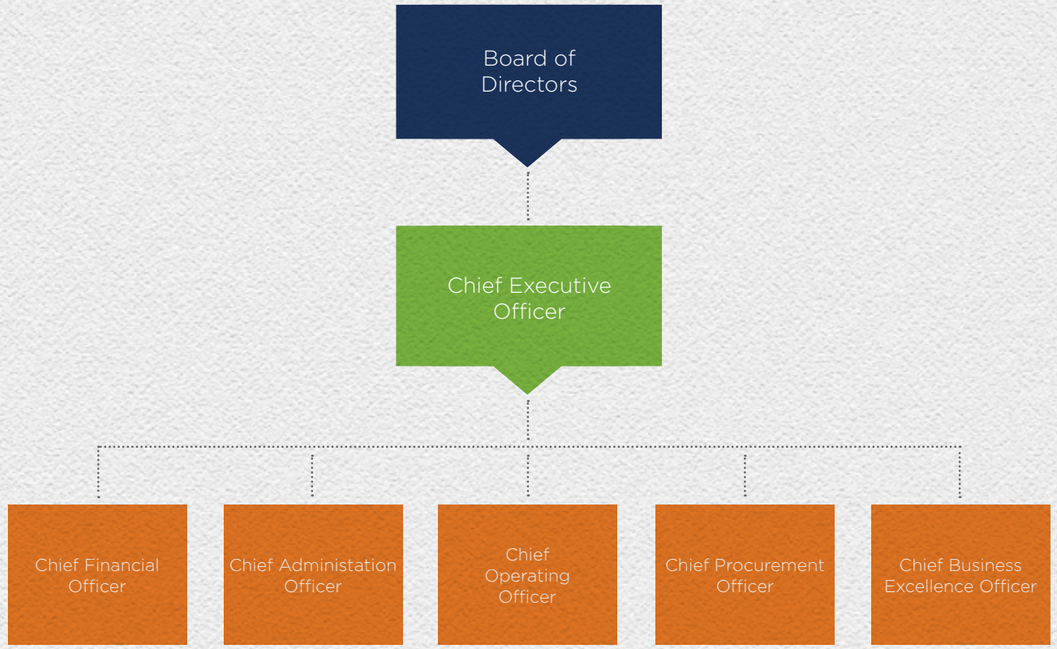
LCYMEC is the wholly owned subsidiary of LCY Investments Corp. (LCY) that in turn is the wholly owned subsidiary of the Lee Chang Yung Group of Taiwan, one of the major suppliers of petrochemical products.

20%

OPIC Middle East Corporation (OMEC)

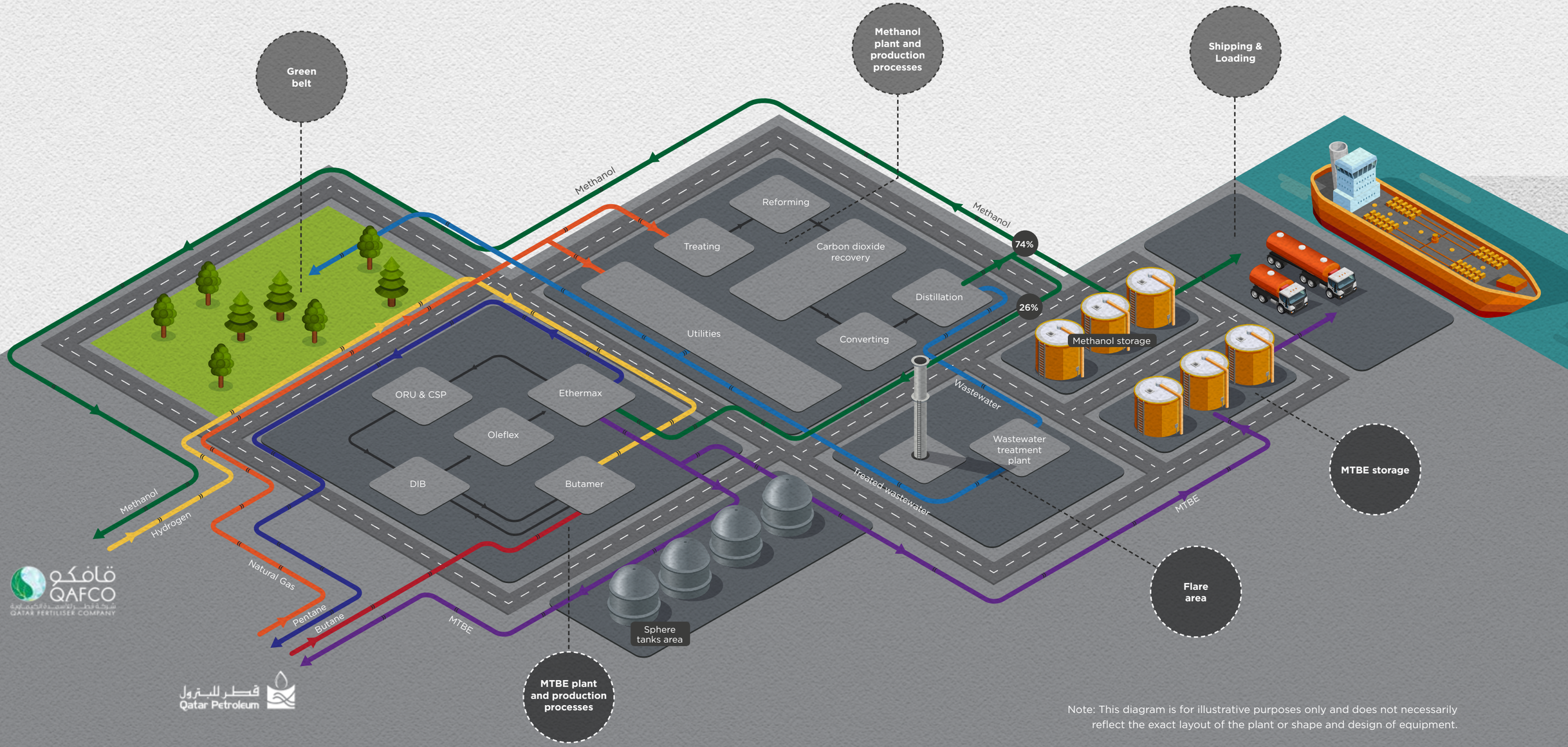
OMEC is a wholly owned subsidiary of the Overseas Petroleum and Investment Corporation (OPIC), which in turn is beneficially owned by the Chinese Petroleum Corporation (CPC) of Taiwan.

Governance Structure

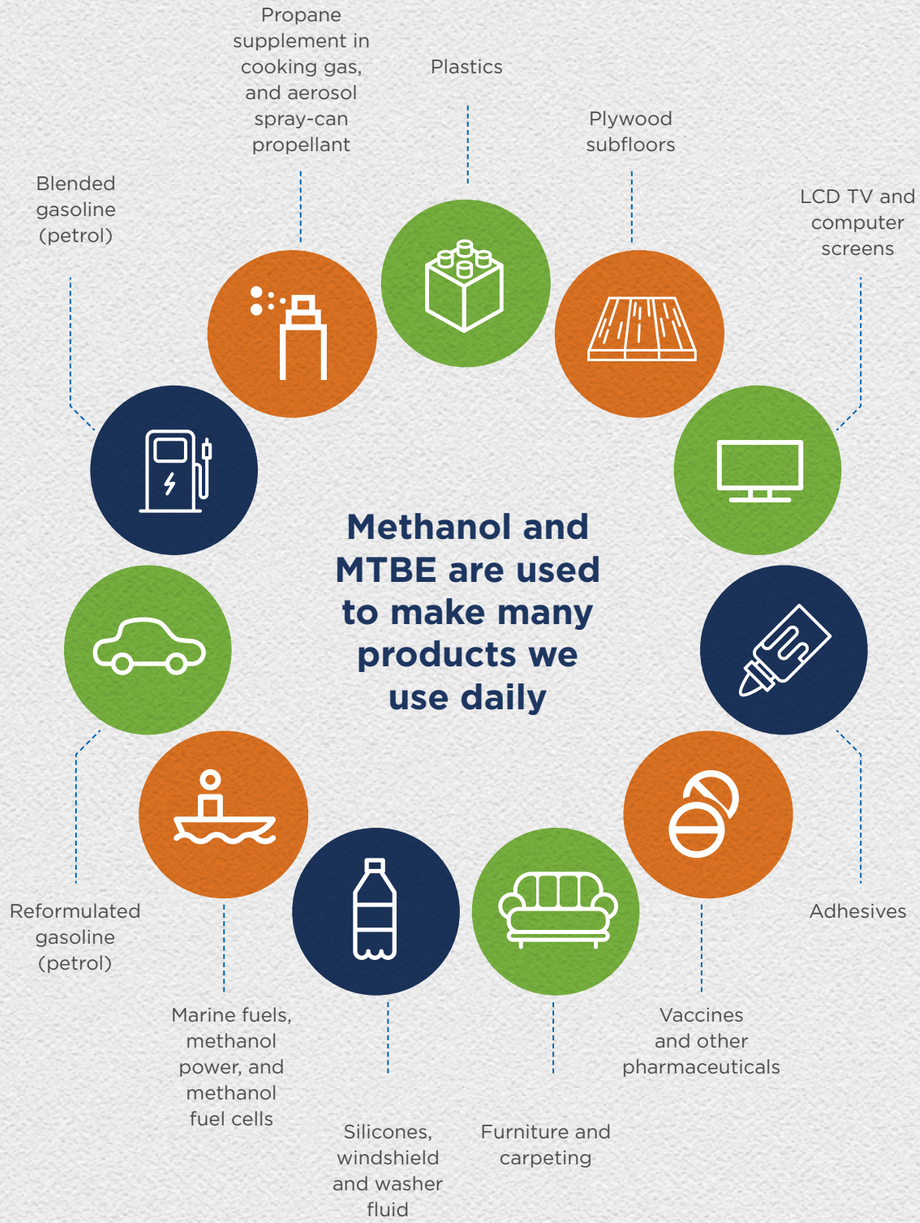


Value Chain of QAFAC

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 equipment.



Engagement in Associations and Conferences

QAFAC's sustainability approach is also guided by our membership in strategic external associations and participation in international conferences.

QAFAC is an active member of the following associations:

- Air and Waste Management Association (AWMA)
- The Royal Society for the Prevention of Accidents (RoSPA)
- The Gulf Petrochemicals and Chemicals Association (GPCA)
- Mary Kay O'Connor Process Safety Center (MKOPSC)
- American Chemical Society (ACS)
- Methanol Institute (MI)
- Asian Clean Fuels Association (ACFA)
- Information Systems Audit and Control Association (ISACA)
- EC-Council

In 2016, we participated in the following International conferences:

- 2016 UOP Oleflex™ Technology Users' Conference
- 3rd edition, GPCA Sustainability Conference
- 11th annual GPCA Forum
- 8th edition GPCA Supply Chain Conference

Ethics and Conflict of Interest Policy and Management

QAFAC's business is guided by our purpose, values, and Code of Conduct. They drive our business decisions and remain the cornerstone of the Company's business conduct. We recognize that these standards are integral components of a truly sustainable company, which is what we strive to be.

Our Code of Conduct, based on international standards, is applicable to and provides clear guidance to all employees on what it means to act ethically, professionally, and with integrity. It covers a wide range of topics including anti-bribery, conflict of interest, fraud, corruption, and compliance.

QAFAC also has a Code of Conduct Committee to oversee compliance with the Code of Conduct, while Internal Audit ensures QAFAC remains in compliance with all corresponding laws and regulations.

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. In 2016, there were no cases of corruption or ethical violations.

Did you know this about the air quality benefits of MTBE?

According to the California Air Resources Board (CARB), cleaner burning gasoline with MTBE has:

- Reduced smog-forming emissions by more than 1300 tons per day.
- Eliminated toxic emissions equivalent to removing 3.5 million cars from Californian roads.
- Reduced human cancer risk related to gasoline exposure by an estimated 40%.

Asian Clean Fuels Association

MANAGING SUSTAINABILITY

Our New Corporate Strategy

At QAFAC, we endeavor to strengthen our sustainability performance. Even though we have been on our sustainability journey for over five years and are proud of our accomplishments, we never stop learning and improving upon our approach to sustainability. In working towards that ambition, we have developed a new and improved corporate strategy underpinned by our new vision.

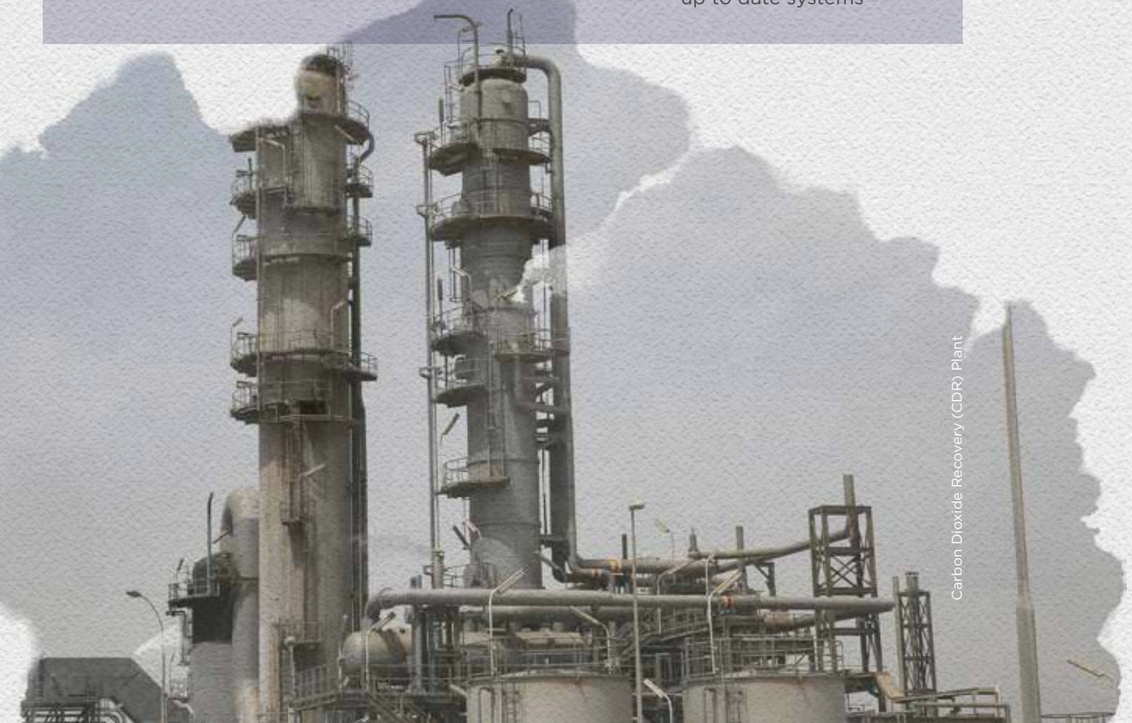
Our new corporate strategy identifies four strategic priorities for 2020:

Growth
Aiming to increase the revenues by seeking expansion opportunities;

Value to all stakeholders
Contributing to add value to the country

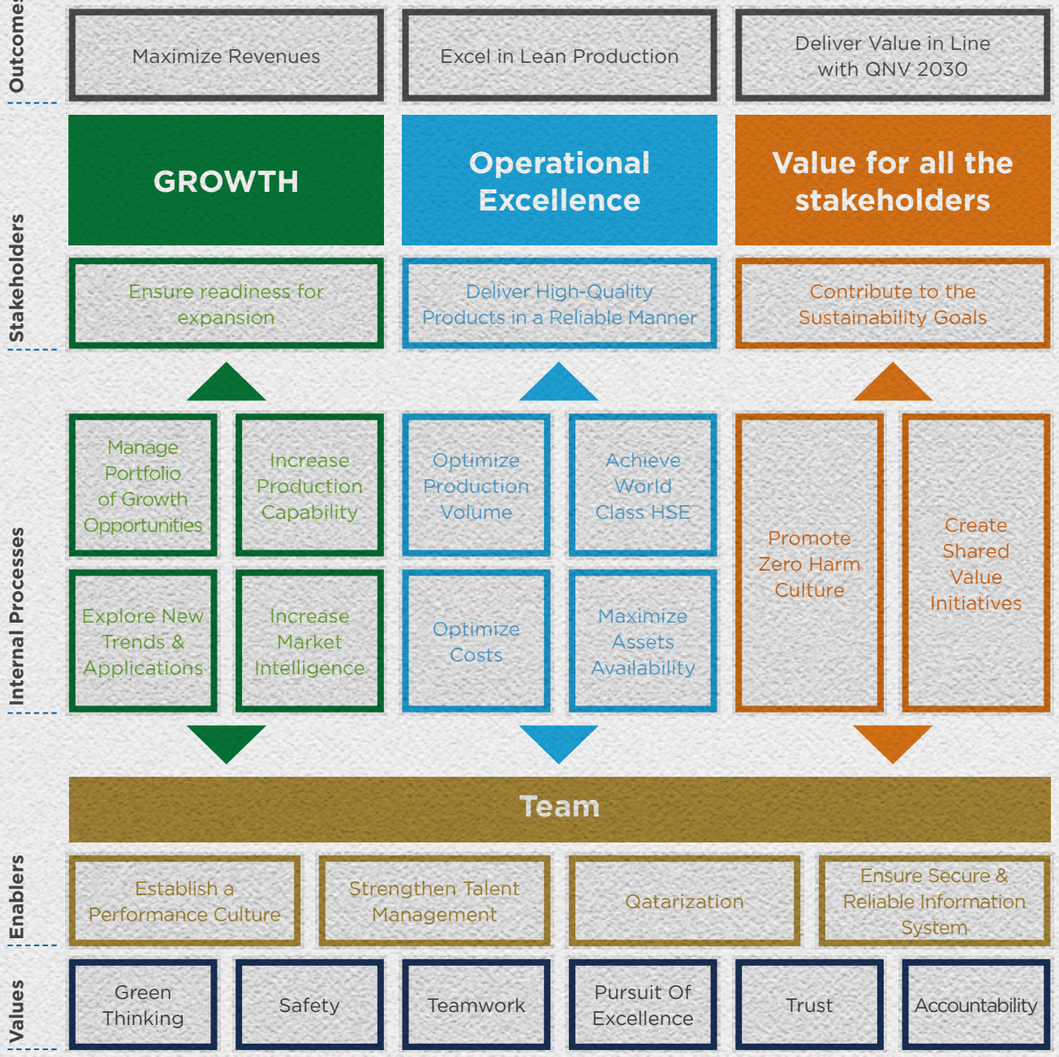
Operational excellence
Excelling at producing efficiently high-quality products

