

SUSTAINABILITY
REPORT

Encompassing Operational Excellence



2020


شركة راس لفان للأوليفينس المحدودة
Ras Laffan Olefins Company Limited


شركة قطر للكيمياويات المحدودة
QATAR CHEMICAL COMPANY LTD.



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About this report

We are pleased to present our 7th annual Sustainability Report for the year of 2020. Sustainability reports allow us to actively engage with our stakeholders, through transparency about the impact of our business on economic, social and environmental aspects. We disclose our performance at our three Q-Chem operated facilities:

- Qatar Chemical Company Ltd. (Q-Chem)
- Qatar Chemical Company II Ltd. (Q-Chem II)
- Ras Laffan Olefins Company Ltd. (RLOC)

DISCLAIMER

This report contains not only past and present facts but also includes statements that may be deemed as “forward-looking statements”, which express the way in which Q-Chem intends to conduct its activities.

Forward statements could be identified by the use of forward-looking terminology such as “plans”, “aims”, “assumes”, “continues”, “believes”, or any variations of such words that certain actions, events or results “may”, “could”, “should”, “might”, “will”, or “would” be taken or be achieved.

REPORTING PERIOD

The report covers the 2020 calendar year.

CONTACT US

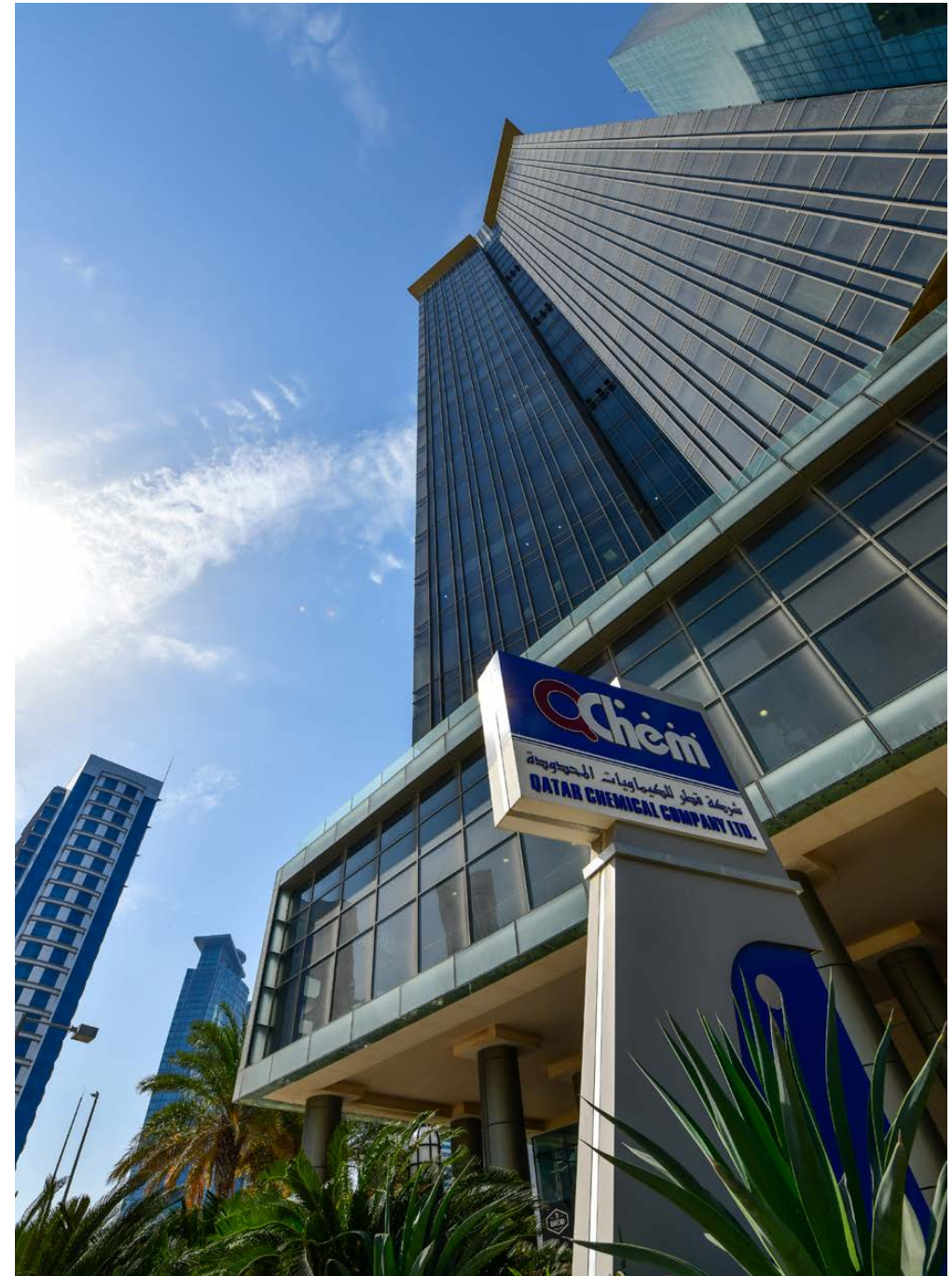
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We have made every effort to ensure the report is as accurate and truthful as possible. However, by nature, forward-looking statements are qualified due to inherent risks and uncertainties surrounding future expectations that could cause actual results to differ materially from these projected or implied statements. Such statements are subject to risks that are beyond Q-Chem's ability to control and therefore do not represent a guarantee that events implied in these forward-looking statements will actually occur.



