



“Developing  
Sustainably”

**SR13**

SUSTAINABILITY REPORT 2013





HIS HIGHNESS  
**SHEIKH TAMIM BIN HAMAD AL-THANI**  
EMIR OF THE STATE OF QATAR







HIS HIGHNESS THE FATHER EMIR  
**SHEIKH HAMAD BIN KHALIFA AL-THANI**





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## QAFCO AT A GLANCE IN 2013

### KEY *Achievements*

Revenues: .....	<b>USD 2,250,926,878</b>
Workforce: .....	<b>1,541 employees</b>
Production of ammonia : .....	<b>3,641,331 metric tonnes (MT)</b>
Production urea : .....	<b>5,510,995MT</b>
Direct energy use: .....	<b>181,972,288GJ</b>
Direct GHG emissions: .....	<b>5,759,262 tonnes CO<sub>2</sub>eq</b>
Seawater intake from sea: .....	<b>1,180,000,000m<sup>3</sup></b>
Fresh water used: .....	<b>41,242,080m<sup>3</sup></b>
Fresh water discharged to the sea:.....	<b>1,138,757,920m<sup>3</sup></b>
Employee Total Recordable Injury Rate TRIR:.....	<b>0,41</b>
Contractor TRIR: .....	<b>1,53</b>

Around **QAR 7 million** spent on voluntary social investments

### KEY *Figures*

QAFCO-6 has become fully operational in 2013, increasing QAFCO's total urea production to 5.5 million tonnes urea, which has propelled Qatar to be the fourth largest urea producer and exporter in the world.

In the 2013 SDIR Awards under the Sustainable Development Industry (SDIR) Programme, QAFCO received the runner-up position from HE Mohamed bin Saleh al-Sada, Ministry of Energy and Industry in Qatar.

The Royal Society for the Prevention of Accidents (RoSPA) honored QAFCO's efforts in occupational safety and health with two awards: Management of Occupational Road Risk (MORR) Gold Award and the RoSPA Silver Award for occupational safety.

Qatar University (QU) and QAFCO signed a memorandum of understanding (MoU) to enhance cooperation in the areas of energy systems. The agreement includes building and commissioning a heat exchanger pilot plant at QU and appointing a QAFCO Chair in the Energy Systems at the College of Engineering.

Texas A&M University, Qatar and QAFCO have announced a collaboration to bring a world-recognized environmental expert to Qatar recognized as the first holder of the QAFCO Chair in Green Chemistry and Green Engineering at Texas A&M University at Qatar.

QAFCO scored the highest at 375 points among the international fertilizer companies and receive the IFA Green Leaf Award for outstanding performance in Safety, Health and Environment (SHE) in fertilizer production across the product life cycle for its ammonia and urea production facilities.





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## CEO'S STATEMENT

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### Khalifa A. Al Sowaidi

I am pleased to present QAFCO's third sustainability report to share our progress on the sustainability journey, focusing on the triple bottom-line growth that forms the basis of our core business values. Through this report, we wish to showcase our stakeholders' our commitment to run business sustainably, our performance on various sustainability aspects and our efforts to operate in a transparent manner by maintaining two-way dialogue with both our employees and our external stakeholders.

With growing competition, declining ammonia and urea prices, and transition of the sales and marketing of our products to a third party, this year has been a major challenge to QAFCO and the fertilizer sector at large. However, QAFCO has successfully managed and overcome these constraints and ended up with remarkable growth while making significant contribution to the environment and the society.

Year 2013 has been a landmark for QAFCO, as with the completion of QAFCO 5 and 6 units, we are honored to be the largest single site manufacturer and exporter of urea and ammonia. This year, we have shown a remarkable growth of 13.4% and 21% in ammonia and urea production, respectively. Through adoption of state-of-the-art and energy efficient technologies, we were able to achieve 13% reduction in specific energy consumption for urea production, which consequently resulted in reduced carbon emission intensity of our products.

At QAFCO, we believe that caring for the environment is not only a legal but an ethical duty towards the society and the world and is a tool for sustainable competitive advantage. This year, we have continued our efforts to pursue diversification into more environment-friendly products, preserving the natural resources and making least impact on human health.

We are collaborating with the University of Liège in Belgium to look at the possibility of using urea as poultry feed to increase protein and to reduce administration of antibiotics that ultimately impact human health. Studies are also underway on the use of urea to improve nutrient capacities of cassava root – one of the largest food carbohydrates source in Africa. Once successful, our Sahara Reserve Forest project could be a model for home grown crops and may prove to be a milestone for providing food security to the nation.

QAFCO has taken the lead to collaborate in research activities with local universities and provide facilities that will benefit many industries in Qatar, such as deployment of DeNOx technology. The company has signed an MoU with Qatar University (QU) to build and commission a heat exchanger pilot plant and appoint a QAFCO Chair in Energy Systems at the College of Engineering (CENG). Through this initiative, we aim to strengthen collaboration between industry and academia to enhance the process of connecting research with education for achieving the objectives and priorities for Qatar.



At QAFCO, we believe that caring for the environment is not only a legal but an ethical duty toward the society and the world and is a tool for sustainable competitive advantage.

Our employees are the backbone of our company and we are proud of our workforce for their commitment, integrity and rich experience. It is our privilege to have representation from as many as 33 countries, including 15.69% Qataris, and this diversity is our strength. We acknowledge their contribution in making QAFCO a world-class organization and are committed to providing a safe and secure working environment and due opportunities for career development. Our code of conduct, whistle-blower policy and anti-corruption policy provide our employees with a platform to raise any concerns or issues that may threaten our business ethics.

We take stringent measures to ensure that health, safety, security and environmental concerns are taken into account by our suppliers, transporters, contractors and distributors. This has enabled us in last years to maintain a large network of distributors, with utmost care being taken to ensure that all are satisfied with the quality of QAFCO products, services and level of commitment. Being ISO 9001, ISO 14001 and OHSAS 18001 certified, we are one of the few organizations in the Middle East to have achieved this distinction at the time. We have also achieved management system certifications in RC 14001 and the IFA Product Stewardship Programme.

QAFCO pursues a policy of retaining existing customers while forging ties with new ones. We wish to expand our direct engagement with customers and farmers, as they are the key stakeholders to our expanding enterprise and they help us improving in our products. We are proposing to deepen our engagement with the farming community and the direct customers through our marketing company to ensure that we provide them with a richer menu of services, taking them along in a mutually beneficial and interdependent relationship that ensures not only profits but also our sustainable growth.

Continuing our sustainability journey, our newly constituted sustainability reporting committee is in the process of formulating a strategy that would align our approach to the ambitions of Qatar National Vision 2030. This strategy will define QAFCO's broad sustainability objectives and targets and will pave the way for achieving the triple bottom-line growth.

While we hope you enjoy reading it, we would welcome your feedback in improving our efforts.



**Khalifa A. Al Sowaidi**  
QAFCO Vice-Chairman & CEO

## QAFCO POLICY

### OUR *Mission*

We shall operate the plants efficiently, safely and in an environmentally responsible manner to produce and dispatch ammonia, urea, urea formaldehyde and melamine at the quality required by customers and to carry out investments to maximize shareholders returns.

### OUR *Vision*

- Maintain QAFCO as the largest quality ammonia and urea producer.
- Satisfy QAFCO's need for urea formaldehyde.
- As operator of Qatar Melamine Company, our vision is to be a quality melamine producer.

### QAFCO's *Main Objectives*

- Achieve highest possible production at comparatively low cost.
- Operate the plants with maximum online factor.
- Design and operate the plants in a safe, secure and environmentally responsible manner.
- Meet customers' expectations with regard to quality and timely dispatch of our products.
- Supply QAFCO with quality urea formaldehyde.

### QAFCO's *Main commitments*



**WE ARE COMMITTED THROUGH OUR OCCUPATIONAL HEALTH & SAFETY, ENVIRONMENTAL AND QUALITY MANAGEMENT SYSTEMS TO:**

- Lead QAFCO in ethical ways that increase the benefits to society by protecting our employees, environment and community.
- Increase the competency of personnel and use of technology to enhance customers satisfaction, environmental, safety, health and security performance.
- Prevent pollution and control operational and security risks in order to protect the environment, the safety and health of our employees, contractors, visitors, neighbors and the community.
- Steward our products and services through each life cycle stages in order to protect people and the environment.
- Implement Occupational Health & Safety, Environmental, Quality and Responsible Care Integrated Management Systems as a prime line responsibility at all levels of our organization and continually improve their performance and effectiveness.
- Involve and consult our employees on matters related to our Integrated Management Systems.
- Comply with all relevant Qatari legislations, regulations and standards adopted by the Company.
- Communicate this policy and systems performance measures to our employees, contractors and other stakeholders including public and make it available to them and other interested parties.
- Monitor, study, assess for significance and record the environmental impacts of our operations for possible reductions.
- Encourage re-use and recycling and manage our solid waste to reduce environmental impacts.
- Conduct regular reviews of relevant occupational health, safety, security, environmental, quality and responsible care activities for compliance with the adopted Standards.
- Open information, communication and sharing of experience with all parties affected by or interested in our activities on safe use, transportation and disposition of our products and to recognize, respect and respond to our community concerns about our products and operations.
- Work with government, agencies and associations at all levels in the development of effective and efficient health, safety, security, environmental laws and in industry standards and supporting research.

## OUR APPROACH TO SUSTAINABILITY REPORTING



*This report showcases our commitment towards the sustainable growth of our employees, economy, society and the environment.*

We are proud to present this third annual sustainability report for the year 2013 highlighting our commitment to communicate our sustainability performance to all of our stakeholders. This report provides an overview of our efforts towards preserving the environment; contributing to the sustainable development of our economy and society; and our commitment towards our employees.

"Developing sustainably" is the adoptive theme for this year's report as it reflects our focus on inclusive growth by fostering ethics and transparency, investing in our employees' welfare, reducing our environmental impacts and conducting a community minded approach to business.

We strongly believe that our growing business demands a holistic approach, transcending the immediate requirements of production results, regulatory compliance and financial interests. In consideration to the interests of our stakeholders, this sustainability report reflects our efforts to manage the impact of our activities on the environment, the community and the economy where we operate.

Qatar National Vision (QNV) 2030 reflects the aspirations, objectives and culture of our Qatari people resting on four pillars: Human Development, Social Development, Economic Development, Environmental Development. At QAFCO, our mission is aligned to the QNV 2030's pillars which serve as a framework within which our sustainability report is developed. The report is divided into 5 sections:

Business transparency and integrity; Responsibility on Qatar's growth, Employees' well-being; Environmental liability; and Community engagement.

QAFCO also follows reporting standards consistent with the best international practices, with the goal of making sustainable development in QAFCO comparable to local and internationally recognized peer companies. QAFCO's report is developed in line with the Global Reporting Initiative (GRI) third generation (G3.1) Guideline, a globally recognized framework for reporting on an organization's economic, social, and environmental performance.

For two consecutive years, the GRI has rated the QAFCO 2013 Sustainability Report as Level A+ which is the highest achievable level from the GRI requiring entire management disclosure on sustainability performance standards and assurance by an external third party. This achievement demonstrates our ambition to be recognized as one of the local leaders in sustainability reporting.

QAFCO has also been a member of the United Nation Global Compact (UNGC) since 2010. This report highlights our efforts and progress towards embracing UNGC principles, a set of core values in the areas of human rights, labor standards, the environment and anti-corruption.

All data and information in the report refers to the calendar year starting 1<sup>st</sup> January 2013 until 31<sup>st</sup> December 2013 unless otherwise indicated.

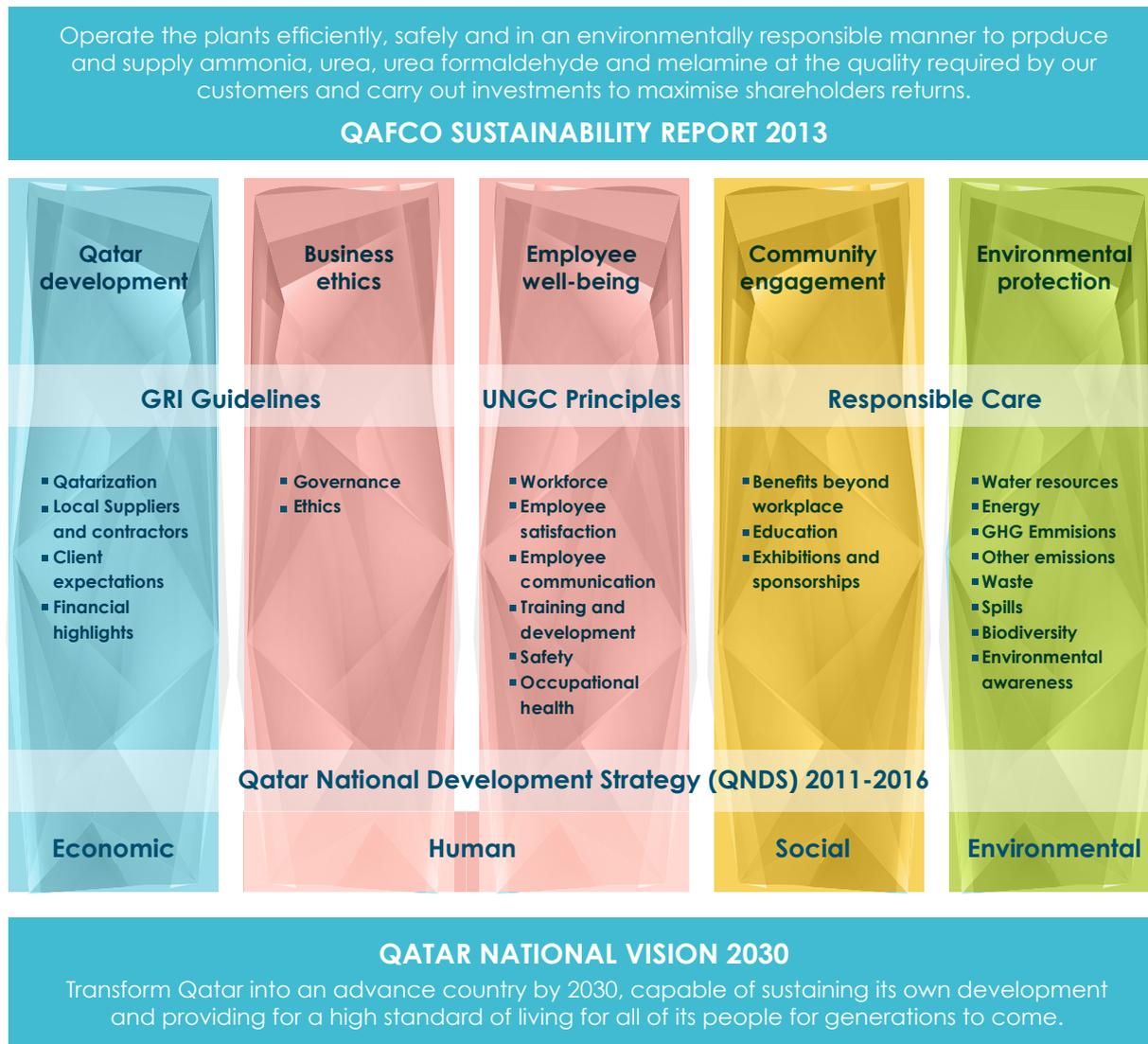


Figure 1: QAFCO approach to sustainability reporting

The scope of this report focuses on all facets of the parent company Qatar Fertiliser Company Q.S.C.C. and does not include our subsidiaries. However, our processes are fully integrated within our subsidiaries, which makes it challenging to disaggregate data without comprising accuracy. In 2013, we reported data on energy, water and emission, including the whole QAFCO group, rather than adjusting for equity share of each subsidiary. In 2014, we seek to create an approach to report standalone data.

In line with the GRI principles, we strive to ensure data completeness and accuracy through a meaningful data capture and aggregation approach based on QAFCO's management systems. In 2013, we established a Sustainability Reporting Committee that oversees the data collection and reporting processes, verifying and ensuring that most material issues are included in the report and performance data are presented in an accurate manner.

The information in the report is largely sourced from QAFCO's management systems and addresses specific requirements unique to the company's particular needs (enhance customer satisfaction, reduce our impacts on the environment, comply with regulation, prevent personal injuries and ill health at work, damage to plant and equipment and loss of production, etc.). Our top management ensures that both the operation and management of systems are effective through internal monitoring and verification of key performance indicators (KPIs).

For further reference, the GRI index at the end of the report provides the list of GRI indicators covered and aligned to UNGC principles, explaining the reasons for any omission of information.

Complimentary to the time and resources we have invested to ensure data quality, we have also enacted measures to identify and prioritize the issues relevant to our stakeholders' interests through "materiality analysis" as described on page 14.

Furthermore, the report has been assured upon by an independent third party to provide confidence to our stakeholders. We have adopted a robust approach to ensure the accuracy of the data and information contained in the report.

At QAFCO, we consider sustainability reporting a journey, and in the following year, we plan to improve our reporting process through the development of a sustainability reporting road map. We also encourage our stakeholders to provide feedback showing our commitment towards an excellence in reporting process for the years to come.



## INTEGRATING SUSTAINABILITY *Into Our Business*

While issues related to sustainability have for years been central to the way in which QAFCO conducts its business, our formal journey to integrated sustainability began in 2011 when we published our first dedicated sustainability report. This journey continues to unfold each year as we evolve and refine the process to distil the business' most material issues and integrate them into our 5-year action plan for sustainability reporting. We have already identified key sustainability areas to enhance our disclosures in the coming reporting period:

- Full life cycle impacts (including upstream and downstream impacts)
- Environmental impacts in intensity ratios (per quantity produced)
- Impacts through the value chain
- Non-discrimination
- Human rights responsibilities
- Product reliability
- Social investment
- Segregated data of the mother company and subsidiaries
- Switch to GRI 4, which allows more focus on material issues

Although much has been achieved, we recognize the need for stronger integration with the Qatar National Vision 2030 and the Energy & Industry Sector sustainable development framework. In 2014 we continue our journey in improving our 5-year plan by setting an overall sustainability direction for where QAFCO wishes to go in its sustainable development work in short-, medium- and long term. We will determine specific priority areas and establish goals and objectives to overcome and mitigate sustainability challenges and risks, such as energy efficiency, GHG emissions, water scarcity, over consumption, waste generation or human rights.

To ensure the effectiveness of our plan, we will monitor progress towards our sustainability vision through a set of SD indicators and targets (mostly quantitatively) and review them in regular intervals (mostly qualitatively). We have started integrating our processes of sustainability reporting (stakeholder engagement, stakeholder mapping, materiality assessment, performance indicators) in existing ISO certified management systems to ensure that sustainability progress is being tracked in one centralized system that can be used for periodic reporting.

Additionally, a careful management and coordination will be required to ensure effective progress is made. Thus, QAFCO is planning to strength our current 'Sustainability Reporting Committee' by creating a 'Sustainability Committee' chaired by the CEO and with a broad balance of representation from top management. This new committee will assess progress towards established sustainability goals and targets and looks for ways to improve performance in areas that impact all stakeholders. This Committee will be also responsible for preparation of QAFCO's Sustainability Report.

Continuous stakeholder engagement and dialogue mechanisms play a critical role in strengthening any sustainability plan. By 2014, we will clearly establish a formal approach to define, identify and prioritize our stakeholders. Accordingly, we will be able to enhance our disclosures by reporting on: process by which stakeholders are identified; why and how we engage with them (case studies, examples on how this dialogue impacted on QAFCO's processes, etc). The results of dialogue will also serve to shape both sustainability policy and procedures within QAFCO.

## OUR Stakeholder Engagement

Stakeholder engagement is a critical process that helps QAFCO understand its key environmental and social impacts, identify sustainability risks and develop innovative solutions to sustainability challenges.

As part of our reporting process we engage with our stakeholders in a constructive dialogue through formal and informal means of communication. This enables us to learn their priorities and concerns in order to align our management plans and actions.

We leverage on the experience and knowledge of our departments heads to capture our stakeholders feedback. As part of our commitment to our stakeholders, we aim to improve our engagement processes by adopting a more structured and systematic approach.

Key stakeholders	Stakeholders concerns	Communication channel
Qatar Petroleum (QP)	<ul style="list-style-type: none"> <li>Economic contribution (revenues, production)</li> <li>Climate change and energy (energy, GHG emissions, flaring / venting, natural gas used)</li> <li>Environment (water, SOx, NOx, spills, waste)</li> <li>Health and Safety (injuries, illness, incidents, LOC, heat stress)</li> <li>Workforce (female employment, employee satisfaction, training and development, Qatarization)</li> <li>Society (community investment, human rights)</li> </ul>	<ul style="list-style-type: none"> <li>QAFCO and QP's long-term agreement (QP supplying NG feedstock since 18 June 1994)</li> <li>Performance information requests</li> <li>SDIR Programme (Annual SDIR template annual; Annual sustainability report; 5-year plan for sustainability strategy, forums/workshops, awards)</li> </ul>
Muntajat	<ul style="list-style-type: none"> <li>Product quality and responsibility</li> <li>Product information/labeling</li> <li>Quality and cost of services</li> <li>Customer satisfaction</li> <li>Response to complaints</li> <li>Safety information</li> </ul>	<ul style="list-style-type: none"> <li>Audit reports</li> <li>Customer feedback</li> <li>Material safety data sheets (MSDS)</li> <li>Compliance with safety and quality requirements</li> <li>Efficient production</li> </ul>
Shareholders and investors	<ul style="list-style-type: none"> <li>Maximization of shareholder value</li> <li>Transparency, compliance with good ethical principles</li> <li>Good corporate governance</li> <li>Good risk management</li> <li>Dividends and Return on Investment (ROI)</li> </ul>	<ul style="list-style-type: none"> <li>Regular board meetings</li> <li>Annual general meetings</li> <li>Annual financial statements</li> <li>Annual sustainability report</li> <li>Investor communication materials</li> <li>Investor website</li> <li>Code of ethics</li> </ul>
Suppliers and contractors	<ul style="list-style-type: none"> <li>Clear and transparent procurement criteria (price, health &amp; safety, environment, human rights, etc.)</li> <li>Long-term partnerships</li> <li>Stability of operations and reliability</li> </ul>	<ul style="list-style-type: none"> <li>Invoices</li> <li>Evaluation process</li> <li>Material safety data sheets (MSDS)</li> <li>Suppliers meeting and events</li> <li>Participation in cooperative bodies in the sector industry</li> <li>Products safety and quality information</li> </ul>
Analysts and media	<ul style="list-style-type: none"> <li>Comprehensive and up-to-date information</li> <li>Good availability and accessibility</li> </ul>	<ul style="list-style-type: none"> <li>Press releases</li> <li>Meetings and interviews with CEO</li> <li>Information events</li> <li>Public communications</li> </ul>

continued in the next page

Key stakeholders	Stakeholders concerns	Communication channel
Employees	<ul style="list-style-type: none"> <li>• Qatarization and local hiring</li> <li>• Employee benefits</li> <li>• Labor practices grievance mechanisms</li> <li>• Decent labor practices (equal opportunities)</li> <li>• Career mobility and training and development)</li> <li>• Response to issues, future plans, current positioning and available prospects</li> </ul>	<ul style="list-style-type: none"> <li>• Accommodation, transport allowances, compensation</li> <li>• Mesaieed School</li> <li>• Management systems, website, memos, emails</li> <li>• Whistle blowing policy</li> <li>• Training and development programmes</li> <li>• Employee Performance Appraisal System (EPAS)</li> <li>• QAFCO day</li> </ul>
Government and regulatory authorities	<ul style="list-style-type: none"> <li>• Economic growth</li> <li>• Social well-being</li> <li>• Natural resources conservation</li> <li>• Lobbying issues</li> <li>• Compliance to laws and regulations</li> <li>• Qatarization</li> </ul>	<ul style="list-style-type: none"> <li>• Alignment to Qatar National Vision 2030 and Qatar National Development Strategy (2011-16)</li> <li>• Press notes</li> <li>• Audit reports</li> <li>• Participation in conferences / forums / roundtables / meetings</li> <li>• Al-Besheriya Island conservation</li> </ul>
Sector peers	<ul style="list-style-type: none"> <li>• Fair trade and competition practices</li> <li>• Long-term partnerships</li> <li>• Best available technologies</li> <li>• Reporting standards</li> <li>• Product responsibility</li> <li>• Innovation</li> </ul>	<ul style="list-style-type: none"> <li>• WEBS portal</li> <li>• Benchmarking studies</li> <li>• Conferences/forums/ industry meetings</li> <li>• Associations: International Plant Nutrition Institute (IPNI) ; United Nations Global Compact (UNGC); Responsible Care (RC); IFA Product Stewardship; AFA Arab; Gulf Petrochemical and Chemical Association (GPCA)</li> </ul>
Local community	<ul style="list-style-type: none"> <li>• Impact of products and operations on the community</li> <li>• Local community engagement</li> <li>• Education</li> <li>• Resource conservation</li> </ul>	<ul style="list-style-type: none"> <li>• Sponsorships (exhibitions, conferences, etc)</li> <li>• Donations</li> <li>• Community investment (Sahara project, sea water heat exchanger project, fish hatchery project)</li> <li>• Environmental awareness at QAFCO school</li> </ul>

Table 1: Stakeholder engagement

## DEFINING CONTENTS *On the Report*

To develop a focused sustainability report we conducted a robust materiality analysis and identified the most important and strategic sustainability aspects relevant to QAFCO - from a stakeholder perspective and QAFCO's position. It was based on:

- Collecting feedback for our key internal stakeholder through questionnaires
- Analyzing industry trends
- Conducting benchmarking analysis

Materiality analysis determined the most relevant sustainability issues for QAFCO and its stakeholders. Levels of significance attributed internally were measured by means of a questionnaire distributed to representative of QAFCO's staff, considered as key internal stakeholders, asking them to rank relevant sustainability aspects based on its impact/importance for QAFCO (1- lowest; 5 - highest). External materiality, meanwhile, was measured by reviewing and analyzing sustainability issues and materiality matrix reported by local and international peer companies.