Team
Having a highly experienced and engaged team with up to date systems



Carbon Dioxide Recovery (CDR) Plant

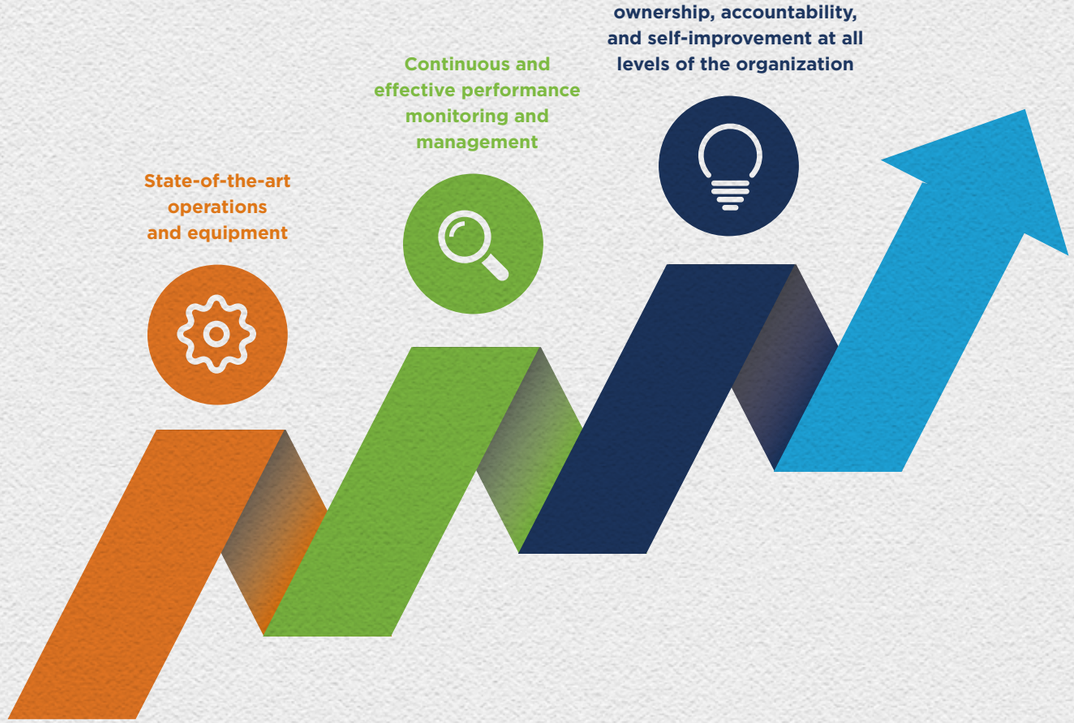
For each strategic focus, we identified key indicators to help us concentrate on the metrics that matter the most to our company goals. We also identified our organizational enablers, which together with the implementation of internal processes and stakeholder interactions, will produce outcomes in line with our strategic goals.



Operational Excellence

In 2013, we deployed our Operational Excellence (OE) program to build upon our successes and identify key opportunities to realize improvements. Ever since, we have been on a continuous quest for operational excellence.

Through the OE program and in line with QAFAC's ambition to become a world-class company, we seek to reinforce our position as a leading Methanol and MTBE producer in the industry and transform procedures through the introduction of world-class tools and practices. Our goal is to increase performance, efficiency and reliability.



In 2016, we successfully completed Wave 3 of the program, focusing on the development of new capabilities, on building the basis for a culture of excellence, and on continuous improvements throughout the organization.

As part of the OE Wave 3 in 2016, QAFAC has implemented the following initiatives in our methanol plant:

- As part of an energy saving initiative, steam-to-flare reduced by observing flare conditions. Steam-to-flare control valve output reduced from 25% to 20%, saving approximately 0.4 to 0.5 T/hr of low pressure steam during normal operations, and increasing steam-to-flare during MTBE plant Reactor Effluent Dryer (RED) regeneration to remove C4 from bed. QAFAC plans to install a flow meter during the 2019 plant turnaround to conduct additional trial studies. We expect further optimized steam-to-flare with a steam savings potential of 1.0 to 1.5 T/hr.
- We developed a catalyst change out evaluation model to study the economic feasibility of replacing converter catalyst during the next plant turnaround, based on catalyst performance and economic conditions.

Under the same program, the following improvements were observed in our MTBE plant as a result of OE Wave 3 initiatives:

- A trial was performed by arranging the temporary portable chiller package in the oleflex loop to observe compressor performance improvement, while maintaining the same winter plant load conditions. Compressor performance improved and has the potential to marginally increase plant load; however, further actions are on hold due to the MTBE revamp proposal which has provisions for implementing such changes.
- Daily dash board discussions continued during the year where issues of interest were raised such as major indicators of production, energy and feedstock consumption, maintenance issues, plant problems and potential losses. Any deviations from approved limits were flagged immediately and corrective actions were initiated to bring back within an acceptable range.

Did you know this about the air quality benefits of MTBE?

In Finland, the widespread use of oxygenated fuel containing 9-13% MTBE has reduced CO emissions by

10-20%

and hydrocarbons by 5-10%.

Asian Clean Fuels Association

Business Excellence

In 2016, QAFAC inaugurated the Business Excellence department, previously Strategy & Business Development, to oversee the 'Business Excellence' program (BE).

The BE program is Wave 4 of the Operational Excellence program and focuses on support functions that extend across the business, including IT, Finance and Administration. Under the BE program, each department maintains a dashboard of performance targets, and monthly meetings are held to monitor performance against targets. The Business Excellence department is a key driver behind synergy development and identifying cross-functional relationships of its sub-departments (as displayed in the following chart). Although the program and department are still in their infancy, a performance orientated culture has continued to grow at QAFAC with the introduction of BE. Aside from actively searching for synergistic relationships with other IQ and QP subsidiaries, the BE department is dedicated to discovering new catalysts to improve our chemical conversion of methane to methanol and butane to MTBE.

Sultan Bakhit Al-Enazi

Position: Chief Business Excellence Officer
Started working at QAFAC in 2004

What do you like about working at QAFAC?

For one, I like the dynamism of our team and the fact that it is a melting pot of people from different nationalities and varying levels of experience. Second, I enjoy working for such a transformative company. We are a leader in transforming natural gas to methanol, one of the most efficient and clean burning fuels. On top of this, we also produce MTBE, which helps to reduce harmful emissions from gasoline combustion. We are providing cleaner energy for the planet and a better tomorrow.

How have sustainability enhancements positively affected QAFAC as a company?

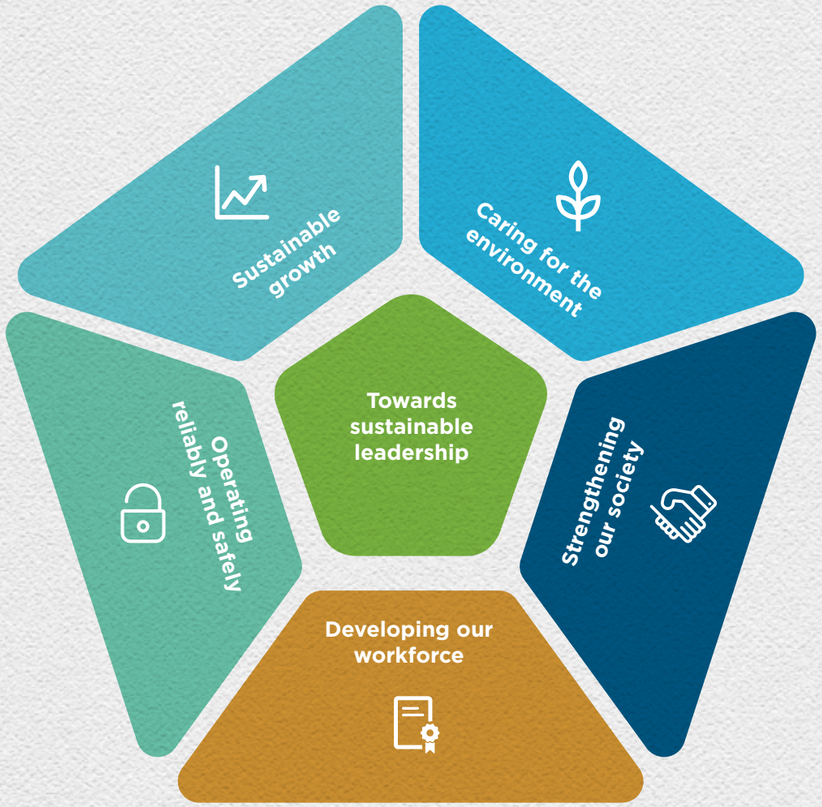
We are the first company in Qatar to capture our carbon dioxide flue gases and reinsert them into the production cycle to create our methanol, avoiding emissions and reducing Qatar's carbon footprint. It is also a great example of what a mid-sized petrochemical company like QAFAC can do to drive innovation. We have shown other companies that you do not need to be the biggest to invest and gain from the latest technologies.

What is the most important initiative for your department?

Given current economic conditions, sustaining excellence in operation and business management has been a daily challenge throughout 2016. In light of the crude oil market, we focused on optimizing internal resource use and sound business planning to expand our production with minimal capital investment. We are proud of our efficiency gains across the business while maintaining excellent product quality and customer satisfaction.

Our Sustainability Framework

Our sustainability framework articulates the company's commitment to sustainable development (SD). Each pillar of the sustainability framework represents a goal on our journey 'Toward Sustainability Leadership.' Reaching these sustainability goals depends on effectively addressing issues that are material for QAFAC and its stakeholders. It helps us focus on areas of our core business activities which impact the world and where we can positively influence outcomes.



Our Sustainability Policy

Our sustainability policy is the roadmap that guides us towards fulfilling our sustainability goals, and developing internal management systems, procedures and tools that support the company in achieving its objective of operational excellence.

QAFAC's sustainability policy builds on the five-pillars of our sustainability framework and describes the high-level approach of addressing, implementing and evaluating our progress across each pillar of the framework.

Sustainability Framework Pillar	Sustainability Policy Commitment
Sustainable Growth	• Expanding our market presence and operations, and improving economic performance while contributing to Qatar's economic diversification. • Building strong relationships with both suppliers and customers in order to reach new levels of quality through process and product innovation.
Caring for the Environment	• Producing cleaner fuel and fuel derivative products, which will generate a reduced amount of emissions. • Managing the environmental impact of its operations through a world-class Environmental Management System (EMS) that addresses environmental issues such as energy consumption, fugitive emissions and flaring, water management, and waste management effectively.
Developing our Workforce	• QAFAC is committed to invest in the development of its most valuable asset – workforce – to support its development and wellbeing while maintaining equal opportunities for all.
Strengthening our Society	• Promoting Qatarization. • Developing a responsible supply chain with a focus on the local supply chain. • Investing in the community and promoting various sponsorship initiatives.
Operating Reliably and Safely	• Continually fine-tuning operations and investing in efficient advanced technologies. • Continually improving our health and safety management systems, while focusing on process safety and personnel safety of our employees and contractors.

Aligning Our Priorities

As a responsible corporation, we are committed to promoting sustainability in all our activities. We demonstrate our commitments through the responsible management of our social, environmental and economic impacts outlined in our sustainability policy. These commitments are aligned to our sustainability and corporate strategies; and as a company rooted in Qatar are linked to the objectives, goals and targets established by the Qatar National Vision 2030 (QNV 2030) and the National Development Strategy 2011-2016 (NDS 2011-16). The table below demonstrates how our various priorities align within these frameworks.

Also included in the following table are the targets we set for ourselves in 2016, along with our performance against them, and our targets are for the future.

Sustainability Framework	Toward Sustainability Leadership	Sustainable Growth	Caring for the Environment
Sustainability Policy commitments		• Expanding its market presence and operations, and improving its economic performance while contributing to Qatar's economic diversification. • Building strong relationships with both suppliers and customers in order to reach new levels of quality through process and product innovation.	• Producing cleaner fuel and fuel derivative products, which will generate a reduced amount of emissions. • Managing the environmental impact of its operations through a world-class Environmental Management System (EMS) that addresses environmental issues such as energy consumption, fugitive emissions and flaring, water management, and waste management effectively.
Corporate objectives	• Maximize revenues • Excel in lean production • Deliver value in line with QNV 2030	• Ensure readiness for expansion • Manage portfolio of growth opportunities • Increase production capacity • Explore new trends & applications • Increase market intelligence • Optimize production volume • Optimize costs	• Achieve world-class HSE • Contribute to sustainability goals
SD Elements and Issues	Sustainability Management	Reliable production	Maintaining Product Quality and Improving Sales	CDR Plant	GHG Emissions
2013-2017 Targets	Improve management of QAFAC's sustainability related material aspects through our Sustainability Policy and Sustainability Committee.	Minimizing unexpected shutdown, with the target of 96% reliability	To become a world-class producer of Methanol & MTBE	Operate CDR plant to reduce total emissions.	Formalize GHG emissions measurement.
2016 Targets	Conduct benchmarking of sustainability indicators against peer companies on regional and international level and against Energy and Industry sector of Qatar.	96% reliability	Achieve maximum possible production levels in accordance with reliability target.	Capture 100% of the budgeted amount of CO_2 from the plant and maximize capture by using the full capacity of the CDR plant.	QAFAC will continue to track progress in its actual CO_2 emissions and avoided CO_2 emissions due to the capture by the CDR plant

Sustainability Framework	Toward Sustainability Leadership	Sustainable Growth		Caring for the Environment	
Progress During 2016	QAFAC conducted benchmarking of sustainability indicators against peer companies on regional and international level and against Energy and Industry sector of Qatar.	• Methanol: 86.3% • MTBE: 99.3% • Average reliability: 92.5%	• Methanol production: 88.2% of total budget • MTBE production: 103.4% of total budget • Pentane production: 119% of total budget	84% of the targeted CO_2 recovered	Avoided CO_2 emission through CDR capture are measured.
2017 Targets	75% QNV Contribution Index	96% reliability for both methanol and MTBE	Increase in production capacity from creep projects	Capture 100% of the budgeted amount of CO_2 from the plant and maximize capture by using the full capacity of the CDR plant.	Capture 162,000 tonnes of CO_2
NDS 11-16	• Improved governance and outcomes; • Regulation and efficiency; • Strengthening evidence-based policy-making; • Managing resources and protecting opportunity for future generations; • Improved governance and regional and international cooperation; • Performance management; • Reduced economic volatility; and • Managing resources and protecting opportunity for future generations.	• Expanding the productive base; • Enhancing economic stability; • Enhancing technical and economic efficiency; • Enhancing market efficiency; • Fostering cross-sectoral links; • Growth with balance; and • Enhancing technical and economic efficiency.	Expanding the productive base.	• Cleaner air and effective climate change responses • Launch two environmental projects involving private sector participation: CDR Plant, being one the world's largest commercial-scale CO_2 capture facility in methanol production, represents a nationally significant project focused on GHG emission reduction.	Effective climate change responses (that require accurate measurement of GHG emissions in order to provide their efficient management).
QNV 2030	• Promoting sustainable prosperity; and • Reasonable and sustained rates of economic growth that secure a high standard of living for this and future generations.	• Long term maintenance of strategic reserves of oil and gas to meet the needs of national security and sustainable development.	A business climate capable of attracting foreign funds and technologies and encouraging national investments.	• Preserving and protecting the environment including air, land, water, and biological diversity; and • Sustaining the environment for future generations.	

Sustainability Framework	Developing our Workforce		Strengthening our Society		
Sustainability Policy commitments	• QAFAC is committed to invest in the development of its most valuable asset – our workforce – to support its development and wellbeing while maintaining equal opportunities for all.		• Promoting Qatarization; • Developing a responsible supply chain with a focus on the local supply chain; and • Investing in the community and promoting various sponsorship initiatives.		
Corporate objectives	• Establish a performance culture; and • Strengthen talent management.		• Contribute to the sustainability goals; and • Create shared value initiatives.		
SD Elements and Issues	Human Rights	Support workforce professional development	Qatarization	Community Investment	Local Procurement
2013-2017 Targets	Protect and uphold all employees' human rights.	Organizing and financing workforce training.	Attract talented local professionals and invest in developing young local specialists.	Strategically invest in the development of Qatar society.	Continue to prioritize sourcing goods and services from locally based suppliers.
2016 Targets	0 Human rights violations reported	Complete the second round of selecting participants for the Leadership and Development Program 'Gadan'	35% Qatarization	Establish a community investment and CSR strategy and policy.	At least 60% spending on local suppliers and services.
Progress During 2016	0 Human rights violations reported	'Gadan' second round applicants selected.	29% Qatarization	QAFAC established a CSR Policy.	74% spending on local suppliers and services.
2017 Targets	0 Human rights violations reported	100% of Gadan learning objectives achieved	41% Qatarization	• Deliver 8 activities in line with Qatar's sustainable goals; and • Complete 70% of the shared value initiatives plan.	74% spending on local suppliers and services.
NDS 11-16	• Implement a corporate responsibility framework suited to the country's economic, political and social context, including a monitoring system.	• Nurturing and managing human resources; • Fostering a capable and motivated workforce; • Expanding high-quality training opportunities for Qataris; • Optimize the skill mix; and • Educated workforce and institutional development plan.	• Increase the proportion of Qatari's in the private sector from 5% to 15%; and • Expanding high-quality training opportunities for Qataris.	• Enable private sector collaboration in public investment projects within a coherent frame-work that delivers development benefits to the state, including knowledge and skill transfers. • Increase participation in sports and physical activity by Qatari men, women and children.	• More competitive, productive and dynamic economy; • Expanding the productive base; • Planned investment spending; and • Enhancing economic stability.
QNV 2030	• Promoting human development. • Establish a secure and stable society operating on the principles of justice, equality, and the rule of law • Protecting the rights of expatriate labor.	• High quality training opportunities for all citizens, corresponding to their ambitions and abilities. • Recruitment of the right mix of expatriate labor.	• Incentives for Qatari's to enter professional and managerial roles. • Taking and integrated approach to sound social development. • A vigorous oil and gas sector that generates advanced technological innovations and contributions to the development of human resources and economic capacity throughout Qatar.		