A message from our Chairman

WELCOME TO THE SEVENTH SUSTAINABILITY REPORT FOR Q-CHEM. THE 2020 SUSTAINABILITY REPORT DETAILS OUR SUSTAINABILITY PERFORMANCE IN TERMS OF ECONOMIC CONTRIBUTION, ENVIRONMENTAL INITIATIVES, AND CARING FOR OUR PEOPLE AND COMMUNITIES.

We are committed to delivering open, transparent, and informative communications to our stakeholders in the disclosure of our sustainability performance and we continue to adopt partially the Global Reporting Initiative (GRI) standards as a further endorsement of our credibility.

COVID-19 has impacted people's lives and businesses in every industry, while offering new horizons for innovation and growth at the same time. Global problems necessitate global strategies and solutions, cross-border collaboration, and mutual confidence and trust. As these characteristics are very important to Q-Chem, they have enabled us to develop tremendous resilience in the face of adversity.

Sustainability has been integrated into Q-Chem's strategy and culture since its inception, and we have been enjoying its benefits ever since. However, in a challenging year such as 2020, the true meaning of sustainable business has never been clearer.

Throughout 2020, we at Q-Chem were able to navigate smoothly through the pandemic with our operational excellence and robust risk management framework, which enabled us to maintain our business running without disruptions while keeping our employees safe and sound. We did not only conclude the year with two major turnarounds with an outstanding health and safety performance, but also recorded several environmental and financial achievements.

I would like to thank the Q-Chem team for their support during this exceptional year, looking forward to achieving further successes in the year ahead by working in collaboration to capture the opportunities and benefits that sustainability brings.

ABDULRAHMAN AL-SUWAIDI
Chairman of the
Board of Directors



A message from our CEO

Q-CHEM HAS LONG BEEN REGARDED AS PIONEERS IN SUSTAINABILITY IN QATAR, A REPUTATION WE ARE PROUD OF. WE BELIEVE THAT INCORPORATING SUSTAINABILITY INTO OUR BUSINESS STRATEGIES LEADS TO VALUE DEVELOPMENT AND CREATIVITY.

Therefore, through aligning our sustainability strategies to national and international priorities, we are making significant contributions to Qatar's National Vision (QNV) 2030 and the global Sustainable Development Goals (SDGs), driving economic growth and prosperity in Qatar and beyond.