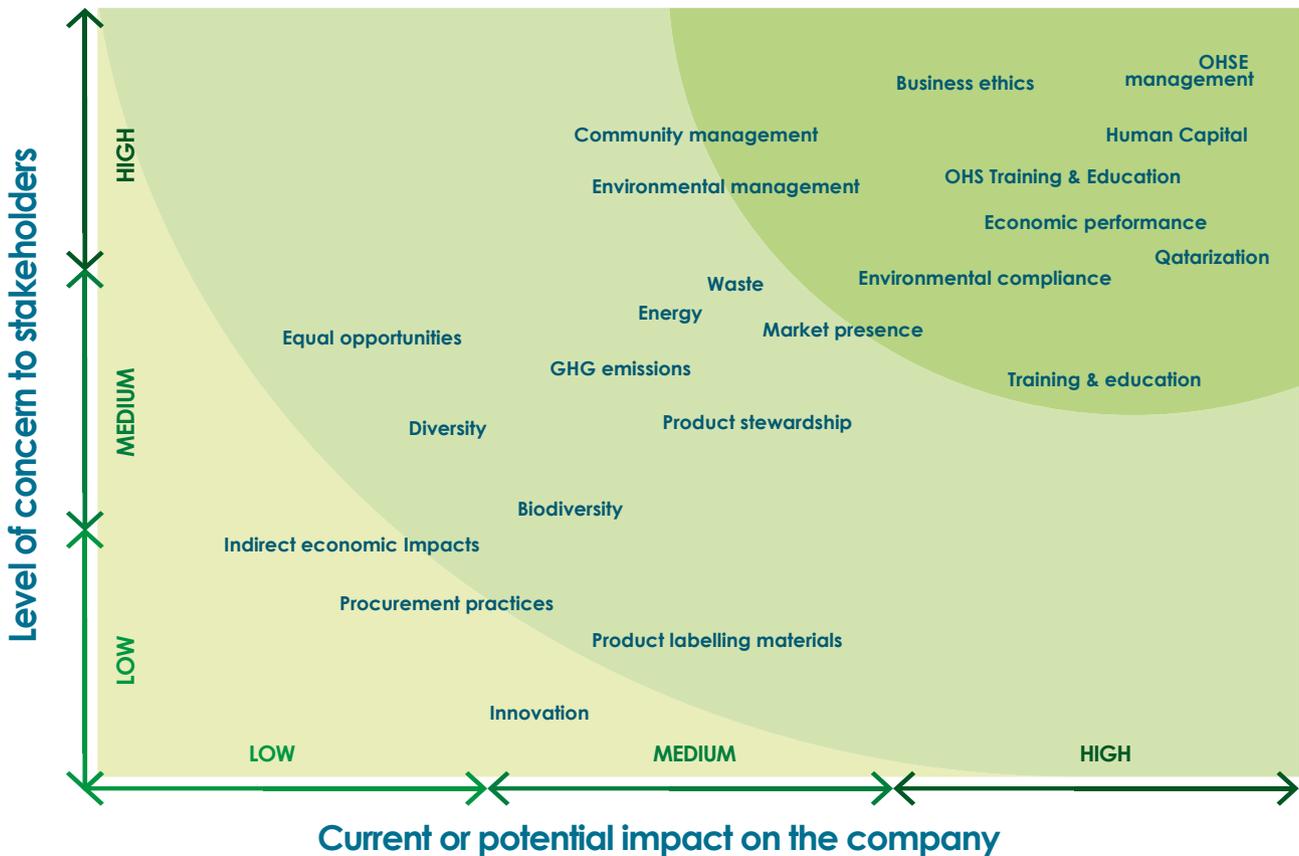


Figure 2: Materiality Matrix

We plotted each issue in the materiality matrix and developed our report content based on the issues of highest importance to our stakeholders and the greatest impact on our business (top right corner in the matrix). Based on the analysis of the most material issues, QAFCO fully reported on 48 GRI core indicators for the 2013 sustainability report. An additional 22 KPIs were also reported against, surpassing the minimum number of indicators required for level-A report.

We understand that robust materiality analysis is essential to strategic sustainability planning and transparent reporting. QAFCO is committed to improve our approach to materiality assessment for subsequent reporting years through workshops with internal stakeholder and key external stakeholders such as customers, contractors, suppliers and community, as a platform to discuss their expectations and needs.

## ABOUT OUR COMPANY

*Qatar Fertiliser Company (S.A.Q) is a world-class ammonia and urea producer.*

Created in 1969 as a joint venture company between the State of Qatar, Norsk Hydro Norway, Davy Power Gas, and Hambros Bank to produce chemical fertilizer, QAFCO is the country's first large-scale venture in the petrochemical sector. Its inception was a significant first step in Qatar's industrial diversification program to utilize its natural gas resources. It is now owned by Yara Netherlands owing 25% shareholding and Industries Qatar (IQ) 75% shareholding, a joint stock company and the majority of its shares are owned by QP, which becomes the major shareholder in QAFCO.

Our complex is located in Mesaieed Industrial City (MIC), 40 km south of Doha, on the east coast of Qatar peninsula. MIC is currently the hub for petrochemicals, chemical fertilizers, oil refining, metallurgical and primary building materials industries in Qatar, hosting numerous small and medium-sized industries as well as a well-planned, self-contained, sustainable, modern township with fully-serviced infrastructure providing a high quality of life for its residents, mainly MIC's employees and families.

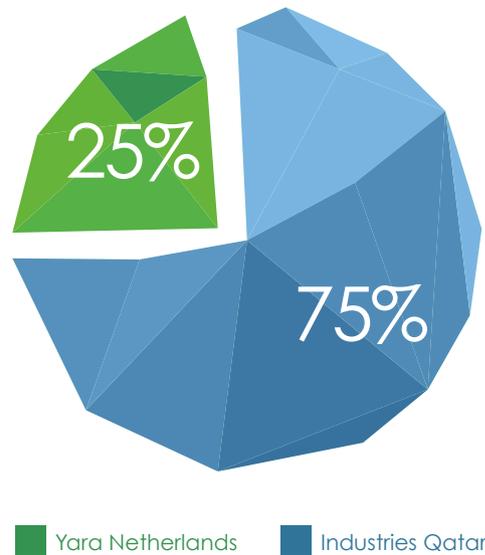


Chart 1: QAFCO Ownership Structure

**QAFCO's steady growth and success has put Qatar among the leading exporters of ammonia and urea in the world.**

QAFCO inaugurated its very first plant and production units in 1973 with a daily design capacity of 900 tonnes of ammonia and 1000 tonnes of urea. Posteriori, QAFCO's complex expanded its operations with three more trains: QAFCO 2 (1979), QAFCO 3 (1997) and QAFCO 4 (2004). Each train consists of two production lines, one for producing urea and the other for ammonia. These milestones brought QAFCO to the height of one of the largest ammonia and urea producers and exporters in the world. Completion of QAFCO 4 made QAFCO the single largest producer of urea with an annual production capacity of 3 million tonnes in addition to 2 million tonnes of ammonia.

With the scale of mega projects continuing to climb, QAFCO always sought ways to save its costs while maintaining the quality and safety performances. In 2011, for QAFCO-5, we kept control of all commissioning phases and improved the overall project schedule. With the completion of QAFCO 5, our annual production capacity jumped to 3.6 million tonnes and 4.2 million tonnes of urea and ammonia respectively.

With the final part of QAFCO's expansion in 2012 and becoming fully operational in 2013, we have solidified our position in the international market of fertilizers, as one of the world's leading fertilizer companies QAFCO-6, with a total installed capacity of 3.8 million tons of ammonia and 5.6 million tons of urea, is a state-of-the-art plant that has been designed by keeping the proven commitment to minimize the impact on the environment.

QAFCO has been diversifying its products and in 2003 we incorporated Gulf Formaldehyde Company (Q.S.C) which produces Urea Formaldehyde Concentrate (UFC) in collaboration with Qatar Industrial Manufacturing Company and United Development Company, currently having the annual production capacity of 59,172 tonnes of UFC in 2013. In 2006, we collaborated with Qatar Intermediate Industries (Alwaseeta) to establish Qatar Melamine Company (QMC) for melamine production. The state-of-the-art-plant and the largest of its kind in the Middle East, has been completed in 2010 and it annually produces about 60,000 tonnes of melamine.

## OUR *Efficient Management of Resources*

Most of the air we breathe is 78% nitrogen. In this form, it is inert and insoluble, and not accessible to plants. Ammonia is the basic raw material for producing almost all other forms of nitrogen-based fertilizers. In some cases, ammonia is also used directly as a commercial fertilizer.

At QAFCO, ammonia is produced through the Haber-Bosch process by reacting nitrogen from the (N<sub>2</sub>,O<sub>2</sub>) process air with hydrogen (3H<sub>2</sub> + N<sub>2</sub> → 2NH<sub>3</sub>) at high pressure and temperature in the presence of a catalyst. In this process, the hydrogen is produced through 'Steam Reforming' by reacting natural gas, our main raw material, with water at conditions above mentioned. To a lesser extent, natural gas is also used as a process gas (i.e., an energy source) to generate the heat required in the ammonia production process.

When producing the hydrogen, sulfur compounds are removed from the natural gas to avoid deactivation of the catalysts in subsequent steps. Sulfur removal requires catalytic hydrogenation to convert sulfur compounds in the feedstock to gaseous hydrogen sulfide. The gaseous hydrogen sulfide is then adsorbed and removed by passing it through beds of zinc oxide where it is converted to solid zinc sulfide. Catalytic steam reforming of the sulfur-free feedstock is then used to form hydrogen plus carbon monoxide.

Input materials consumption	Unit	2013
Process air (N <sub>2</sub> ,O <sub>2</sub> )	MMSCF	115,137
Steam	MT	7.026 million
Ammonia consumed in Urea plants (U 1-6)	MT	2,996,839.05
Natural gas in Ammonia Plants (A 1-6)	KNm <sup>3</sup>	3,843,822.61
Natural gas in Urea plants (U 1-6)	KNm <sup>3</sup>	14,514.85
Electric power	MW	1,769,566
LTS catalysts	Liters	20,000
Reformer catalyst - K+	Liters	1,800
Reformer catalyst	Liters	10,400
Sec reformer catalyst	Liters	5,000
HT shift catalyst	Liters	40,000

Table 2: Input material consumption ( 2013)



The next step then uses catalytic shift conversion to convert the carbon monoxide to carbon dioxide and hydrogen. The carbon dioxide is then removed either by absorption in aqueous ethanolamine solutions or by adsorption in pressure swing absorbers (PSA) using proprietary solid adsorption media. The final step in producing the hydrogen is to use catalytic methanation to remove any small residual amounts of carbon monoxide or carbon dioxide from the hydrogen.

Urea (N 46.6%) is produced by a reaction of liquid ammonia with carbon dioxide under high pressure, both feedstock being supplied by the ammonia (1-6) plants. The process steps include solution synthesis, where ammonia and carbon dioxide react to form ammonium carbamate, which is dehydrated to form urea; solution concentration by vacuum, crystallization, or evaporation to produce a melt; formation of solids by prilling (pelletizing liquid droplets) or granulating; cooling and screening of solids; coating of the solids; and bagging or bulk loading. The carbon dioxide for urea manufacture is produced as a by-product from the ammonia plant reformer.

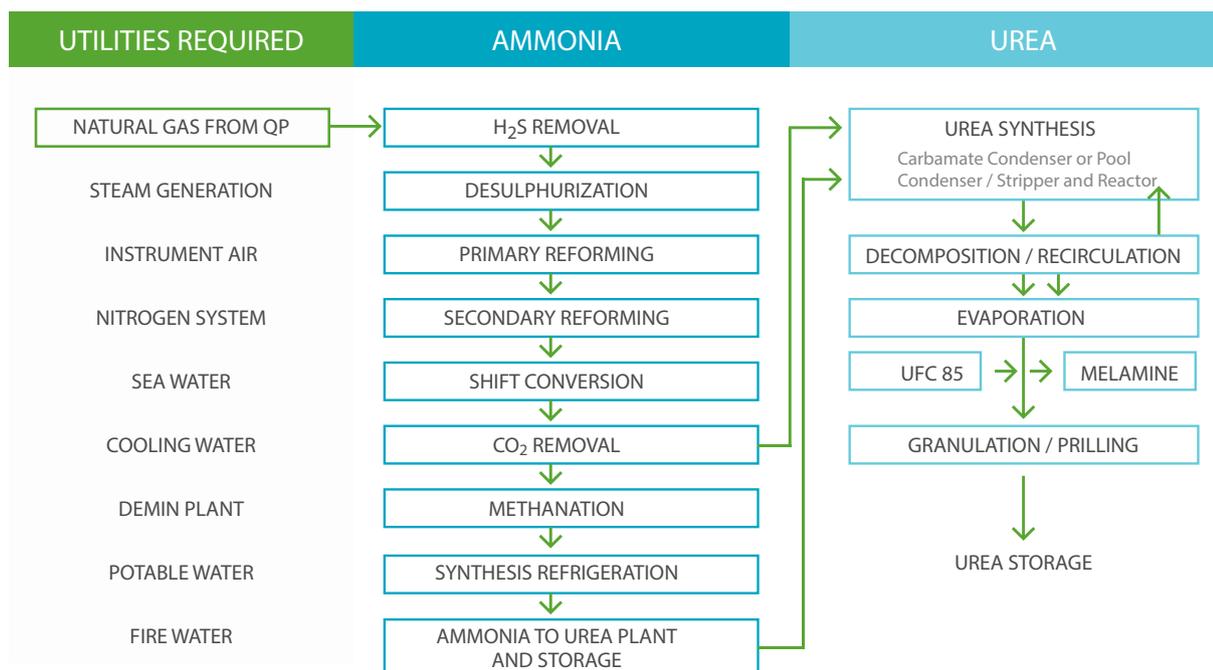


Figure 3: Ammonia-urea production process at QAFCO

The conservation of resources is a fundamental economic principle for us and we continually strive to use our materials efficiently. Our specific consumption of natural gas as feedstock (per tonne of urea) decreased slightly when compared to 2012 primarily due to more efficient technology applied in QAFCO 5 and QAFCO 6 production process.

	2012	2013
Natural gas feedstock consumption for ammonia (KNm <sup>3</sup> )	3,502,675	3,843,822
Ammonia production (MT)	3,210,561	3,641,331
Specific consumption for ammonia production (KNm <sup>3</sup> / MT)	1.09	1.05
Natural gas feedstock consumption for urea (KNm <sup>3</sup> )	44,905	44,089
Urea production (MT)	4,554,766	5,510,995
Specific consumption for urea production (KNm <sup>3</sup> / MT)	0.0098	0.008

Table 3: Specific natural gas consumption per metric tonnes (MT) produced (2012-13)

## PRODUCT ENHANCEMENT: *Meeting Market Requirements*

Our core business of nitrogen fertilizer production is closely linked with agricultural productivity and food production. The role of our products in food production is usually underestimated. Fertilizers are the nutrients for healthy growth of plants.

Nitrogen, phosphorus and potassium or NPK are the three major nutrients required for a wide range of growth processes. Micronutrients — for example, manganese (Mn), iron (Fe) and copper (Cu) — are also essential for performing a number of important functions in plant nutrition.

Mineral fertilizers are used to supplement the soil's nutrient stocks with minerals that crops remove from the soil and can be quickly absorbed and used by crops. Without the addition of fertilizers, crop yields would be significantly reduced.

Since its inception 40 years ago, QAFCO has seen a shift in buying patterns of the customers with incrementally rising demand for granular fertilizer that is deemed more suitable for modern agricultural techniques. Therefore, while our oldest plant still produces prilled urea, the newest ones are designed to meet this requirement and accordingly, we have increased our output of granular products. In addition, QAFCO is planning to produce sulfur-coated urea (SCU), a product that increases nutrient recovery, improves crop yields and reduces the negative effects on the environment.

### **Case study: securing food in Qatar**

The cultivation of food crops is a difficult proposition for Qatar due to scarcity of water supply and limited availability of arable land. The country is vulnerable to fluctuations in international commodity markets because of heavy dependence on imported grains and food items, leading to a growing sense of food insecurity in Qatar.

In response, QAFCO has begun to address the situation by aiming to efficiently utilize "cutting-edge technology" to establish a sustainable approach to food security for dry land countries. Our Sahara Project is one such effort that would allow sustainable production of food, while re-vegetating and storing carbon in arid areas.

Sahara Project, in 2011, entered into cooperation with Yara ASA and QAFCO to build a pilot facility. Successful crop cycles were witnessed in 2013, and the vegetation and grain crops grown outdoors were successfully harvested throughout the year. The external evaporative hedges functioned designed, providing the necessary cooling effect for the crops and desert plants grown externally. Also, successful growth of test algae presented good tolerance to heat and high evaporation rates, as well as the halophytes that grew well during summer. The success of the pilot study for more than two years has shown potential for implementation of the project on a larger scale.

Source: "Sahara Forest Project in Food Security Program on Qatar TV," Sahara Forest Project, 2012.



Fertilizers plays a critical role in the world's food security and is important from both the yield and food quality perspectives. As reported by the International Plant Nutrition Institute (IPNI), the world demand for food will increase sharply over the coming years as population is expected to increase by almost 40% from the current 6.7 to an expected 9.2 billion by 2050<sup>1</sup>.

Being one of the largest single-sited urea exporter and by investing in innovation, product value addition and energy optimization, QAFCO contributes to address the world's food security challenges.

QAFCO ammonia and urea production capacity is of 3.8 million metric tonnes (MT) and 5.6 million MT per annum respectively. During the reporting year, QAFCO produced 3,641,331 MT of ammonia, the highest volume in its production history. Of the total production this year 3,042,026 MT (84%) was utilized within QAFCO for the production of urea, aqueous ammonia and melamine. In the same year QAFCO produced 5.5 million MT of urea.



Chart 2: Ammonia and urea production trend (2009-13)

Majority of our products are sold in bulk which allows us to reuse the vessels and containers many times. Additionally, QAFCO exported a total of 5.7 million bags of urea, bagged at a bagging plant and then loaded to ship. We recycle polypropylene (PP) and Polyethylene (PE) plastic packaging waste that is generated during bagging the product for export and other plastic waste from different departments across QAFCO. In our contract with Muntajat, we have established requirements to encourage the company to reuse urea-packaging materials whenever possible.

<sup>1</sup><http://www.ipni.net>

## GROWING *Within*

As a result of our production achievements, we are experiencing a rapid growth in our operational units, human resources, financial dimensions and physical assets. Therefore, necessary measures have been taken to stream-line and restructure the organization. Key opportunities derived from these changes include re-evaluation of job categories and creation of career opportunities for our employees.

As part of business restructuring, in 2013 our marketing and activities have been handed over to Muntajat, a company established by the State of Qatar with the right to purchase, market, distribute and sell the chemical and petrochemical products produced in the state of Qatar, including our products, all over the world.

In 2013, QAFCO products were exported through Muntajat to more than 35 nations, its primary market regions being South East Asia, North America, Australia and South Africa.

The restructuring of the organization reflects QAFCO's ambition to be organized in order to efficiently meet the market's needs as well as dedicating further time and resources to its production activities. Though this restructuring is a welcome move, what we would be missing is our direct contact with the customers who have always helped us improve our product quality. We would sincerely hope to keep receiving the customers' feedback through Muntajat and continue our efforts in meeting the dynamic market requirements.

## AWARDS AND *Recognitions*

As part of our commitment to grow sustainably and to ensure quality of products and operations, we have received several certifications from international bodies and institutions for our compliance against international standards.

Management system	First certification date	Current validity date	Current certification body
ISO 9001:2008 – Quality Management System	29 May 1996	14 May 2015	Bureau Veritas, Doha Qatar
ISO 14001:2004 – Environmental Management System	30 Dec 1997	14 May 2015	Bureau Veritas, Doha Qatar
OHSAS 18001:2007 – Occupational Health & Safety Management System	15 Dec 1999	14 May 2015	Bureau Veritas, Doha Qatar
RC 14001:2008 - Responsible Care	19 Apr 2011	18 Apr 2014	Bureau Veritas, USA
IFA Protect & Sustain Product Stewardship Programme – (Excellence Level)	12 May 2011	12 May 2014	Det Norske Veritas (DNV), Belgium
ISO /IEC 17025:2005 – Requirements for the Competence of Testing and Calibration Laboratories	11 Mar 2011	10 Mar 2016	Deutsche Akkreditierungsstelle GmbH German Accreditation Body

Table 4: QAFCO Certifications

In 2013, QAFCO participated for the first time in the Royal Society for the Prevention of Accidents (RoSPA) and won two awards in the same year: Management of Occupational Road Risk (MORR) Gold Award and RoSPA Silver Award for occupational safety and health. These awards recognize our commitment to accident and ill-health prevention and not only looks at accident records, but also health and safety management systems and practices, such as leadership and workforce involvement.

QAFCO was also awarded the IFA Green Leaf Award 2013 for its outstanding implementation of management systems to ensure Health, Safety and Environment controls across the product life cycle at its ammonia and urea production facilities.

In 2013, QAFCO was the runner-up among organizations with more than 500 employees under the SDIR Programme Awards. The awards were developed by QP's HSE Regulations and Enforcement Directorate over the past three years to recognize high-quality sustainability reporting and performance.



The organizational structure determines the hierarchy within QAFCO.

Segment management is located in Mesaieed, Qatar.

# QAFCO

## ORGANIZATIONAL STRUCTURE

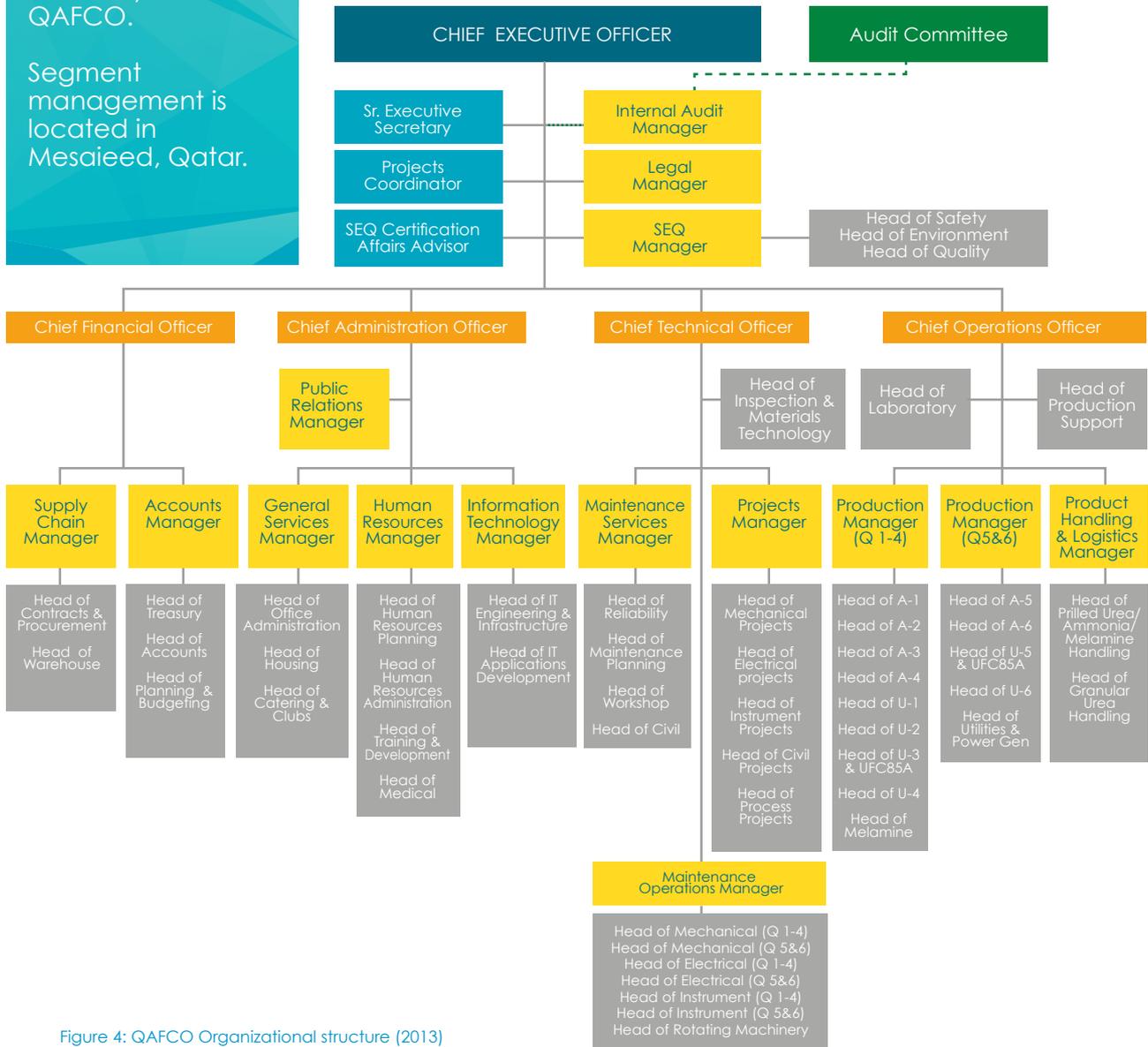


Figure 4: QAFCO Organizational structure (2013)

# DEVELOPING SUSTAINABLY

## Our Business

### *Transparency and Integrity*

*"The National Vision builds on a society that promotes justice, benevolence and equality protects public and personal freedoms"*

Qatar National Vision 2030

*"We are committed to the highest levels of transparency and integrity in the organization and we believe that our corporate governance structure is important in delivering long-term sustainable growth"*

Khalifa Abdulla Al-Sowaidi  
QAFCO Chief Executive Officer

*Let's talk about our governance and ethics...*



At QAFCO, we believe that transparent and sound corporate governance and ethical behavior are essential to aligning the interests of our shareholders, management, employees and other stakeholders. A good corporate governance drives value creation and promotes sustainable business conduct.