Sustainability Framework	Operating Reliably and Safely	
Sustainability Policy commitments	• Continually fine-tuning operations and investing in efficient advanced technologies; and • Continually improving our health and safety management systems, while focusing on process safety and personal safety of our employees and contractors.	
Corporate objectives	• Deliver high-quality products in a reliable manner; • Achieve world-class HSE; • Maximize assets availability; • Ensure secure & reliable information system; and • Promote zero harm culture	
SD Elements and Issues	World-class standards in process safety and asset integrity	Employee Health and Safety
2013-2017 Targets	Continuously enhancing process safety and asset integrity	Maintain a high level of safety and health for all employees.
2016 Targets	Complete Phase 1 of the Process Safety Management Program	• Reach or exceed 8 mln LTA free man-hours; • 0 LTA; and • 0 TRIR
Progress During 2016	Phase 1 of the Process Safety Management program completed	• Exceeded 8.5 mln LTA free man-hours; • 0 LTA; and • 0.19 TRIR
2017 Targets	• Complete Phase 2 of the Process Safety Management program; and • 0 Process safety incident	• 0 LTA; and • 0 TRIR
NDS 11-16	• Reduce the rate of injuries lasting more than three days to 3,000 or less per 100,000 workers; and • Ensure the quality of healthcare professionals.	
QNV 2030	• A skilled national workforce capable of providing high quality health services. • Protecting the safety of expatriate labor.	

Did you know this about the air quality benefits of MTBE?

"Carbon monoxide (CO) emission is reduced on average by at least the same percentage as MTBE content in gasoline."

This means using reformulated gasoline containing 10-15% MTBE, compared to conventional gasoline, equates to 20-25% less carbon monoxide.

Asian Clean Fuels Association

102-40, 102-42, 102-43, 102-44

Stakeholder Engagement

We continuously engage with our diverse groups of internal and external stakeholders in constructive dialogue to help us address and be responsive to issues that are important to our shareholders, customers, employees, the wider Qatari society and the environment. Through the process of continuous stakeholder engagement, QAFAC reviews the issues that are material to the company and its stakeholders, and implements corresponding actions in each of its sustainability focus areas via programs, initiatives, and dialogue.

Below is a summary of the key issues for each stakeholder group, along with the methods of engagement to foster these relationships and how we respond those issues.

Main Stakeholders	Methods of Engagement	Stakeholder Needs	How We Respond to Them
Our Shareholders & Investors	• Quarterly board meetings. • Active participation in QAFAC's Management Team. • Annual and sustainability reporting.	• Financial targets and economic growth. • Legal compliance. • Governance. • Transparency and accountability. • Shareholders' sustainability mandate. • Ethics. • Operational innovation and efficiency.	• Board committees. • Monitoring of and ensuring compliance through Internal Audit Department and Ethics Committee. • Initiation of sustainability management policies and guidelines. • Business Excellence (BE) program.
Our Customers & Muntajat	• Participation in conferences and exhibitions. • Open communication and dialogue. • Monthly meetings with Muntajat.	• Production and business continuity. • Product responsibility. • Mutual aid and collaboration. • Supply chain management. • Service excellence. • Open and effective communication. • Customer feedback	• Regular dialogue with Muntajat and partners. • Membership in industry associations.
The Environment	• Open and full communication with the Ministry of Municipality and Environment (MME). • Continual monitoring and assessment of our impact on the environment. • Sustainability reporting.	• Climate change mitigation. • Efficient water consumption. • Resource management and optimization. • Efficient energy consumption. • Waste management. • Compliance with environmental regulations. • Product impact and responsibility. • Supply chain impact. • Biodiversity.	• Investment in the CDR (Carbon Dioxide Recovery) Program. • Flare Management Program. • Waste management systems. • Environmental management systems. • Steam Trap Management Program. • Regular reporting of environmental performance. • Leak Detection and Repair (LDAR) program.
Qatari Society	• Open dialogue and collaboration with government agencies. • Career fairs. • Interaction with families of employees. • Participation in exhibitions and conferences. • Educational/HSE awareness sessions.	• Compliance with all regulations. • Recruitment and development of local talent. • Preparation of local community for the job market. • Job opportunities. • Community engagement. • Community contribution. • Awareness of our products' significance and impact. • Local sourcing.	• Development of CSR Policy. • Contribution to community needs. • Improvement of Qatarization rates.
Our Employees	• Employee satisfaction surveys (every two years). • "Town Hall" style meetings with the CEO. • Informal career planning. • Intranet. • Email communications. • Internal and external training. • Educational/HSE awareness sessions.	• Workforce capacity and training. • Engagement and open communication. • Transfer of knowledge and succession planning. • Employee satisfaction. • Safety in all operations. • Career and personal development planning. • Employee wellbeing. • Occupational health and fitness. • Rewards and recognition. • Emergency preparedness and trained safety staff. • Diverse and inclusive work atmosphere.	• Recognition and awards. • Employee/community activities. • Development and training. • Heat stress campaigns. • Periodic baseline medical examinations. • Strong emergency preparedness measures. • Achievement of OSHAS 18001 certificate. • Process Safety Management (PSM) program. • Adoption of international safety standards and best practices (e.g. RoSPA).

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Materiality Assessment

As a company that operates in a fast-paced environment, it is crucial for us to stay ahead of developments and effectively respond to them. Through our stakeholder-driven approach to materiality, we determine the relevance of issues to address and report on, keeping in mind their significance to both our business and stakeholders. Defining material topics helps to prioritize areas of the corporate strategy and operations, and forms the basis of our reporting.

In 2016, a total of 19 topics were identified as material and classified under our five sustainability pillars. The results are summarized in the diagram below:

Sustainable growth

- Operational and financial growth
- Resource optimization
- Product quality and innovation
- Supply chain

Caring for the environment

- Energy efficiency
- Air emissions
- GHG emissions (climate change)
- Water management
- Waste management

Operating reliably and safely

- Health and Safety
- Human rights and labor standards
- Process safety and Asset integrity
- Plant reliability

Strengthening our society

- Qatarization
- Local procurement
- Corporate Social Responsibility

Strengthening our society

- Qatarization
- Local procurement
- Corporate Social Responsibility

102-46

Our approach to materiality:

To keep our materiality assessment current, QAFAC periodically reviews its material topics against the changing context of the industry, emerging trends and the feedback we receive from our stakeholders. In our reporting, we make sure to reflect those critical issues as they arise.

QAFAC's materiality assessment consists of five core steps demonstrated below. The process is used to identify, select and rank the topics addressed throughout the sustainability report.

Identifying the scope of materiality

Materiality for QAFAC covers the issues of relevance for the Company and its stakeholders. This includes issues that QAFAC has a direct impact on and issues that are out of QAFAC's control but affect the company and its stakeholders.

Identifying the objective of materiality

Being responsive to the needs of stakeholders, QAFAC employs materiality analysis to align its business priorities with the priorities of its stakeholders.

Identifying material issues

We rely on multiple sources to help identify material issues of potential relevance for QAFAC and its stakeholders.

The sources we refer to include:

- Material issues identified by the Sustainability Accounting Standards Board (SASB) for the oil and gas refining sector.
- Material issues identified by SASB for the chemical sector.
- Material issues identified by several peer companies i.e. producers of methanol, MTBE and refining companies.
- Material topics identified by the Global Reporting Initiative (GRI) Standards relevant to QAFAC's business operations and the GRI G4 Oil and Gas Sector Disclosures.

Organizing materiality issues around QAFAC's sustainability focus areas.

Categorizing issues in accordance with the relevance for a given stakeholder.

Final prioritization

Material issues within each sustainability focus area are ranked in accordance with the feedback received during communication with stakeholders.

Obtaining feedback from internal stakeholders regarding priority of material issues relevant to them and to external stakeholders that they communicate with on a regular basis.

We communicate via interviews with all key functional areas of QAFAC operations.

SUSTAINABLE GROWTH

Sustainable growth at QAFAC means conducting our business in a way that promotes sustainable financial growth, a healthy environment, vibrant communities, and a continued focus on high value and reliable products.

The volatile global economic conditions and low oil prices have made the past few years challenging, not only for QAFAC but for the oil & gas and petrochemical industries. Despite these volatile market conditions, we have remained focused on resilience and withstanding price competition, increasing efficiency and reliability in our operations, and improving the quality of our products.

High Value Products

Production by main products	2012	2013	2014	2015	2016
Methanol (tonnes)	843,543	940,963	869,271	1,118,210	903,767
MTBE (tonnes)	610,985	648,022	600,342	688,450	664,835
Pentane (tonnes)	7,492	8,513	8,194	11,035	11,195

Our performance in 2016
In 2016, our methanol production dropped by 24% due to an unplanned plant shutdown during the first quarter of the reporting year; while MTBE production dropped by only 3%, also as a result of an unplanned shutdown. During the methanol plant shutdown, MTBE production was maintained owing to two shipments from international markets, albeit at lower loads.

Sustainable uses of our products
The world comes into contact with our products on a daily basis whether directly or indirectly, and we serve a multitude of industries, including automotive, agriculture, construction, furniture, oil and gas, textiles, adhesives, pharmaceuticals and many more.

Methanol
Methanol is an important chemical feedstock and alternative energy application used widely around the world. It comes in liquid form and is primarily derived from natural gas or coal. Ultra-clean, renewable methanol is also increasingly being developed from bio-waste and from carbon dioxide. On the chemical side, methanol's main derivatives include formaldehyde and acetic acid.
In recent years, demand has increased significantly for methanol's use in energy applications, including: environmentally-friendly, economically viable land transportation fuels, marine fuels, power generation in turbines and fuel cells, cooking stoves, and industrial boilers. Methanol is a truly global commodity, as evidenced by the fact that more than 160,000 metric tons are shipped from one continent to another every day. China accounts for nearly half of the world's production and consumption.

Methanol is starting to be used more widely in marine applications because of its minimal environmental footprint. Methanol produces no Sulphur oxides, very low nitrogen oxides, and is compliant with current marine emission reduction measures, such as emission control areas in North America and Northern Europe. Methanol is also biodegradable, water soluble, and more environmentally-friendly than current bunker fuels.

MTBE
MTBE is a proven clean fuel component recognized by many environmental protection agencies around the world, including the United States and the European Union, for reducing vehicle pollution and carbon dioxide emissions. Adding MTBE to gasoline allows for a more complete combustion of the fuel due to its oxygenate properties, reducing harmful exhaust emissions. It has been shown to significantly reduce tailpipe emissions, including carbon monoxide, benzene, nitrogen oxides, particulate matter and unburned hydrocarbons. Using MTBE also reduces evaporative emissions and reduces the formation of ground level ozone and smog. MTBE is known as a clean octane, because it is a substitute for the 'dirty' components in common gasoline blends, such as olefins, aromatics, benzene and Sulphur, while at the same time replaces the lost octane from new limits placed on these components. As a result of MTBE being compatible with both older and new vehicle engines, the immediate improvements to air quality are significant.

Economic Performance

Economic Performance	2012	2013	2014	2015	2016
Revenue (USD 000's)	927,768	984,547	816,702	685,861	506,231
Indirect Economic Value Generated (USD 000's)					
Employee wages and benefits	44,983	45,260	55,678	57,276	54,875
Contractors paid amount – total	16,059	18,455	19,769	26,542	24,186
Suppliers paid amount – total	5,540	13,262	16,150	9,679	9,666

2016 continued to bring with it lower-than-average oil prices, imposing significant challenges to the industry. We also experienced an unplanned shutdown of our natural-gas based methanol plant as well as a brief unplanned shutdown in our MTBE plant. These two factors have resulted in a 26% drop in revenue. QAFAC's response was to significantly cut costs while at the same implementing measures to improve efficiency and maximize production from our current facilities. Overall, we managed to reach most of our targets and performed relatively well given the circumstances, achieving an encouraging net profit for the year 2016.

In efforts to adapt to the changing market conditions, in 2015 we conducted a debottlenecking study to learn the possibilities of optimizing our MTBE plant production capacity to maximize profitability. The results of this feasibility study for debottlenecking the MTBE plant displayed the potential to increase the production capacity from the current 1,830 tonnes per day to 2,100 tonnes per day. Since then, QAFAC has initiated a FEED (Front End Engineering Design) study on this project.

Additionally, we continue to explore opportunities for synergies among IQ and other companies in MIC. In 2016, QAFAC engaged in synergy exercises to reduce costs by focusing on big aggregate orders across companies for preferential pricing, for example, in the procurement of health and safety equipment and health insurance packages. Supply chain management continues to play a vital role in the reliability of our operations, ensuring that all materials, parts and equipment are available when needed.

Did you know this about the air quality benefits of MTBE?

"It is estimated that each 1% of MTBE results in a 2 to 3% particulate matter (PM) emission reduction."

This means using reformulated gasoline containing 10-15% MTBE, compared to conventional gasoline, equates to about 30% less particulate matter.

Asian Clean Fuels Association

Managing Risk

Risk management forms an integral part of our business success and serves as the beacon of our strategic planning. For the past two years, we have been enhancing and integrating our risk management processes across all departments, which has allowed us to be the first petrochemical company in Qatar to successfully receive the ISO 22301 certification.

At QAFAC, internal audit is considered one of the lines of defense in risk management. QAFAC is also a member of the Information Systems Audit and Control Association (ISACA), the EC-Council, and adheres to the Institute of Internal Auditors (IIA) framework. Conformity to the IIA standards is ensured by a quality assessment during shareholder audits.

As part of the company-wide cost optimization program, in 2016 QAFAC was the first company in Qatar to co-source its internal audit function. Through co-sourcing internal audit, we still maintain control yet cut costs and maximize our internal audit capabilities.

We continuously seek to standardize our operations, and to operate in a safe and reliable manner to meet the strict requirements of several ISO certifications including:

- ISO 9001:2008 Quality Management System
- ISO 14001:2004 Environmental Management System
- BS OHSAS 18001:2007 Occupational Health and Safety Management System
- ISO/IEC 27001:2015 Information Security Management System (ISMS)

QAFAC is also seeking to attain the Responsible Care® certification, as it touches on material issues relevant to our core business operations. Responsible Care is the chemical industry's unique global initiative to continuously improve environmental, health, safety and security performance, and business operations. The initiative was adopted by the Gulf Petrochemical Association (GPCA) in 2006, and as a member of GPCA, QAFAC has been working to uphold its guidelines.

IT Support

The effective use of Information Technology (IT) at QAFAC is considered a business imperative. We recognize that an effective IT system is a key enabler in achieving strategic business objectives, and integrating core risk control processes across the Company. Given the swift pace of technological advancements, we aim to align our IT systems with our corporate strategy and invest in the latest technologies to deliver value for our business. In 2016, QAFAC's IT strategy has undergone further refinement and alignment with the QAFAC corporate strategy.

The key values of the comprehensive IT strategy are:

- IT investments aligned with the business requirements
- Better visibility in return on IT investments
- Optimized capital expenditures and operating costs
- Better business ownership of IT projects
- On time launch of new products and services
- Better IT user satisfaction within the organization

In 2016, we implemented the final SAP® module for a total of 16 modules. These modules have helped in streamling and automating business processes, allowing for data sharing across all functions to increase organizational effectiveness, efficiency and improve accuracy. The SAP® system facilitates processes and information synchronization in the following key businesses: production planning, materials management, financial management, maintenance management, project management, change management, HSE management, and document management. QAFAC has established the SAP® 'Center of Excellence (CoE)' to manage its SAP® system across the entire activities spectrum.

QAFAC Establishes SAP® Center of Excellence (CoE)

The SAP® CoE was conceived as a part of the strategic vision of having quality in-house expertise and self-sufficiency to:

- address all SAP® business stream requirements, optimize and further stabilize all the SAP® modules;
- enhance and improve the functional and technical aspects of the SAP® system; and
- introduce new business functions as per the requirements.

With the establishment of the SAP® CoE, IT staff have clear and well defined objectives cascading through the organizational and departmental objectives, and linked to the performance appraisals within a framework of regular monitoring and feedback.

In this context, a team of 12 functional and technical SAP® consultants have been inducted for the SAP® CoE. The team operates with the prime objectives of strategic and tactical resolutions such as:

- Providing timely solutions for business issues encountered; and the
- Continued implementation of SAP® recommendations, implementation of enhancements, assessment of user satisfaction up to implementation, and final satisfactory feedback for closure.

We seek to build a strong IT governance and security system. Our Information Security Management System (ISMS) provides us with a framework that enables us to minimize risks, protect the confidentiality of information, and establish business continuity plans. Another proud achievement in 2016 is the successful recertification of the ISMS with ISO 27000.

Did you know this about the air quality benefits of MTBE?

"MTBE generates about half the ozone compared with iso/alkylates and one-tenth that of aromatics."

This means using reformulated gasoline containing 10-15% MTBE, compared to conventional gasoline, reduces ground-level ozone.

Asian Clean Fuels Association

The six IT strategic principles are the rules that must be followed, while delivering maximum value to the business at optimum cost and risk. Strategic principles define the operating mechanism and the culture of the QAFAC IT system.

IT as Investment
IT is a strategic enabler to business in which each IT service will be managed as an investment portfolio that is regularly monitored for cost and returns.

Centralization
QAFAC's IT infrastructure will be managed in a centralized manner. Consolidation of IT infrastructure will be a primary focus for IT management to avoid any unnecessary costs due to duplicate or redundant systems.

Standardization
All systems to follow a set of standards to ensure architectural integrity on an ongoing basis. Multiple variants of similar hardware, software or processes will be strictly avoided.

Reuse
Reuse existing IT infrastructure will be the first option to meet any business requirement before planning to acquire or develop a new IT system.

Efficiency & Effectiveness
Efficiency & effectiveness will be the primary criteria for QAFAC IT in delivering its projects and services on an ongoing basis.

Information Security
Information security is a critical responsibility of QAFAC IT in ensuring the confidentiality, integrity and availability of business information. IT will ensure QAFAC complies with all application laws, regulations and standards with regards to information security.

OPERATING RELIABLY AND SAFELY

Operating in a reliable and safe manner lies at the heart of our business. We invest heavily in our people, plants, and processes to reduce operational risk and drive continuous improvement.

