

## **SUSTAINABILITY REPORT 2017-18**









The Emir of State of Qatar



**Qatar Fertiliser Company (P.S.C)** 



**QAFCO Sustainability Report 2017-18** 



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MOHAMED SALEM AL-MARRI CHAIRMAN, QAFCO

### MESSAGE FROM THE CHAIRMAN

2017-18 period was very successful for QAFCO. The Company posted profits in both years driven by the improved market conditions and supported by optimization initiatives that started in 2016.

In 2017, QAFCO achieved the highest annual urea production figures in its history and capitalized on the last quarter upswing in urea prices. It also readjusted its ammonia production when ammonia prices rose earlier in the first half of the year.

Throughout the period, safety has been, and shall continue to be one of QAFCO's core business principles.

QAFCO was also proud to launch its new strategy to all employees which shall guide the organization for the foreseeable future.

Finally, I would like to convey my deep appreciation and express my gratefulness to H. H. Sheikh Tamim Bin Hamad Al-Thani, Emir of the State of Qatar for his visionary leadership, which provided the platform to enhance QAFCO's position as a globally recognized company. I am much obliged to the guidance given by His Excellency Minister of State for Energy Affairs, and Qatar Petroleum President and CEO Saad Sherida Al-Kaabi. I am thankful for the continuous support of the QAFCO board, the shareholders Industries Qatar (IQ) and Yara Nederland and to QAFCO Management and staff who have worked hard towards achieving QAFCO's goals.

Mohamed Salem Al-Marri Chairman, QAFCO



ABDULRAHMAN M. AL-SUWAIDI MD & CEO

# CHIEF EXECUTIVE OFFICER'S MESSAGE

QAFCO is committed to contributing to the realization of the aspirations articulated in the Qatar National Vision 2030. In line with those aspirations, QAFCO has developed a strategic plan focusing operational excellence, growth and diversification in line with the Company's Mission as well as the first and third pillars of the QNV 2030; namely, human and economic development.

QAFCO is committed to the global challenge of mitigating the negative environmental impact. As part of this, it is constantly reinventing as well as investing in its processes and technologies that will help not only ensure growth and promote innovation but also help sustain the world for future generations. The company is driven by a strong commitment to protect the environment for the next generation to inherit.

QAFCO's efforts were focused on building upon its safety culture during 2017-18. During the period, many initiatives and awareness programs were initiated and embedded as part of the Company's strategy.

In conclusion, I would like to convey my sincerest thanks and gratitude to H. H. Sheikh Tamim Bin Hamad Al-Thani, Emir of the State of Qatar for his inspirational leadership and guidance. I am grateful to His Excellency Minister of State for Energy Affairs, and Qatar Petroleum President and CEO Saad Sherida Al-Kaabi and the QAFCO Board of Directors for their continued support of the company. I am thankful to QAFCO's shareholders, Industries Qatar (IQ) and Yara Nederland, QAFCO Management, and employees of QAFCO, for their support for ensuring QAFCO's continued success.

Abdulrahman M. Al-Suwaidi Managing Director & Chief Executive Officer

### **CORPORATE POLICY**

Qatar Fertiliser Company (QAFCO, the Company) is a world-scale ammonia and urea company supporting the national aspirations of the State of Qatar by embracing the principles of the Qatar National Vision 2030 and adding value to Qatar's natural resources.

QAFCO seeks to create and protect shareholder value in the long term through the profitable manufacture and sale of urea, ammonia and related products as one of the leading companies in the industry. The Company recognizes that its commercial success depends on the skills and competencies of all of its employees. QAFCO endeavors to attract and retain a high caliber, diverse workforce, with a special emphasis on developing Qatari Nationals. The Company is committed to creating and maintaining a positive, safe working environment as well as promoting the development and utilizing the skills of its employees.

QAFCO seeks to operate as a prudent and responsible corporate stakeholder committed to continuous improvement with proper regard to health, safety, security and the environment. The Company is committed to maintaining high standards of business ethics and complies with all applicable laws and regulatory requirements.

The Company is committed to achieving high levels of customer satisfaction through the reliable supply of high-quality products in an environmentally responsible and sustainable manner coupled with first-class product support.

### **MISSION, VISION AND VALUES**

#### **MISSION**

We shall operate our assets safely, efficiently and in an environmentally responsible manner to produce high quality Ammonia and Urea.

### **VISION**

Be the world's leading Urea producer by 2030, driving towards a greener earth.

#### **VALUES**

### Excellence

We improve our process continuously to enhance efficiency.

### Safety

We are committed to safety in all life's aspects.