In February 2009, the Qatar Financial Markets Authority (QFMA) announced a Corporate Governance Code for public companies in Qatar, developed in line with international practices and guidelines, and in collaboration with the Hawkamah Institute of Corporate Governance. Since then, QAFCO has been upgrading its corporate governance practices to align with the code.

Our Board of Directors is committed to adopting the highest standards of corporate governance as a fundamental part of their responsibilities to manage the business and affairs of the company. We ensure that new issues from our stakeholders are incorporated into our corporate governance structure for improvement.

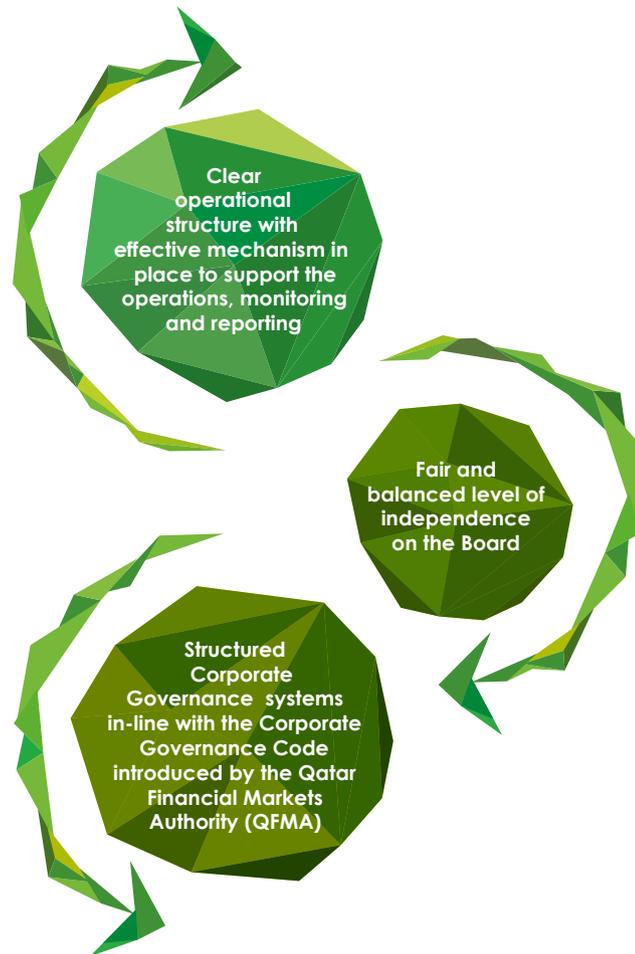


Figure 5: Corporate governance highlights

## OUR *Governance Framework*

All shareholders are entitled to submit items to the annual meeting's agenda, to meet, speak and vote. In accordance with the Articles of Association and Qatar Law, shareholders or their authorized representatives must be present in order to vote. In addition, votes can be cast only for shares registered in the owner's name.

The meeting is normally held in February every year. Notice of the meeting is sent to all shareholders individually, at least one month in advance of the meeting. The annual meeting of the shareholders approves the annual accounts, the board report and any proposed dividend payment. In accordance with the Articles of Association and Qatar legislation, shareholders consider and vote on the appointment of the external auditor based on the Board's proposal and approve the remuneration to be paid to the external auditor.

Normally, the Board, the Chairman and the external auditor are present at the annual general meeting. The Chairman leads the meeting.

Our Board of Directors is the highest governing body in QAFCO and has specific responsibilities that facilitate best interests of the company. Seven of our eight board members are independent, non-executive members, along with the chairman who does not participate in company operations. Our Board Members provide a good mix of industry-specific knowledge, broad business sense and commercial experience. This balance enables the Board to provide clear and effective leadership to the company and bring information and independent judgment to many aspects of our strategy and performance to deliver the following responsibilities:

Board Member Name	Date of Appointment
H.E. Abdulaziz Bin Ahmed Al-Malki	Appointed as director on 20 May 2007 and as Chairman on 6 March 2011
Khalifa Abdullah Al-Sowaidi	As a director on 27 December 1997 and as Vice Chairman on 6 March 2011
Hamad Rashid Al-Nuaimi	6 March 2011
Jorgen Ole Haslestad	1 May 2009
Nasser J. Al-Kuwari	6 June 2010
Meshaal M. Al-Mahmoud	12 March 2008
Saeed Mubarak Al-Kuwari	6 March 2011
Jan Duerloo	15 January 2013

Table 5: QAFCO Board members

- Provide strategic oversight for operations and monitoring its execution;
- Board leadership and composition;
- Monitor the conduct of business to evaluate whether the business is being properly managed and sustained;
- Identify risks and threats, ensuring the implementation of appropriate systems to mitigate the risks; and
- Review the adequacy and integrity of our internal control systems including mechanisms for compliance with applicable laws, regulations, rules, directives and guidelines.

Each director has fiduciary duties and must at all times act in good faith and with proper care and diligence in the best interests of the company. Our shareholders nominate their representatives on the QAFCO Board of Directors which provides them with a mechanism to present their recommendations or direction to the governance body (i.e. QAFCO Board).

The Board hold at least four meetings each year at the Company Office. In addition to the formal meetings of the Board, the Chairman and Chief Executive Officer maintain frequent contact with the other Directors to discuss any issues of concern they may have relating to the operation of the Company. The Board meetings are governed by a structured formal agenda and schedule of matters arising for approval or documentation with sufficient time given for consideration.

Board committees are established to assist the Board of Directors in performing its duties. Currently, the company has the following seven committees:

Committee	Duties and Responsibilities
Internal audit committee	Oversees areas such as the company's financial statements, compliance with legal and regulatory requirements, internal control framework and the management of internal and external auditor's activities.
Project steering committee	Oversees expansion projects, i.e. Urea 1 Revamp, Melamine Project and QAFCO 5 and 6 Projects.
General tender committee	Oversees the tendering and contract award process for all Purchase Orders and Contracts above QAR 10 million and below QAR 50 million.
Limited tender committee	Oversees the tendering and contract award process for all Purchase Orders and Contracts above QAR 500,000 and below QAR 10 million.
Small tender committee	Oversees the tendering and contract award process for all Purchase Orders and Contracts above QAR 100,000 and below QAR 500,000.
Project approval committee	Oversees the approval of internal projects for capacity enhancement, safety, environment, minor plant modifications etc.
Safety and environment committee	Established under the Chairmanship of the CEO to discuss, promote and consider policy matters in occupational health & safety and environmental issues of significant importance to the company.

Table 6: QAFCO Committees



#### QAFCO Sustainability Reporting Committee

In line with the company's goal to strengthen and improve its governance structure, QAFCO established a sustainability reporting committee in 2013, with seven members representing different departments, which have supported the development of the 2013 sustainability report. Additionally, the committee members will support the sustainability efforts within QAFCO by:

- Draft a sustainability reporting road map and facilitating its implementation;
- Identifying key functional sustainability improvement areas that are in need to be implemented; and
- Increase sustainability awareness within QAFCO.

No compensation is paid to the QAFCO Board Members other than the annual remuneration determined by Special Resolution of the Shareholders but it is not directly linked to company performance. The compensation of senior managers and executives is directly linked to the annual performance of the company.

QAFCO places great importance on maintaining a sound control environment. Accordingly, the Board ensures that adequate review is performed on all controls, including financial, operational, compliance and risk management.

The Board is ultimately responsible for the establishment, maintenance and review of the company's internal control framework in order to obtain reasonable assurance that the company's operations are effective and efficient, that there are adequate controls over financial reporting and that compliance with relevant laws and regulations are being observed.

The principal objective of QAFCO's risk management governance structure is to manage business risks, with a view to enhancing the value of shareholders' investments and safeguarding assets. Accordingly, QAFCO has consistently and continually monitored risks and processes across the company to identify, assess, measure, manage and report on opportunities and threats that could impact the achievement of our objectives.

The Board is principally responsible for establishing risk tolerance, establishing and approving related risk strategies and policies, and for the oversight over risk and compliance management framework of QAFCO. We have complied with applicable rules and the applicable market listing and disclosure requirements and no penalties or structures were imposed on QAFCO during the last financial year.

## OUR *Ethics*

QAFCO is committed to adhering to the highest standards of ethics and legal conduct for its operations and subsidiaries with the full support of all its stakeholders. This objective provides an avenue of raising concerns related to fraud, corruption or misconduct and we assure all our staff and stakeholders that anyone disclosing such information will receive full support and protection from the company.

Our whistle-blowing and complaint procedure has been developed to ensure that any allegations and concerns expressed anonymously will be reviewed at the discretion of the head of internal audit in discussion with the audit committee and the managing director. While doing this assessment, the factors to be considered include seriousness of the allegation, credibility, and extent to which the allegation can be confirmed or corroborated through evidences.

All QAFCO employees are instructed to disclose any act related to fraud, corruption or misconduct that comes to their attention. Receipt of any allegation will be registered and if the identity of the staff is known, an acknowledgment receipt will be provided. Within three months, the staff should expect an official correspondence to a preliminary evaluation on the subject matter. The type of disclosures required of QAFCO staff and concerned third parties include the following:

- Unlawful acts requiring the violation of a law, gross waste of Company resources, mismanagement, abuse of authorities and specific health or safety issues related to our operations;
- Fraud, which basically means any act or mission, including misrepresentation that knowingly misleads, or attempts to mislead a party to obtain financial or other benefits or to avoid an obligation;
- Any activity that deliberately attempts to undermine the organizations operations and aims; and
- Corruption, which means any attempt to offer, give, receive or solicit, directly or indirectly anything of value with the intent of influencing the actions of another party.

QAFCO committed to the principles of the UN Global Compact in 2011. The UN Global Compact is a strategic policy initiative for businesses that are committed to aligning their operations and strategies with 10 universally accepted principles in the areas of human rights, labor, environment and anti-corruption. Below is a summary of our reporting against the UN Global Compact principles within the content of this 2013 Sustainability Report.

### **Code of conduct**

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In order to ensure QAFCO employees represent the high ethical standards that center our company, we have produced a Code of Conduct document that we expect all to abide by. The document not only details clear ethical and compliance standards applicable to those in current positions, but it also provides guidance for post-employment. The Code of Conduct is used as a measure to reduce the likelihood of unethical practices, sustain the high reputation that our company enjoys and provide for fair and objective resolutions to unethical actions, should they arise.

### **Human rights**

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QAFCO not only complies with standards and laws imposed by our Government and shareholders, but also ensures that a minimum wage is provided to all contractor' employees. In our bid assessment processes, we look into the right treatment contractors meet out to their employees. All contractors have to meet a minimum set of criteria specified in QAFCO's terms and conditions, which includes safety and security conditions for employees, hygiene practices accommodation, provision of personal protective equipment, technical and HSE training and the possession of various certifications prerequisite to specific services and industry practices.

## Labor standards

We abide by and obey the Qatar Labor Law, which prevents us from child labor practices in our workforce, contractors and suppliers. Additionally, our workforce, contractors and suppliers are aware of QAFCO's Code of Conduct & Ethics, which is aligned to Qatar Labor Law. Further information is available in our employee section.

## Environment

We acknowledge the impact of our operations on the environment and we take actions to reduce our impact. The section "Our environment" on page 48-59 provides an overview of our environmental performance and activities to manage our natural resources.

## Anti-corruption

The QAFCO Board of Directors, senior management and all employees in our organization aim to create a positive and transparent environment and organizational culture committed to the prevention, detection and avoidance of fraud and to undertake prompt action to eradicate fraud in the event it does occur.

QAFCO aims to adopt some common methods of fraud detection, such as tips and whistle-blowers, internal audit, discovery of fraud by accident, internal control reviews and enhancement, external audit and alertness/notification by the regulators.

No organization is exempted from fraud. However, we can take steps to determine fraud occurrence and mitigate losses due to fraud.

Our organization aims to adopt three focal approaches to minimize the commission and likelihood of fraudulent acts, as well as to mitigate the magnitude of loss associated with fraud. Initiatives that QAFCO aims to put in place to prevent fraud include:

- Formalizing our fraud policies and fraud management and awareness framework;
- Putting in place strong internal controls for our expanding business activities;
- Willingness to prosecute and enforce disciplinary measures/procedures;
- Constant awareness and ethics training for our employees;
- Discreet or anonymous fraud reporting escalation mechanisms, i.e., whistle-blowing structure; and
- Providing induction program with specific sections.



# DEVELOPING SUSTAINABLY

## Our Responsibility On Qatar's Growth

*“Training and support for entrepreneurs is a basic precondition for enabling the private sector to carry out its required role, besides providing financial and non financial support mechanisms that will help incubate and grow small and medium-scale enterprises”*

Qatar National Vision 2030

*“By supporting SME development and by being financial sustainable, we support Qatar economic development, reputation and the achievement of the Qatar Vision 2030”*

Cees Van Amelsfoort  
QAFCO Chief Financial Officer

*Let's talk about: financials, suppliers & contractors, customer expectations*



Qatar continues to secure improvements in standards of living of the society through a sound management of its hydrocarbon resources. Qatar has become the most competitive economy in the Middle East. The World Economic Forum's Global Competitiveness Report for 2011-2012, which ranks the world's fastest growing economies, placed Qatar 14<sup>th</sup>, overtaking other countries in the region including United Arab Emirates (UAE), Bahrain and Kuwait<sup>2</sup>.

Similarly, since 2010, QAFCO's rapid growth has not only improved the company's fortunes in QAR 4,314 million (revenues), 64% increment, but has also positively impacted our national economy growth (213 million QAR income tax payable and approximately QAR 7 million in community investment in 2013)

An improved standard of living is not the only objective at QAFCO. We also need to remain true to our mission, vision and values and balance challenges such as the size and quality of our supply chain. Qatar, and thus QAFCO, faces challenges in delivering the volume of goods & services forecast. Local supply chain capacity will need augmenting and barriers to entering the market will have to be overcome, to attract contractors, consultants and resources of sufficient scale and calibre to meet our growing demand.

Customer satisfaction – satisfaction with products, services and performance – is a cornerstone of QAFCO's corporate strategy, laying the foundation for long-term, sustainable success. In line with the requirements of REGULATION (EC) No 1907/2006 of The European Parliament and of the Council, of 18 December 2006, concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH), QAFCO is committed to providing our customers with the necessary / required information on any substance on the current candidate list which is or may be present in our products at a concentration above 0.1% weight-by-weight.

## FINANCIAL Highlights

The price of fertilizer is a key metric that influences our company's revenues. As farmers must reapply ammonia and urea products year-over-year to help plants grow, the price of fertilizer remains inelastic. This makes price a significant factor that affects income and share prices. Significant changes in urea prices are largely driven by changes in supply. Since urea trades globally, prices depend on worldwide factors such as marginal production cost and production capacity.

The large decline in ammonia and urea prices we have seen since April 2013 can be attributed to lower production costs at carbon-intensive manufacturing economies. Since 2011, coal based manufacturers have benefitted from larger increases in coal supply relative to demand which reduces their operation costs. As a result, the shares of natural gas-based fertilizer producers were negatively affected earlier in 2013.

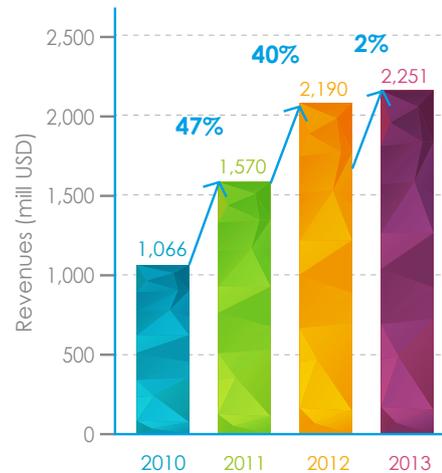


Chart 3: Revenues in QAR (2010-13)

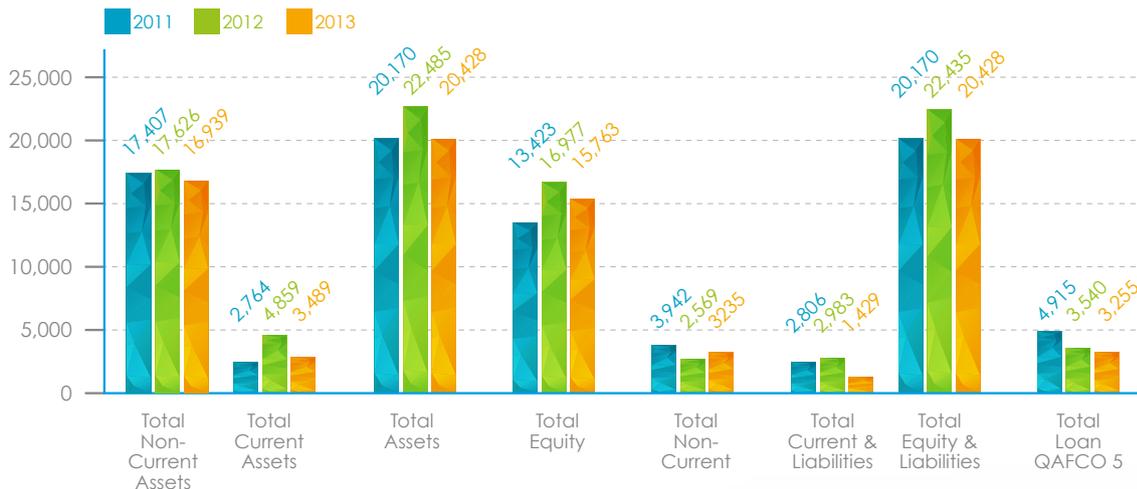


Chart 4: QAFCO Financial highlights in QAR (2011-13)

<sup>2</sup>World Economic Forum's Global Competitiveness Report for 2011-2012

In 2013, QAFCO's revenues were higher mainly due to greater sales volume of urea due to full operation of QAFCO 5 and 6 plants although sales prices of urea and ammonia also went down, in line with international prices. Negative sales price of urea affected a dip in profits compared to the year 2012. However, it was mitigated by higher selling price of ammonia and we achieved a net profit of QAR 3.2billion in the year under review.

In 2013, the Board of Directors has proposed a cash dividend of QAR 300 per share totalling QAR 3billion, which is subject to the approval of the shareholders at the annual general meeting.

## OUR *Suppliers and Contractors*

QAFCO does not limit its responsibility to safety, security and clean work environment within its premises. It has taken stringent measures to check that health, safety, security and environmental concerns are taken into account by the suppliers, transporters, contractors and distributors. Suppliers of chemicals, equipment and spare parts, as well as contractors are selected following procedures for HSSE (health, safety, security and environment) requirements. The HSSE performance of suppliers and contractors is evaluated periodically to ensure the compliance.

We have taken a number of steps to support local suppliers and give preference to source local goods and services in all our contracts, provided certain criteria are met. The local suppliers can register with us through the web portal on our website and we make our tenders openly available to them. Once the materials and services become unavailable locally, we opt for international suppliers.

We have also supported development and empowerment of local small and medium enterprises over the years by initially engaging them for small projects and investing in their development and progressively giving them more responsibilities. A successful example of this is a multi-discipline industrial engineering and construction company, capable of delivering complete solutions to its clients in the oil and gas industries.

In 2013, we locally sourced goods and services worth approximately QAR413m. This constitutes more than half (59.57%) of our total goods and services spending despite a decrease in trend since 2011 to 2013, mainly because of difficulties in obtaining local suppliers due to a lack of capabilities and limited local business expertise.

At QAFCO, while we are confident about the responsible business practices of our direct operations, the business practices of suppliers represent a potential area of risk that needs to be effectively managed. In 2013, we started the necessary steps towards the achievement of Chartered Institute of Purchasing & Supply (CIPS) certification that assesses our procurement and supply operations against globally and internationally respected standards. It will provide us with a pathway to world-class procurement and supply.

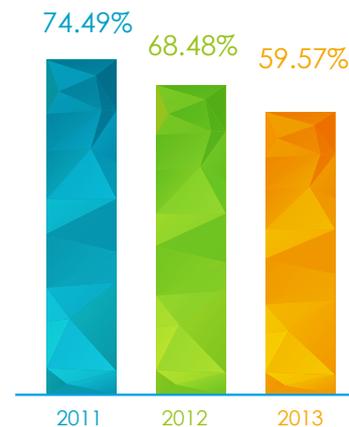


Chart 5: Percentage (%) of goods and service sourced locally (2011-13)

## CUSTOMER *Expectations*

As we aim to become the largest quality producer of urea and ammonia, it is vital to meet and exceed our customers' expectations. We therefore maintain a continuous dialogue with our consumers and the industry through conferences. QAFCO participated in one such conference, the "IFA Communicators" workshop in Paris organized by International Fertilizer Industry Association (IFA) that acts as a platform to regularly conduct interactive sessions on agriculture management and product-related issues.

In 2013, QAFCO was honoured with the IFA Green Leaf Award and was recognized for its outstanding performance in SHE in fertilizer production among the IFA members.

QAFCO's product quality is widely acclaimed within the industry and several agencies have set high rating for our products such as "Level 1 Gold" accreditation by Australian Quarantine & Inspection Service (AQIS).

*In 2011, we achieved management system certifications in Responsible Care (RC) 14001. Responsible Care is a health, safety, security and Environment (HSSE) performance improvement initiative that helps companies in identifying and spreading good management practices, by promoting mutual support among companies and associations through experience sharing.*

To maintain and improve quality of products, QAFCO has implemented a stringent quality management programme facilitated by real time monitoring and measurement of production processes, right from incoming raw materials till distribution of final products, supported by sophisticated laboratory analysis at various stages of production processes. Our laboratory is accredited to ISO 17025 and we keep records of our tests whilst storing product samples to respond to any client's complaints and/or queries after delivery.

As part of its commitment to meet customers' expectations, QAFCO complies with national and international standards. REACH (Registration, Evaluation, Authorization and Restrictions of Chemicals) promulgated by the European Union intends to ensure a high level of protection of human health and the environment from the risks that can be posed by chemicals. REACH also intends to promote alternative test methods, provide free

circulation of substances on the internal market and enhance competitiveness and innovation. QAFCO has fully implemented the REACH regulation requirements and the company is actively engaged in making sure it stays compliant.

REACH influences what companies manufacture, import, market and use in Europe. Besides requirements for testing and registration, REACH requires exchange of relevant chemical and use information between suppliers, customers, producers, importers and authorities. This regulation is an opportunity for manufacturers/importers to properly start managing risk of their chemicals.

#### **License to operate**

QAFCO has incorporated REACH permanently into its operations and implemented relevant processes and IT-systems company-wide. In 2013, QAFCO did not face any significant incident of non-compliance with regulations relating to the labelling of our products.

With the "license to operate," QAFCO will continue to supply its full portfolio of REACH-compliant products, meeting current and future legal requirements and customer expectations.