Safety continues to be our core value and a critical component of any business decision made. Our goal is to ensure 'Zero Harm' for all our employees, contractors, visitors, customers, and shareholders. We manage safety across our businesses through a combination of rigorous systems, procedures, and by building a culture of safe operations. Our standards and operating procedures define the controls and physical barriers we require to prevent incidents. QAFAC manages safety risks in line with the Company policy and procedures, local laws, and contactors must abide to terms of their contracts with relevant permits and approvals.

In all our projects, we foster Health, Safety, and Environment as core values. Each person is encouraged to understand the importance of good health, and his/her role in creating a safe workplace. Essential QAFAC induction and other training are provided before commencement of work, and our safety performance is reviewed during various safety meetings with management.

Nadeem Bashir

Position: HSE Manager
Started working at QAFAC in 1999

What do you like about working at QAFAC?

QAFAC has provided me the opportunity to learn, work on innovative projects, and most importantly chances to prove myself and grow. QAFAC has also developed a unique corporate culture that is open and beyond barriers. I have been privileged to work in an environment that is supportive of one's ambitions and enabled me so many opportunities for learning and growth. A prime example of this is that over the years I have regularly appeared at international conferences on sustainability and process safety, which have been important avenues to share lessons learned and experiences with other companies, driving the industry further and showcasing QAFAC's achievements.

What are your goals for the HSE department?

At the forefront of my goals is not only to maintain our performance records, but to improve upon them. HSE is different from other functions, in that, accepting anything less than perfect means accepting a degree of risk and contrary to our goal of 'Zero Harm.' This mentality extends not only to protecting people, but also to our plant assets and the environment.

In 2017, my team and I are fully committed to seeing the successful completion of Phase 2 of the AMAN PSM program. In 2017-2018, we will begin planning for a major plant turnaround that is planned 2019. Plant turnarounds bring about increased risk and mitigating against risks like simultaneous operations relies on careful planning and preparations to prevent safety incidents.

How have sustainability enhancements positively affected society?

QAFAC provides cleaner energy in the form of methanol and by providing MTBE helps the fuel industry deliver cleaner burning gasoline. Starting from this foundation, we have been improving our processes to improve the environmental net benefit they bring. Our sustainability enhancements extended beyond technical considerations as well. QAFAC has been a positive contributor to society through its Corporate Social Responsibility (CSR) initiatives. We have a strong aspiration to help community.

Sustainable Infrastructure

We continue to rapidly rehabilitate and expand our infrastructure based on the latest green building requirements, to improve both our financial and operational performance.

In 2016, we resumed the expansion of our infrastructure through the QAFAC Support Service Area (QSSA) construction project. We strive that all newly constructed buildings will be in accordance with the Global Sustainability Assessment System (GSAS), which considers factors within our regional context including, but not limited to, energy demand of buildings, water consumption, land conservation, material disposal, cultural conservation, and support to the national economy.

The GSAS is the first of its kind, performance-based sustainability rating system in the MENA region. The objective of GSAS is to create a sustainable built environment that minimizes ecological impact while addresses specific regional needs and Qatar's environment. We are implementing this system to support the QSSA project. Doing so will help us achieve the following sustainability goals:

Having achieved the 3-star level rating as a start off point, QAFAC will be able to implement further upgrades in the future as the company will already have the necessary foundational infrastructure. We also plan to introduce a Building Management System (BMS) in the future. The project is being implemented in three phases:

- **Phase 1** – Laboratory: will be world-class, in-line with national and international standards, and certified by the respective authorities such as Qatar Civil Defense & QP-MIC.
- **Phase 2** – Security and Amenities: will include 2 guard houses, a firewater network extension and the fencing surrounding the QSSA.
- **Phase 3** – Construction of further infrastructure: will include facilities like maintenance offices, workshops, an IT office, a HSE building, a warehouse, a laydown area, a scrap yard, etc.

In 2016, the tendering process finalization for Phases 1 and 2 began and construction is expected to commence in 2017.

Work on the installation of a special stand-alone industrial elevator is currently underway and expected to be completed by the first quarter of 2018. The elevator will be attached to the 68-meter-high Continuous Catalyst Regeneration (CCR) tower to enhance the ergonomics, thereby improving the working conditions for anyone accessing the CCR/Oleflex/HCFE platforms and offering more efficient transportation of materials at various heights.

Other projects currently underway include:

- The construction of an additional firewater tank with the prime objectives of; increasing the reliability of firewater availability, increasing the potable water storage capacity for various purposes, and enabling the inspection of the current tank for its operational integrity.
- The installation and commissioning of a coalscer vessel in the MTBE plant with the prime objectives of; reducing the undesirable effluent carryovers in downstream processes, increasing the life of catalysts and adsorbents, and reducing spooge generation.

GSAS Strategy

Energy effeciency goals

Energy efficiency strategies are put in place early in the design process to achieve the energy score criterion in GSAS such as:

- Reduce cooling load through specifying windows with low solar transmittance that control solar gain
- Lower energy demand of building through caluclating actual demand load based on owner's project requirements
- Efficient lighting and building systems
- Reduce plug load electricity requirements through using energy efficient appliances
- Use of high occupancy sensors with manuals on and automatic off controls in daylit spaces

Water effeciency goals

Water efficiency strategies are put in place early in the design process to achieve a good score in water conservation such as:

- Efficient plumbing fixtures
- Minimize the need for irrigation through sustainable landscape design
- Installing water meters for each unit
- Minimize the use of potable water for irrigation

Indoor environment quality goals

The quality of the indoor environment has a direct impact on health, comfort, well-being, satisfaction and productivity. Our strategies in this area include:

- Minimizing glare
- Ensuring sufficient level of illumination
- Maximize exterior views
- Minimize volatile organic compound content through selection of appropriate material

Cultural and economic value goals

Maintaining the region's cultural identity and contributing to the economy growth are two major concerns of the project design team. Our strategies in this regards include:

- Designs to align with cultural identity and traditions
- Use local materials and contractors
- Procuring construciton-related material products and services from within the region

Hasan Saleh Al-Jaber

Position: Maintenance Field Manager
Started working at QAFAC in 2005

What do you like about working at QAFAC?

QAFAC has provided me with the opportunity to work in my dream career. When I was a child, my father had a small soldering workshop in our house and I would spend a lot of time in this workshop tinkering and using his tools. My interest in instrumentation only grew from there, and I would take my older brother's engineering textbooks to read. Now, I have been a proud engineer at QAFAC working in instrumentation for over 10 years. My love for instrumentation only continues to grow; I am proud that we are bringing in the latest smart technology to standardize all accessories and enable us to monitor the plant remotely by the end of 2017.

How have sustainability enhancements positively affected QAFAC as a company?

The CDR plant remains one of the most important sustainability enhancements positively affecting QAFAC. We used to have to buy carbon dioxide for our production; now we are using this gas that we were already producing, harnessing it, and using it as feedstock! We are now self-sufficient and there could be opportunities for synergies around the selling of excess carbon dioxide.

What is the most important initiative for your department?

Planning for the turnaround in 2019 is extremely important to ensure that we implement a smooth transition, and that we will be able to resume productive operations as soon as possible. The preparations that are needed for our instrument, electrical, static equipment and civil functions will play an important role to safeguard our plant's reliability, efficiency, and the safety of our people. Working as a team will be a key element in our success.

Looking forward
In 2017, in collaboration with QP, we are planning to commence construction of a MTBE pipeline connecting QAFAC to QP's refinery. This project will improve the safety and reliability of our operations by eliminating the potential for spills when filling tankers, reducing the amount of flammable substances being transported on roadways, reducing traffic, and eliminating loading and unloading bottlenecks. The pipeline construction is expected to finish by 2019.

We also plan to construct a third boiler for steam production. This in turn will reduce the load from the other two boilers and NOx emissions, as well as improve plant reliability. The new boiler will meet the new Ministry of Municipality and Environment (MME) NOx regulations.

QAFAC is in the process of moving to near-zero liquid discharge. We are currently conducting a brine study with all other MIC companies, to test the effects of brine on marine ecosystems as well as the point of dilution in both winter and summer months. The study is expected to conclude in 2018. In the meantime, we continue to increase the water efficiency of our operations and reuse more wastewater.

Noor Al-Mosallam

Position: Senior Contract Engineer
Started working at QAFAC in 2013

What do you like about working at QAFAC?

Most of all I like the environment; QAFAC has a friendly atmosphere. You feel that you are part of a team, working together to overcome challenges. QAFAC is a relatively small company and everyone can have direct access to the senior management, which is important and keeps motivation high. Everyone's office doors are always open and there is a welcoming atmosphere.

How have sustainability enhancements positively affected QAFAC as a company?

QAFAC's sustainable approach to procurement is expressed in making sure that the services provided by contractors correspond to the HSE requirements of the company. We use our own internally developed HSE guidelines during the tendering stage to compare tender applicant HSE plans along with supporting documentation. The preliminary screening that Procurement conducts improves the efficiency of the entire tendering process and helps to ensure that only those tender applicants that manage HSE properly progress to subsequent screening by the HSE department before contracts are awarded. This helps to ensure the wellbeing of all our staff and contractors.

What is the most important initiative for your department?

Since the transfer of Procurement management to SAP® system, our management of contract implementation has become more efficient. This transfer occurred in 2015, but in 2016 we noticed a marked improvement as the process of SAP® use became more mature, particularly in terms of monitoring the various stages of contract implementation.

Reliable and Efficient Operations

Reliable and efficient operations are fundamental to ensuring top performance. In 2016, the overall reliability level of our operations was 93% against a target of 96%. We did not quite achieve our target due to the unplanned shutdown of our methanol plant for almost 55 days. Despite this interruption, we are proud of our achievement given the circumstances and strive to improve our reliability and efficiency targets. Although reliability in our Methanol plant dropped to 86.3%, reliability in our MTBE plant reached an impressive 99.3%.

Monitoring Production

To ensure efficiency, we closely monitor our production through daily and monthly dashboard meetings. These meetings have become the core of our operational management at both our methanol and MTBE plants. The dashboards help us track performance improvements and review them at all operational levels.

In 2016, the dashboards operated on a larger scale, covering all business aspects. With the support of company leadership, plant managers are fostering a mindset change, focused on pushing the limits of what it means to be a world-class producer of MTBE and methanol. Through the dashboards, we set targets and monitor performance against these targets to identify bottlenecks and address them.

During the year, we added new key performance indicators (KPIs). The most important outcome of the dashboard meetings is the face to face discussions that occur amongst teams. For each initiative, we created a specialized task team with champions. Diverse teams from all QAFAC functions develop procedures and stand-alone documents to improve clarity clear and accessibility of information.

Continuous Competency Management Program (CCMP)
The CCMP initiative was launched in 2016 within the MTBE plant for all shift groups. The CCMP is conducted each week and led by the on-duty shift engineer with the participation of all shift staff. The main purpose of the CCMP is to refresh staff on important plant parameters, SD logics, critical SOPs, previous plant and safety incident reports, and learn through the mutual sharing of information. By providing continuous engagement on these essential topics, the program helps to maintain the competency that allows successful operation of the MTBE plant and achievement of business goals.

Enhancing Plant Reliability

In order to maintain strong production performance, QAFAC is continually working to improve plant reliability. We invest in initiatives, as well as human and non-human capital resources, to enhance the reliability of our operations. Over the years, they have displayed their value in fewer operational interruptions, and in higher production levels and a good HSE record.

Risk Based Inspection (RBI)
The RBI is a dynamic tool that can provide current and projected future risk evaluations. It is important that we maintain and update our RBI program to ensure that the most recent inspection, process, and maintenance information is included. When the whole basis of a risk assessment changes, then it is vital that a reassessment is carried out. In line with best practice and to ensure we include all circumstances at all levels of production, we reassess risks at relevant stages of the plant life cycle.

Beginning in 2014, we carried out inspections of the static equipment and Piping Corrosion Loops (PCLs) for all QAFAC plants. Upon successful completion of these inspections, the results of the original RBI study are now being updated to reflect the new risk levels in preparation for the next inspections.

Advanced Process Control (APC)
The APC project was awarded to Honeywell and project commissioning at site started in 2016. Data collection and step test activities were also completed in 2016. The APC is located with the MTBE plant and will reduce the energy and butane consumption, as well as enhance production volume by reducing fluctuations affecting plant operation. All three major controllers were put into service in 2016. Since commissioning the APC, major benefits have ensued in terms of smoother plant operation, reduction of process deviation alarms, improvement in production, and steam savings.

Fikra Program
We encourage the active participation of our employees and support innovation that could help us excel in how we think, work and perform. In line with this vision, in 2016 we initiated the Fikra program in our maintenance function as a pilot.

Fikra, the Arabic word for “idea”, is an initiative developed to drive continuous improvement by encouraging positive suggestions that could improve our daily activities, and help optimize our business units.

Fikra has a reward scheme through which we recognize talents contributing to the company. The business excellence function supports this initiative through collecting ideas and presenting them to an evaluation committee.

Once the initiative is successfully implemented in the maintenance department, we plan to roll-out this initiative to other departments.

Did you know this about the air quality benefits of MTBE?

“It is estimated that, for each 1% of MTBE, there is an equivalent percentage reduction in benzene emissions, both evaporative and exhaust.”

This means using reformulated gasoline containing 10-15% MTBE, compared to conventional gasoline, equates to 20-30% less benzene.

Asian Clean Fuels Association

Process Safety

Process Safety Performance	2012	2013	2014	2015	2016
Loss of containment (LOC) / process safety incidents	0	2	0	1	1
Emergency response drills	4	8	12	12	12
Safety incident investigation initiated	0	0	2	2	2
Safety incident investigation completed	0	0	2	2	2

Process safety is one of QAFAC’s core values. By managing the safety of our processes, we can better achieve excellence in our performance. Process safety ensures continuity of business operations, safeguards healthy and safe working conditions for QAFAC employees and contractors, minimizes impact of production activities on the environment, and results in greater acceptance among local society.

In our operations, we use the OHSA 1910.119 (Management of Highly Hazardous Chemicals) model to analyze QAFAC’s safety practices, identify any gaps, and implement recommended process safety improvements that would help us achieve excellence in HSE practices.

Process Safety Management (PSM) at QAFAC:
QAFAC is shifting from standard safety behavior to a new model in order to build a strong safety culture. Moving towards a mature safety culture, we re-examined the best practice behaviors and standards of leaders in process safety roles, and engaged in benchmarking exercises. We believe that sustainable improvements can only happen with a strong commitment from management and clear leadership expectations.

To align our safe work practices and standard operating procedures with the world’s best industrial practices, in 2016 we embarked on a comprehensive process safety management program in alignment with OSHA 29 CFR 1910.119 PSM standard. For years now, the process safety performance of QAFAC’s facilities has been up to the mark with zero process safety incidents. This would not have been possible without the dedication and efforts of our highly experience workforce and leadership, who have been with the plant since its inception. To sustain this track record and achieve excellence in process safety, we have put in place a fully integrated Process Safety Management (PSM) system called ‘AMAN’ – the Arabic word for safety.

Process safety management is the application of management principles and systems to the identification, understanding and control of process hazards to prevent process-related injuries and incidents. 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.

AMAN was initiated to help introduce a robust and sustainable process safety culture at QAFAC. In 2016, we assessed two process safety areas as part of this program; namely the safety culture maturity of the company and the process safety management practices. Upon the results of this study, the three-year program was launched to strengthen the safety culture and PSM practices. The adopted approach was tailored to QAFAC’s needs, based on fit for purpose, maturity and available capacity to implement the changes necessary.

Objectives of AMAN (PSM) Program

In 2016, a new PSM steering committee was established solely to monitor process safety performance, review process safety KPIs, and to deal with process safety related priority-one risks at a companywide level. The PSM steering committee meets bi-monthly and is led by the CEO and comprised of QAFAC's top management. The involvement of top management in the steering committee demonstrates the visible commitment of QAFAC's leadership towards process safety management system improvement and implementation.

During the implementation of Phase 1 of the AMAN program, extensive training sessions and workshops on process safety were provided to personnel from the top management to the shop floor. One of the key deliverables of the AMAN program was to develop the process safety competency matrix for 20 critical process safety roles in the organization. The process safety competency matrix and plan will form the basis to identify and provide the appropriate training to selected key personnel in the future.

QAFAC HSE Principles and Life Saving Rules

In 2016, QAFAC established nine high-level Health, Safety and Environment (HSE) Principles that will guide QAFAC's AMAN PSM journey in the coming future. These principles state QAFAC's deeply held beliefs and confirm QAFAC's commitment to the highest safety standards.

The HSE principles are the foundation and basis for the Life Saving Rules which were developed by the senior leadership to mitigate risk and prevent fatalities. The purpose of establishing the Life Saving Rules is to protect all personnel from serious life changing injuries or life threatening hazardous injuries. The rules focus on modifying worker and supervisor behaviors in the workplace by raising awareness of activities which are most likely to result in fatalities. They also highlight simple actions individuals can take to protect themselves and others. Any infringement of the Life Saving Rules is also treated as a high potential incident and is subject to a detailed investigation adopting root cause analysis (RCA).

QAFAC HSE Principles

01 Safety is a Core Value.

02 All injuries, occupational illnesses and HSE incidents can be prevented.

03 Working in a safe, healthy and environmentally friendly manner is a condition of employment.

04 People are the most important asset of QAFAC and the most important element of the HSE program.

05 Senior management owns HSE and is responsible for the development of an organizational safety culture where HSE is the responsibility of everyone.

06 Interactive HSE Audits are a must for continuous improvement.

07 Employees must be trained to work in a safe, healthy, and environmentally responsible manner.

08 All incidents and near misses must be reported, investigated and learnt from.

09 Off-the-job safety and health are important parts of the HSE effort.

QAFAC Life Saving Rules

Do not work without proper isolation.

Do not start hot work without a proper hot work permit.

Do not enter a confined space without correct approval.

Do not bring uncontrolled ignition sources into the process area.

Do not override safety interlocks without proper authorization.

Do not bring or be under the influence of drugs or alcohol on all premises.

Do not work at height without the correct approval and equipment.

Do not ride a vehicle without wearing a seat belt and do not use mobile devices while driving.

Do not conduct lifting work without a lifting plan and never walk under a suspended load.