#### Integrity

We base our actions on transparency, honesty and fairness.

### Team Work

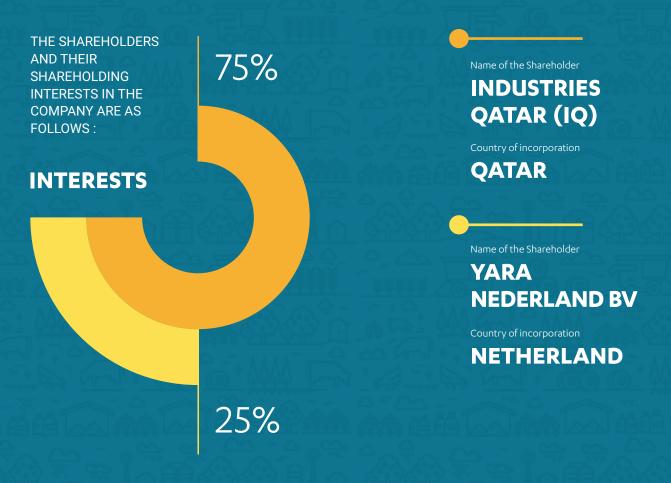
We respect, empower and work together as one family to achieve shared goals.





## **ABOUT QATAR FERTILISER COMPANY**

QAFCO's inception in 1969 as a joint venture company to produce chemical fertilisers was the first and significant step in Qatar's industrial diversification program to utilize its abundant natural resources. Since then QAFCO has steered its way successfully, responding adequately to the world market demand for fertiliser and living up to the expectations of its shareholders.



IQ is a listed Company and majority of its shares are owned by Qatar Petroleum (QP). Thus, QP is the ultimate parent of OAFCO.

QAFCO inaugurated its first plant in 1973 with a design capacity of 900 tons of Ammonia and 1000 tons of urea daily. Presently QAFCO complex comprises six completely integrated trains; QAFCO-1 (1973), QAFCO-2 (1979), QAFCO-3 (1997), QAFCO-4 (2004), QAFCO-5 (2011), QAFCO-6 (2012). Each train is made up of two units, one for the production of ammonia, and the other for urea.

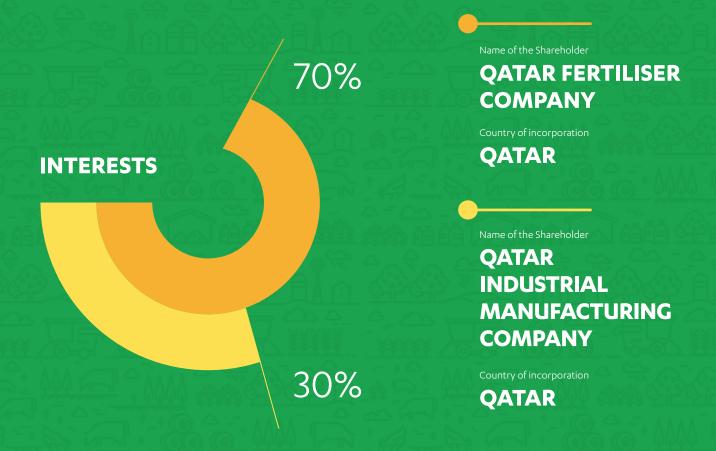
QAFCO has developed steadily, over the years, in terms of nameplate capacity, production quantities, quality and competitiveness of products and become one of the main producers of ammonia and urea in the world. Today, Qatar, after the inauguration of the sixth urea facility at QAFCO, is the 4<sup>th</sup> largest urea producer in the world with an export market, through Muntajat, extending to more than 35 countries across the continents.

QAFCO, as well as boosting its fertiliser production, has gone into new product areas and joint ventures by establishing a urea formaldehyde and melamine downstream subsidiaries.

## **QAFCO DOWNSTREAM**

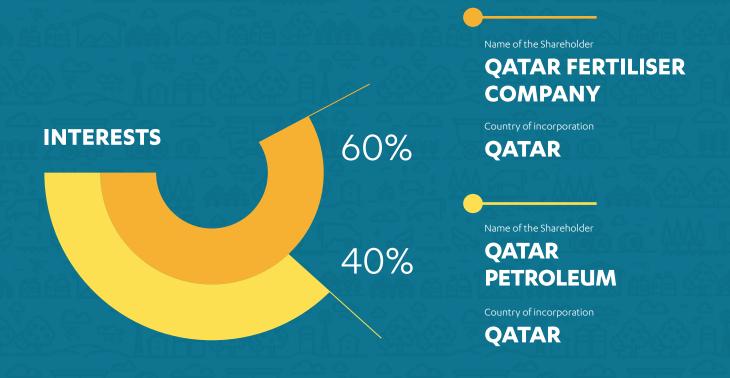
### **GULF FORMALDEHYDE COMPANY**

Gulf Formaldehyde Company Q.S.C was incorporated on 3<sup>rd</sup> March 2003 as a private Shareholding company. All the shareholders are Qatari companies in the State of Qatar. The company is engaged in the production and sale of Urea Formaldehyde Concentrate ("UFC"). The Shareholders and their shareholding interests in the company are as follows:



### **QATAR MELAMINE COMPANY**

Qatar Melamine Company was incorporated in 2011 to produce melamine. QAFCO has utilized its expertise in fertilizer plant operations to operate and manage a production plant of premium grade Melamine, based on the Eurotecnica HP process, on behalf of the Qatar Melamine Company. The plant annual production capacity is 60,000 MT. The plant was inaugurated in 2010.



# 2012 QAFCO-6 2011 QAFCO-5 2011 First sale of Aqueous Ammonia for DeNOx 2010 Melamine plant inaugurated 2009 2006 Company established and incorporated in 2011 2004 QAFCO's ammonia vessel LPG/C Al 2004 2003 1997 QAFCO-3 1979 QAFCO-2 1973 1969 Company incorporated

## **OUR PRODUCTS**

### **Ammonia**

Ammonia is a chemical compound made of Nitrogen and Hydrogen. In QAFCO, it is produced using Natural gas as the primary feedstock. The other feeds required are Steam and Air. These feed materials undergo a series of reactions in the ammonia plant to produce gaseous Ammonia. High pressure converts the Gaseous Ammonia to liquid ammonia. The liquid ammonia is then stored at a temperature of minus 33 degrees centigrade in a specially refrigerated Ammonia storage tank.

### Urea - Prilled and Granular

Urea is a solid fertiliser with 46% Nitrogen. It is produced by the reaction of Ammonia and Carbon Dioxide  $(CO_2)$  under high pressure. The liquid urea thus produced is turned into a solid fertiliser as prilled or spherical granules.

### **Urea Formaldehyde Concentrate**

Urea Formaldehyde Concentrate (UFC-85) is a viscous liquid with 60% Formaldehyde, 25% Urea and water. The formaldehyde produced by the reaction of Methanol with air. This is then dipped in Urea solution to form UFC-85. Urea Formaldehyde Concentrate (UFC-85) is a urea additive, used as an anti-caking agent for the Urea.

### Melamine

Melamine  $(C_3H_6N_6)$  is a product in the form of white powder used for the production of a broad range of synthetic resins. It is obtained by thermal decomposition of Urea, in liquid phase reaction. The urea for melamine synthesis is supplied by the revamped QAFCO Urea-1 plant.

Melamine is used in the synthesis of Melamine Formaldehyde ("MF") and Melamine Urea Formaldehyde ("MUF") resins, which are used mainly for laminates, wood adhesives, surface coating, paper, textile treatment and for molding compounds.

### **Aqueous Ammonia**

Aqueous ammonia is a solution composed of 19% ammonia produced by absorption of gaseous ammonia in demineralized water. It is used as absorbing agent of nitrogen oxides produced on the utilization and burning of gas in power generators and industrial plants. The aqueous ammonia facility was established in QAFCO premises in 2009 with an annual production capacity of 60,000 ton. The aqueous ammonia solution is used for NOx reduction at QAFCO.

## **QAFCO BOARD OF DIRECTORS**



**Mohamed Salem Al-Marri** Chairman



**Ahmad Helal Al-Mohannadi** Vice-Chairman



**Abdulrahman M. Al-Suwaidi** MD & CEO



**Soud Al-Ruwaili** Director



**Faisal Al-Kuwari** Member



**Mohammed Jaber Al-Sulaiti** Member



**Lars Rosag** Member



**Ivan de Witte** Member

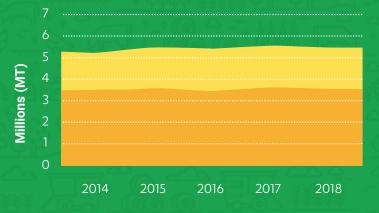


# OPERATIONAL EXCELLENCE

# Ammonia and Urea Production continued to be high

In the year under review, QAFCO continued to be among the top ammonia and urea producers of the world. With a sizable annual production capacity of 3.8 million MT of ammonia and 5.6 million MT of urea, QAFCO is the world's largest single-site producer of ammonia & urea. Responding to modern requirements, QAFCO maximized production of granular urea to meet the specific demand of our customers based in different territories (such as Australia, US, India) with strict regulatory regimes. At present, QAFCO has four granular urea plants with a combined design capacity of 12,900 Metric Tons Per Day (MTPD)

# Ammonia and Urea production last 5 years





**Ammonia production** 



**Urea production** 

# AMMONIA PRODUCTION

QAFCO produced 3.75 Million MT of Ammonia in 2017. This is the highest volume in its production history. Of the total output this year, 3.21 Million MT was utilized in QAFCO for the production of Urea, Aqueous Ammonia, and Melamine.