#### **Material safety data sheets**

Our products information is disclosed through the material safety data sheets (MSDS) that identify the product name and its commonly used synonyms along with the molecular formula. MSDS also provide company contact details, including a dedicated hotline for general or emergency information. Information is supplied and the MSDS containing specific information on handling and storage, identifies product hazards, including:

- **Human health:** how the product affects human health in case the product is harmful if it comes into contact with skin or eyes, if it is ingested or inhaled and any long-term effects that the product might have;
- **Environment:** whether the product has any adverse effect on the environment and animal life; and
- **Other hazards:** whether there are any additional hazards, such as spillage consequences, fire, heating and explosions.

#### **QAFCO representatives for future compliance**

A permanent central function has been established to ensure current and future compliance in Europe and in other parts of the world. Selected focal points can make use of an associated function providing compliance services for QAFCO supplies to Europe.

Through its strong compliance focus and efforts, including programs like REACH, as well as Product Stewardship and HACCP (Hazard Analysis and Critical Control Point), we are committed to product safety. We will continue our contribution to health and protection of the environment by providing compliant products and safe operations.

## DEVELOPING SUSTAINABLY

### Our *Employees Well Being*

*“Attracting and retaining the right mix of skills will require appropriate incentives, as well as institutional arrangements for ensuring the rights and safety of expatriate labor”*

Qatar National Vision 2030

*“Our achievements could not have been reached without our employees. We recognize our responsibility toward guaranteeing a safe and fair working environment where national and non-national employees can enhance their skills and develop their career”*

Hamed Ahmed Al-Marwani  
QAFCO Chief Administration Officer

*Let's talk about: workforce, Qatarization, employee satisfaction, employee communication, training and development, safety, occupation health*



At QAFCO, we face human capital as a challenge to the sustainable growth of our business and our commitment to contribute in achieving Qatar National Vision 2030.

We are faced with several challenges in attracting local talent at QAFCO, impacting our ability to achieve the Qatarization objectives. These challenges include: insufficient supply of qualified national labor, heavy reliance on expatriates, and competition for local talent from public sector/private companies offering better compensation, working conditions, job security, and prestige.

To address these challenges, we have aligned our QAFCO employment strategy to our corporate growth plan. Our employees are central to our sustained growth, and their welfare is a priority for us at QAFCO.

Our approach revolves around "linking our human resources practices and policies with the strategic goals and objectives in order to improve business performance". The diagram illustrates key topics to long term organizational strategy and success at QAFCO.

To identify the need for and availability of human resources, we undertake a very systematic approach that allows us to meet our objectives while guaranteeing employee welfare. All functional Human Resources activities, such as recruiting, training, performance management, compensation, employee relations, succession planning, replacement plans, evaluation and analysis, and Qatarization plans, are all derived from our workforce planning process.



Figure 6: Human resource management highlights

QAFCO is a multicultural and multi-product company located in Mesaieed Industrial City of Qatar, surrounded by chemical and petrochemical plants and handling a very high volume of hazardous gases. Ensuring safety and health is our core value and prime responsibility. We are committed to the safe operation of our plants and to the safety and health of our people and contractors.

Our safety and health strategic goals highlight the importance of continuously improving our safety management system, targeting known risks, improving safety culture and behaviors to minimize the risk of harm to people and our assets. Implementation of systems and processes to identify and mitigate risk and fostering of a culture in which our people take responsibility for and are committed to safety are integral to delivering on this strategy.

As per the nature of the business, QAFCO faces a unique set of challenges to implement its OH&S program and keep a check on the releases from the plants. Due to the ongoing expansion and modification activities and the much needed yearly plant turnarounds, a series of simultaneous activities takes place in an environment where other plants are live and fully functional. Plant personnel and contractors work on a very tight time schedule and sometimes under extreme weather conditions.

QAFCO has established Safety Management Systems in accordance with the ISO standards. The company continuously works toward enhancing the effectiveness of its management systems by monitoring personnel safety performance of its employees and contractors working at the site, involved in routine and major turnaround activities. QAFCO has adopted a proactive approach by using leading indicators, e.g., routine hazards assessment and near misses, to identify the potential weaknesses to get rectified on time.

## WORKFORCE *Overview*

In 2013 our workforce comprised of 1,541 full-time employees on established position. Our workforce headcount, workforce including 61 Trainees & Developpees (on payroll) was 1,602. Labor force rate for female employment (2%) is still low mainly due to the technical nature of our activities and the location of our facilities, despite the fact that female nationals attain higher educational levels compared with male nationals.

Classification	2013			2012			2011		
	Female	Male	Total	Female	Male	Total	Female	Male	Total
<b>Management</b>									
Age 20-35	0	1	1	0	0	0	1	0	1
Age 36-50	1	32	33	1	28	29	0	27	27
Age 51+	0	28	28	0	27	27	0	25	25
<b>Total</b>	<b>1</b>	<b>61</b>	<b>62</b>	<b>1</b>	<b>55</b>	<b>56</b>	<b>1</b>	<b>52</b>	<b>53</b>
<b>Administration</b>									
Age 20-35	9	48	57	9	51	60	9	50	59
Age 36-50	8	113	121	9	114	123	6	101	107
Age 51+	3	38	41	3	39	42	3	34	37
<b>Total</b>	<b>20</b>	<b>199</b>	<b>219</b>	<b>21</b>	<b>204</b>	<b>225</b>	<b>18</b>	<b>185</b>	<b>203</b>
<b>Technical</b>									
Age 20-35	1	547	548	2	489	491	1	407	408
Age 36-50	2	599	601	2	602	604	2	594	596
Age 51+	0	111	111	0	125	125	0	132	132
<b>Total</b>	<b>3</b>	<b>1,257</b>	<b>1,260</b>	<b>4</b>	<b>1,216</b>	<b>1,220</b>	<b>3</b>	<b>1,133</b>	<b>1,136</b>
<b>Grand Total</b>	<b>24</b>	<b>1,517</b>	<b>1,541</b>	<b>26</b>	<b>1,475</b>	<b>1,501</b>	<b>22</b>	<b>1,370</b>	<b>1,392</b>

Table 7: Total workforce composition breakdown by job categories and age groups (2011-13)

At QAFCO we acknowledge and value differences among people with respect to age, class, ethnicity and gender. A highly diverse workforce dominates at QAFCO because of the relatively small Qatari population base. Managing and valuing our diversity is a key component of effective people management, which can improve our workplace productivity. At the same time, a diverse cultural background of our employees brings several challenges, i.e., losses in personnel and work productivity due to prejudice and discrimination, and complaints, which we address in a proactive manner through our code of ethics to meet the diverse cultural needs.

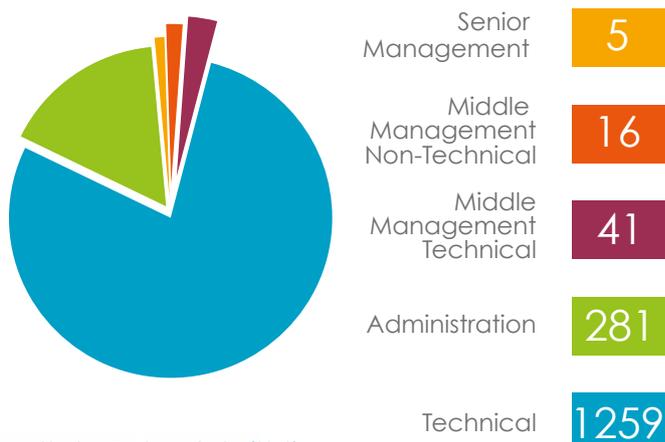


Chart 6: Employees' roles (2013)



Figure 7: Employees' nationalities (2013)

## OUR *Qatarization*

In 2013, our Qatarization rate was 15.69%. The achievement of the elected 50% Strategic Qatarisation objective, as per Qatar National Vision 2030, remains a challenge notwithstanding continued efforts to attract Qataris trainees, graduates and experienced recruits.

By the end of 2013, the number of Qataris on employment contract (established position) reached 176 Qataris. The total headcount was 237 including 61 Qatari Trainees & Develepees and Sponsorship & Scholarship students, on payroll.

Training and Development	No. Of Qataris
Graduate trainee/ develepee	8
Trainees	8
Sponsorship students	12
Scholarship students	33
<b>Total</b>	<b>61</b>

Table 8: QAFCO Training and development (2013)

### Qatar Petroleum Trainee Preparation Program ( TPP)

This programme aims at preparing fresh graduates to acquire the required professional skills to pursue technical career opportunities and operations in the energy and industry sector. The trainee is prepared to obtain TAFE certificate in accordance with the National Training Authority in Australia. Upon completion of this program, graduates are recruited for the position of technician or operator in the industrial installations in one of the following disciplines: Mechanical, Electrical, Instrumentation Engineering and Process. In 2013, QAFCO sponsored 17 Trainees under TAFE QP Programme.

In 2012, although two of our sponsored graduates failed in QP TAFE programme, QAFCO gave them another chance by allocating them in Administration positions at the Company.

We aim to more than double the local headcount by recruiting upto 18 nationals in 2014. This would increase to 16.6%. the national employee body at QAFCO.

The imbalance between the supply and demand for Qatari talent to meet the Company's unique organization needs in the engineering and sciences fields, the location of our facilities and the voluntary movement of trainees and qualified practitioners (between Qatar Petroleum-affiliated companies and within the broader Energy & Industry Sector), remain challenges to overcome and command joint innovation solutions. Projections in Qatari employment till 2014 indicate a growth to approximately 33%.

We have invested in multiple schemes and strategies to attract and retain the best local talent, by collaborating with educational institutions, offering attractive remuneration benefits, and providing clearly communicated career growth prospective. We have also established links with universities and higher learning institutions and research centers, and have concluded a number of cooperation agreements, among others:

- Sponsoring a chair at Qatar University (QU) to develop an applied research program in the area of energy systems;
- Partnering with Texas A&M University to host a Green Chemistry and Engineering Conference to promote cutting edge chemistry research in Qatar and the region;
- Signing an agreement with Texas A&M University to sponsor the QAFCO-Texas A&M Conference for a further 5 years; and
- Sponsoring the participation of a Qatar University (2) Professors and (18) Students in the 4th annual Fertilizers Convention held in Dubai.

In 2013, we actively participated to the Pearl Exhibitor in Qatar Career Fair 2013. We consider career fair an important forum to attract nationals and promote our Company. However, the recruitment from this platform proves to be challenging due to the competition within the various sectors for limited available Qatari talent.

QAFCO's commitment to the continuous development of nationals resulted in the progression of trainees and developpees to targeted established positions in various areas of specialization. In 2013, 16 Qataris (11 developpees and 5 graduate trainees) were promoted to mainstream positions. The efforts and accomplishment of our graduates were acknowledged on QAFCO Day 2013, where the management presented awards to 22 trainees and graduates.

Diligent monitoring of progress in development programs and continued personal support to the Company's Trainees / Developpees / Students, whether at their workplaces or institutes of further education, are key activities in supporting training and development of Qataris. These commendable efforts by QAFCO's training and development staff contributed to a number of sponsored students achieving Grade Point Averages of 4/4 and receiving their degree First Class.

QAFCO continued to create promotional opportunities for vertical progression of Qatari employees through organizational restructuring. This is supported by focused continuing professional development to ensure that the Qataris places in such key positions are competent and confident to perform their duties to the highest possible standards. We concert career development program for the Qatari employees to enhance skill sets which includes vocational training (into local and international undergraduate academic programs) and continuous career development training.

The Company continues to utilize training and development opportunities presented by our recent expansion projects, and plant shutdown periods, for intensive training of Qatari trainees/ graduates.



## EMPLOYEES *Satisfaction*

Through our workforce planning process, we address strategic areas, such as compensation, occupational well-being, and training and development to attract, retain and motivate employees.

In 2013, we engaged with an external consultant to conduct a benchmarking exercise with external competitors in order to understand and adjust our benefits as per market trends. This initiative guaranteed the competitiveness of our salaries, but the difference in pay structure within the oil and gas industry in the region has a negative impact on our ability to attract and retain employees as their perception of fairness of compensation relative to the market is a concern.

In addition to monetary compensation we provide other benefits to ensure the wellbeing of our full-time employees.

Benefits for full-time employees	
Housing allowance or accommodation in Mesaieed, Wakrah and Doha	
Education assistance to employees' children within the State of Qatar	
Auto insurance	
Membership to the QAFCO Albanoush club with gym and swimming pool	
Travel assistance:	
<ul style="list-style-type: none"> <li>• Return air ticket to the home country for the employee and dependents (spouse and children) once in a year.</li> <li>• Incidental travel expenses upon final repatriation to their base countries.</li> <li>• Air tickets and airfreight for the first arrival and final departure</li> </ul>	

Table 9: QAFCO Benefits for full-time employees (2013)

Our temporary staff, which normally joins the company for two or three months, is provided with transportation and canteen facilities.

We monitor and ensure fair compensation and benefits for our contractors as any employee working at QAFCO should be entitled to a minimum monthly salary rate. In line with our procurement policy, the contractors shall increase the minimum contract staff salary of their personnel on long-term hire by 2.5% every year. The adjustment shall be done from the second year of the contract. Further, before issuing any work order, a contractor is evaluated on specific criteria that include condition of workers' accommodation, health and safety plan, labor uniform, food facilities, recreation facilities, emergency response, tidiness and waste handling.

QAFCO continuously employs company-wide surveys to drive improvements in fostering a productive work environment for employees. To evaluate the satisfaction level of our workforce, we conduct an online annual survey and the results are analyzed by our HR system. Any eventual area of concern is reported to the top management and an action plan is developed accordingly. The main survey areas are:

- 1) Promptness and efficiency of issuing company certificates
- 2) Efficiency of online leave request
- 3) Process of education assistance
- 4) On-call duty response in case of emergency

During 2013, the majority of our employees who participated in the survey posted an overall rating of "Excellent." The only area of concern is related to school fees payment mechanism.

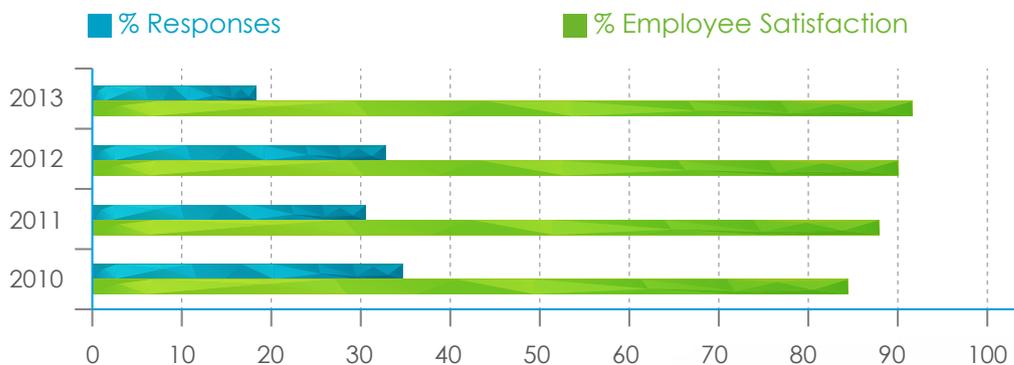


Chart 7: Employee satisfaction (2010-13)

The satisfaction level of our workforce is also reflected in low turnover rates which was 5.51% in 2013. To understand why people leave and reduce attrition rates, we conduct exit interviews — an initiative we started this year.

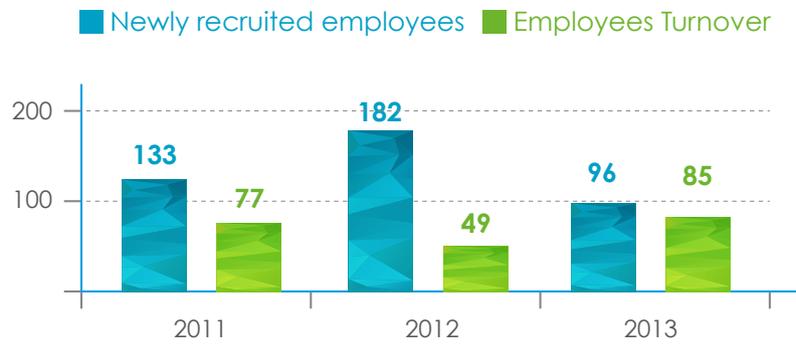


Chart 8: Newly recruited employees and employee turnover (2011-13)

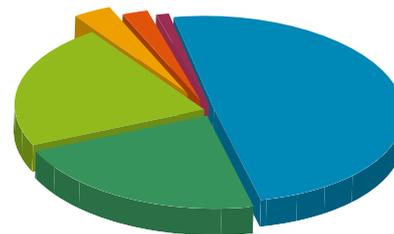


Chart 9: Employee turnover per reason (2013)

## EMPLOYEE *Communication*

Employee involvement at a local level, communicating progress and recognizing achievement are key to our approach to grow sustainability in our company.

We have adopted variety of methods to contact and communicate with our employees on QAFCO policies and procedures, as well as organizational and operational changes. To improve employee communication, we plan to roll out a bulk SMS service to send important messages directly to their mobile phones. The SMS service is expected to be fully implemented in 2014.

QAFCO also has a range of measures to ensure grassroots engagement, including several recurring or annual events to bring senior management together with all employees. These events include the New Year party, shutdown parties and the QAFCO Day celebration.

## TRAINING AND *Development*

Training and development is pivotal to the success of our business and operations. We ensure to provide up-to-date skills and knowledge to our employees and thus allow our business and operations to grow in a sustainable manner. We invest significant efforts towards enhancing our employees' knowledge and skills. By doing so, we strive to guarantee their personal development and ensure efficient and safe operation, besides preserving the environment.

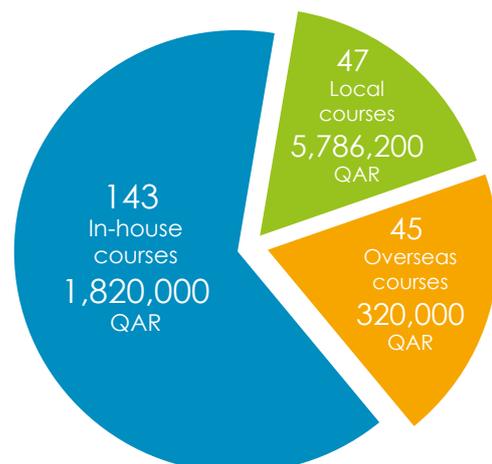


Chart 10: Total training courses and budget per category (2013)

In line with our human resource policies, our training and development department adopts a structured approach to plan and develop training programs using the Employee Performance Appraisal System (EPAS). The EPAS is an automated system that was introduced in 1999 to ensure effective monitoring and control of employee performance. The approach ensures that our training plan reflects the individual development needs of all employees as well as our organizational strategic objectives.

The EPAS cycle includes the following steps:

- Define the purpose of the job, job duties and responsibilities;
- Create objectives spelled out for each area with measurable outcomes (attendance, knowledge, etc.);
- Define the priority of each job responsibility and objective;
- Define performance standards for the key components of the job;
- Conduct interim discussion and provide feedback about employee performance summarized and discussed quarterly;
- Evaluate how the employee is performing against all criteria, and think about areas for potential development;
- Facilitate fair compensation and reward management (incentive programs);
- Track EPAS ranking employee performance; and
- Identify the training needs of employees.

Once training requirements are identified, we develop a training plan that details the level of training necessary for each job category and for individual needs. Our training plan includes management courses that provide management and leadership skills, and communication courses that aim to enhance employees' English language proficiency. Further, we run safety, environment and quality-related courses as well as maintenance and operational programs. Our general courses provide finance, human resources, ERP and IT skills.

Some of our training programs are run in-house by QAFCO's training department, and a few are conducted by reputed external agencies. In some instances, we provide our employees with the opportunity to attend courses abroad. Employees achieving significant improvements are rewarded to ensure that their performance and capabilities are recognized and fully utilized for the growth and success of the organization.

Statistics of training courses – QAFCO employees	2011	2012	2013
Total training courses conducted and attended	170	240	235
Employee participation in trainings	1,562	2,208	2,356
Average attendance per training program	9	9	10
Average number of training hours per year per employee	17	16	21

Table 10: Statistics of training courses – QAFCO employees (2011-13)

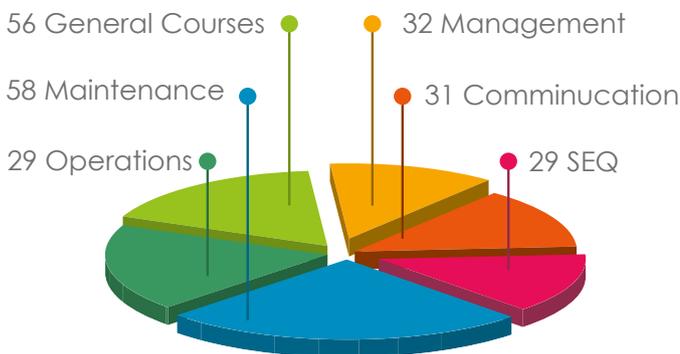


Chart 11: Course as per skills and knowledge (2013)

Participation on local and overseas courses	
Senior Management	0
Middle Management	15
Lower Management	53
Staff / Workers	67

Table 11: Total employees attended local and overseas courses based on management level (2013)

## OUR *Safety*

We are committed to providing a safe workplace for our people, with risk-based safety and health programs across the business in place to prevent workplace injuries. If people are injured, we are committed to assisting them to return to work through proactive injury management.

QAFCO has set a target to achieve zero lost time accident and zero first aid accident for QAFCO staff as well as contractors on-site. The company's determination to prevent accidents and the desire to continue past years good performance is reflected while setting the 2013 limits.

We achieved outstanding safety performance despite growth in operations. Total recordable injury rate is a key measure that we used to monitor workplace safety performance. In 2013, QAFCO's total recorded incident rate was 0.41 for employees and 1.53 for contractors. Both rates, for the employees and the contractors, have increased 2% and 15%, respectively, compared with the 2012 rates. This increment is due to the QAFCO 5-6 project, which became fully operational in 2013.

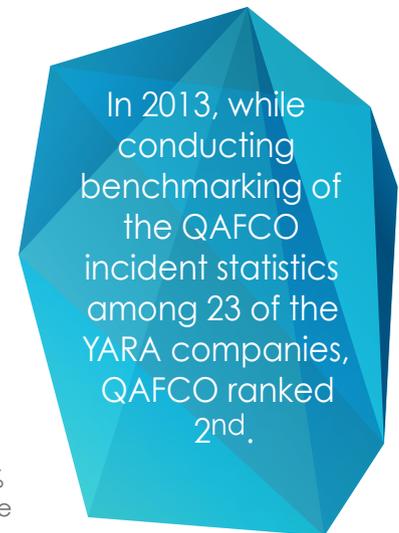


Chart 12: QAFCO employees safety statistics (2013)

Improvement in our safety performance is the result of the dedication of our employees and the success of the Safety Information System (SIS). This system comprises an incident prevention program, including emergency preparedness plans, training, safety procedures, protective equipment, hazard inspection and communication, and incentive schemes.

To assist all departments or sections in setting and achieving their OHSE targets, during 2013, the following activities were performed as a follow-up to the incident prevention program:

- Improving supervision, while performing any job on-site (last 16 years statistics indicate 76% QAFCO and 87% contractor); accidents can be avoided through improved employee and contractor supervision;
- Conducting the "Tool Box" meeting effectively;
- Scheduling and conducting safety walks;
- Assessing critical activities and conducting the required job safety analysis (JSA) for them;
- Ensuring that the risk assessment is reviewed, communicated and followed up as per the safety procedure "Occupational Hazard Identification, Risk Assessment and Determining Controls";
- Ensuring that the entire departmental staff (QAFCO employees and contractors) attends the scheduled safety or fire training, including induction, shutdown refresher and safety workshops, organized by the safety section;
- Encouraging the departmental staff to report near misses, unsafe conditions and unsafe acts; and
- Discussing the following with the staff during weekly or monthly section meetings:
  - o Near misses reported and the possibility of some of them to lead to personal injury.
  - o SIS review to learn from accidents occurred in other areas or at similar plants
  - o Recommendation from the QASEC meeting
  - o Recommendation from the management review meeting
  - o Shutdown recommendation
  - o Mock drill recommendation

**Going beyond our facilities:  
aqueous ammonia transportation**

In 2013, QASEC (the safety and environment committee) raised the following concerns related to aqueous ammonia tankers:

- There are no baffles or partitions installed in tank containers; and
- Leakage is possible in case of a flip over, most probably through the top cover of a tanker.

QASEC adopted the following measures to mitigate the risk of leakage:

- Training provided to contractors on the handling and maintenance of aqueous ammonia was recorded in the SIS. Training frequency was increased (once every six months). In addition, TREM cards, and route map to the QAFCO filling station and back were standardized and provided to tanker drivers; and
- Drivers were trained in defensive driving. All QAFCO drivers at present are certified in defensive driving.