HSE Programs

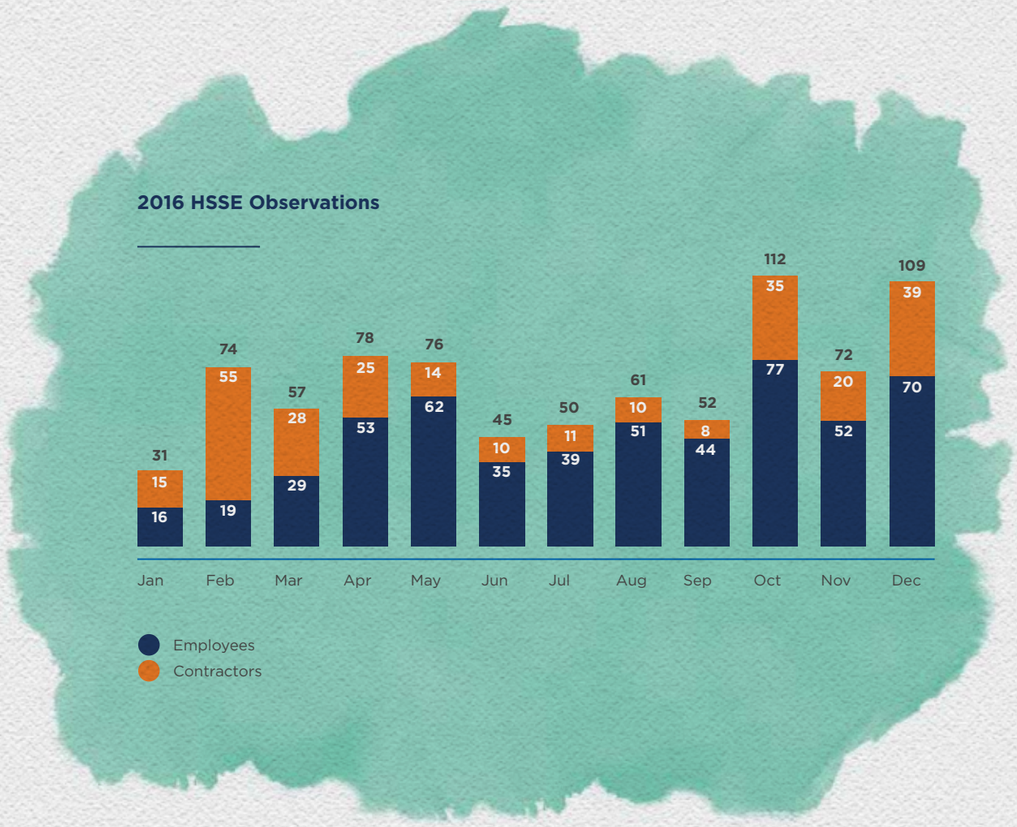
QAFAC has several other safety programs that complement the PSM including:

Behavioral Based Safety (BBS)

- The BBS program is the first of its kind at QAFAC. This program is considered the pathway for our safety culture journey. BBS encourages employees to adopt the right behavior when faced with different types of risks. It also helps employees to identify and correct any divergence from the proper ways of working. Moreover, it is a mechanism that coaches and trains employees to achieve higher standards and continuously learn from their behaviors. Leaders and managers, in addition to supervisors, were all trained on how to use this simple yet powerful tool. The BBS program gave leaders the opportunity to interact with employees on the shop floor.

Health, Safety, Security and Environment (HSSE) Observations

- All our employees and contractors are encouraged to record HSSE observations throughout the year. These observations help to identify job site hazards, controls, and conditions in order to manage and reduce exposure to risks. Ultimately this reduces injury rates. We encourage participation by presenting awards for best quality and quantity of observations on a monthly basis. In 2016, we developed a platform for the electronic submission and follow-up on reported HSSE observations.
- At the end of 2016, a total 817 HSSE observations were recorded by both employees and contractors; 547 of them were provided by employees and 270 by contractors.



Visible Felt Leadership (VFL)

- Felt leadership is our way of developing the Company's safety culture. Through felt leadership, we encourage leaders to have face-to-face discussions that reinforce positive behaviors, and discourage unsafe behaviors. In 2016, we set up one-to-one coaching sessions between QAFAC's leadership and external consultants to help company leaders acquire new skills, and a better understanding of their part as role models to their employees.

Town Hall Meetings

- A key pillar of the AMAN PSM program is to increase awareness on process safety and involve all employees in the program. This has been accomplished through various town hall meetings supported by senior management. At these meetings, the program was discussed, employees' questions were answered, and suggestions for improvement were collected to be considered for on-site implementation.

Safe Work Practices (SWP)

- Through SWP, we reviewed four processes to be upgraded and re-implemented according to industrial best practices: Energy Control (both electrical and mechanical); Workshop Safety Best Practices; Job Hazard Analysis (JHA); and Acid Tanker Unloading.

Process Safety Incident Analysis

- We are currently working on developing a process safety incident analysis tool to better understand and learn the root causes of process safety incidents and near misses. This in turn will help us take better preventive measures to avoid such incidents from reoccurring.

Process Safety Library

- To increase awareness and knowledge on both technical and operational levels, we are building our own process safety library that includes various e-books, standards, videos, webinars, symposium presentations and conference proceedings that are updated on a regular basis with the latest development in the process safety field.

HSE newsletter

In 2016, QAFAC introduced the HSE newsletter focusing on health, safety and environmental issues. Each section of the newsletter includes awareness tips and alerts to increase QAFAC's employees' knowledge in these three areas. Later in the year, we introduced a cross-word puzzle with incentives to encourage employees to actively participate.

Did you know this about the air quality benefits of MTBE?

"MTBE displays low vapor pressure and low volatility compared to olefins. Converting olefins to MTBE in the refinery removes some of the most reactive and volatile components from the gasoline pool."

Asian Clean Fuels Association

Emergency Management:

Having an effective emergency management program is integral to protect our employees, the environment, and our business. Our emergency management approach helps us avoid incidents resulting 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 these risks effectively. This means being in a state of readiness to respond to any critical situation, which is essential given of the dangers present within the hydrocarbon industry.

In 2016, we commenced the construction of a second fire water tank. This tank is an important safeguard should anything happen to the first tank. Upon completion of this project, the original fire water tank will undergo inspection and maintenance. In addition to the safety benefit of the second tank, it will enhance the plant reliability by allowing 70% of the water to be consumed as process water at any given time. The project is expected to be completed in 2018.

In 2016, QAFAC added a new state of the art fire truck to our fleet, to provide emergency services to protect our employees and contractors in case of fires.

Occupational Health and Safety

Health and Safety Performance	2012	2013	2014	2015	2016
Work hours (employees)	496,234	469,968	542,016	496,408	462,648
Work hours (contractors)	891,832	940,120	2,819,236	559,160	593,568
Employee fatalities	0	0	0	0	0
Contractor fatalities	0	0	0	0	0
Employee lost-time injuries	0	0	0	0	0
Contractor lost-time injuries	0	0	0	0	0
Employee total recordable injuries	0	0	0	0	0
Contractor total recordable injuries	0	0	1	0	1
Employee occupational illnesses	0	0	0	0	0
Heat stress events	0	0	0	0	0

We have a duty to protect people which is why occupational health and safety continues to be a critical component in every business decision we make at QAFAC. It is of paramount importance to achieve the highest occupational health and safety standards in every operational activity. We believe that excellence in managing workplace health and safety is key to our long-term success. This extends beyond solely ensuring our workers' safety on site, we also provide training and education to help them improve their general well-being.

Our main goal is to ensure 'Zero Harm' to all employees, contractors, visitors, customers and shareholders. We manage safety across all QAFAC business units through a combination of rigorous systems, procedures and by building a culture for safe operations. To support this goal, in 2016, we reviewed our incident procedure and identified ways to make it more practical and robust. These are currently being implemented through the SAP system.

2016 also marked another outstanding year in QAFAC's exemplary track record of occupational health and safety performance, by exceeding 8.5 million man-hours without a Lost-Time Accident (LTA) among our employees and contractors. This achievement is attributed to all the training events that occurred over the course of the year, and to the persistent integration of safety culture among our employees and contractors.

Health and Safety Training

Our employees receive appropriate health and safety training to ensure they operate in a risk-free environment, not only for their own wellbeing, but also to instill a positive health and safety culture.

In 2016, we tracked over 7,000 HSE training hours, including emergency first aid, noise control, risk management, firefighting basics, heat stress, radiation protection, Emergency Response Team (ERT) and many more. Of these trainings, 87% were held internally.

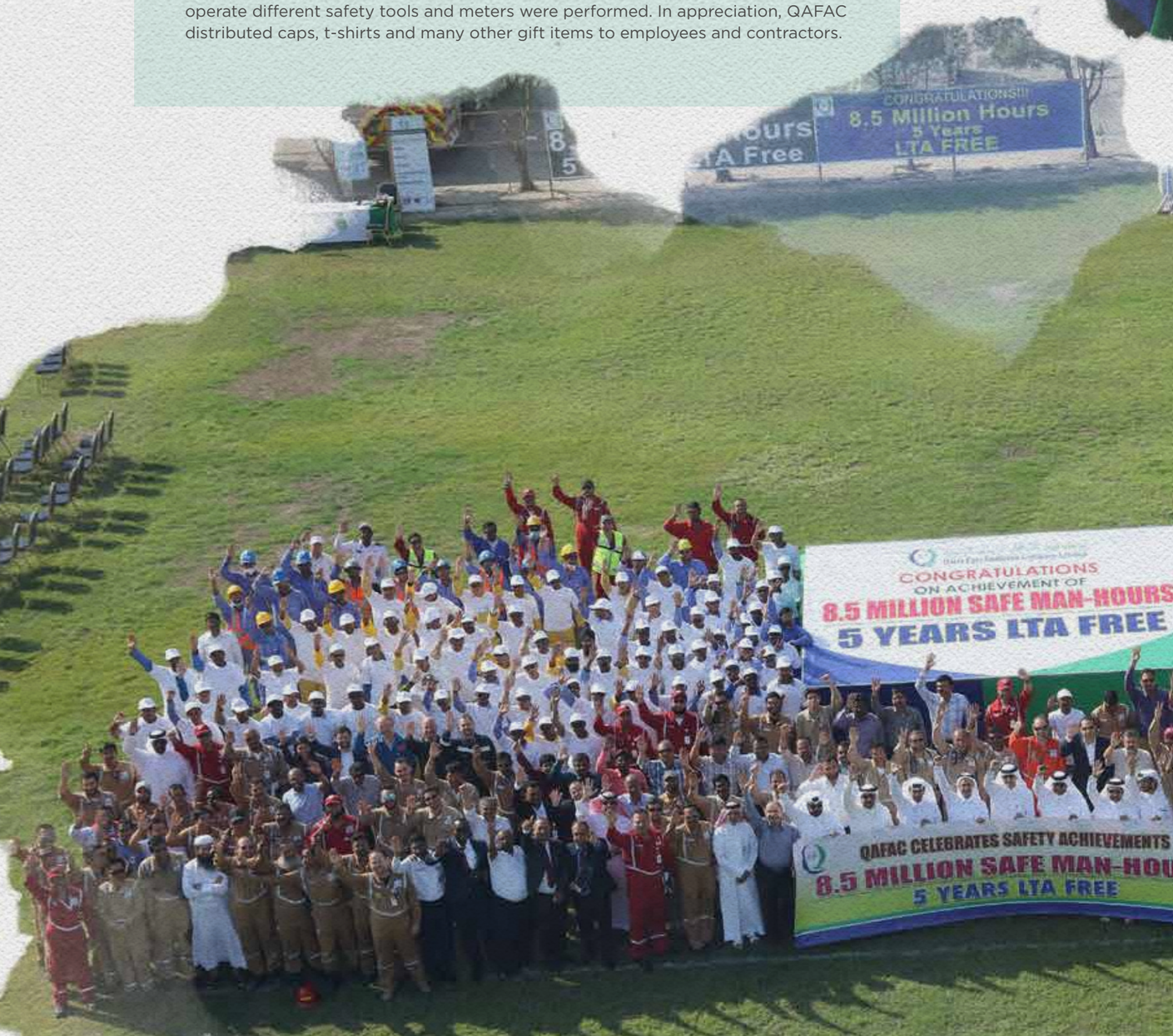
Throughout the reporting year, QAFAC invested $217,550 in total on HSE training in addition to other career and skills development training programs. The average cost of training per employees was $88 and average training time provided was almost 3 hours per employee.

To reduce the risk of injury to workers, all new employees must undergo the HSE Induction training which includes information on risk assessment, waste management, environmental awareness, and emergency response plan.

Training Name	Number of trainees planned	Number of trainees attended	Training duration	Total training hours provided
ERT Training	342	228	8	1824
Confined Space	22	22	2	44
Work @ Heights	11	9	2	18
Work @ Heights (External)	66	48	6	288
Permit to Work (PTW)	48	46	8	368
PTW (Refresher)	143	143	2	286
Heat Stress	200	156	1	78
Emergency Response Plan	100	92	2	184
Advance First Aid	4	3	12	36
Incident Commander Training	3	3	18	72
NFPA 472 -HAZMAT Awareness	5	5	18	90
Graduate Trainee Training	13	11	16	176
NFPA 1081 -Industrial Fire Brigade-Exterior	4	4	40	40
Authorized Gas Tester - AGT	3	2	4	8
Emergency First Aid	30	30	6	180
Safety Induction (DVD) Employees / Trainees	16	16	2	32
Safety Induction (DVD) Contractors	1211	1211	2	2754
Fire Marshall	21	20	2	40
Defensive Driving	21	20	6	120
Risk Management	11	9	2	18
Accident Investigation	6	6	8	108
Noise Control	120	99	2	198
Radiation Protection	105	61	2	122
Chemical handling	24	22	2	44
Environmental Awareness	42	42	2	84
Firefighting Basics	7	7	2	14
Total training	2571	2308	-	7,226

5 Years LTA Free

On December 17th, 2016, QAFAC celebrated 8.5 million man hours without LTA with great success. The celebration commenced with Quran verses and was followed by speeches from QAFAC's HSE Manager, COO and CEO. The CEO congratulated all QAFAC employees and contractors for their contribution to this important company objective and encouraged everyone to keep up the good work. Contractor management was rewarded and exhibitions on how to operate different safety tools and meters were performed. In appreciation, QAFAC distributed caps, t-shirts and many other gift items to employees and contractors.



Occupational health

Throughout the year, we have run several campaigns to increase awareness on health-related issues such as influenza, food poisoning, high cholesterol, cardiovascular diseases (CVD), among others.

The campaigns shed light on healthy eating, healthy lifestyle habits, food safety and disease prevention using posters and by circulating pamphlets around QAFAC facilities.

QAFAC's MIC clinic provided our employees with flu vaccinations and CVD screenings to minimize the risk of illness.

Heat stress

Given that we operate in a country with long heat waves, it is particularly important to prevent heat stress events.

We have a comprehensive heat stress management approach to manage both employees' and contractors' ability to work in unfavorable, hot weather conditions. Our approach includes a monitoring heat index that keeps everyone aware of the heat conditions and precautions to be taken. For the past five years, we have not had a single heat stress incident.

Medical check on QAFAC employees

We seek to prevent inherent occupational health risks, and require all our employees to undergo periodic medical checks at the MIC clinic. These periodic checks allow us to carefully monitor and manage any health risks. The goal of the pre-employment examination is to determine whether an employee is fit to perform his/ her job.

Managing safety and wellbeing of contractors

At QAFAC, we work closely with our contractors to meet our safety standards. When it comes to safety and well-being, there are no distinctions between our employees and contractors. Everyone including contractors must meet the best industrial practices and international standards at all times. Contractors need to adhere to our health and safety standards during their involvement with our operations at all times.

Many contractors are involved during maintenance and upgrade work of our industrial facilities, and they are a fundamental part of QAFAC's workforce. It is equally important to establish the same safety culture for everyone involved in the operational process. The PSM program helps analyze the HSE management procedure that is currently being used for contractors, and recommends further actions focused on enhancing contractors' safety performance.

Did you know this about the air quality benefits of MTBE?

Using reformulated gasoline containing

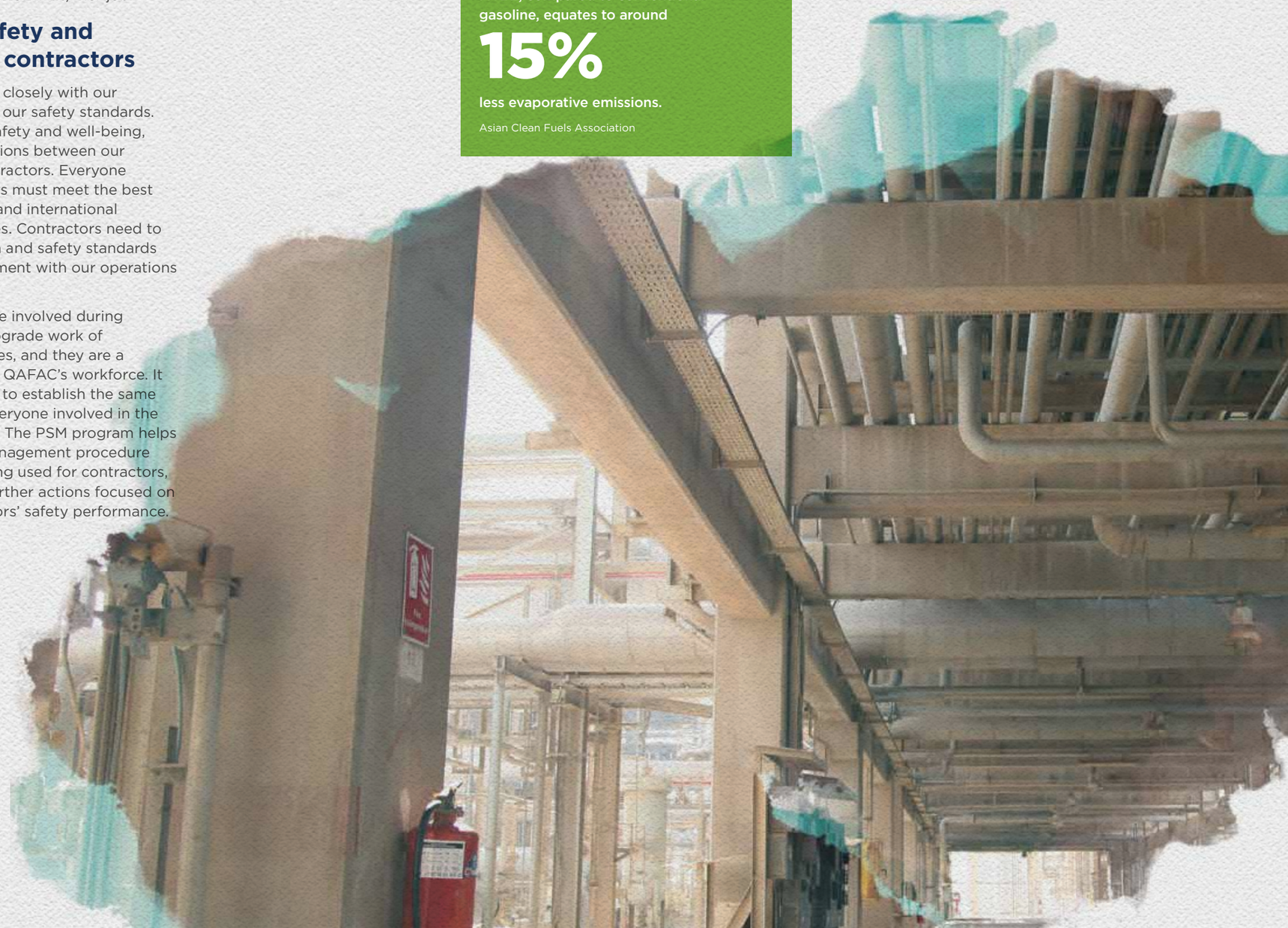
10-15%

MTBE, compared to conventional gasoline, equates to around

15%

less evaporative emissions.