Ammonia production witnessed a decrease in 2018 to 3.72 Million MT in which 3.14 were utilized in QAFCO.

# UREA PRODUCTION

QAFCO produced 5.78 and 5.66 Million MT of urea in 2017 and 2018 respectively. The rest was used in the production of Melamine and Urea Formaldehyde.

QAFCO ACHIEVED THE HISTORIC UP-TIME OF

### **88.6 PERCENT**

IN 2017

# **GULF FORMALDEHYDE** COMPANY (GFC)

The Gulf Formaldehyde Company (GFC) was created in 2003. The plant began operations in 2004. The company has two plants namely UFC A – became operational in 2004 and UFC-B that became operational in 2012. The GFC plants A and B are designed to produce 82 and 85 tons per day of Urea Formaldehyde (UFC-85) respectively.

The Urea Formaldehyde Concentrate is a viscous liquid with 60 percent formaldehyde, 25 percent urea and 15 percent of water. Most of the UFC-85 produced is consumed by QAFCO and is used as an anti-caking agent in the production of urea.

### **MELAMINE**

QAFCO has utilized its expertise in fertilizer plant operations to operate and manage a production plant of premium grade Melamine, based on the Eurotechnica HP process, on behalf of the Qatar Melamine Company. The plant annual production capacity is 60,000 MT. The plant was inaugurated in 2010.

# HEALTH, SAFETY, ENVIRONMENT AND QUALITY PERFORMANCE

### Safety - a way of life

QAFCO believes that a strong safety culture is a business imperative, accordingly, the company is committed to providing a safe workplace for people working on its behalf through a variety of risk-based safety and health programs.

It has set a objective to achieve zero recordable injuries for both QAFCO staff and contractors on-site. Continuous improvement efforts are ongoing to reduce the number of worksite injuries for both our contractors and employees.

### **Environment – mitigating the impact**

QAFCO is committed to reducing the impact on the environment. It is driven by its determination to care and protect the environment to help in ensuring a safer planet for the next generation to inherit. QAFCO's policies objectives and various projects reflect this. Strict environmental considerations are in place at QAFCO to minimize air emissions and discharges to the sea, as well as recycling and managing waste.

QAFCO has installed DeNOx system to control the NOx emission at numbers of emission sources hand-in-hand with the initiative to install the Continuous Emission Monitoring System (CEMS). Furthermore, the 'Zero Liquid Discharge to Sea' has already been achieved at QAFCO 5-6 site, with a similar aspiration for the QAFCO 1-4 site.

### Quality

Integrated management system external audit was successfully conducted during September 2017 and 2018. The certification body has successfully recommended transition recertification to ISO 9001:2015, ISO 14001:2015 and RC 14001:2015 standards and recertification to OHSAS 18001:2007.

Company	Management System	First Certification/ Accreditation Date	Current Validity Date	Current Certification/ Accreditation Body
QAFCO 1-6, GFC and QMC	ISO 9001:2015 – Quality Management System	29 May 1996	16 Nov 2020	Lloyd's Register
QAFCO 1-6, GFC and QMC	ISO 14001:2015 – Environment Management Systems	30 Dec 1997	16 Nov 2020	Lloyd's Register
QAFCO 1-6, GFC and QMC	OHSAS 18001:2007 – Occupational Health & Safety Management Systems	15 Dec 1999	16 Nov 2020	Lloyd's Register
QAFCO Canteen, Al Banush Club	Hazard Analysis & Critical Control Point (HACCP)	05 May 2009	27 July 2021	Bureau Veritas
QAFCO Laboratory	ISO /IEC 17025:2005 – Requirements for the Competence of Testing and Calibration Laboratories	11 Mar 2011	28 Feb 2021	Deutsche Akkreditierungsstelle GmbH German Accreditation Body
QAFCO 1-6, GFC & QMC	RC 14001:2015 – Responsible Care	19 Apr 2011	16 Nov 2020	Lloyd's Register
QAFCO 1-6	IFA Protect and Sustain Product Stewardship Programme (Excellence Level)	12 May 2011	18-Jun-2020	Det Norske Veritas(DNV)
QAFCO 1-6, GFC and QMC	ISO 50001:2011-Energy Management System	18 Oct 2015	17 Oct 2021	Lloyd's Register
QAFCO Inspection & Material Technology Section	ISO 17020:2012 type B Conformity assessment — Requirements for the operation of various types of bodies performing inspection	30 Nov 2015	31 Jan 2020	American Association for Laboratory Accreditation (A2LA)