QASEC also decided to check the following:

- Valve specification of the tanker; and
- Reasons of a contractor for breaking the journey and not transferring aqueous ammonia directly from QAFCO to Ras Gritas.

With the aim to maintain our progress towards zero lost time accident and zero first aid, we established a high-level safety and environment committee, QASEC. The committee was formed under the Chairmanship of the CEO to discuss, promote and consider policy matters in occupational health and safety, and environmental issues of significant importance to QAFCO. Our sixteen (16) members committee meets twice a year and each year the CEO selects two employees to represent the workforce. The role of the selected employees is to bring employees' interests, which might not be identified by the top management, under the attention of the committee.

851 QAFCO employees trained	721 Contractors trained
<ul style="list-style-type: none"> <li>• Auxiliary fire training</li> <li>• Behaviour based safety awareness Risk Assessment</li> <li>• Shutdown safety training</li> <li>• Safety Briefings</li> </ul>	<ul style="list-style-type: none"> <li>• Safety in Handling Transporting Aqueous Ammonia</li> <li>• Safety Induction Briefings</li> </ul>

**Safety culture**

Even after achieving impressive safety performance, safety awareness among our employees and contractors remains our paramount concern. The culturally diverse background, despite the obvious strengths it brings to the company, creates the challenge of impressing the importance of some safety aspects either from language or cultural perspective. Our priority, therefore, is to ensure high safety standards by instilling a common perception of safety risks among employees through safety awareness campaign and mandatory contractor training before commencement of any work. This year, we have initiated development of two films about safety measures that are being sponsored by QAFCO. The films will be translated into six different languages.

Road accidents in Qatar are considered to be another dominant challenge and we attempt to mitigate it by providing a driving awareness course to remind our employees of the significance of defensive driving, not only for when they commute to work but also for personal travel. QAFCO has established and maintained documented procedure that aims at registering for identified occupational hazards, risk assessment and risk control.

## Hazard identification and mitigation

Over the period, with increase in production capacity, QAFCO has diligently worked on improving its safety performance. The company has adopted continuous improvement strategies, implemented industry best practices, and conducted risk assessment and mitigation. QAFCO engages employees at all levels in its efforts towards hazard identification and mitigation. The figure below describes our risk assessment approach towards hazard identification and reporting.

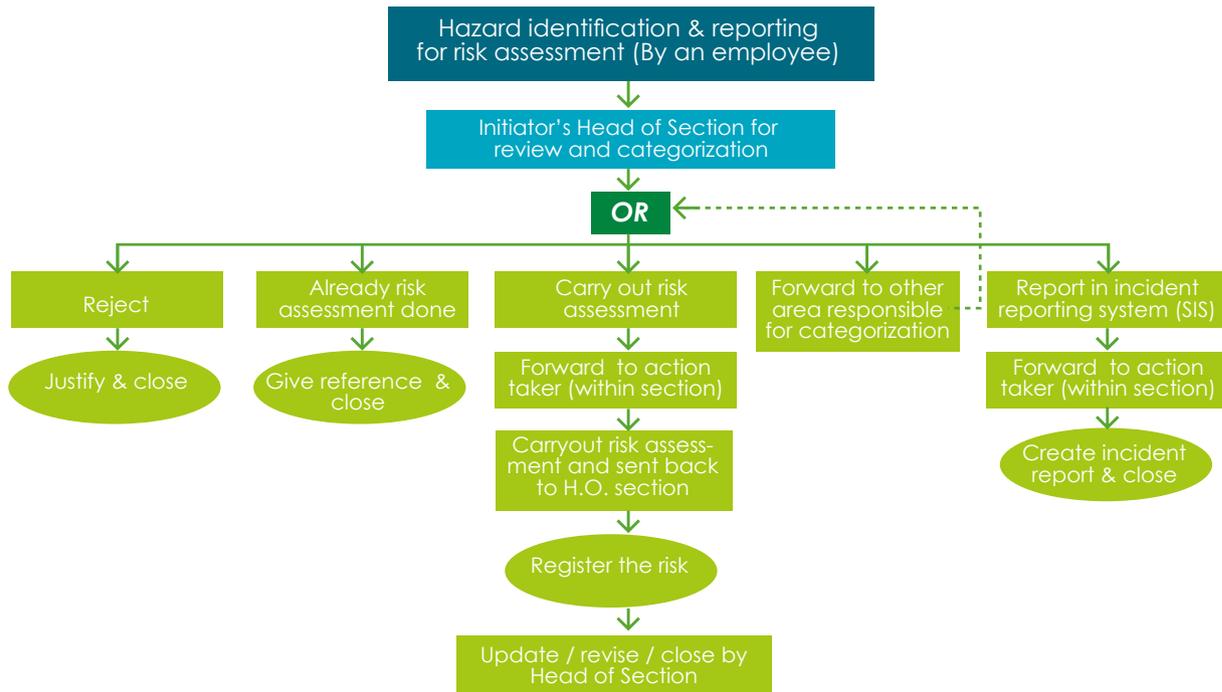


Figure 8: Risk assessment approach at QAFCO

In addition, the company has been adopting the best available technologies, learning from others and sharing information with the industry on a local as well as global level by attending seminars and workshops around the world.

All sections at QAFCO carry out risk assessment for their respective activities. An organizational setup involving employees at different levels, heads of sections and department managers has been assigned the responsibility of implementing the risk assessment process. For any change in the organization, management system or operations, risk assessment shall be carried out for significant associated hazards prior to the introduction of such a change.

The risk assessment process is being used as the main tool to enhance and support workplace precautions. Further, it helps in the classification of risks as major, medium and minor and thus supports in prioritizing the corrective action for those risks where a safeguard is not sufficient. Each area (sections and departments) identifies the hazards relevant to their area of responsibility, carries out the risk assessment, comes out with the risk control measures as required, and registers them electronically in the SIS.

QAFCO has made great efforts to strengthen security by carrying out Security Vulnerability Assessment (SVA) and taking many critical proactive measures to deal with security threats. Based on the identified critical threats, an SVA is carried out and registered in a dedicated and confidential file accessible only to authorized personnel within the company. The SVA register identifies the threat type, likelihood, vulnerabilities and consequence. The risk is assessed (using a risk matrix) on the basis of these aspects, and relevant counter measures are recommended accordingly.

Our employees are in the best position to identify safety and security risks as well as reducing the likelihood of an accident while doing their daily jobs according to safety best practices. Therefore, we encourage our staff to report risks and near misses and we recognize and reward good safety performance. Our CEO recognizes the best reported near miss and risk during the Annual QAFCO Day celebrations by awarding the individuals with certificates and cash award. A contractor's employees are awarded during shutdown activities on a daily basis by identifying the best safety performance.

### Plant reliability

As part of the continual improvement process and our commitment to achieve excellence in safety performance, we carefully maintain our assets and reduce the incidents of risks due to fires, explosions and accidental chemical releases.

This year, two optimized shutdowns were executed without any lost time and were completed ahead of schedule. Shutdown excellence is a journey, and achieving and sustaining excellence is wholly dependent on a site's approach to shared accountability and is a continually improving process.

### [Relief valves study](#)

To increase the production capacity, old plants in QAFCO are subject to a de-bottlenecking process. For the past many years, QAFCO has been able to operate the plants well above the plate capacity through plant revamps and modifications. During one of the internal evaluation process, it was observed that a relief valves evaluation against the maximum demonstrated production (MDR) load was not carried out. A concern was raised and relief valves evaluation (maximum relieving capacity vs. plant load) was conducted across the site. The evaluation turned satisfactory except for a few relief valves that were operating close to the rated capacity. The case was referred to the vendor for further evaluation and recommendations.

### [Hazardous area classification](#)

To protect personnel and equipment from unexpected fire, due to the presence of flammable atmosphere, we have adopted the international standard IEC 60079-10 as the basis for classifying hazardous areas within the QAFCO site. This standard has been applied to all production facilities (all ammonia, urea, power generation and utilities areas), and plant areas have been suitably classified into different zones (Zone 0, Zone 1, Zone 2) and non-hazardous areas. Any changes in the in-plant facilities are subjected to assessment of impact on existing hazardous area classification drawings, and changes are made following the established guidelines and procedure.



### [Ammonia venting in the old plants](#)

During one of the annual risk assessment reviews, it was observed that old ammonia plants did not have adequate system to handle ammonia release during plant upset and emergency shutdown. It was proposed that instead of venting ammonia vapors at high elevation, an adequate flaring system should be installed to avoid ammonia concentration in the surrounding and splashing out of liquid ammonia from the vent. The project is in the final stages of implementation.

### [Modification of the primary reformer fuel supply system](#)

Due to the recent incident of primary reformer explosion during plant startup in a European fertilizer company, QAFCO conducted a risk assessment study to evaluate all the reformer firing procedures and the built-in safeguards available that could avoid an explosion. During the study, two out of four reformers were found not to have an adequate built-in safeguards. A project was initiated and the required safeguards were provided based on a header tightness test as a condition to get permissive to open the main fuel supply valve to the reformer.

### [Equipment critically ranking](#)

In QAFCO, equipment criticality ranking is done based on the consequence of failure of the particular equipment or machine on the safety of personnel, impact on the environment and its cost implication due to business interruption. All the new and existing tagged equipment at site are categorized in terms of consequence of failure and probability of occurrence and are assigned the necessary preventive maintenance tasks according to the QAFCO maintenance process requirements.



### [Ammonia storage systems](#)

QAFCO's anhydrous ammonia storage capacity has increased with the increase in production capacity. The surplus anhydrous ammonia is shipped to consumers or is kept in four inter connected unrefrigerated storage tanks for its consumption in the process. This gives QAFCO the flexibility to keep all the urea plants in service even when any of the front-end (ammonia) plant is down.

As the old tanks were built in 1970s, it was normal practice to store anhydrous ammonia in single wall (single containment) refrigerated atmospheric tanks. However, during the expansion project in 1997 and subsequently in 2004, a double integrity, double-wall full-containment design (Bund wall) was chosen to improve the safety and reliability of the ammonia storage facility. To avoid spread of ammonia vapors in the surroundings in case of plant upset or breakdown of storage tanks refrigeration system, a flare system has been installed to be used for ammonia gas venting through flare.

We are currently proposing to put up foam suppression system to further reduce the risk of spreading ammonia. In case of accidental release from the storage tanks, applying foam will slow down the release of ammonia vapor into the atmosphere. It will provide enough time for evacuation, if needed. The project is in the initial stages, as the foam stability with respect to the local weather conditions is being evaluated.

To maintain the integrity of the ammonia storage tanks and to protect the workers and the environment, a detailed study was also conducted to evaluate the operation of ammonia storage tanks in QAFCO. In this study, industry best practices for the maintenance of ammonia storage tanks were identified and recommended based on the comparison of data with other plants. Implementation of these recommendations will reduce the potential risks and the hazards associated with the equipment or plant operation.

For many years, stress corrosion cracking (SCC) in carbon steel anhydrous ammonia storage tanks has been a major concern for the fertilizer industry. This is because in early 1980s, SCC was found in fully refrigerated ammonia storage tanks and the research performed afterward confirmed the potential of SCC in low-temperature applications. Considering the potential risk of SCC, an internal study was conducted to evaluate QAFCO's anhydrous ammonia storage tanks to ensure safety and health of workers, to protect the environment and to maintain the integrity and operating capability of these assets. In this study, the operating parameters were taken into consideration, as one of the main reasons for SCC is moisture and oxygen content in stored ammonia. As mentioned earlier, QAFCO has a multilayer protection around ammonia storage tanks; therefore, the chances of ammonia containment loss from the storage tanks are minimal.

Reliability and maintenance benchmarking study

QAFCO always looks to identify where can reliability and maintenance performance be improved at our plants and processes. In 2013, a benchmarking study was carried out to compare our maintenance processes and practices in 2012 against 293 chemical peer companies located and operating within the Gulf region and globally. Representative employees from each section participated in the process of collating information for the benchmarking purpose.

The overall performance is presented in terms of a Reliability and Maintainability Efficiency Index (RAM EI). QAFCO was ranked just within the top 25% list of companies, being the first-quartile performer.

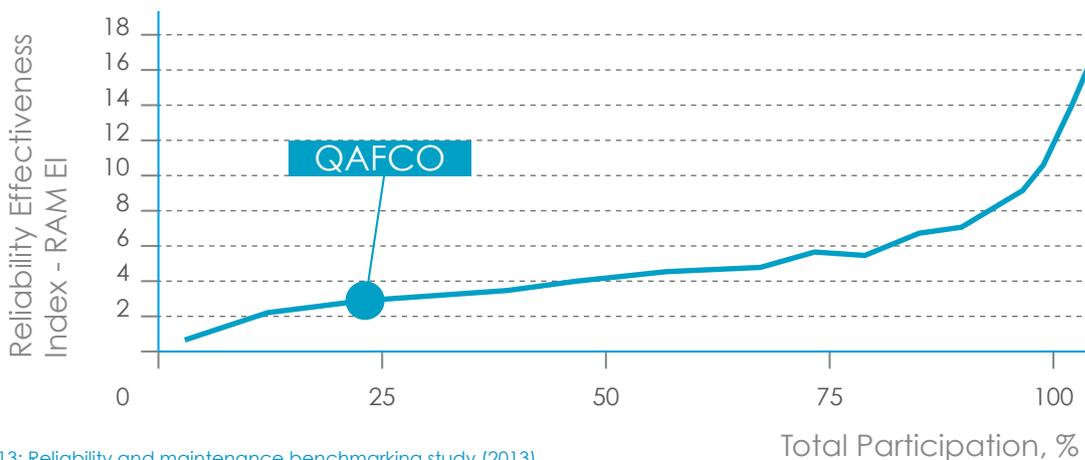


Chart 13: Reliability and maintenance benchmarking study (2013)

We also adopt Root Cause Analysis (RCA) approach to prevent the reoccurrence of any process safety issues and to find effective solutions to improve plant equipment reliability.

In 2013, QAFCO management supported the selection of the Reality Chart RCA methodology and made a significant investment to train approximately 300 staff members to effectively use this methodology. The implementation of this methodology is in progress with approximately 30 failure analyses being carried out using this method and generating value adding solutions. This is certainly a step in the right direction and helps eliminate defects and improve overall reliability.

## Occupational health

We provide employees with preventive and curative health services, such as medical surveillance, vaccinations, illness and injury treatment, health promotion and first-aid training within the company. Further, we assess all workers for exposure to workplace hazards and monitor general health status. Medical screening is also provided at specific occasions, such as:

- Pre-employment
- Job transfers
- Return to work after long illness or significant injury

In addition to medical services, QAFCO provides its employees and their families with health insurance that covers both private and public medical services available locally and abroad.

Even though the number of employees has been increasing steadily for last few year, the total number of consultations and sick leave days have relatively decreased from 2012 to 2013. We treated 10,321 cases during 2013 that were 15.3% less than the previous year.

Medical centre statistics	2013	2012	2011
Consultations	10,321	11,909	10,723
Sick leave days	5,597	5,735	4,756
Sick leave days per employee	3.5	3.6	3.26
Contractor consultations	1,120	1,056	1,137
Referrals to specialist	140	170	136
Hospital admissions	58	36	36
Work accidents	12	8	13
Work related illness	13	17	19
No. SL for work related cases	4.5	16.5	10

Table 12: Medical centre statistics (2011-13)

Due to extreme hot weather in Qatar, where temperature in summer can reach as much as 50 degrees, incidents of heat stress are very likely. In order to reduce the risk of heat-stress disorders, QAFCO organizes a heat stress campaign every year. The campaign includes:

- Issuing pamphlets to QAFCO and contractor employees;
- Posting banners and flags at different locations in QAFCO 4/1 and QAFCO 6/5; and
- Closely monitoring heat index (combination of temperature and humidity)



To prevent heat stress, QAFCO has adopted a heat index for evaluating the working atmosphere condition. Heat Index, Flag Colors and Rest Period are based on the following table:

Heat Index	Flag Color to be posted	Controls	Work: Rest Period (Minutes)	Water Requirement (1Cup=1/4 Litre)
Up to 26	No Flag	-	-	-
27-38	Yellow	Continuous monitoring and not working alone	40:10	1 Cup every 20 mins
30-53	Red	Work under shade above 49, Elevated Work Stopped	30:10	1 Cup every 15 mins
above 54	Black	Stop Work	-	-

Figure 9: Heat stress index

### Case study: less stress and more resilience

Technology must be aligned with the human resources of any organization in order to be successful.

In 2013, QAFCO requested for consultancy services of a leader in the application of psychology to safety, leadership development and well-being in the workplace. The services included carrying out the "Less stress and more resilience" workshop for most senior managers at QAFCO.

This workshop took our management through a well-being model, which is grounded on the latest neuroscience well-being research. Through a practical approach, our management was able to experience for themselves the advantages of having appropriate psychological well-being of resources to deal with life's challenges.



# DEVELOPING SUSTAINABLY

## Our *Environmental Liability*

*“Economic development and protection of the environment are two demands neither of which should be sacrificed for the sake of the other”*

Qatar National Vision 2030

*“We are committed to maintain a balance between developing needs and protecting the environment by managing our operations and preserving the natural heritage of Qatar”*

Mohd. Y. Al-Eshaq  
QAFCO Safety, Environmental and Quality (SEQ) Manager

*Let's talk about: water, energy, emissions, waste, spills, biodiversity, environmental awareness*



Qatar is facing major environmental challenges that need to be appropriately resolved, particularly in achieving water security, reducing carbon emissions, increasing energy efficiency and mitigating risks that threaten the safety of the terrestrial and marine environment.

Qatar has already committed to enforcing international standards for environmental protection when designing and implementing its industrial projects. Companies must also commit to making its future path of development compatible with the requirements of protecting and conserving the environment.

At QAFCO, we acknowledge the impact of our operations on the environment and community living close to our activities and have taken considerable actions to reduce and mitigate that impact. We have a well-established Environmental Management System (EMS), ISO 14000-certified, which help us set up processes and practices to identify, evaluate and reduce our environmental impact and at the same time increase our operating efficiency.

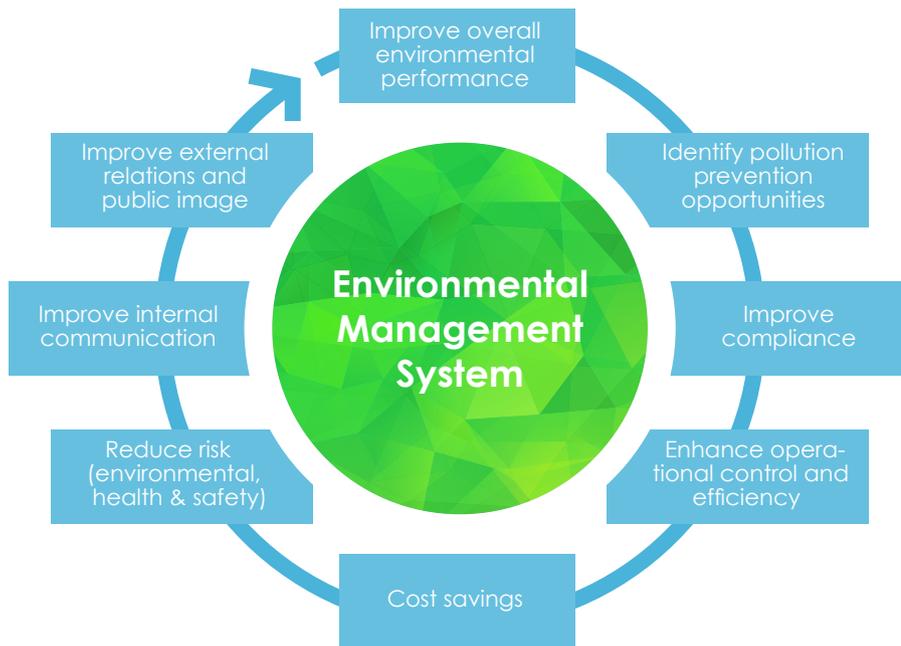


Figure 10: Environmental Management System highlights

Our top management commits to environmental improvement, which is reflected in our established environmental policy. Our HSE Committee oversees the effectiveness of these systems by holding frequent review and progress meetings that ensure objectives and targets are met.

The EMS is also designed to address our regulatory demands in a systematic manner, reducing the risk of non-compliance and non-regulated issues, such as pollution prevention, odor management, and water and energy conservation.

Being in operation for a long time does present particular challenges while complying with environmental laws and regulations. Some of our facilities are 40 years old, dating back before many of the modern environmental best practices were conceived. Therefore a part of our successful environmental legal compliance in 2013 included our continuing effort to retrofit and upgrade these facilities in order to meet environmental standards.

At QAFCO, we are not only focused on the immediate holdings of the company, but we also adopt particular external sustainability projects. For instance, our Sahara project aims at protecting and enhancing Qatar biodiversity through conservation of maritime and terrestrial species at Al-besheriya Island and at creating revegetation and other green jobs through profitable production of food, water, clean electricity and biomass in desert areas.

## OUR Water Sources

It has been forecast that by 2020-30, water demand in Qatar would be 602 million m<sup>3</sup> due to increased food production for an increasing population<sup>3</sup>. However, the country's current water supply is around 465 million m<sup>3</sup> and a severe shortfall is expected by 2030<sup>4</sup>. Qatar is located in a water scarce region and, factoring in the climate change repercussions, water security is one of the most important environmental issues.

QAFCO understands business risks and opportunities relating to water scarcity and is committed to promote responsible water management. It acknowledged the fundamental need for more detailed work on water conservation, efficiency and productivity. The strategy adopted by the company is to use water efficiently, and recycle and reuse it wherever possible.

There has been an increment in the net water intake from sea since QAFCO 5 and 6 are fully operational in 2013. QAFCO (1-4) supports QAFCO (5-6) for water export; therefore, water supplied by municipal authorities has also increased in 2013 compared to 2012.

Ammonia and urea manufacture are highly energy-intensive processes and require water for process cooling and steam generation. Seawater is used as the main cooling media (once through seawater circulation via seawater cooling towers). Apart from forming the main cooling media, seawater is also used to produce desalinated water, which is used as makeup water for producing demin water. The process and steam condensates, and boiler blowdowns generated during the ammonia and urea process are reprocessed via long exchange waterbeds, and demin water thus produced is recycled and reused completely within the process.

Wastewater is often produced in high volumes during the ammonia process. Discharging ammonia-laden water into the environment can cause problems. QAFCO has already initiated a project to collect all the discharges from the plants to be sent for proper treatment and disposal in order to attain the goal of zero process wastewater discharge to the sea. The plan is to reuse the treated water after further processing for steam production or for other uses in the plant. By incorporating and modifying operating procedures during plant startup and rundown activities, QAFCO has already significantly reduced discharge to sea.

The company does not use freshwater for irrigation purposes. Final sanitary wastewater is treated in our sanitary wastewater treatment plant and is used as irrigation water for greenbelt within the company premises. We plan to fully utilize the treated water for irrigation by increasing green spaces in QAFCO.

Water management		2011	2012	2013
<b>Sea water intake/returned (m<sup>3</sup>)</b>				
Sea water intake from sea		1,290,000,000	1,320,000,000	1,180,000,000
Sea water returned back to sea		1,280,000,000	1,308,000,000	1,138,757,920
<b>Water consumed/used (m<sup>3</sup>)</b>				
Net water intake from sea after discounting water returned back to the sea		10,000,000	12,000,000	41,242,080
Municipal water supplies or other water utilities	QAFCO (1-4)	330,896	305,293	437,357
	QAFCO (5-6)	60,000	46,293	12,390
Total water consumed/used		10,390,896	12,351,586	41,691,827
<b>Water recycled/reused (m<sup>3</sup>)</b>				
Process and steam condensate re-used within QAFCO (1-4) and QAFCO (5-6) and Melamine Plants		11,589,900	15,584,900	12,442,066
Treated sanitary waste water used in irrigation		60,500	61,000	39,955

Table 13: Water management (2011-13)

<sup>3</sup>Middle-East and Northern Africa Water Outlook, World Bank, January 2011.

<sup>4</sup>Qatar General Electricity & Water Company - 2013

## OUR Energy

At QAFCO, we seek to become a leader in energy efficiency in our sector. Energy efficiency is central to our strategy as we look to scale up production and reach an annual capacity of 5.6m tonnes of urea in 2013. In the coming years, QAFCO wants to conserve energy and at the same time increase production of both ammonia and urea<sup>5</sup>.

Energy management	2012	2013
<b>Direct energy sources total purchased (GJ - GHV) for electricity, heating, conversion units</b>		
Direct non-renewable (natural gas)	155,189,018	181,972,288
Direct energy sources produced (GJ)	NA	NA
Total direct energy consumption (GJ)	155,189,018	181,972,288
<b>Indirect energy sources purchased (MWh)</b>		
Electricity	294,411	257,847
<b>Electricity generated (MWh)</b>		
QAFCO (1-4)	379,865	734,419
QAFCO (5-6)	655,216	777,300
Total electrical power generation	1,035,081	1,511,719

Table 14: Energy management (2011-13)

### Installation of co-generation – 1 unit

The present auxiliary boiler in Ammonia 1 and 2 belongs to old generation boilers (2 Nos.) producing saturated steam at 12 bar and 26 bar, respectively. These boilers are not equipped with a proper heat recovery system, and thus operate at low thermal efficiencies.