Asian Clean Fuels Association



DEVELOPING OUR WORKFORCE

Talent Management

At QAFAC, we focus on talent development and growth. We seek to spark innovation and retain passionate individuals who contribute to our everyday successes. We help our employees in building their skills and careers, and provide them with a safe, secure, and engaging work environment.

We commit ourselves to fostering a diverse workforce and building an inclusive corporate culture where employees can reach their highest potential irrespective of gender or ethnicity. We believe that a diverse and inclusive workforce helps us deliver more innovative and effective business outcomes.

At QAFAC, we promote equal employment, training and career development opportunities for women. In 2016, women represented around 8% of the total workforce. Since 2012, female employment has increased by over 4 percentage points.

We also seek to be a catalyst for addressing the youth unemployment challenge, through initiatives that build a pool of talented, young Qatari engineers. In 2016, young people between the ages of 18 to 30 made up 18% of our total workforce.

Supporting the development of our Qatari employees is part of our commitment to Qatar's National Vision 2030. We are making steady progress towards our goals in attracting, developing and retaining the best Qatari talents, through several initiatives that gives Qatari employees the opportunity to reach their full potential.

Workforce	2012	2013	2014	2015	2016
Total workforce	291	329	364	382	337
By employment level					
Senior management	10	13	13	13	11
Middle management	8	21	21	21	18
Staff	273	295	364	348	308
By nationality					
Expatriates	241	254	266	284	241
Qatari nationals	50	75	98	98	96
Qatarization (% of Qatari employees in the total workforce of QAFAC)	17%	23%	27%	26%	29%

Workforce Age Profile	2012	2013	2014	2015	2016
Workforce by age 18-30	28	59	72	78	60
Workforce by age 31-40	55	67	79	77	68
Workforce by age 41-50	116	126	124	117	105
Workforce by age 51-60	92	77	88	110	104

Female Employment	2012	2013	2014	2015	2016
Number of female employees	11	24	33	36	26
Female employment rate	3.6%	7.3%	9.1%	9.4%	7.7%
Females in senior management	-	-	1	1	1

Our Talent Management Framework

Talent management involves attracting and retaining the right people with the right skill-sets, engaging with them effectively, and providing them with learning and development opportunities to expand their knowledge and contribute to QAFAC's continued success.

Managing our talent pipeline is essential to ensure we have the right human resources to grow, and pave the way towards our objectives. At QAFAC, our talent management framework is built upon five pillars:

- **Succession planning:** With over 30% of QAFAC's workforce over the age of fifty, it is imperative that we have succession plans in place for all critical senior roles to ensure business continuity. To prepare for the retirement of a large cohort of our workforce over the coming few years, which will reach its height in 2019-2020, we have ramped up our succession planning across all departments. We started by identifying those critical roles that pose significant risk to our business and that would be difficult to fill quickly through external hire or internal succession. We then identified junior personnel to be actively developed in the areas necessary for success in a given role.
- **Qatarization:** QAFAC is making good progress in attracting, developing and retaining the best Qatari talents by ensuring they take on leadership roles in the company. Year-on-year, we continue to increase the number of nationals among our workforce. In 2016, we had 96 Qatari nationals making up 29% of our total workforce.
- **Graduate engineering program:** The graduate engineering program 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 program is not exclusive to Qatari nationals; however, applicants must be born and raised in Qatar. Upon completion of the two-year program, graduates may be asked to join QAFAC as permanent employees and are then able to enter QAFAC's talent pipeline. In 2016, QAFAC welcomed 7 new engineers into the program. In 2017, the first batch of 9 engineers are expected to graduate. In total, there will be three entry rounds for a total of 30 participants.
- **Gadan initiative:** Started in 2015, 'Gadan' is the Arabic word for 'tomorrow'. The objective of the program is to support the aspirations of our employees whilst meeting the future talent requirements of the Company. Through this initiative, we aim to develop the capabilities of a pool of highly motivated and talented individuals for those critical roles identified in our succession planning. This two-year training and development program combines classroom, writing, e-learning and on-the-job instruction. This initiative stands out from other personnel development initiatives because of its focus on developing the soft skill essential for those leadership roles. In 2016, the second cohort was selected and began the program.
- **Mentorship program:** After the successful pilot in 2016, QAFAC will officially launch its Mentorship program as part of its talent management activities. The pilot utilized section managers and Gadan champions to test how the system would run. In this program, senior employees will mentor junior employees to ensure knowledge transfer and supplements QAFAC's succession planning.

Hamad Al-Khayarin

Position: Human Resources Manager
Started working at QAFAC in 2001

What do you like about working at QAFAC?
QAFAC has a healthy work environment. There is a team spirit where everyone is very supportive and we help each other to excel. Over the many years I have been here, I have also found that QAFAC employees are extremely loyal to the company because we are like a big family. It is something that is hard to find.

How have sustainability enhancements positively affected QAFAC as a company?
Our talent management and succession planning is a great example of a programme truly focused on the future. We are ensuring that we have the right human resources to maintain the successful continuity of our operations and hence the sustainability of the company.

What is the most important initiative for your department?
The movement to SAP® is streamlining our processes and is going to help the human resources department operate more smoothly. This will be an important contributor to productivity and more effective human resource management.

Attracting human resources

We seek to hire talented people that will propel our company even further. We make sure all new hires are equipped with the right tools to succeed at their jobs and are welcomed as part of the company. To attract the best in a highly competitive market, we offer carefully devised vocational training, on-the-job training, and align their values to the Company's values.

Developing our human capital

The growth of our employees is essential to our success. We provide our people with several opportunities at both the managerial and specialist levels to develop within our company.

Training Profile	2012	2013	2014	2015	2016
Total number of training hours for total workforce	3,920	4,176	4,452	2,681	2,860
Average hours of training per year per employee	13.5	12.7	12.2	7.0	10.7
Average hours of training per employee for nationals	17	24	780	30	30
Total cost of training (QR)	5,411,264	14,184,346	10,930,711	15,912,657	8,760,000
Average cost of training per employee (QR)	18,595	43,113	30,029	41,656	6,993

Retaining Human Resources

In 2016, QAFAC's overall turnover rate was 9%, an increase of around 4 percentage point from the previous year. The turnover can be mainly attributed to downsizing, which is always the most unfortunate side effect of an economic downturn. At the same time, we are confident that those employees released has gained skills while at QAFAC that will provide them with opportunities elsewhere, and we are grateful for their dedicated service. The turnover rates of our female employees remained relatively low (7%) compared to male employees (23).

Turnover Profile	2012	2013	2014	2015	2016
Turnover rate	0.3%	2.7%	1.1%	4.7%	8.9%
Total number of employees who left the organization	1	9	4	18	30
Turnover by employment level					
Senior management	0	2	0	1	0
Middle management	0	3	1	3	0
Staff	1	4	3	14	30
Turnover by gender					
Female	1	1	0	2	7
Male	0	8	4	16	23
Turnover by age					
Workforce by age 18-30	0	0	3	2	5
Workforce by age 31-40	0	2	0	5	6
Workforce by age 41-50	1	4	1	2	8
Workforce by age 51-60	0	3	0	9	11

Employee Engagement

We strive for everyone at QAFAC to achieve job satisfaction, because we recognize that satisfied employees demonstrate loyalty, commitment, and productivity. To gain insights on our employees' overall job satisfaction with QAFAC, we ask them to participate in an employee engagement survey on a biannual basis. To facilitate an open and honest survey, employees are encouraged to participate in an anonymous voluntary basis. Results of the survey are important to us, as they can be ultimately tied to the retention of our employees. The results are analyzed by a third party and benchmarked against other industry peers as well as against our own performance in previous years. Summaries of results are then provided to QAFAC leadership for follow-up and action plan development. The next employee engagement survey will be fielded at the close of 2017.

Acknowledging Long Service Employees

Loyalty, commitment, dedication and exemplary efforts are always rewarded and recognized at QAFAC. We show appreciation for long serving employees who have completed five, ten and fifteen years of service at the company. In 2016, 19 employees were awarded for 5, 10 and 15 years of continuous service with the Company. The CEO presented them with commemorative gifts in recognition of their loyal service.

QAFAC Holds 5th Annual Cricket Tournament

Cricket is by far our employee's favorite sport, it is the sporting 'heart beat' of QAFAC. The annual Inter-Department Cricket Tournament took place at the QP Cricket ground in Mesaieed this past November. The MTBE team retained their title, and as always, this highly anticipated event was an overwhelming success.

Did you know this about the air quality benefits of MTBE?

Using reformulated gasoline containing

10-15%

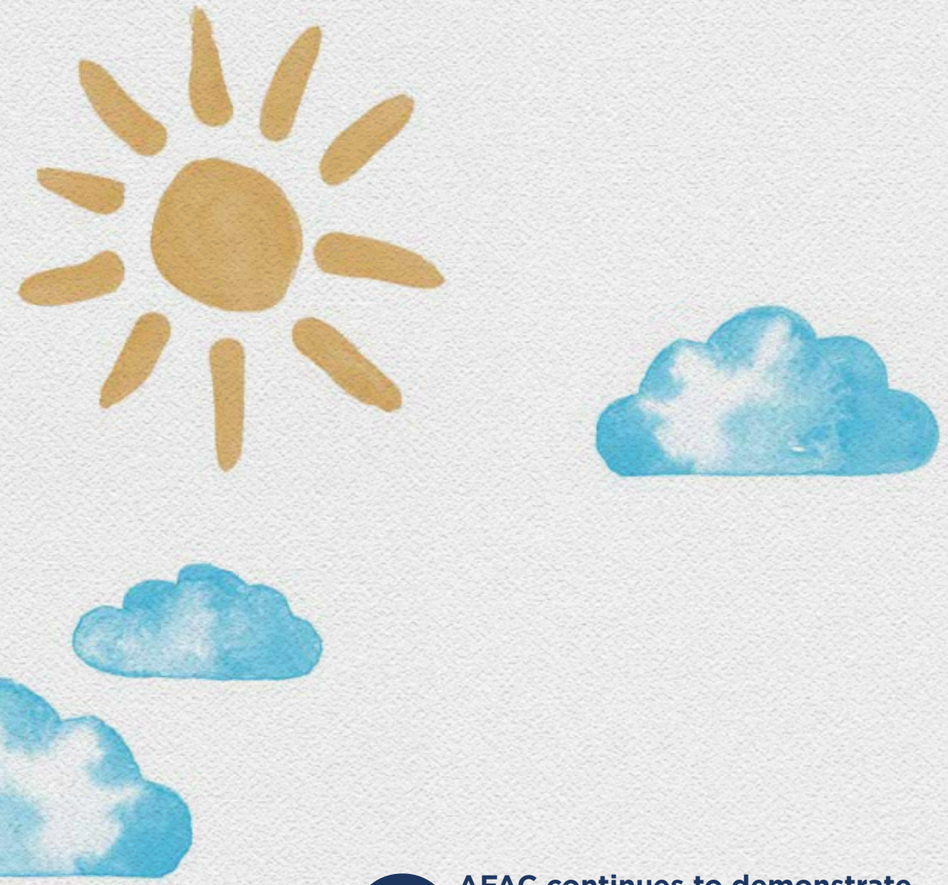
MTBE, compared to conventional gasoline, equates to around

5%

less nitrogen oxides (NOx).

Asian Clean Fuels Association

CARING FOR THE ENVIRONMENT



QAFAC continues to demonstrate its commitment and dedication to a heathier natural environment, through our environmental conservation processes and activities.

We recognize the potential negative environmental impacts associated with our production processes, and therefore strive to implement proper environmental management to mitigate and minimize these impacts.

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Climate Change and Energy Efficiency

Climate change is one of the most critical global challenges, as it represents an urgent and irreversible threat to the planet. We seek to contribute to the fight against climate change, while providing our products to meet present and future demand.

We seek to implement closed loop processes that result in cost savings, and reductions in emissions, waste and raw materials. A prime example is our Carbon Dioxide Recovery (CDR) plant.

By commissioning the CDR plant three years ago, QAFAC has demonstrated a world-class example of achieving sustainable growth; by utilizing production resources for maximum efficiency, while simultaneously avoiding significant emissions of greenhouse gas CO_2 into the atmosphere. The plant resulted in QAFAC becoming self-sufficient in generating CO_2 gas which is used as an input material to produce methanol.[1] The CDR plant contributes to recycling greenhouse emissions from our methanol plant and produces additional clean methanol that is sold through our normal sales channels. Through the operation of the CDR plant, QAFAC is contributing in a concrete way to reducing the carbon footprint of the state of Qatar.. In addition to increasing methanol production by 250 MT/day, the CDR plant also reduces water consumption by 10% by recycling recovered water vapor from flue gases and reduces NOx emissions.[2]

In 2016, energy intensity went up slightly by 0.77 GJ/tonne of production, out of which, 0.57 GJ/tonne of production is attributable to the methanol plant shutdown. Another 0.2 GJ/tonne of production increase is attributable to MTBE Butamer scrubber off gases, which were not considered in previous years.

Energy efficiency has always been a top priority on our agenda. By managing our energy consumption, we strive to increase cost efficiency in our operations and fulfil greenhouse gas targets. In 2016, we managed to lower both our total direct and indirect energy consumption by 8%, however, this was mostly due to the unplanned Methanol plant shutdown that occurred.

The installation of our Isothermal Methanol Converter (IMC) in 2015 allowed us to increase our efficiency in the use of natural gas by reducing the use of natural gas as feed-in material.[3] The IMC is performing well with a carbon efficiency of approximately 95% on average. In 2016, we revamped the converter which led to a decrease of 1 GJ/MT in the methanol specific energy consumption.

In efforts to decrease energy consumption in our offices and administrative facilities, we launched a campaign to utilize more daylighting and switch off lights.

1. CO_2 used as input material is not taken into account in the calculation of GHG emissions, where only emissions from the use of fuel are accounted for. For this reason, avoided CO_2 emissions are not reflected in the statistics GHG emissions.
2. More detailed information on CDR plant is provided in QAFAC Sustainability Report 2014
3. The use of natural gas as feed-in material is not taken into account during the calculation of the energy consumed, and only natural gas as a fuel is taken into account. Thus, with the total increase in the use of fuel due to higher levels of production, the level of energy used is increased, as well as the energy intensity level. While the use of natural gas as feed-in material is reduced, this is not reflected in the statistics of energy consumption.

QAFAC switches to LED lights

In an effort to improve energy efficiency, while reducing electricity and maintenance costs, QAFAC has replaced 280 fluorescent lighting fixtures with LED panel lighting in its administration, general service and HSE buildings.

This rather small initiative has displayed big savings, reducing electricity consumption and costs by around 50%. Over one year, this change reduces electrical consumption in our buildings by around 36,000 kWh, resulting in a modest savings of nearly QR 5,000. Moreover, with each LED light lasting around 28,000 hours more or 4.5 times more than a fluorescent bulb, this equates to using less materials, less light bulb changing, and reduced maintenance and replacement costs.

Comparing LED to fluorescent lighting, the benefits go beyond saving watts and riyals, switching to LED lighting also has the following additional benefits:

- Contains no toxic mercury
- RoHS compliant
- No sensitivity to humidity
- On/Off cycling does not affect lifespan
- Turn on instantly
- Very durable
- Emit less heat (around 12 BTU/hour less than compact fluorescents)

Energy Consumption	2012	2013	2014	2015	2016
Energy intensity (GJ/tonne production)	13.67	13.68	13.27	13.46	14.23
Direct energy consumption (natural gas, diesel, purge gas and off gases used as fuel) (GJ)*	19,158,500	20,964,690	18,761,283	23,442,665	21,506,200
Indirect energy consumption (electricity) (GJ)	727,906	771,782	739,512	874,080	821,444
Total direct and indirect energy consumption (GJ)	19,886,406	21,736,472	19,500,795	24,316,745	22,327,644

* Direct energy was labelled only as diesel in the previous year's report.

GHG Emissions	2012	2013	2014	2015	2016
Direct GHG emissions (diesel and fuel gases, scope 1) (tonnes)	769,195	823,722	856,445*	1,059,287*	974,770
Indirect GHG emissions (electricity, scope 2) (tonnes)	99,116	105,285	100,696	119,020	111,853
Total GHG emissions (tonnes of CO_2e)	868,311	929,007	957,141*	1,178,307*	1,086,623
GHG intensity (GHG/tonne production)	0.60	0.58	0.65*	0.65*	0.69

* These figures have changed because of more accurate calculation methods.