### **HUMAN DEVELOPMENT**

### **Empowering Qatari talent**

Qatar Fertiliser Company (QAFCO) is committed to contribute to the realization of the human development aspirations as articulated in the Qatar National Vision 2030. In support thereof, and in line with the Energy and Industry Sector's overall Qatarization target, QAFCO continued its focus on increasing and diversifying participation of Qataris in its workforce.

The Company's journey toward the achievement of Qatarization imperatives focuses on development of a capable and motivated workforce through appropriate interventions and programs, inclusive of: Vocational Education and Training Programs, College - and Undergraduate Academic Programs, and Continuing Professional Development.

2018 witnessed the implementation of the Qatar Petroleum Energy & Industry Sector Centralized Scholarship Administration and QAFCO put into effect a number of changes to its policies and procedures to ensure alignment with this initiative.

QAFCO improved its Development Programs' monitoring and assessment processes through implementation of a systematic, a step by step methodology and standardized supporting documentation. With management support, the employer value proposition to Qatari Nationals was conceptualized, whereby the QAFCO career ladder was communicated. The aforementioned specifies the qualification and duration criteria for career progression from Trainee to Engineer and beyond, through continuous Career Development.

## **CORPORATE SOCIAL RESPONSIBILITY**

S. No	Activity	2017	2018
1	QAFCO-TAMUQ Conference	<b>√</b>	√
2	Health, Safety & Environment Awareness	√	√
3	Education City Career Fair		<b>√</b>
4	Qatar National Sports Day		
5	Qatar Environment Day		√
6	Qatar University Career Forum	√	√
7	Qatari Day	√	√
8	Stop Smoking Campaign	√	√
9	Earth Day		<b>√</b>
10	World Day - Safety & Health at Work	✓	√
11	QAFCO Town Hall	√	√
12	World Environment Day	√	√
13	Global Fertiliser Day	√	<b>√</b>
14	Blood Donation Program	√	√
15	Human Rights Day	√	√ √
16	Qatar National Day		√
17	Annual School Visits	√	√
18	Quarterly meetings with Employees		
19	Supplier Day - Annual Forum For Suppliers and Contractors	√	√
20	Health Awareness Session for employees in association with HMC	<b>√</b> ((6)) <b>√ ⊘</b>	√
21	Layali Al Khair - Ramadan-themed activities for the community	((0)(0) √ (0)	.46=60_
22	Donation to Qatar Society for Rehabilitation of Special Needs		
23	Donation to Ehsan - The Center for Elderly Care and Empowerment		
24	Step Into Health program	- The state of the	√
25	QAFCO Career Fair		

### Food Security Partnerships – February 2018

QAFCO signed two strategic partnerships in association with YARA International ASA, Hassad Foods and Agrico to support efforts to increase food production from the Qatari agricultural sector. The partnerships are focused on increasing agricultural yields, in line with Qatar's aim to achieve self-sufficiency in a reliable and sustainable manner.

In the partnership with Hassad Foods, workshops and farm tests were conducted with several local farmers in Qatar to demonstrate the yield potential and create best practices for the agricultural sector of Qatar.

In the joint cooperation with Agrico, a Hydroponic Trial and Demonstration Center was established in Qatar to test local greenhouse technologies, nutrient management and best horticultural practices with the aim of developing a sustainable crop management system suited for the Qatari climate that achieves high yields and productivity while conserving precious local water resources and limiting any negative impact of vegetables production on the local environment.

## **CORPORATE SOCIAL RESPONSIBILITY**

TAMUQ conference 2017 and 2018









Health, Safety and Environment Awareness Program





Qatar Environment Day 2017 and 2018





QAFCO QU Career Fair



Qatari Day



**Town Hall Meeting** 





**Global Fertilizer Day** 





**Blood Donation** 



**Human Rights** 



### **QAFCO** Annual Schools Visit







Layali Al Khair









**QAFCO Career Fair** 





### Qatari Day





### MOU with Hassad and Yara





### Donation to Qatar Society for Rehabilitation