Also, the old power station (PS 1.7) is a conventional electric power system based on once-through cycle. The electric generation capacity of the station is 25–30 MWh, with an overall efficiency of 20%–22%.

Accordingly, with the objective to improve efficiencies, QAFCO opted for gas turbine-based, CoGen 1 and 2 (CHP) plants with a capacity of 140MW and producing 600t of steam per hour. The CHP plants are designed to meet the thermal and electrical base loads of a facility, leading to an increase in the facility's operational efficiency and a decrease in energy costs. At the same time, CHP reduces the emission of greenhouse gases, which contribute to global climate change. The facility includes four General Electric Frame 6B gas turbine generators, five steam turbines, five compressors and additional heat recovery steam generators. The turbines are equipped with dry low NOx (DLN) technology, which makes the facility more environment friendly.

Auxiliary boilers in Ammonia-1 and the power station (PS 1.7) have been replaced after new Co Gen-1 unit at QAFCO (1-4) site, with installation of 85% efficiency that became operational in 2013. CoGen-1 generates 64MWh of electric power and 300 metric tonnes/h of superheated steam at MP pressure of 50 bar. The old vintage auxiliary boiler Ammonia-2 will be decommissioned by December 2015.

Additionally, QAFCO is working on several initiatives to increase energy efficiency and improve production output. Use of advanced technology in QAFCO 4, 5 and 6 has resulted in improved energy efficiency. Also, transferring to production of granular urea in these units instead of crystalline urea is considered more suitable for agricultural techniques. QAFCO is looking to enhance its QAFCO 1 and QAFCO 2 projects as well. This development would lead eventually to raising energy efficiency in Ammonia 1 and 2 projects, so that they consume 35GJ per tonne instead of 46.5GJ per tonne.

<sup>5</sup> <http://www.thefreelibrary.com/Energy+efficiency+to+guide+Qafco+production+policy.-a0329144226>

## GREENHOUSE GAS (GHG) emissions

At QAFCO, we are looking for mitigation measures to reduce our carbon footprint in order to assure the environmental sustainability of critical processes, which are indispensable, such as the production of ammonia process. Integrating ammonia plant with urea plant helps prevent huge amounts of CO<sub>2</sub> release to the atmosphere; however, this depends on the production capacity of urea plants.

Metric tonnes (MT)	2011	2012	2013	NOTES
Direct GHG emissions (scope 1)	142,000	4,683,855	5,759,262	
Indirect GHG emissions (scope 2)	NA	NA	47,255	56 kg CO <sub>2</sub> /GJ (LHV) Lower heating value = Higher heating value x 1.11
GHG emissions saving	66,209	345,951	261,664	Reported by U-3 as CO <sub>2</sub> export to Q-5 (ref PIMS U-3 report)

Table 15: Greenhouse gas (GHG) emissions (2011-13)

Before 2011, QAFCO faced the issue with excessive amounts of CO<sub>2</sub> released to the atmosphere and reduced these amounts by increasing urea production capacity and by sending some CO<sub>2</sub> to neighboring plants — Qatar Fuel Additives Company and Qatar Vinyl Company — that used CO<sub>2</sub> as feedstock for methanol production. Exports to the neighboring plants were stopped in 2012, after Urea-6 plant came online in the same year.

In 2013, with QAFCO-5 and 6 being fully operational, we maximized the use of process CO<sub>2</sub> for urea production. When synthesizing ammonia and urea from natural gas, ammonia is always formed in excess and there is a shortage of CO<sub>2</sub>. The excess hydrogen is used as fuel for the steam reformer, excess of ammonia is sent for urea production and the CO<sub>2</sub> produced by the reforming process and the CO<sub>2</sub> recovered from the flue gas reformer or boiler are then fed together to the urea synthesis section. It maximizes the urea production, minimizes reconstruction and reduces our CO<sub>2</sub> emissions.

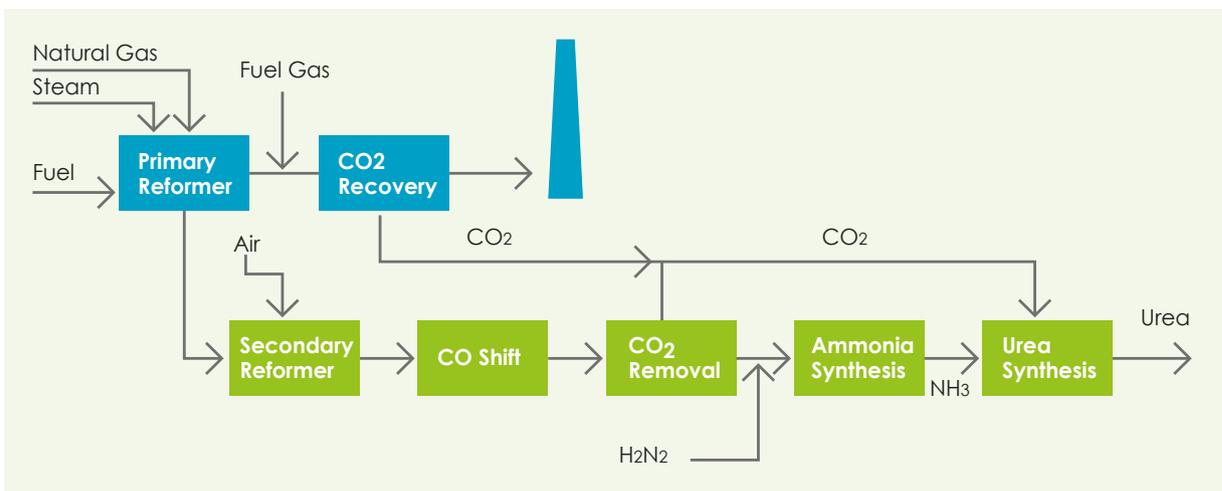


Figure 11: Flue gas CO<sub>2</sub> recovery for urea production

## OTHER Emissions

### Emissions of ozone- depleting substances

We have conducted detailed studies on alternative substances and their suitability, and subsequently planned and executed the phaseout of halon, such as chlorofluorocarbons (CFCs) and HCFs, as a firefighting agent.

As an alternative, water mist and Novec 1230 are used in the total flooding firefighting system. This initiative demonstrates our dedication to environmental preservation and our people. All ozone-depleting substances are being phased out completely and these projects are ongoing.

### NOx emissions

QAFCO is also responding to the local environmental regulations by conducting feasibility studies and modifications to achieve the challenging NOx emission limits (125 mg/N m<sup>3</sup>) specified by the Ministry of Environment. Nitrogen oxides or NOx, are highly reactive gases, where nitrogen dioxide (NO<sub>2</sub>) and nitric oxide (NO) are the most harmful air pollutants.

Due to old vintage boiler and burner technology, normally NOx generation is high in flue gas. In December 2013, auxiliary boilers at Ammonia-1 plant were decommissioned after Cogen-1 commissioning. QAFCO is planning to decommission auxiliary boilers at Ammonia-2 plant by the end of 2015. Meanwhile, QAFCO has requested local authorities an extension of current TBCAP to exempt these limits.

In 2013, QAFCO also exceeded its limits in primary reformer Ammonia-3 since the DeNOx system stopped functioning due to corrosion in downstream coil. Additional exceeding limits were detected at HRSG G1.8 in our power station. The HRSG DeNOx system did not perform properly due to suspected chocking at the upstream and downstream of the flue gas recycle blower. Inspection and repairs were planned from March, along with G1.8 shutdown for 20 days.

A time-bound compliance action project was also raised to control NOx emission from the Ammonia-4 primary reformer. In the meantime, request was made to the Ministry of Environment to extend exemption by the end of 2013.

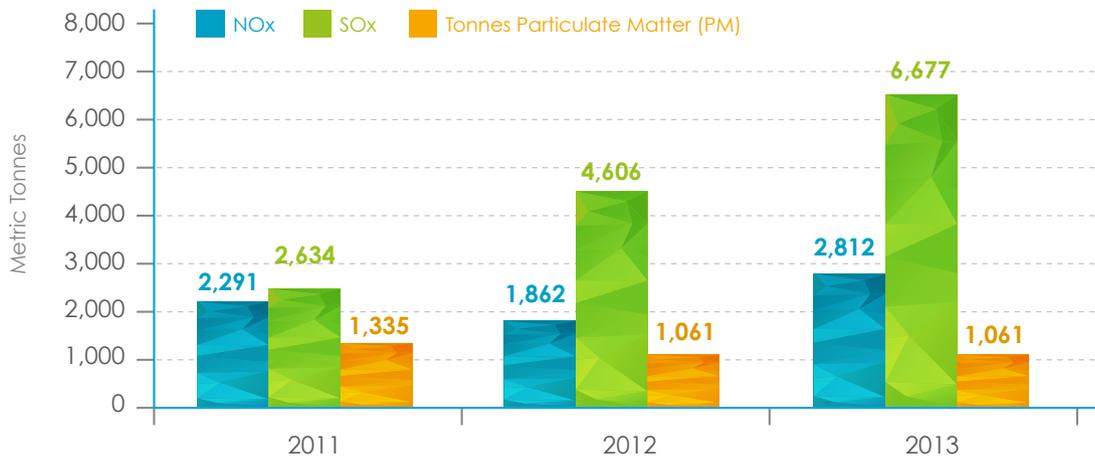


Chart 14: Other emissions (2011-13)

Note: (1) Calculation is based on laboratory analysis on flue gas OR direct measurement through online analyser wherever applicable and corresponding estimated stack flows as per plant load conditions.(2) Lab measurements are based on fortnightly analysis frequency.(3) Particulate matter reported is in form of Urea dust from prilling tower and granulator stacks

In 2013, QAFCO 1–4 significantly decreased NOx and SOx emissions to the atmosphere from QAFCO 1–4 plants compared to emissions in 2012. Overall emissions have increased as QAFCO 5–6 became fully operational in 2013.

Efforts are underway to improve compliance by implementing environment-related projects. The following measures have significantly reduced our plants' NOx emissions:

- **Selective Non Catalytic Reduction (SNCR) DeNOx system** has been installed at the primary reformer flue gas duct in Ammonia-3 plant. Besides the two main products (prilled and granular), QAFCO is also producing UFC-85 and aqueous ammonia. Both ammonia and urea solution are used to reduce the NOx in the flue gases of the primary reformer. It has been planned to implement the same in Ammonia-4 plant to further reduce the NOx emission at QAFCO site. Both Ammonia-3 and Ammonia-4 primary reformers DeNOx systems will be fully operational in 2015.
- In heat recovery steam generator system, **Selective Catalytic Reduction (SCR) DeNOx technique** has been applied to reduce the NOx emissions from the gas turbine exhaust. The system is a combination of catalytic and ammonia or urea solution injection system.
- To reduce the NOx emissions from the auxiliary boilers in Ammonia-3 plant, **Low NOx burners with Flue Gas Recirculation (FCR) technique** has been applied. Low NOx burners are designed to provide fuel staging which generates fuel-rich and fuel-weak areas to reduce flame temperature. Introduction of FGR reduces NOx by reducing flame temperatures and local oxygen concentration in the flame zone.

QAFCO not only meets NOx reduction challenge, but also helps other industries to meet their NOx targets. QAFCO is leading the way in reducing NOx emissions by using DeNOx technology in its plants and is also providing urea and ammonia solutions to other Qatari industries and power stations to help control their NOx emissions.

In 2012, QAFCO invested QAR 31.72 million to build up the necessary infrastructure for the preparation, storage and export of those solutions to different users. In 2013, a total of 3,961 metric tonnes/day of 19% aqueous ammonia solution was produced in QAFCO's DeNOx infrastructure.

## OUR Waste

### Non-hazardous waste

We produce three type of non-hazardous waste: food waste, general domestic waste, and non-hazardous Industrial waste.

For collection of non-hazardous waste generated, we use three color-coded rubbish skips. As part of the induction training and shut-down briefing, we educate our employees on waste segregation, management and disposal to control QAFCO's liabilities on the environment. Each rubbish skip has a signboard displaying information on the type of waste and the correct management practices to be followed.

Food waste from the canteen and dining halls is collected and sent for landfill at the Domestic Solid Waste Management Centre, a local licensed landfill located in Mesaieed city. We are conscious that wasting food raises social questions; therefore, we monitor the amount of food waste produced on a daily basis and our experienced canteen staff ensures preparation of the right amount of food.

General domestic waste, such as cardboards and office refuse, is collected and sent to the landfill. Non-hazardous industrial wastes includes construction/industrial wood, glass, small empty plastic cans, small empty metal containers, rubber/fabric/plastic materials, spent resins, metals, concrete/ceramics/soil, ammonia converter, iron oxide catalyst, alumina balls/lumps, and ceramic balls/rings. The waste is collected, segregated into plastic, glass, steel and paper waste and sent for recycling to the local companies.

Through our procedure, we established the requirements and means for environmental management that is mandatory for the contractor working in QAFCO premises, in order to control, manage and dispose of the non-hazardous industrial wastes that are generated during the preparation, execution and completion of the activities.

The table below shows the total amount of waste disposed and recycled during 2012 and 2013. The waste is composed of tires, spent catalyst, waste lead-acid batteries and used oil (lube, hydraulic, transformer, and grease) and other non-hazardous waste (food waste, cardboards, office refuse, construction/industrial wood, glass, small empty plastic cans, alumina balls/lumps, ceramic balls/rings, etc.)

	2012	2013
Total waste disposed (kgs)	12,000	12,100
Percentage waste recycled	75%	75%

Table 16: Amount of waste generated and recycled (2012-13)

### Hazardous Waste

#### Spent catalyst

All types of spent catalysts are filled (immediately after being unloaded from plants' vessels) into labeled metal drums and kept in a temporary special store yard awaiting sale for the purpose of recycling/metal recovery by a third party, which provides a "certificate of consumption" stating the details of each catalyst treatment and the ultimate fate of the components of the catalysts. Spent catalyst is the only type of waste sent out of the Mesaieed Industrial City (MIC) Hazardous Waste Treatment Center (HWTC).



Chart 15: Spent catalyst waste (2011-13)

The third party is selected through tendering and evaluating the bidders on technical, environmental and commercial criteria. The bidders are required to specify the intended catalyst treatment method and commit to provide the certificate of consumption at the end of the treatment process.

#### Used Oil

All types of used oil (lube, hydraulic, transformer and grease) that are generated from QAFCO's plant machinery/equipment are collected into labeled used oil drums, labeled with information on origin and type of used oil. The used oil drums are then temporarily transferred to a designated used oil yard, until they are taken out by the oil supplier, who takes back the used oil from QAFCO site for reuse/reclamation. The oil supplier also provides a certificate of consumption describing where the collected oil/grease has been used or the ultimate fate of the oil/grease.

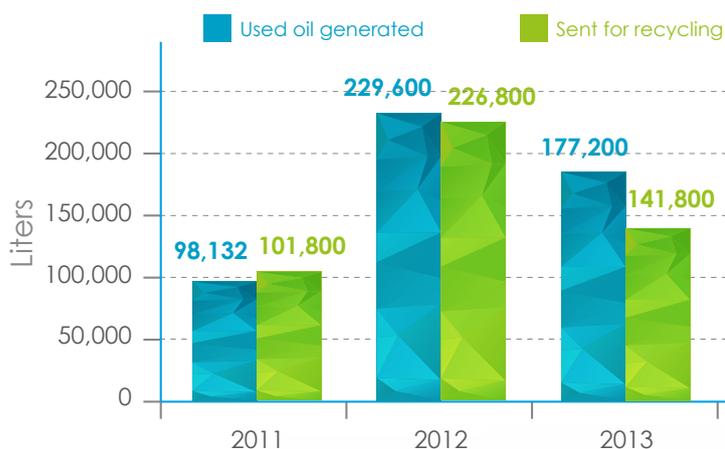


Chart 16: Used oil waste (2011-13)

### Lead-acid batteries and tires

Waste lead-acid batteries generated in QAFCO are collected and sent for recycling/treatment. The field maintenance engineer of the concerned group (electrical/mechanical/instrument) holds the overall responsibility for preparing the batteries for disposal and sending the waste batteries to the "Waste Lead Acid Batteries Temporary Storage" after filling and submitting the online "Waste Lead Acid Batteries Entry Form," under EMS (Environmental Management System).

The stored waste lead-acid batteries are treated at the MIC Hazardous Waste Treatment Centre, at price based on the rate-tariffs/charges stipulated in the "Hazardous Waste Management Services Agreement" signed between QAFCO and MIC. Our environment section is responsible for the coordination with MIC, for the disposal of the stored waste batteries in an environmentally responsible manner, in accordance with QAFCO's policy.

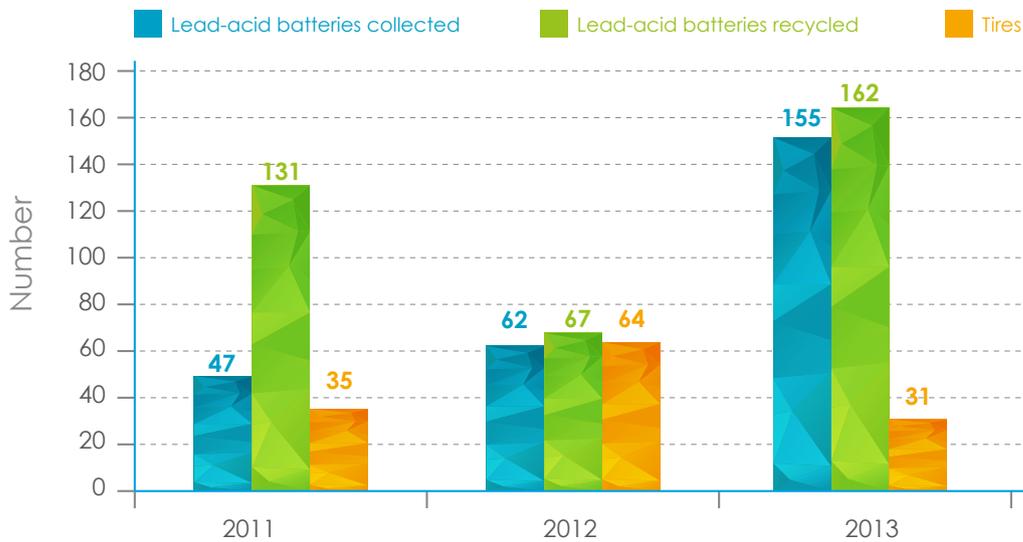


Chart 17: Other hazardous waste (2011-13)

### Miscellaneous hazardous wastes

Other hazardous wastes, such as cement asbestos sheets and spent laboratory reagents that are generated from concerned areas are generally transferred to a relevant designated storage temporarily, until taken out for treatment/disposal at a licensed hazardous waste treatment facility. The facility must be committed to provide the certificate of consumption at the end of the treatment process, describing the ultimate fate of the waste components.

### Spills

Chemicals handling at ammonia plants are Ammonia Hydrazine ( $\text{NH}_2\text{-NH}_2$ ), Methyl diethanolamine (MDEA), aMDEA, Nalco-8539, Nalco-8514, oil and grease. Spillage of these chemicals can be mixed with water of the trench during operational activity. Although no spills were reported in 2013, QAFCO continues adopting the following precautions to avoid impact to the environment:

- No spillage should be contained (secondary containment pallets are being used for storing chemical drums);
- Chemical oils must not be washed out in the trench during plant washing/cleaning activity;
- MDEA filter backwash water from system 00 and 05 must not be lined out to the trench;
- U0503, U1201, U1202, U1203 condensate must not be drained in the trench;
- Routine cleaning of compressor house oil pit is to be followed strictly;
- Urea 4 granulation section washing is to be carried out without draining contaminated water into the trench; and
- Urea conveyor belt washing is to be done without draining contaminated water into the surface trench.

QAFCO has also prevent spills by using different kits, tools and equipment stationed in each of A-1, A-2, A-3, U1, U2, U3 plants, Chemical Store No. D and safety store. A smaller kit is located inside the laboratory.

- Spill-defense mobile kit: to respond quickly to clean up the indoor and outdoor spills;
- Leak-sealing lance: for fast-leak sealing by a single operator on storage tanks or road tankers;
- Drum and tank repair kit: repair leaks in stainless steel, zinc-plated steel, rubber and beryllium storage tanks and drums;
- Pipe patch kit: repairing a variety of pipes sizes from 0.5 inch to 5 inch diameter;
- Sorbent materials: made from inert materials designed to absorb and temporarily retain liquids without deteriorating or solidifying;
- Spill X-A: a ready mix sorbent, neutralizing and solidification agent for use directly on acid spill treatment;
- Spill X-C: a ready mix sorbent, neutralizing and solidification agent for direct use on caustic spill treatment;
- Spill X-FP: a urea-based agent designed to chemically react with the formaldehyde solutions for controlling formaldehyde spills and their vapors;
- Hazorb bulk boom: used for diking to control the spread of spill around machinery, drums and trucks;
- Test ammonia-recondensing kit: pumping out of liquid ammonia and solution-based chemicals;
- Spill control applicators: the gun applicator can treat up to 3 gallons of spill, which is equivalent to about 9.30m<sup>2</sup> spill;
- Oil and acid drainage gully: used as collecting gutter for chemical liquid leaking;
- Spill-XS: agent designed to clean up the organic solvents spills, reduces vapors released and minimizes waste for disposal;
- Tractor cart: with positive locking latch and safety bail to add extra protection to prevent accidental dumping;
- Diaphragm hand pump: pumping both low and high-viscosity media as well as heavily contaminated liquids containing stones, sand and metal parts with 10mm diameter; and
- Chemical decanting pump: decanting of aggressive and high viscose chemicals.



## OUR *Biodiversity*

We believe biodiversity has an intrinsic value that is worth protecting regardless of its value to humans. An environmentally aware population values the preservation of the natural heritage of Qatar and its neighboring states. QAFCO is not aware of any event in 2012 causing significant impacts on biodiversity in protected areas or areas of high biodiversity value. The company is located in Mesaieed Industrial Area, approximately 50km south of Qatar's capital, far away from any community or a protected area of high biodiversity value.

Our environmental, health and safety section manages historic environmental liabilities associated with known or suspected contamination of soil at QAFCO, which includes operating sites and legacy sites. In addition, we support several projects that help protect and restore our delicate ecosystem outside Mesaieed Industrial Area.

### **Caring for Al Besheriya's environment**

Al-Besheriya Island is located in the marine zone of Mesaieed Industrial City (MIC) where QAFCO facilities are located. The island is frequented by tourists and bird watchers. It does not hold an economical value since a grant of a permit is needed to visit the island.

In 1999, the Ministry of Environment (MoE) appointed QAFCO as a custodian of the island. Since then, QAFCO, together with the MoE has been conducting clean-up operations on the island where families were also invited to participate. The campaign aimed at installing new containers for rubbish disposal, planting 200 mangrove saplings, and renovating all the shelters on the island.

Whatever fate is set for Al-Besheriya, at present it is safe in the hands of QAFCO. We continue with our effort in monitoring the environmental condition on the island by carrying out a baseline survey, in collaboration with Qatar University, of both the marine and terrestrial zones showing the details of the biodiversity at the island and its surrounding waters.

The central part of Al-Besheriya is quite small, less than a kilometer in full length. Vegetation is scruffy and soils demonstrate marked aridity. On the island, there is a graveyard covering almost a third of the area.

The island is devoid of fresh water and too saline and arid to support plant growth. However, two species known to occupy disturbed location all over Qatar grow profusely on the island. These are *Zygophyllum qatariense* and *Salsola imbricata*. Since the island is isolated, detailed studies on these can be carried out on their autecology.

Small mangrove plantations set up in 1999 constitute less than 20 individuals. Verbal communications reveal that 200 saplings were initially planted at the southeastern end of the island. Only 19 survived but they are of good growth and healthy condition.

Al-Besheriya is a locus for those interested in carrying out serious studies on bird species and their migration routes. Besides being a resting place with an aesthetic value, it is also a paradise for bird watchers. Though ospreys are not listed as endangered bird, they do occupy vicinities of the sea since they depend on fish as their diet. A pair exists on the scaffolding with two nests. These can be monitored to gain information on their breeding habits and reproductive success on an isolated location.

As for the future of the island, it must be a bird sanctuary under IUCN category II under QAFCO's care. Presently, efforts are ongoing to declare the island as protected area and to restrict any movement on the island during the migration and nesting season.



### **Fish farm and hatchery**

To support and improve fish diversity and population, QAFCO is planning to establish a fish hatchery in Mesaieed. After completion, the project will improve the biodiversity of the local marine life by introducing various native species.