Air emissions

The production process yields smog-causing emissions such as Sulphur dioxides (SOx), nitrogen dioxides (NOx) and particulate matter (PM). As a result, we continually seek to reduce SOx and NOx emissions. In 2016, the total NOx emissions were reduced by 10% while SOx emissions increased by 8%. We will continue to proactively increase our efforts to reduce air emissions, in line with MME requirements and best practice.

Air Emissions	2012	2013	2014	2015	2016
SO_x (tonnes)	93	103	94	108	117
NO_x (tonnes)	1,235	1,363	1,254	1,371	1,237

Selective Non-Catalytic Reduction (SNCR): Cutting emissions at QAFAC

The SNCR system aims to reduce NOX emissions that are generated by the fuel burning in methanol reformer and helps QAFAC to meet the emissions level set by the Ministry of Municipality and Environment (MME) of Qatar.

In 2016, we appointed an external consultant to work on a Computational Fluid Dynamics (CFD) model considering the SNCR to reduce the NOX with aqueous ammonia solution. The model was successfully completed and we are currently running the last trial.

Upon receiving the final report form the consultant in March 2017 and receiving the project approval from the MME, we will begin the implementation taking into consideration the required modifications.

Flaring

Flaring Performance	2012	2013	2014	2015	2016
Flaring of off-spec gases (MMSCM)	138.0	152.0	151.0	150.7	184.7

Our production processes at QAFAC require a certain degree of flaring to ensure the safety and reliability of our operation. In our industry, flaring is a common means of disposing of off-spec-gas that otherwise would pose a hazardous threat to people nearby. In addition, flaring is used as a safety measure to depressurize process units and eliminate the risk of combustive incidents. Nonetheless, we work hard to minimize the flaring associated with our production processes, wherever practical.

For three years now, we have been able to measure the quantity of gas being flared from each plant and report on it to the Ministry of Municipality and Environment (MME) on a monthly and quarterly basis.

We are applying the hydrogen recovery approach to minimize flaring, which allows us to re-inject hydrogen instead of flaring. In addition to minimizing flaring, this approach also reduces the use of raw materials.

Another approach we plan to implement to reduce flaring of net gas at QAFAC is by removing hydrogen sulfide (H2S) from RED regeneration net gas by installing caustic scrubbing units. Net gas will be used as fuel in the fuel network. QAFAC is also planning to install a caustic treatment plant to treat the spent caustic before sending it to the effluent treatment plant.

In 2016, our flaring went up by 23%, as compared to the previous three years. This was due to the long unplanned shutdown of our methanol plant and continued operation of the methanol reformer for some days during the plant outage, start-up and shutdown period, and unproductive feed gas flaring.

Indoor Air Quality

Indoor air quality (IAQ) is about having clean air inside our office buildings. Good IAQ is important to the health of our dedicated people who spend most of their time indoors. It improves their health and personal well-being. We recognize that workplace premises with good IAQ will also affect the productivity of employees making them feel happier, more energetic and alert.

QAFAC is committed to improving its people's working environment in any way possible. We installed state-of-the-art portable monitoring equipment to measure 16 air parameters in accordance with the highest standards. In 2015, we measured the air quality in our administrative buildings, laboratories, workshops and safety buildings under the HSE team supervision. It was identified that all parameters are normal in consideration of industrial guidelines for indoor air quality.

In 2017, we have scheduled a second round of indoor air quality monitoring within the entire QAFAC complex.

Water Management

Given our geographical location and that we operate in a water scarce country, water efficiency forms an integral part of our environmental management approach. To overcome our water scarcity challenges, we have wastewater treatment units that enable us to treat water and reuse it in our operations and irrigation.

We are ambitious to implement the Near Zero liquid discharge directive issued by the MME. The FEED study has been completed. The plant will have a new secondary and tertiary wastewater treatment system through which approximately 85% of process wastewater will be recovered upon the installation of the ultra-filtration and reverse osmosis techniques in the new plant. We are also currently participating in a brine study initiated by all MIC industries to test the effects of brine on marine ecosystems as well as the point of dilution in both winter and summer months. The study is expected to be completed in 2018.

In 2016, 50% of the sanitary wastewater was reused in irrigation of the trees around plant facilities and the main road leading to QAFAC, known as the 'Green Belt.' Also, our total water consumption dropped by 7% compared to 2015; however, this was also a result of plant shutdowns rather than solely attributable to efficiency measures.

Water Consumption and Wastewater Discharge	2012	2013	2014	2015	2016
Fresh water used, purchased (m^3)	1,405,222	1,563,951	1,219,204	1,132,829	1,054,688
Fresh water used, company generated:			125,615	814,680	723,250
- of which water recovered and reused from CDR plant (m^3)			125,615	315,360	222,563
Total wastewater generated, including non-contact cooling water (m^3)	575,947	720,960	484,961	567,859	501,902
Water discharged, including non-contact cooling water) (m^3)	312,669	317,724	258,463	276,744	250,788
Recycled wastewater discharged to the Green Belt (m^3)	263,278	403,236	226,498	291,115	251,114
Share of wastewater recycled to the Green Belt (%)	46%	56%	47%	51%	50%

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Waste Management

Waste Generation and Recycling	2012	2013	2014	2015	2016
Total waste disposed (tonnes) *	2,264	682	658	695	1,074
Total industrial waste (hazardous) disposed to MIC Hazardous Waste Treatment Center (tonnes)	2,114	518	512	551	880
Domestic waste (tonnes) **	150	164	146	144	194
Oil waste, recycled (tonnes)	27	20	66	58	24
Total waste recycled (tonnes)	27	21	66	64	45

* The figures have changed due to more accurate calculation methods.

** The figures have changed due to more accurate calculation methods that are based on the weight of waste.

Our production processes do not generate a significant amount of hazardous and non-hazardous waste compared to companies in other industries, 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.

In 2016, we also started monitoring our paper and electronic waste; around 11 tonnes of paper and 10 tonnes of electronic waste were recycled.

11

tonnes of paper recycled in 2016

10

tonnes of electronic waste recycled in 2016

Raising environmental awareness

Every year, we hold a poster making competition for the children of our employees on World Environment Day. Not only is the event a fun-filled activity for kids of all ages, but it also helps to raise environmental awareness. This year's theme was 'Go Wild for Life.' The competition was judged by representatives from local schools in Doha, and the winners and runner-up contestants from all age categories received shields and prizes.

STRENGTHENING OUR SOCIETY

We recognize that the way we conduct our business can have wide-ranging socio-economic effects on local communities. As we aim to create shared value for all our stakeholders, our purchasing decisions across our value chain plays an important role.

QAFAC's support extended to local businesses is aligned to our company goals and QNV 2030, which includes supporting local procurement to help develop the national economy, creating long-term jobs and hiring locals to ensure the development of Qatar's human capital, improving quality of lives, and addressing the needs of our local community.

Indirect Economic Impact

Supporting Local Suppliers	2012	2013	2014	2015	2016
Percentage of locally based suppliers	64%	65%	65%	60%	61%
Local suppliers paid amount – total (QR '000)	68,845	90,170	92,391	101,778	91,427
Percentage of spending on local based contractors and suppliers (% of total spending)	88%	78%	71%	77%	74%

We prioritize purchasing goods and services locally to ensure that local businesses and communities benefit from our business activities, and by doing so, help to bolster local economic development.

QAFAC's procurement strategy requires that, at a minimum, 60% of procurement tenders are awarded to local vendors registered in Qatar. We give priority to purely national companies, even if their prices are up to 10% higher than other competitors.

Since 2015, we began shifting our procurement practices from traditional purchasing to a more strategic purchasing strategy. The new approach is part of our cost optimization and business excellence programs, in which procurement is now playing an active role in creating synergies with other companies located in Mesaieed Industrial City (MIC). Our procurement department has also effectively renegotiated several long-term contracts, allowing the company to save immensely.

In 2016, 74% of our total procurement spending was awarded to locally based contractors and suppliers, a 3% decrease compared to 2015.

Over the coming year, procurement will play an important role in the success of the plant turnarounds planned in early 2019. Successful purchase planning, especially for long-lead items, will enable a smooth transition by ensuring equipment is available as per scheduled, eliminating delays, and as such, throughout 2017 monthly material forums will be held.

Rashid Al-Abdulla

Position: Chief Procurement Officer
Started working at QAFAC in 2002

What do you like about working at QAFAC?
Ever since I began working at QAFAC, I have enjoyed the challenge. We are constantly pushing ourselves and one another to improve and for the good of the company. The way in which employees can interact with management plays an important role in employee's ability to grow. Management is very accessible, staff are encouraged to share ideas, and management helps to give the tools needed to implement them. This open culture allows for collaboration and constant progress. I value my past managers that challenged me and helped me to grow, and now I am happy to help others do the same.

How have sustainability enhancements positively affected QAFAC as a company?
Sustainability reporting was one of the first things that opened our vision to operational excellence. It was when we first started to publicly report our sustainability performance that we began to expand the way we thought about what it means to be a sustainable company and to then develop initiatives to improve our performance. It gives us great pride to be recognized as leaders in the industry in terms of sustainability reporting and performance. Procurement plays an important role in the efficiency of operations and avoidance of shutdowns, both of which are critical to QAFAC's sustainability.

What is the most important initiative for your department?
Building synergies with other companies located in Mesaieed Industrial City (MIC) has been a big success. It is something that will only continue to grow, allowing us to realize significant cost reductions already. Pooling resources and aggregating orders for all types of goods and services has allowed everyone to benefit from discounted pricing. Also, we have achieved the target that a minimum of 60% of our awarded contracts go to national or local companies as a part of our local contribution and social responsibility.

Qatarization

Supporting Education and Training	2012	2013	2014	2015	2016
Number of Qatari students sponsored to study in universities abroad	13	14	9	9	21
Number of Qatari students sponsored to study in university/technical school in Qatar	7	10	8	8	12
Number of trainees and interns at QAFAC	14	16	20	13	17
Number of QAFAC employees supported to complete their education			33	40	33
Total cost for supporting Qatari students and QAFAC employees in their education (QR)				2,268,050	2,758,065

Qatarization at QAFAC means identifying and developing talented and capable Qataris to take permanent long-term careers in the Company. It is not just about Qatarization ratios aligned to the Qatar National Vision 2030. It is also related to promoting the professional development of the local workforce and the future intellectual capital of the country. We do so by offering qualified, young Qatari students scholarship opportunities to national and international educational institutions.

Our commitment to Qatarization is reflected in our educational and training support offered to Qatari nationals. We also provide educational assistance to those employees who wish to continue their education in areas that are consistent with their career development.

Contribution to Research and Innovation

Research and innovation at QAFAC is underpinned by strong partnerships with local academic institutions, which develop the talents of local academics and contribute to innovation in industry.

In 2016, we funded for a second year the Advanced Materials Chair at Qatar University (QU) as part of our three-year agreement with QU. In return, QU provided consultation services for the Company in addition to training courses for QAFAC employees.

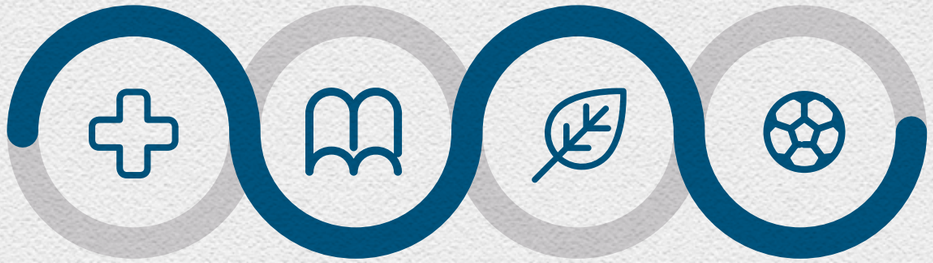
We also cooperate directly with local educational institutions on technical issues relevant to QAFAC processes. We have teamed with Texas A&M University at Qatar (TAMUQ) to study the environmental impact of residual chlorine and thermal discharges into the Arabian Gulf.

Supporting Needs of Society

As a Qatari company and an active member of the community, we play an important role in contributing positively to Qatari society. We strongly believe that in addition to operating responsibly and ethically, we can make a broader contribution to local communities. We are committed to supporting development programs with benefits that are based on the needs of communities to help build a stronger society, improve quality of life, and create a sustainable future.

In 2015, we developed a CSR policy prioritizing issues that are most important to our stakeholders and at the same time most likely to have a positive impact on the local community. The policy focuses on meeting society's basic needs in health, education, environmental awareness, and sports.

QAFAC's Corporate Social Responsibility Committee screens all community activity proposals that fall under our four focus areas, only supporting those programs aligned with QNV 2030 and addressing the needs of all segments of society.



CSR Budget

Investment in Community Initiatives	2012	2013	2014	2015	2016
Community investment (QR)	1,185,593	7,655,618	17,157,000	7,826,000	1,144,916
Community investment by areas of impact					
Spent on educational initiatives (QR)	539,535	2,390,392	601,139	2,020,000	900,124
Spent on environmental initiatives (QR)	329,026	513,398	836,476	928,200	38,399
Spent on safety initiatives (QR)	87,001	497,035	2,376,589	291,200	32,928
Spent on health initiatives (QR)	230,032	202,227	6,751,248	928,200	140,519
Other			6,750,540	3,658,400	32,947

Qatar National Sports Day

Qatar National Sports Day is a national holiday celebrated on the second Tuesday of February every year, with the objective of promoting healthy lifestyles nationwide. Across the country, participants take advantage of this fun-filled day by engaging in physical activity and sport.

In 2016, QAFAC employees and their families joined our sister companies QAPCO and QChem, and collectively held the 5th annual National Sports Day at QAPCO Club in Mesaieed. The event was a great success and featured several competitions including badminton, table tennis, football, among others.

Asthma-Friendly Schools

Asthma is one of the most common chronic diseases among children and adults in Qatar. In 2016, QAFAC entered the second year of its three-year sponsorship for the 'Asthma-Friendly Schools' Program. The program was launched by the Supreme Council of Health in thirty schools, and it promotes the adoption of policies and procedures to help students safely manage asthma attacks.

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Annex 1. Sustainability in Numbers

	Indicator	Unit	2010	2011	2012	2013	2014	2015	2016
ECONOMIC CONTRIBUTION	Revenue	USD 000's	569,611	921,244	927,768	984,547	816,702	685,861	506,231
	Indirect Economic Value Generated								
	Employee wages and benefits	USD 000's		34,735	44,983	45,260	55,678	57,276	54,862
	Contractors paid amount – total	USD 000's		7,917	16,059	18,455	19,769	26,542	24,186
	Suppliers paid amount – total	USD 000's		1,502	5,540	13,262	16,150	9,679	9,666
	Percentage of spending on local based contractors and suppliers	% of total spending	90	79	88	78	71	77	74
	Percentage of locally based suppliers	% of all suppliers and contractors		58	64	65	65	60	61
	Local suppliers paid amount – total	QR 000's		27,115	68,845	90,170	92,391	101,778	91,427
	Production – broken down by main products:								
	Methanol	t	879,196	1,021,872	843,543	940,963	869,271	1,118,210	903,767
	MTBE	t	512,705	654,549	610,985	648,022	600,342	688,450	664,835
	Pentane	t	5,012	7,903	7,492	8,513	8,194	11,035	11,195
CLIMATE CHANGE AND ENERGY	Energy intensity	(GJ/tonne production)		13.63	13.67	13.68	13.27	13.46	14.23
	Direct energy consumption (natural gas, diesel, purge gas and off gases used as fuel)*	GJ	18,985,973	22,057,736	19,158,500	20,964,690	18,761,283	23,442,665	21,506,200
	Indirect energy consumption (electricity)	GJ	697,489	786,701	727,906	771,782	739,512	874,080	821,444
	Total direct and indirect energy consumption	GJ		22,847,568	19,886,406	21,736,472	19,500,795	24,316,745	22,327,644
	Direct GHG emissions (scope 1)	t CO_2e	774,008	882,373	769,195	823,722	856,445***	1,059,287**	974,770
	Indirect GHG emissions (scope 2)	t CO_2e	94,974	107,122	99,116	105,285	100,696	119,020	111,853
	Total GHG emissions	t CO_2e		989,495	868,311	929,007	957,141**	1,178,307**	1,086,623
	GHG intensity	GHG/tonne production		0.59	0.60	0.58	0.65**	0.65**	0.69
	Flaring	MMSCM	118	150.2	138.0	152.0	151.0	150.7	184.7
	Flaring of off-spec gases	MMSCM		150.2	138.0	152.0	151.0	150.7	184.7
	Natural gas used	m^3 000's	957,597	1,116,416	955,560	1,054,480	958,029	1,201,630	1,038,166
ENVIRONMENT	Fresh water used, purchased	m^3	1,170,556	1,289,819	1,405,222	1,563,951	1,219,204	1,132,829	1,054,688
	Fresh water used, company generated:	m^3	0	0	0	0	0	814,680	723,250
	- of which water recovered and reused from CDR plant	m^3					125,615	315,360	222,563
	Total wastewater generated, including non-contact cooling water	m^3		521,323	575,947	720,960	484,961	567,859	501,902
	Water discharged, including non-contact cooling water)	m^3		288,223	312,669	317,724	258,463	276,744	250,788

* Direct energy was labelled only as diesel in the previous year's report.
** These figures have changed because of more accurate calculation methods.
*** The figures have changed due to more accurate calculation methods.