### **Artificial reef installation**

Increase in industrial activities close to the Mesaieed shorelines have adverse effects on the local marine environment due to the damage to natural reefs and decrease in fish population. These reefs provide a rich habitat for fish and other marine species, and unfortunately cannot rebuild themselves fast enough to meet the environmental and human demands. QAFCO has taken the initiative to reduce the impact of industrialization on marine environment by deploying artificial reef balls in selected sites close to the Sealine beach in Mesaieed. There has been a significant buildup and recovery of coral reef has been observed in the area.



## DEVELOPING SUSTAINABLY

### Our *Community Engagement*

*“Qatar will provide its citizens with their basic needs and guarantee them equal opportunities”*

*Qatar National Vision 2030*

*“This convention has showed me that big companies meet together and work together to find solutions to the problems they are having. Also, the convention discussed how to optimize the methods of producing fertilizers in different types. This was really interesting and informative. I would like to thank the CEO of QAFCO Khalifa Al-Sowaidi for this great experience”*

*Ahmad Ali Al-Kuwari  
Student from Texas A&M University sponsored  
by QAFCO at the GPCA convention*

*Let's talk about our efforts beyond our workplace, our exhibitions and sponsorship*

In line with the Qatar National Vision 2030 and as an integral part of our business approach we engage with, and support the development of, local communities.

Our main operations are located in Mesaieed, managed by the MIC, a subsidiary of Qatar Petroleum, in the State of Qatar. Mesaieed was established in 1949 as a tanker terminal by Qatar Petroleum on a previously uninhabited site along the coast.

Our community development activities encourage us to behave ethically whilst improving the quality of life of the workforce, family and society at large. Our community development activities organized in 2013, support employees' volunteering aspirations by engaging them in several programs such as the flower and vegetable shows, as well as enhancing environment awareness.

We understand that stakeholders are paying more attention to how responsibly we behave towards their communities. Employees, customers, government and investors are now asking for information on our sustainability performance and social investment is an important part of this. We strive to evolve from corporate philanthropy and cash donations into more collaborative and focused forms of community partnerships. Measurement and reporting of these activities and creating the best possible outcome for the funds invested in our social activities will be a goal pursued with the same rigour as our financial objectives.

Our total investment in social activities such as sponsorships, donations and community development projects was QAR 7 million in 2013.

## **BENEFITS** *Beyond the Workplace*

All our full-time employees can avail benefits of housing services. We have more the 1,300 houses and accommodation for families and bachelors, and we strive to ensure high-level maintenance services as well as cover water and electricity expenses.

While we strive to provide comfortable accommodation, we have already created two social and sports clubs: Al Banush and Al Maha Club. Our clubs were developed with the vision to create a place where employees can engage in social activities and enjoy their recreational time. Both the clubs are non-revenue generating; all operations of the clubs are subsidized by QAFCO and membership of the clubs is open to all employees. Considering the diverse culture in QAFCO, we introduced various exciting activities, including social get-togethers, Ramadan celebrations, children talent shows, cultural activities and artistic performances. Further to this, the clubs host various personal development programs to enhance the skill levels of our local community; both facilities also serve the purpose of a "ladies' club" or a meeting point for women of the surrounding community. The annual QAFCO flower and vegetable show is also held in Al Banush club. Finally, we encourage club members to come up with social activities and strive to support their initiatives.

Each club has its own committee that is responsible for taking care of the social activities and initiatives. We are committed to expand both facilities by providing additional place for recreational activities.

Our employees are encouraged to complete an annual questionnaire aimed at improving the level of service and evaluating the tenants' satisfaction levels. In 2013, we started developing a report summarizing the tenants' feedbacks, and we are even planning to further develop it by automating the system to limit the usage of paper as well as streamlining our system.

### **QAFCO celebrates National Sports Day**

As part of its social responsibility towards the community, QAFCO features various sport activities on the occasion of the second anniversary of the Qatar National Sport Day (QNSD). In 2013, QAFCO's employees, their families and Mesaieed residents from different age groups actively participated in the event and engaged in several sport activities.

## COMMITMENT *to Education*

As part of our commitment to support community development as well as the development of our employees' families, we sponsor the QAFCO Primary School, which was established in 1974. The school provides education from three to eight years of age along with free transport facilities. Currently, the school has about 220 students from six to seven different nationalities being taught by 14 teachers recruited from the communities. The school is governed by a committee that meets formally once a month and informally on a daily basis.

In 2013, we received accreditation from the supreme educational council as well as the Civil Defense Approval. Further, we placed order for new furniture, which will be delivered next year for providing better facilities to our students.

During the academic year 2013–14, our students engaged in several activities, including outdoor educational trips. Further, our school has taken various initiatives towards increasing environment awareness among students. They are being taught to think and act in ways that will conserve our nature; they are being involved in programs that include water conservation, planting of trees or participation in QP Environment Fair in Doha. The environmental program is supported by the Environment Team of QAFCO. Student competitions, such as recitation competition, talent competition and coloring competition are held in the school as part of their curriculum to compare each of their skill levels and creativity with that of their classmates. Our students have actively participated and won prizes in the QAFCO flower and vegetable show, drawing and coloring competitions conducted by IAAD, Friends of Thrissur Doha, etc. They are also taken for educational trips to Islamic museums and gardens in Mesaieed with the aim of bringing them closer to nature.



### Case study: Qatar University seawater heat exchanger

Qatar Fertiliser Company and Qatar University (QU) have signed an MoU to enhance cooperation in areas related to energy systems. The agreement includes building and commissioning a heat exchanger pilot plant at QU and appointing a QAFCO Chair in Energy Systems at the College of Engineering (CENG). The pilot plant is a stand-alone unit that will be housed at the university's Gas Processing Center and is expected to be operational in 2014. The Chair, which is established and funded by QAFCO, will develop an applied research program in the area of energy systems according to QAFCO's needs. The research program will be integrated with the undergraduate student graduation projects and graduate theses, wherever appropriate. The Chair will also establish a research and consulting program, as well as conduct workshops, technical consultation, and provide engineering education through course development and summer training supervision.

## OUR Environmental Awareness to the Community

QAFCO is not only focusing on complying with local regulations by reducing its environmental foot print but also reaching out to the community by organizing and sponsoring events to educate community members and school children about their responsibilities towards environmental protection.

Calendar of environmental awareness around the year	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec
Al-Maha club conducted an Environmental Drawing Competition in March 2013, to mark the Qatar Environment Day.												
Coordinated the distribution of Grass heads to 3 Arabic School and 2 Expat Schools to mark the Gulf Environment Day and the Earth Day												
Environment Corner during QAFCO's Flower & Vegetable Show in Al-Banush Club, in March 2013. One of the main highlights was the success of the Sahara forest Project.												
3-days participation on the QP Environment Fair in April 2013 to showcase and present our environmental achievement and initiatives to the community.												
Environmental Awareness Materials in the form of Posters, Wall Stickers, labels, rulers with environmental messages were distributed to five different local schools.												
Environmental Awareness presentation and training to students from Texas A&M University of Qatar in March 2013, and Al- Eeman Independent School for Girls, in Oct. 2013.												
"Kulluna" (We are all for Children's Health) fair participation that was conducted at Mesaieed Primary and Preparatory Independent School for Girls, from 26-28 November 2013. The Kulluna for Health and Safety campaign has taken its vital message to nine Qatar schools, educating children, teachers and parents about health and safety and the benefits of a healthy lifestyle.												
Drawing competition in Mesaieed Schools on theme "Environment & Safety during Qatar National Day" Celebration. Competition was divided into 4 groups & each group was awarded three prizes. A total 118 entries were received from Schools.												



## OTHER Exhibitions and Sponsorships

### QAFCO flower and vegetable show

Our commitment to the environment is reflected in our activities, such as the flower and vegetable show that we have been supporting since 1988. The exhibition grew steadily since its inception in terms of the number of people attending, as well as exhibitors.

The flower and vegetables show would not have been so successful without the commitment of our employees who volunteer during the exhibition every year. The show is a great platform for encouraging volunteerism and cooperation between QAFCO and the community, as well as increase environmental awareness among our workforce and their families.

### QAFCO participation in the TAMUQ Conference

Texas A&M University hosted the QAFCO-Texas A&M Qatar Chemistry (TAMUQ) Conference. The main focus of the conference was to explore green chemistry and its application in environmental challenges. This was the sixth installment of the annual event with QAFCO that began in 2007.

The conference featured an impressive technical program and sessions showcasing opinions and research from some of the industry's most respected names in green chemistry and engineering. It provided a forum for exchange of ideas that would benefit academia as well as industry.

### QAFCO sponsored the Made in Qatar exhibition

QAFCO sponsored the Made in Qatar exhibition organized at the Doha International Exhibition Centre. The exhibition symbolized the Qatar National Vision 2030 of diversifying the country's economy from the traditional sectors of oil and gas and expanding its sources of generating national income. QAFCO participated as a "Gold Sponsor" to the "Made in Qatar" exhibition.

Event / Activity	Owner	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec
Qatar Career Fair: An event to meet with Qatari University and secondary school graduates to enhance the Qatarization policy.	Qatar Foundation State of Qatar												
Qatar National Day	State of Qatar												
National Sport Day	Gulf												
4 <sup>th</sup> GPCA Annual Fertilizer Convention	Petrochemicals and Chemicals Association GPCA												
Participation of University Student in 4 <sup>th</sup> GPCA Annual Fertilizer Convention: Initiative by QAFCO to involve University students in professional scientific forms	QAFCO												
Made in Qatar Exhibition: for promoting Qatar Industry	Qatar Chamber of Commerce												
4 <sup>th</sup> Conference on Corporate Responsibility	Ministry of Business & Commerce												
7 <sup>th</sup> IEEE GCC 2013 Conference: QAFCO Sponsored the participation of 20 University students in this professional & scientific Conference	Qatar Society of Engineers												
2 <sup>nd</sup> Form for young Volunteers: social and human event	Qatar Center For Voluntary Activities												
Equestrian Racing Tournament: In cooperation with QP and QP subsidiaries	Equestrian & Racing Club												
6 <sup>th</sup> Open Fly-In Day	Qatar Flying Club												
QAFCO Flower and Vegetable Show 2012: Annual Event sponsored by QAFCO since 1988.	QAFCO												
QAFCO-Day: Social & Entertainment Event for QAFCO Staff	QAFCO												
2 QAFCO Open Tennis Championship: Annual Event sponsored by QAFCO since 1985	QAFCO												
QAFCO Annual Ramadan Tournament: Annual sport tournament includes, Football, Cricket, Volleyball and Basket Ball and snooker competitions for QAFCO employees	QAFCO Sport Committee												
QP Chairman's Cup Football Tournament: In cooperation with QP and QP subsidiaries	QP												
QAFCO Annual Cricket Tournament	QAFCO Sport Committee												

Table 18: Calendar of community engagement activities around the year

## STAKEHOLDER *Feedback Form*

1) Kindly assess the following elements of the report. (Please tick the appropriate box)

	Poor	Satisfactory	Good	Excellence
All important topics are addressed				
The report structure and wording make the report easy to read				
Quantitative data is comprehensive				
The report is balanced				

2) Please provide your feedback on the following sections of the report. (Please tick the appropriate box)

Report section	Poor	Satisfactory	Good	Excellence
Our business transparency and ethics				
Our responsibility towards Qatar's growth				
Our employees' well-being				
Our environmental liability				
Our community engagement				

3) Please provide your overall opinion. (Please tick the appropriate box)

	Poor	Satisfactory	Good	Excellence
QAFCO 2013 Sustainability Report				

4) Would you like to see any additional topic in the sustainability report 2014?

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5) Do you have any further comments or suggestions?

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## GRI Application Level Check



### Statement GRI Application Level Check

GRI hereby states that **Qatar Fertiliser Company** has presented its report "QAFCO Sustainability Report 2013 "Developing Sustainability"" to GRI's Report Services which have concluded that the report fulfills the requirement of Application Level A+.

GRI Application Levels communicate the extent to which the content of the G3.1 Guidelines has been used in the submitted sustainability reporting. The Check confirms that the required set and number of disclosures for that Application Level have been addressed in the reporting and that the GRI Content Index demonstrates a valid representation of the required disclosures, as described in the GRI G3.1 Guidelines. For methodology, see [www.globalreporting.org/SiteCollectionDocuments/ALC-Methodology.pdf](http://www.globalreporting.org/SiteCollectionDocuments/ALC-Methodology.pdf)

Application Levels do not provide an opinion on the sustainability performance of the reporter nor the quality of the information in the report.

Amsterdam, 23 April 2014

Ásthildur Hjaltadóttir  
Director Services  
Global Reporting Initiative



The "+" has been added to this Application Level because Qatar Fertiliser Company has submitted (part of) this report for external assurance. GRI accepts the reporter's own criteria for choosing the relevant assurance provider.

*The Global Reporting Initiative (GRI) is a network-based organization that has pioneered the development of the world's most widely used sustainability reporting framework and is committed to its continuous improvement and application worldwide. The GRI Guidelines set out the principles and indicators that organizations can use to measure and report their economic, environmental, and social performance. [www.globalreporting.org](http://www.globalreporting.org)*

**Disclaimer:** Where the relevant sustainability reporting includes external links, including to audio visual material, this statement only concerns material submitted to GRI at the time of the Check on 11 April 2014. GRI explicitly excludes the statement being applied to any later changes to such material.

# ASSURANCE *Statement*



## Assurance for the QAFCO 2013 Sustainability Report

On behalf of QAFCO Vincotte performed a limited assurance of the QAFCO Sustainability Report 2013 (the "Report") on environmental and social disclosures.

### Scope

Verification was done for QAFCO for the principles Materiality, Stakeholder Inclusiveness and Responsiveness to Stakeholders. The Report was further checked for the principles of Accuracy and Clarity.

Furthermore a selection of environmental and social Key Performance Indicators (KPI's) and qualitative claims and statements were verified. The review of the financial performance information was excluded from the scope, as Vincotte assumes it was derived from the audited financial records of QAFCO.

### Assurance engagement

For the assurance engagement the procedures followed were:

- Benchmarking of the Report against the sustainability indicators for the chemical sector;
- Face-to-face interviews with employees in charge of preparing the Report and data owners, who provided the raw data for the KPI's;
- Audits of the data-management systems;
- Audit of the way of processing and aggregating the raw data;
- Sampling of raw data with regard to the reported KPI's;
- Site visit to the offices of QAFCO in Mesaieed Industrial City, Qatar (31/03-1/04 2014).

### Responsibilities

The Report has been prepared by QAFCO, which remains responsible for its content. Vincotte's responsibility was solely to perform the assurance for selected information.

### Declaration of independence

The assurance was carried out by Vincotte as an independent third party.

Beyond the scope of this mission QAFCO is not a customer of Vincotte or Vincotte affiliates.

### Conclusion

Based on the work undertaken it is the opinion of Vincotte that QAFCO works according to the principles of Materiality, Stakeholder Inclusiveness and Responsiveness to Stakeholders. The Report is in accordance with the principles of Accuracy and Clarity. With regards to the selected environmental and social KPI's, it is the opinion of Vincotte that the reviewed reported KPI's are not materially misstated.

### Recommendations

Without affecting our conclusion, Vincotte recommends QAFCO to:

- Continue to integrate the processes of sustainability reporting (stakeholder engagement, stakeholder mapping, materiality assessment,...) in QAFCO's existing ISO certified management systems;
- Go for reporting of full life cycle impacts (including upstream and downstream impacts, when feasible);
- Continue to look for opportunities to communicate impacts through the value chain;
- Segregate data of the mother company and subsidiaries;
- Consider switching to the GRI 4 reporting framework.

18<sup>th</sup> of April 2014

Evert Vermaut  
Product Manager Eco-claim Validation  
Business Unit Vincotte Environment, Safety  
and Sustainability

## GRI Index

STANDARD DISCLOSURES PART I: Profile disclosures			
Profile Disclosure	Disclosure	Level of reporting	Location of disclosure
<b>1. Strategy and analysis</b>			
1.1	Statement from CEO presenting overall vision	Fully	pp. 5-6
1.2	Key impacts, risks, and opportunities	Fully	pp. 5-6
<b>2. Organizational profile</b>			
2.1	Name of reporting organization	Fully	Front cover
2.2	Primary brands, products and/or services	Fully	pp. 3 and 15-19
2.3	Operational structure of the organization	Fully	p. 21
2.4	Location of organization's headquarters	Fully	p.15
2.5	Countries of operation	Fully	QAFCO only operates in the State of Qatar.
2.6	Nature of ownership and legal form	Fully	p.15
2.7	Markets served	Fully	pp.15; 18-19
2.8	Scale of reporting organization	Fully	pp.15-19
2.9	Significant changes during the reporting period	Fully	pp. 9; 20-21
2.10	Awards received in the reporting period	Fully	p. 20
<b>3. Report parameters</b>			
3.1	Reporting period	Fully	p. 9 - Further to information occurred in 2013, data from previous years are also provided to facilitate comparison. In those cases, it is indicated in which period occurred.
3.2	Date of most recent previous report	Fully	p. 8 - Latest report in 2012.
3.3	Reporting cycle	Fully	p. 8 - QAFCO develops the report in annual basis since 2010.
3.4	Contact for questions regarding the report or its content	Fully	pp. 2; 65; and back cover
3.5	Process for determining report content	Fully	pp.13-14
3.6	Boundary of the report	Fully	p. 9 - In 2013 report, our subsidiaries (GFC and QMC) were excluded from the boundary of the report. Both companies operate as integrated parts of QAFCO, which complicates the segregation of information on environmental aspects (energy, water, emissions, effluents and waste). In 2014, we will work hard to include our subsidiaries within the boundary and provide a clear data breakdown of QAFCO and its subsidiaries.
3.7	Limitations on the scope or boundary of the report	Fully	There are no specific limitations.
3.8	Basis for reporting on joint ventures, subsidiaries, leased facilities, outsourced operations, and other entities that can significantly affect comparability from period to period and/or between organizations	Fully	p. 9
3.9	Data measurement techniques and the bases of calculations	Fully	pp. 9-10; 52
3.10	Explanation of any re-statements of information provided in earlier reports	Fully	There are no re-statements of information.
3.11	Significant changes from previous reporting	Fully	<ul style="list-style-type: none"> <li>Subsidiaries (GFC and QMC) have been excluded from the boundary in the 2013 report;</li> <li>In 2013, QAFCO changed its organizational structure mainly to create promotional opportunities for vertical progression of Qatari employees; and</li> <li>The migration of QAFCO's marketing, sales and distribution activities to Muntajat was completed on 1st March 2013. Mandated by Emiri Decree in 2013, Muntajat holds exclusive rights to purchase, market, distribute and sell Qatar's production of chemical and petrochemical regulated products to the global market.</li> </ul>
3.12	Table identifying the location of the Standard Disclosures in the report	Fully	p. 77
3.13	Policy and practice with regard to external assurance for the report	Fully	pp.10 and 67

Profile Disclosure	Disclosure	Level of reporting	Location of disclosure
<b>4. Governance, commitments, and engagement</b>			
4.1	Governance structure, including committees under the highest governance body responsible for specific tasks, such as setting strategy or organizational oversight.	Fully	pp. 22-25
4.2	Is the Chair of the Board of Directors also an executive officer?	Fully	p. 24
4.3	Number of members of the Board of Directors that are independent and/or non-executive members	Fully	p. 24 - All Board of Directors' members are males.
4.4	Mechanisms for shareholders and employees to provide recommendations or direction to the highest governance body	Fully	p. 24
4.5	Linkage between compensation for members of the highest governance body, senior managers, and executives, and the organization's performance	Fully	p. 25
4.6	Processes in place for the highest governance body to ensure conflicts of interest are avoided	Fully	QAFCO has established and implemented appropriate controls and procedures to ensure the systematic identification of potential conflicts of interest and to address such conflicts of interest if they arise. Our Related Party Policy monitors related party transactions to ensure fair rules for employee and board member share trading.
4.7	Process for determining the qualifications and expertise of the members of the Board of Directors	Fully	p.24
4.8	Statements of mission or values, codes of conduct, and principles	Fully	pp.7 and 26-27
4.9	Procedures of the highest governance body for overseeing economic, environmental, and social performance, including risks and opportunities, and adherence or compliance with internationally agreed standards, codes of conduct, and principles	Fully	p.25
4.10	Process for evaluating the highest governance body's performance, particularly with respect to economic, environmental, and social performance	Fully	p.25
4.11	Explanation of how the precautionary approach or principle is addressed by the organization	Fully	Precautionary Principle is addressed by applying our principles of risk assessment and management. Risk assessment includes hazard identification, characterization, exposure assessment and risk assessment. Risk management encompasses the identification, selection and implementation of alternative actions for addressing risk through the control of identified hazard(s) and/or exposure.
4.12	Externally developed economic, environmental, and social charters, principles, or other initiatives to which the organization subscribes or endorses	Fully	pp. 13 and 20
4.13	Memberships in associations and/or advocacy organizations	Fully	pp. 20 and 30
4.14	List of stakeholder groups engaged by the organization	Fully	pp.12-13
4.15	Basis for identification and selection of stakeholders with whom to engage	Fully	p.12
4.16	Approaches to stakeholder engagement	Fully	pp.12-13
4.17	Key topics and concerns raised through stakeholder engagement and how the organization has responded to those key topics and concerns	Fully	pp.12-13

STANDARD DISCLOSURES PART II: Disclosures on anagement Approach (DMAs)				
G3.1 DMAs	Disclosure	Level of reporting	Location of disclosure and reasons for omission	UNGC principles
<b>DMA EC Disclosure on Management Approach to Economy</b>				
Aspects	Economic Performance	Fully	pp. 28 - 31	Principles 1, 4, 6, and 7
	Market presence	Fully	pp. 19-20 and 29-31	
	Indirect economic impacts	Fully	pp. 29-31 and 60-64	
<b>DMA EN Disclosure on Management Approach to Environment</b>				
Aspects	Materials	Fully	pp. 16-17	Principles 7, 8 and 9
	Energy	Fully	p. 51	
	Water	Fully	p. 50	
	Biodiversity	Fully	pp. 58-59	
	Emissions, effluents and waste	Fully	pp. 52-57	
	Products and services	Fully	pp. 15-20 and 30-31	
	Compliance	Fully	There were no cases of non-compliance reported in 2013 concerning environmental aspects. Our Internal Audit Committee, supported by QASEC Committee, oversees areas such as: <ul style="list-style-type: none"> <li>• Compliance with legal and regulatory requirements related to environmental issues;</li> <li>• Internal control framework; and</li> <li>• Management of internal and external auditor's activities for environmental aspects.</li> </ul>	
	Transport	Partially	p. 41 and 52 - QAFCO does not completely measure EN29 i.e. impact due to GHG emissions of transportation, waste, etc. We plan to disclose further information in the 2014 report.	
Overall	Not reported	Information on EN30 is confidential. However, we are planning to get approval to disclose on this indicator in 2014 report.		
<b>DMA LA Disclosure on Management Approach to Labor Practices and Decent Work</b>				
Aspects	Employment	Fully	pp. 33-39	Principles 1, 3 and 6
	Labor/management relations	Fully	pp. 32-33 and 36-38	
	Occupational health & safety	Fully	pp. 46-47	
	Training and education	Fully	pp. 35-36; 38-39; 41; 46-47	
	Diversity and equal opportunity	Fully	pp. 33-36	
	Equal remuneration for women and men	Fully	Aligned to Qatar Labor Law, a working woman is paid wages equivalent to wage payable to a man, if the nature of work is the same, and shall be offered the same opportunities for training and promotion. More information "Our employee well-being"	
<b>DMA HR Disclosure on Management Approach to Human Rights</b>				
Aspects	Investment and procurement practices	Fully	pp. 26-27 and 30	Principles 1, 2, 3, 4, 5, and 6
	Non-discrimination	Fully	pp. 26-27	
	Freedom of association and collective bargaining	Fully	Qatar's constitution and laws provide for freedom of association, within limits based on public order and morality concerns.	
	Child labor	Fully	We abide by and obey Labor Law which prevents us from Child Labor practices in our workforce, contractors and suppliers. Additionally, our workforce, contractors and suppliers are aware of our Code of Conduct & Ethics, which is aligned to Qatar Labor Law. More information in HR2 and "Our business transparency and integrity" section.	
	Forced and compulsory labor	Fully	pp. 26-27	
	Security practices	Fully	All our contractors are trained in QAFCO's Code of Conduct & Ethics aligned to Qatar Labor Law. Qatar Labor Law states procedures and behaviors to be followed regarding human rights compliance.	
	Indigenous rights	Not reported	This indicator is not applicable to QAFCO as no indigenous population are affected by the Company operations.	

G3.1 DMAs	Disclosure	Level of reporting	Location of disclosure and reasons for omission	UNGC principles
<b>DMA HR Disclosure on Management Approach to Human Rights</b>				
Aspects	Assessment	Fully	All our contractors are trained in QAFCO's Code of Conduct & Ethics aligned to Qatar Labor Law. Qatar Labor Law states procedures and behaviors to be followed regarding human rights compliance.	Principles 1, 2, 3, 4, 5, and 6
	Remediation	Fully	Our Internal Audit team is responsible for overseeing and resolution of any internal grievance issues.	
<b>DMA SO Disclosure on Management Approach to Society</b>				
Aspects	Local Communities	Fully	pp. 60-64	Principle 10
	Corruption	Fully	pp. 26-27	
	Public policy	Not reported	Not material	
	Anti-competitive behavior	Fully	There is no contribution in 2013 to any political party.	
	Compliance	Fully	In 2013, there were no cases of non-compliance with laws and regulations.	
<b>DMA SO Disclosure on Management Approach to Product Responsibility</b>				
Aspects	Customer health and safety	Partially	More information in PR1 and PR2.	Principles 1 and 8
	Product and service labeling	Fully	pp. 30-31	
	Marketing communications	Not reported	QAFCO is not responsible for marketing and communications.	
	Customer privacy	Not reported	Muntajat is responsible to manage customer satisfaction.	
	Compliance	Fully	In 2013, there were no cases of non-compliance with laws and regulations related to Marketing communications or labeling.	

<b>STANDARD DISCLOSURES PART III: Performance Indicators</b>				
Indicator	Disclosure	Level of reporting	Location of disclosure and reasons for omission	UNGC principles
<b>Economic Performance</b>				
EC 1	Direct economic value generated and distributed including revenues, operating costs, employee compensation, donations and other community investments, retained earnings and payments to capital providers	Fully	<p>p. 29-30</p> <p><b>Income statement period ended 31.12.2013 (QAFCO standalone):</b>                      Sales: 8,240,052,435 QAR                      Cost of sales: (4,081,771,274) QAR                      GROSS PROFIT: 4,158,281,161 QAR                      Other income: 118,910,523 QAR                      Selling and distribution costs: (307,825,494) QAR                      Administrative expenses: (587,381,823) QAR                      Finance costs: (167,052,163) QAR                      Gain/ (loss) on foreign currency exchange: 3,394,366 QAR                      PROFIT FOR THE YEAR: 3,218,326,570 QAR                      Other comprehensive income                      Net unrealized gain on cash flow hedges: 155,150,515 QAR                      Total comprehensive income for the year: 3,373,477,085 QAR</p> <p><b>Employee wages and benefits:</b>                      Cost of sales – Salaries, wages, and related expenses: 246,796,520 QAR                      Administrative expenses – Salaries and related expenses: 281,394,930 QAR</p> <p><b>Payments to provider of funds:</b>                      Dividends to all shareholder:                      - Declared during 2013: 1,700,000,000 QAR                      - Actual in 2013: 2,900,000,000 QAR                      Interest payments made to providers of loans: 41,421,455 QAR                      Interest on all forms of debt and borrowings:                      - Interest on interest rate swap: 119,152,280 QAR                      - Amortisation of deferred arrangements fees: 6,478,428 QAR</p>	No Specific Requirement

Indicator	Disclosure	Level of reporting	Location of disclosure and reasons for omission	UNGC principles
<b>Economic Performance</b>				
			<b>Payment to government (Income tax payable):</b> 213,112,608 QAR Donations and other community investments: Around \$2 million spent on voluntary social investments	
EC 2	Financial implications and other risks and opportunities due to climate change	Fully	pp. 16-19 and 50-52	Principle 7
EC 3	Coverage of the organization's defined benefit plan obligations	Fully	pp. 36-37	No Specific Requirement
EC 4	Significant financial assistance received from government	Fully	QAFCO did not receive any financial value assistance from the government in 2013.	No Specific Requirement
EC 5	Range of ratios of standard entry level wage by gender compared to local minimum wage	Fully	There is no minimum wage established in the State of Qatar .	Principle 1
EC 6	Policy, practices, and proportion of spending on locally-based suppliers	Fully	p. 30 - 'Local' means companies manufacturing goods and providing services at Qatar, which are registered in Qatar".	No Specific Requirement
EC 7	Procedures for local hiring and proportion of senior management hired from the local community	Fully	pp. 35-36	Principle 6
EC 8	Development and impact of infrastructure investments and services provided primarily for public benefit through commercial, in-kind, or pro bono engagement	Fully	pp. 60-64	No Specific Requirement
EC 9	Understanding and describing significant indirect economic impacts, including the extent of impacts	Fully	pp. 29-30 and 60-64	No Specific Requirement
<b>Environment performance</b>				
EN 1	Materials used by weight	Fully	pp. 16-17	Principle 8
EN 2	Percentage of materials used that are recycled input materials	Fully	pp. 16-17	Principles 8 and 9
EN 3	Direct energy consumption by primary source	Fully	pp. 3 and 51	Principle 8
EN 4	Indirect energy use by primary source	Fully	p.51 - Most of the electricity consumed at QAFCO is catered from Internal generation. A small share is purchased from Qatar General Electricity & Water Corporation (KAHRAMAA), the sole transmission and distribution system owner and operator (TDSOO) for the electricity and water sector in Qatar. A total of 928,249 GJ were purchased in 2013 and 1,059,880 GJ in 2012.	Principle 8
EN 5	Energy saved due to conservation and efficiency improvements	Partially	p. 51 - QAFCO does not calculate energy saved as result of conservation and efficiency improvements. In the next reporting year, QAFCO will report on this key performance indicator.	Principles 8 and 9
EN 6	Initiatives to provide energy-efficient or renewable energy-based products and services	Fully	p. 51	Principles 8 and 9
EN 7	Initiatives to reduce indirect energy consumption and reductions achieved	Fully	In 2013 there were no initiatives in place to reduce indirect energy consumption.	Principles 8 and 9
EN 8	Total water withdrawal by source	Fully	p. 50	Principle 8

Indicator	Disclosure	Level of reporting	Location of disclosure and reasons for omission	UNGC principles
EN 9	Water resources significantly affected by withdrawal of water	Fully	p. 50	Principle 8
EN 10	Percentage and total volume of water recycled and reused	Fully	pp.3 and 50	Principles 8 and 9
EN 11	Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	Fully	pp. 58-59	Principle 8
EN 12	Description of significant impacts on biodiversity in protected areas and areas of high biodiversity value	Fully	pp. 58-59	Principle 8
EN 13	Habitats protected or restored	Fully	pp. 58-59	Principle 8
EN 14	Strategies, current actions, and future plans for managing impacts on biodiversity	Fully	pp. 58-59	Principle 8
EN 15	Number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk	Not reported	There are no IUCN Red list species and national conservation list species with habitats in areas affected by operations.	Principle 8
EN 16	Total direct and indirect greenhouse gas emissions by weight	Fully	pp. 3 and 52	Principle 8
EN 17	Other relevant indirect greenhouse gas emissions by weight	Not reported	QAFCO is planning to estimate other indirect GHG emissions for next reporting year.	Principle 8
EN 18	Initiatives to reduce greenhouse gas emissions and reductions achieved	Fully	p. 52	Principles 7, 8 and 9
EN 19	Emissions of ozone-depleting substances by weight	Fully	p. 53	Principle 8
EN 20	NOX, SOX, and other significant air emissions by type and weight	Fully	pp. 53-54	Principle 8
EN 21	Total water discharge by quality and destination	Fully	p. 50	Principle 8
EN 22	Total weight of waste by type and disposal method	Fully	pp. 54-56	Principle 8
EN 23	Total number and volume of significant spills	Fully	pp. 56-57	Principle 8
EN 24	Weight of transported, imported, exported, or treated waste deemed hazardous under the terms of the Basel Convention Annex I, II, III, and VIII and the percentage of transported waste shipped internationally	Fully	pp. 54-56	Principle 8
EN 25	Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by discharges of water and runoff	Fully	pp.5-6, 50 and 58-59	Principle 8
EN 26	Initiatives to mitigate environmental impacts of products and services and extent of impact mitigation	Fully	pp. 49-59	Principles 7, 8 and 9

Indicator	Disclosure	Level of reporting	Location of disclosure and reasons for omission	UNGC principles
EN 27	Percentage of products sold and their packaging materials that are reclaimed by category	Fully	p. 19	Principles 8 and 9
EN 28	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations	Fully	No non-compliance in 2013.	Principle 8
EN 29	Significant environmental impacts of transporting products and other goods and materials used for the organization's operations and transporting members of the workforce	Partially	p. 41- QAFCO does not measure the environmental impact of transporting members of the workforce such as GHG emissions. We are planning to provide further information in the next report.	Principle 8
EN 30	Total environmental protection expenditures and investments by type	Not reported	QAFCO can not disclose this information due to confidentially reasons. We will consider to get approval on the disclosure of expenditures in the coming reporting period.	Principles 7, 8 and 9
<b>Labor and Decent Work performance</b>				
LA 1	Total workforce by employment type, employment contract, and region, broken down by gender	Fully	p. 34 - Please note that all our employees are full-time and permanent employees. QAFCO is only operating in Qatar.	No Specific Requirement
LA 2	Total number and rate of employee turnover by age group, gender, and region	Fully	p. 38 - Out of the total 88 staff who were discharged from QAFCO, there were 3 staff who belonged to Training & Development. Thus, the number of staff who were discharged, excluding those under T&D, is 85. The employee Turnover rate based on 1541 employees is 5.51. -Total number and rate of new employee hires entering employment (males: 96 / Rate: 6.23; females: 0) - Total number and rate of new employee hires entering employment (< 30yrs – 54 / Rate: 3.5; 30yrs<M<50yrs – 42 / Rate: 2.72; >50yrs – 0) - Total number and rate of newly hired employees leaving during the reporting period (males: 2 / Rate: 0.13; females: 0) - Total number and rate of newly hired employees leaving during the reporting ( < 30yrs – 1 / Rate: 0.065; 30yrs<M<50yrs – 1 / Rate: 0.065; >50yrs – 0) Total number and rate of employees leaving employment during the reporting period (males: 82 / Rate: 5.32; females: 3 / Rate: 0.19) - Total number and rate of employees leaving employment during the reporting period(< 30yrs – 3 / Rate: 0.19; 30yrs<M<50yrs – 50 / Rate: 3.24; >50yrs – 32 / Rate: 2.08)	Principle 6
LA 3	Benefits provided to full-time employees that are not provided to temporary or part-time employees, by major operations	Fully	p. 37	No Specific Requirement
LA 15	Return to work and retention rates after parental leave, by gender	Fully	There were no parental leaves in 2013.	No Specific Requirement
LA 4	Percentage of employees covered by collective bargaining agreements	Fully	Collective bargaining agreements are not allowed in the State of Qatar.	Principles 1 and 3

Indicator	Disclosure	Level of reporting	Location of disclosure and reasons for omission	UNGC principles
LA 5	Minimum notice periods regarding operation changes, including whether it is specified in collective agreements	Fully	Operational changes are communicated through our intranet – however, there is no formal policy and/or procedure around minimum notice period.	Principle 3
LA 6	Percentage of total workforce represented in formal joint management-worker health and safety committees that help monitor and advise on occupational health and safety programs	Fully	p. 41	Principle 1
LA 7	Rates of injury, occupational diseases, lost days, and absenteeism and the number of work-related fatalities by region and by gender	Fully	p. 3 and 40	Principle 1
LA 8	Education, training, counseling, prevention, and risk-control programs in place to assist workforce members, their families or community members regarding serious diseases	Fully	pp. 38-39, 41 and 60-64	Principle 1
LA 9	Health and safety topics covered in formal agreements with trade unions	Fully	Trade unions are not allowed in the State of Qatar.	Principle 1
LA 10	Average hours of training per year per employee, by gender, and by employee category	Fully	pp. 38-39 - Data are only focused on the PUBLIC Courses (Local & Overseas Courses). Hours of training attended by Senior Management:0 / Hours of training attended by Middle Management (Male: 688; Female: 0) / Hours of training attended by Lower Management (Male: 4392; Female: 848) / Hours of training attended by Workers (Male: 6432; Female: 40)	No Specific Requirement
LA 11	Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings	Fully	pp. 38-39	No Specific Requirement
LA 12	Percentage of employees receiving regular performance and career development reviews by gender	Fully	p. 39 - In 2013, all our employees received regular performance and career development reviews.	No Specific Requirement
LA 13	Composition of governance bodies and breakdown of employees per employee category according to gender, age group, minority group membership and other indicators of diversity	Fully	pp. 24 and 34 - All Board of Directors' members are males.	Principles 1 and 6
LA 14	Composition of governance bodies and breakdown of employees per employee category according to gender, age group, minority group membership and other indicators of diversity	Fully	QAFCO pays fairly regardless of gender. Salary ratio between men and women is 1:1.	Principles 1 and 6

Indicator	Disclosure	Level of reporting	Location of disclosure and reasons for omission	UNGC principles
<b>Human Rights performance</b>				
HR 1	Percentage and total number of significant investment agreements that include human rights clauses or that have undergone human rights screening	Partially	p. 26 - QAFCO has not specific clauses in its contracts mentioning human rights. We have already proposed our legal department to consider including clauses incorporating human rights concerns in investment agreements and contracts.	Principles 1, 2, 3, 4, 5, and 6
HR 2	Percentage of significant suppliers and contractors that have undergone screening on human rights and actions taken	Partially	In 2013 none of our contractors & suppliers was declined as a result of human rights screening. QAFCO abides by Labor Law which prevents us from situations of Forced Labor, Child Labor, Women Discrimination as well as any other anti-human rights behavior. Qatari Labor Law states. Accordingly, QAFCO values are aligned to the Labor Law. Additionally, we get to know our contractors before engaging them, ensuring they abide Law of Qatar. We also educate our contractors on QAFCO values and code of conduct.	Principles 1, 2, 3, 4, 5, and 6
HR 3	Total hours of employee training on policies and procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained	Partially	At QAFCO, all employees receive induction related to our Code of Conduct & Ethics i.e. Fraud Awareness Framework, Whistle Blowing Policy, QAFCO values and principles, behavior, etc. QAFCO abides by Labor Law which prevents us from situations of Forced Labor, Child Labor, Women Discrimination as well as any other anti-human rights behavior. Qatari Labor Law states. Accordingly, QAFCO values are aligned to the Labor Law and induction training is provided to all employees. We will provide with more detailed and accurate information in our next report.	Principles 1, 2, 3, 4, 5 and 6
HR 4	Total number of incidents of discrimination and actions taken	Fully	No incidents reported in 2013.	Principles 1, 2 and 6
HR 5	Operations and significant suppliers identified in which the right to exercise freedom of association and collective bargaining may be at significant risk and actions taken to support these rights	Fully	Qatar's constitution and laws provide for freedom of association, within limits based on public order and morality concerns.	Principles 1, 2 and 3
HR 6	Operations and significant suppliers identified as having significant risk for incidents of child labor and measures taken to contribute to the elimination of child labor	Fully	No incidents reported in 2013.	Principles 1, 2 and 5
HR 7	Operations and significant suppliers identified as having significant risk for incidents of forced or compulsory labor and measures to contribute to the elimination of forced or compulsory labor	Fully	No incidents reported in 2013.	Principles 1, 2 and 4
HR 8	Percentage of security personnel trained in the organization's policies or procedures concerning aspects of human rights that are relevant to operations	Fully	p. 26-27	Principles 1 and 2

Indicator	Disclosure	Level of reporting	Location of disclosure and reasons for omission	UNGC principles
HR9	Total number of incidents of violations involving rights of indigenous people and actions taken	Not	This indicator is not applicable to QAFCO.	Principles 1 and 2
HR 10	Percentage and total number of operations that have been subject to human rights reviews and/or impact assessments	Fully	We abide by and obey Qatar Labor Law. We ensure that our operations are developed to comply with local laws. All our operations undergo an environmental impact assessment and we ensure that are aligned with our code of ethics and conduct.	No Specific Requirement
HR 11	Number of grievances related to human rights filed, addressed, and resolved through formal grievance mechanisms	Fully	No incidents reported in 2013.	No Specific Requirement
<b>Social performance</b>				
SO 1	Percentage of operations with implemented local community engagement, impact assessments, and development programs.	Fully	p. 12-13 and 60-64 - We develop environmental impact assessment (EIA) reports to evaluate the possible impacts that our proposed project have on the environment, consisting of the environmental, social and economic aspects.	No Specific Requirement
SO 9	Operations with significant potential or actual negative impacts on local communities.	Fully	pp. 60-64	No Specific Requirement
SO 10	Prevention and mitigation measures implemented in operations with significant potential or actual negative impacts on local communities.	Fully	pp. 60-64	No Specific Requirement
SO 2	Percentage and total number of business units analyzed for risks related to corruption	Fully	pp. 23-27 - All our departments and employees (100%) are analysed for risk related to corruption as per our Whistle Blowing policy.	Principle 10
SO 3	Percentage of employees trained in the organization's anti-corruption policies and procedures	Fully	All employees receive induction in QAFCO's Code of Conduct & Ethics i.e. Fraud Awareness Framework, Whistle Blowing Policy, QAFCO values and principles, behaviour, etc.	Principle 10
SO 4	Actions taken in response to incidents of corruption	Fully	No non-compliance	Principle 10
SO 5	Public policy positions and participation in public policy development and lobbying	Not reported	QAFCO does not report on this topic, as during the stakeholder consultation it was not deemed material to an assessment of QAFCO's future prospects.	Principles 1-10
SO 6	Total value of financial and in-kind contributions to political parties, politicians, and related institutions by country	Fully	No contribution in 2013	Principle 10
SO 7	Total number of legal actions for anti-competitive behavior, anti-trust, and monopoly practices and their outcomes	Fully	No non-compliance	No Specific Requirement
SO 8	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations	Fully	No non-compliance	No Specific Requirement
<b>Product Responsibility performance</b>				
PR 1	Life cycle stages in which health and safety impacts of products and services are assessed for improvement and	Partially	pp. 30-31- Planning of Product Realisation is carried out at our company, based on our Integrated Policy and other organisational practices and in consistency with the other processes of the QAFCO Management Systems. QAFCO has implemented a	Principle 1

Indicator	Disclosure	Level of reporting	Location of disclosure and reasons for omission	UNGC principles
	percentage of significant products and services categories subject to such procedures		<p>stringent quality management programme facilitated by real time monitoring and measurement of production processes, right from incoming raw materials till distribution of final products, supported by sophisticated laboratory analysis at various stages of production processes. For our Ammonia and urea products, we identify significant environmental aspects and occupational health, safety and security risks related to: purchase of materials, evaluation and selection of suppliers, certification, manufacturing, storage and disposal stages through documented procedures and practices. The Consent to operate conditions as specified by the HSE legal requirements also helps us in identifying significant aspects and impacts. During the enquiry stage, QAFCO determines customer requirements including those for delivery and post-delivery activities. We also identify other product requirements not stated by the customer but necessary for specified use or known and intended use.</p> <p>The reason why we are not assessing EH&amp;S impacts during the development of product concept is due to the fixed nature of our products. We are planning to develop new products, such as sulfur-coated urea (SCU). QAFCO will document the EHS impacts during the research and development of product concept.</p> <p>In 2013, Muntajat started managing Marketing and promotion of our products. That is the reason why we are not reporting on EHS impacts at this stage. However, we will continue engaging with Muntajat to be able to provide information in the coming year.</p> <p>QAFCO is strongly committed to technological innovation for global agriculture and investment in sustainable practices. Since 2012, QAFCO is an active member of the International Plant Nutrition Institute (IPNI) focused on nutrient stewardship research and education, world food security, environmental concerns, and related issues. As part of this commitment, we will extend the identification, documentation and actions to mitigate HSE impacts in the use of our products.</p>	
PR 2	Total number of incidents of non-compliance with regulations and voluntary codes concerning the health and safety impacts of products and services during their life cycle, by type of outcomes	Fully	No non-compliance	Principle 1
PR 3	Type of product and service information required by procedures and percentage of significant products and services subject to such information requirements	Fully	pp. 30-31	Principle 8
PR 4	Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling, by type of outcomes	Fully	No non-compliance	Principle 8

Indicator	Disclosure	Level of reporting	Location of disclosure and reasons for omission	UNGC principles
PR 5	Practices related to customer satisfaction, including results of surveys measuring customer satisfaction	Fully	Page 3 and 30-31	No Specific Requirement
PR 6	Programs for adherence to laws, standards, and codes related to marketing communications, including advertising, promotion, and sponsorship	Not reported	Muntajat is responsible to buy and distribute our products.	No Specific Requirement
PR 7	Total number of incidents of non-compliance with regulations and codes concerning marketing communications, including advertising, promotion, and sponsorship by type of outcomes	Not reported	Muntajat is managing marketing issues at QAFCO - The Company is not directly responsible	No Specific Requirement
PR 8	Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data	Not reported	Muntajat is managing marketing issues at QAFCO - The Company is not directly responsible	Principle 1
PR 9	Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services	Fully	No non-compliance	No Specific Requirement

## REPORT *Acronyms*

<b>CENG</b>	Chair in Energy Systems	<b>RC</b>	Responsible Care
<b>CEO</b>	Chief Executive Officer	<b>RCA</b>	Root Cause Analysis
<b>CFC</b>	Chlorofluorocarbons	<b>REACH</b>	Registration, Evaluation, Authorization and Restriction of Chemicals
<b>CIPS</b>	Chartered Institute of Purchasing & Supply	<b>ROI</b>	Return of Investment
<b>CO2</b>	Carbon Dioxide	<b>RoSPA</b>	Royal Society for Prevention of Accidents
<b>EC</b>	Economic	<b>SCC</b>	Stress Corrosion Cracking
<b>EMS</b>	Environmental Management System	<b>SCR</b>	Selective Catalytic Reduction
<b>EN</b>	Environment	<b>SDIR</b>	Sustainable Development Industry Reporting
<b>EPAS</b>	Employee Performance Appraisal System	<b>SIS</b>	Safety Information System
<b>ERP</b>	Enterprise Resource Planning	<b>SNCR</b>	Selective Non Catalytic Reduction
<b>FCR</b>	Gas Recirculation Technique	<b>SO</b>	Society
<b>GHG</b>	Greenhouse Gases	<b>SVA</b>	Security Vulnerability Assessment
<b>GJ</b>	Giga Joules	<b>TAFE</b>	Technical and Further Education
<b>GPCA</b>	Gulf Petrochemical and Chemical Association	<b>TAMUQ</b>	QAFCO-Texas A&M Qatar Chemistry Conference
<b>GRI</b>	Global Reporting Initiative	<b>TPP</b>	Trainee Preparation Program
<b>HACCP</b>	Hazard Analysis and Critical Control Point	<b>TREM</b>	Transport Emergency
<b>HFC</b>	Hydrochlorofluorocarbon	<b>TRIR</b>	Total Recordable Injury Rate
<b>HR</b>	Human Rights	<b>UFC</b>	Urea Formaldehyde Concentrate
<b>HRSG</b>	Heat Recovery Steam Generator	<b>UNGC</b>	United Nations Global Compact
<b>HSE</b>	Health, Safety and Environment		
<b>HWTC</b>	Hazardous Waste Treatment Center		
<b>IFA</b>	International Fertiliser Association		
<b>IPNI</b>	International Plant Nutrition Institute		
<b>ISO</b>	International Organization for Standardization		
<b>IT</b>	Information Technology		
<b>KPI</b>	Key Performance Indicator		
<b>LA</b>	Labor Practices and Decent Work		
<b>LHV</b>	Lower Heating Value		
<b>LOC</b>	Loss of Containment		
<b>MDEA</b>	Methyl diethanolamine		
<b>MIC</b>	Mesaieed Industrial City		
<b>MoE</b>	Ministry of Environment		
<b>MORR</b>	Management of Occupational Road Risk		
<b>MSDS</b>	Material Safety Data Sheet		
<b>MT</b>	metric tonnes		
<b>MWh</b>	MegaWatts hour		
<b>NG</b>	Natural Gas		
<b>Nm3</b>	Normal Cubic Meter		
<b>OHSE</b>	Occupational, Health, Safety and Environment		
<b>PIMS</b>	Process Information Management System (PIMS)		
<b>PR</b>	Product responsibility		
<b>PSA</b>	Pressure Swing Absorbers		
<b>QAFCO</b>	Qatar Fertiliser Company		
<b>QAR</b>	Qatari Riyal		
<b>QASEC</b>	QAFCO Safety and Environment Committee		
<b>QMC</b>	Qatar Melamine Company		
<b>QNDS</b>	Qatar National Development Strategy		
<b>QNSD</b>	Qatar National Sport Day		
<b>QNV</b>	Qatar National Vision		
<b>QU</b>	Qatar University		
<b>RAM EI</b>	Reliability and Maintainability Efficiency Index		



قافكو  
QAFCO

شركة قطر للأسمدة الكيماوية  
QATAR FERTILISER COMPANY

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