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	Indicator	Unit	2010	2011	2012	2013	2014	2015	2016
ENVIRONMENT	Recycled wastewater discharged to the Green Belt	m^3		233,100	263,278	403,236	226,498	291,115	251,114
	Share of wastewater recycled to the Green Belt	%		45	46	56	47	51	50
	Water discharged (to sea)	m^3	248,245	288,223	312,669	317,724	258,463	276,744	250,788
	SO_x	t	63	120	93	103	94	108	117
	NO_x	t	1,091	1,329	1,235	1,363	1,254	1,371	1,237
	Significant oil spills (> one barrel)	-	0	0	0	0	0	0	0
	Volume of oil spills	l	-	-	-	-	-	-	-
	Total waste disposed***	t		506	2,264	682	658	695	1,074
	Total industrial waste (hazardous) disposed to MIC Hazardous Waste Treatment Center	t		642	2,114	518	512	551	880
	Domestic waste ****	t		136	150	164	146	144	194
	Oil waste, recycled (tonnes)	t		0	27	20	66	58	24
	Total waste recycled	t		0	27	21	66	64	45
HEALTH AND SAFETY	Work hours (employees)	hr	449,670	460,056	496,234	469,968	542,016	496,408	462,648
	Work hours (contractors)	hr	1,185,252	515,974	891,832	940,120	2,819,236	559,160	593,568
	Employee fatalities	-	0	0	0	0	0	0	0
	Contractor fatalities	-	0	0	0	0	0	0	0
	Employee lost-time injuries	-	0	0	0	0	0	0	0
	Contractor lost-time injuries	-	0	0	0	0	0	0	0
	Employee total recordable injuries	-	1	1	0	0	0	0	0
	Contractor total recordable injuries	-	1	1	0	0	1	0	1
	Employee occupational illnesses	-	0	0	0	0	0	0	0
	Heat stress events	-	0	0	0	0	0	0	0
	Loss of containment (LOC) / process safety incidents	-	0	0	0	2	0	1	1
	Emergency response drills	-	4	4	4	8	12	12	12
	Safety incident investigation initiated	-	0	1	0	0	2	2	2
	Safety incident investigation completed	-	0	1	0	0	2	2	2
WORKFORCE	Total workforce	-	304	300	291	329	364	382	337
	By employment level								
	Senior management	-		8	10	13	13	13	11
	Middle management	-		27	8	21	21	21	18
	Staff	-		265	273	295	364	348	308
	By nationality								
	Expatriates	-		246	241	254	266	284	241
	Qatari nationals	-		54	50	75	98	98	96
	Qatarization (% of Qatari employees in the total workforce of QAFAC)	%	17	18	17	23	27	26	29
	Workforce Age Profile								
	Workforce by age 18-30	-		65	55	67	79	77	60
	Workforce by age 31-40	-		135	116	126	124	117	68
	Workforce by age 41-50	-		53	92	77	88	110	105
	Workforce by age 51-60	-		47	28	59	72	78	104

*** The figures have changed due to more accurate calculation methods.
**** The figures have changed due to more accurate calculation methods that are based on the weight of waste.

	Indicator	Unit	2010	2011	2012	2013	2014	2015	2016
WORKFORCE	**Female Employment**								
	Number of female employees	-		9	11	24	33	36	26
	Female employment rate	%		3	3.6	7.3	9.1	9.4	7.7
	Females in senior management	-					1	1	1
	Employee satisfaction	%	N/A	N/A	N/A	N/A	N/A	-	N/A
	Training Profile								
	Total number of training hours for total workforce	hr	1,414	2,353	3,920	4,176	4,452	2,681	2,860
	Average hours of training per year per employee	hr		7.8	13.5	12.7	12.2	7.0	10.7
	Average hours of training per employee for nationals	hr		3	17	24	780	30	30
	Total cost of training	QR		3,729,510	5,411,264	14,184,346	10,930,711	15,912,657	8,760,000
	Average cost of training per employee	QR		12,431	18,595	43,113	30,029	41,656	6,993
	Turnover rate	%		5.0	0.3	2.7	1.1	4.7	8.9
	Total number of employees who left the organization	-		15	1	9	4	18	30
	Turnover by employment level								
	Senior management	-		3	0	2	0	1	0
	Middle management	-		2	0	3	1	3	0
	Staff	-		10	1	4	3	14	30
	Turnover by gender								
	Female	-		0	1	1	0	2	7
	Male	-		15	0	8	4	16	23
	Turnover by age								
	Workforce by age 18-30	-		3	0	0	3	2	5
	Workforce by age 31-40	-		3	0	2	0	5	6
	Workforce by age 41-50	-		7	1	4	1	2	8
	Workforce by age 51-60	-		2	0	3	0	9	11
	Corruption or human rights incidents	-	0	0	0	0	0	0	0
SOCIETY	Community investment	QR		1,230,276	1,185,593	7,655,618	17,157,000	7,826,000	1,144,916
	Community investment by areas of impact								
	Spent on educational initiatives	QR		274,939	539,535	2,390,392	601,139	2,020,000	900,124
	Spent on environmental initiatives	QR		79,399	329,026	513,398	836,476	928,200	38,399
	Spent on safety initiatives	QR		82,828	87,001	497,035	2,376,589	291,200	32,928
	Spent on health initiatives	QR		-	230,032	202,227	6,751,248	928,200	140,519
	Other	QR					6,750,540	3,658,400	32,947
	Number of Qatari students sponsored to study in universities abroad	-		5	13	14	9	9	21
	Number of Qatari students sponsored to study in university/technical school in Qatar	-		9	7	10	8	8	12
	Number of trainees and interns at QAFAC	-		17	14	16	20	13	17
	Number of QAFAC employees supported to complete their education	-					33	40	33
	Total cost for supporting Qatari students and QAFAC employees in their education	QR						2,268,050	2,758,065

Annex 2. GRI Content Index

GRI Standard	Disclosure	Page number(s) and/or URL(s)	Omission		
			Part Omitted	Reason	Explanation
GRI 101: Foundation 2016					
General Disclosures					
GRI 102: General Disclosures 2016	**Organizational profile**				
	102-1 Name of the organization	Qatar Fuel Additives Company Limited			
	102-2 Activities, brands, products, and services	40			
	102-3 Location of headquarters	Doha, Qatar			
	102-4 Location of operations	QAFAC operates only in Qatar			
	102-5 Ownership and legal form	14, 16			
	102-6 Markets served	QAFAC products are sold in Asia and in the Middle East			
	102-7 Scale of the organization	40, 41, 69			
	102-8 Information on employees and other workers	69			
	102-9 Supply chain	18, 19, 20			
	102-10 Significant changes to the organization and its supply chain	No significant changes			
	102-11 Precautionary Principle or approach	Embedded in QAFAC's approach to sustainability management			
	102-12 External initiatives	QNV 2030, Qatar NDS 2011-2016			
	102-13 Membership of associations	21			
	Strategy				
	102-14 Statement from senior decision-maker	9, 11			
	102-15 Key impacts, risks, and opportunities	13, 31-34			
	Ethics and integrity				
	102-16 Values, principles, standards, and norms of behavior	21			
	Governance				
	102-18 Governance structure	17			
	Stakeholder engagement				
	102-40 List of stakeholder groups	35			
	102-41 Collective bargaining agreements	Trade unions are not allowed in Qatar			
	102-42 Identifying and selecting stakeholders	35			
	102-43 Approach to stakeholder engagement	35			
	102-44 Key topics and concerns raised	35			
	Reporting practice				
	102-45 Entities included in the consolidated financial statements	Financial statements include the activities of QAFAC and no other entity			
	102-46 Defining report content and topic Boundaries	6, 36, 37, 98			
	102-47 List of material topics	36			
	102-48 Restatements of information	79, 82, 91, 92			
	102-49 Changes in reporting	No significant changes			
	102-50 Reporting period	January 1, 2016 - December 31, 2016			
	102-51 Date of most recent report	2015			
	102-52 Reporting cycle	Annual			
	102-53 Contact point for questions regarding the report	6			
	102-54 Claims of reporting in accordance with the GRI Standards	6			
	102-55 GRI content index	94-97			
	102-56 External assurance	Not assured			

GRI Standard	Disclosure	Page number(s) and/or URL(s)	Omission		
			Part Omitted	Reason	Explanation
Material Topics					
GRI 200 Economic Standard Series					
Economic Performance					
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	31, 32, 39, 98			
	103-2 The management approach and its components	24, 31, 32, 41			
	103-3 Evaluation of the management approach	41			
GRI 201: Economic Performance 2016	201-1 Direct economic value generated and distributed	41			
	201-2 Financial implications and other risks and opportunities due to climate change	40-41			
	201-4 Financial assistance received from government	No financial assistance received from the government			
Market Presence					
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	33, 69, 85, 98			
	103-2 The management approach and its components	33, 71, 88			
	202-2 Proportion of senior management hired from the local community	69			
Indirect Economic Impacts					
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	33, 85, 86, 98			
	103-2 The management approach and its components	33, 50, 85, 86, 98			
	103-3 Evaluation of the management approach	41, 86			
GRI 203: Indirect Economic Impacts 2016	203-1 Infrastructure investments and services supported	49			
	203-2 Significant indirect economic impacts	41, 86			
Procurement Practices					
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	33, 85, 86, 98			
GRI 204: Procurement Practices 2016	204-1 Proportion of spending on local suppliers	86			
Anti-corruption					
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	21, 98			
GRI 205: Anti-corruption 2016	205-3 Confirmed incidents of corruption and actions taken	21			
GRI 300 Environmental Standards Series					
Materials					
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	31, 32, 82, 98			
	103-2 The management approach and its components	31, 32, 50, 82			
	103-3 Evaluation of the management approach	31, 32, 82			
GRI 301: Materials 2016	301-2 Recycled input materials used	82			
Energy					
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	31, 32, 78, 79, 98			

	103-2 The management approach and its components	31, 32, 78, 79
	103-3 Evaluation of the management approach	31, 32, 78, 79
GRI 302: Energy 2016	302-1 Energy consumption within the organization	78, 79
	302-2 Energy consumption outside of the organization	78, 79
	302-3 Energy intensity	78, 79
	302-4 Reduction of energy consumption	78, 79
Water		
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	31, 32, 81, 98
	103-2 The management approach and its components	50, 81
	103-3 Evaluation of the management approach	81
GRI 303: Water 2016	303-1 Water withdrawal by source	81
	303-3 Water recycled and reused	81
Emissions		
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	31,32, 78-80, 98
	103-2 The management approach and its components	31, 32, 78-80
	103-3 Evaluation of the management approach	31, 32, 78-80
GRI 305: Emissions 2016	305-1 Direct (Scope 1) GHG emissions	79
	305-2 Energy indirect (Scope 2) GHG emissions	79
	305-4 GHG emissions intensity	79
	305-5 Reduction of GHG emissions	79
	305-7 Nitrogen oxides (NOX), sulfur oxides (SOX), and other significant air emissions	80
Effluents and Waste		
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	31, 32, 81, 82, 98
	103-2 The management approach and its components	81, 82
	103-3 Evaluation of the management approach	81, 82
GRI 306: Effluents and Waste 2016	306-1 Water discharge by quality and destination	81
	306-2 Waste by type and disposal method	82
	306-3 Significant spills	92
GRI 400 Social Standards Series		
Employment		
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	33, 69, 73, 98
	103-2 The management approach and its components	69-71, 73
	103-3 Evaluation of the management approach	73
GRI 401: Employment 2016	401-1 New employee hires and employee turnover	73
Occupational Health and Safety		
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	34, 47, 62, 98
	103-2 The management approach and its components	62, 63, 66
	103-3 Evaluation of the management approach	34, 62

*** The figures have changed due to more accurate calculation methods.

**** The figures have changed due to more accurate calculation methods that are based on the weight of waste.

GRI 403: Occupational Health and Safety 2016	403-2 Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities	34, 62
Training and Education		
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	33, 69, 98
	103-2 The management approach and its components	33, 69-72
	103-3 Evaluation of the management approach	33, 72
GRI 404: Training and Education 2016	404-1 Average hours of training per year per employee	72
	404-2 Programs for upgrading employee skills and transition assistance programs	71
Diversity and Equal Opportunity		
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	33, 98
	103-2 The management approach and its components	33, 69-72
	103-3 Evaluation of the management approach	33, 69
GRI 405: Diversity and Equal Opportunity 2016	405-1 Diversity of governance bodies and employees	69, 72
Non-discrimination		
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	66, 69, 98
	103-2 The management approach and its components	66, 69-72
	103-3 Evaluation of the management approach	69
GRI 406: Non-discrimination 2016	406-1 Incidents of discrimination and corrective actions taken	Zero incidents during reporting period.
Child Labor		
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	QAFAC does not have operations where there is significant risk of child labor. The company does not hire anyone under the legal working age in Qatar.
	103-2 The management approach and its components	21, 33, 42
GRI 408: Child Labor 2016	408-1 Operations and suppliers at significant risk for incidents of child labor	Zero identified during reporting period.
Forced or Compulsory Labor		
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	QAFAC adheres to all laws relating to worker rights, and follows international guidelines. QAFAC takes significant steps to help ensure that there are no violations of worker rights, including forced or compulsory labor, among contractors.
GRI 409: Forced or Compulsory Labor 2016	409-1 Operations and suppliers at significant risk for incidents of forced or compulsory labor	See 103-1 for Forced or Compulsory Labor
Marketing and Labeling		
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	40, 98
GRI 417: Marketing and Labeling 2016	417-1 Requirements for product and service information and labeling	21, 40, 42
Socioeconomic Compliance		
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	42, 98
GRI 419: Socioeconomic Compliance 2016	419-1 Non-compliance with laws and regulations in the social and economic area	No incidents during reporting period.

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Annex 3. Reporting Scope and Material Topic Boundaries

Material Aspect	Material within QAFAC	Material outside QAFAC	GRI Material Topic
Operational and Financial Growth	Yes	Customers, Environment, Society	Economic Performance
Resource Optimization	Yes	Environment, Society	Materials
Product Quality and Innovation	Yes	Society	Product and Service Labelling, Research and Development
Supply Chain	Yes	Suppliers, Customers	Procurement Practices
Health and Safety	Yes	Environment	Occupational Health and Safety
Human Rights and Labor Standards	Yes	Society	Labor Practices and Decent Work
Process Safety and Asset Integrity	Yes	Environment	Asset Integrity and Process Safety
Plant Reliability	Yes	Customers	Availability and Reliability, Access
Energy Efficiency	Yes	Environment, Customers, Environment	Energy
Air Emissions	Yes	Environment, Society	Emissions
GHG Emissions (Climate Change)	Yes	Environment, Society	Emissions
Water Management	Yes	Environment, Society	Water
Waste Management	Yes	Environment, Society	Effluents and Waste
Employee Learning and Development	Yes		Training and Education
Human Resources Attraction and Retention	Yes	Society	Employment, Labor Practices and Decent Work
Employee Engagement	Yes		Employment
Qatarization	Yes	Society	Market Presence
Local Procurement	Yes	Suppliers	Procurement Practices, Indirect Economic Impacts
Corporate Social Responsibility	Yes	Society	Local Communities

Annex 4. Glossary

Butamer	A method of isomerizing normal butane into isobutane in the presence of hydrogen and a solid, noble metal catalyst; used to prepare raw material in a gasoline alkylation process.
Butane	A colorless, odorless, gaseous hydrocarbon. The compound in which the carbon atoms are linked in a straight chain is called normal butane, or n-butane; the branched-chain form is isobutane. Both occur in natural gas and in crude oil and are formed in large quantities in the refining of petroleum to produce gasoline
Catalyst	A substance which aids or promotes a chemical reaction without forming part of the final product. It enables the reaction to take place faster, remains unchanged at the end of the reaction and can provide control by increasing desirable reactions and decreasing undesirable reactions
Climate Change	The term "climate change" is used to imply a significant change from one climatic condition to another. Sometimes, climate change is used synonymously with the term global warming; scientists however, tend to use the term in the wider sense to also include natural changes in climate
GHG	Green House Gas - is a gas in an atmosphere that absorbs and emits radiation within the thermal infrared range. The primary greenhouse gases in the Earth's atmosphere are water vapour, carbon dioxide, methane, nitrous oxide, and ozone
Materiality	The report should cover Topics that reflect QAFAC's significant economic, environmental and social impacts; or substantively influence the assessments and decisions of stakeholders.
MTBE	is used in gasoline to boost the octane rating and to decrease the toxic emissions in the exhaust. As an octane enhancer, MTBE delivers high octane numbers at relatively low cost. A direct effect of the use of MTBE is the reduction of both "regulated" emissions (CO, unburned hydrocarbons) and "unregulated" emissions (e.g. ground-level ozone).
Natural Gas	Colourless, highly flammable gaseous hydrocarbon consisting primarily of methane, ethane, and small amounts of heavier gaseous hydrocarbon compounds such as propane. Ethane and propane, also called natural gas liquids (NGL), are converted into ethylene and propylene by steam cracking. It is a type of petroleum that commonly occurs in association with crude oil.
n-Butene	Butenes are formed during the cracking of petroleum to produce gasoline; they can also be prepared commercially by the catalytic dehydrogenation of butanes.
Octane	For a gasoline engine to work efficiently, gasoline must burn smoothly without premature detonation, or knocking. Severe knocking can dissipate power output and even cause damage to the engine.
Olefins	Olefins are petrochemical derivatives produced by cracking feedstocks from raw materials such as natural gas and crude oil. Lower olefins have short chains with only two, three or four carbon atoms, and the simplest one is ethylene.
Propane	A colorless, gaseous hydrocarbon. It is separated in large quantities from natural gas, light crude oil, and oil-refinery gases and is commercially available as liquefied propane or as a major constituent of liquefied petroleum gas (LPG). As with ethane, propane is an important raw material for the ethylene petrochemical industry.
Refining	Conversion of crude oil into useful products, such as naphtha, the most important feedstock for the petrochemical industry. Every refinery begins with the separation of crude oil into different fractions by distillation. The fractions are further treated to convert them into mixtures of more useful products by various methods such as cracking, reforming, alkylation, polymerization and isomerization. These mixtures of new compounds are then separated using methods such as fractionation and solvent extraction.
Scope 1	Scope 1 emissions are direct GHG emissions from sources that are owned or controlled by the entity. Scope 1 can include emissions from fossil fuels burned on site, emissions from entity-owned or entity-leased vehicles, and other direct sources.
Scope 2	Scope 2 emissions are indirect GHG emissions resulting from the generation of electricity, heating and cooling, or steam generated off site but purchased by the entity, and the transmission and distribution (T&D) losses associated with some purchased utilities.
Stakeholders	Stakeholder, an accountant, group, organization, member or system who affects or can be affected directly or indirectly by an organization's.
Sustainability	Meeting the needs of the present without compromising the ability of future generations to meet their own needs
VOC	organic compounds that readily evaporate. VOCs include pure hydrocarbons, partially oxidized hydrocarbons, and organic compounds containing chlorine, sulphur or nitrogen. They are widely used as fuels (e.g., propane and gasoline), as paint thinners and solvents, and in the production of plastics. VOC emissions have to be carefully controlled so as not to contribute to air toxicity and urban smog.

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شركة قطر للإضافات البترولية المحدودة
Qatar Fuel Additives Company Limited