Although 2020 was a transformative year for everyone, it had provided a new perspective and had set challenges for companies globally. At Q-Chem, we were able to maintain our high standards of operational excellence, even while conducting two major turnarounds for 45 days. Our workforce health and safety remained our top priority this year, implementing the best mitigation and prevention plans to keep our people safe, and continuing with our Q-Safe program to instill safety into Q-Chem's culture. As a result, we have recorded the lowest recordable injury rate in Q-Chem's history in 2020, with zero environmental reportable events and process safety events.

Our commitment to be a "Green Company" keeps raising the bar for us to improve our environmental performance and conduct our business more responsibly. We have ended 2020 with zero company responsible environmental events, along with an outstanding performance in every environmental aspect – thanks to our 'Pollution Prevention' program that motivates ownership and innovation among Q-Chem's operating units.

As part of adapting to the new normal of working remotely, we embraced more technology into our daily operations and shifted to e-learning solutions to continue operating effectively and maintain our employees' development. The turnover rate decreased by 0.9%, while increasing the representation of Qatari employees by 2% among the total workforce. This highlights our commitment to retain the best talents within Q-Chem and contribute to the National Development Strategy for human and economic development.

Finally, I encourage you to read further into this report and learn more about the sustainable performance of Q-Chem in such an unprecedented year. As we continue progressing in our sustainability journey, I am confident of the brilliant results we will be attaining, contributing to a sustainable future for the coming generations.

KHALID SULTAN AL-KUWARI
Chief Executive Officer



Our Business

QATAR CHEMICAL COMPANY LTD. (Q-CHEM) WAS ESTABLISHED IN 1997 AND BEGAN OPERATION IN 2004. IT IS A JOINT VENTURE BETWEEN MESAIEED PETROCHEMICAL HOLDING COMPANY, CHEVRON PHILLIPS CHEMICAL INTERNATIONAL QATAR HOLDINGS LLC AND QATAR PETROLEUM.

Q-Chem and its associated company, Qatar Chemical Company II Ltd. (Q-Chem II), are located in Mesaieed Industrial City, whereas Ras Laffan Olefins Company Ltd. (RLOC) is located in Ras Laffan Industrial City. Our mission is to grow sustainably and become the leader of world class operators in the petrochemical industry, planning to meet the Qatar National Vision 2030 by end of year 2027. We produce polyethylene, 1-hexene, and normal alpha olefins in a safe and environmentally friendly manner, creating opportunities for our employees and value for our customers, shareholders, and the State of Qatar.

BUSINESS STRUCTURE

QATAR CHEMICAL COMPANY LTD. (Q-CHEM)

Products: ethylene, high and medium density polyethylene (HDPE and MDPE), 1-hexene and other by-products.

Permitted production capacity: 675,000 metric tons per annum MTPA of ethylene, 720,000 MTPA of polyethylene and 79,000 MTPA of 1-hexene.

Complex facilities: a world-class integrated petrochemical plant producing high-density and medium-density polyethylene (HDPE & MDPE), 1-hexene and other products. Along with the sulfur recovery and solidification plant, the complex includes a water treatment plant; a seawater cooling system; dock facilities; and administrative buildings.



QATAR CHEMICAL COMPANY II LTD. (Q-CHEM II)

Products: HDPE, normal alpha olefins (NAO)

Permitted production capacity: 460,000 MTPA of HDPE and 440,000 MTPA of NAO

Complex facilities: the first full-range Normal Alpha Olefins (NAO) unit producing: Butene; Hexene; Octene; Decene and Higher- Molecular-Weight Olefins up to C30+, and Polyethylene (PE), along with associated utilities, warehousing, and a shipping dock.



RAS LAFFAN OLEFINS COMPANY LTD. (RLOC):

Products: Ethylene, C3/C4 and Pygas

Permitted production capacity: 1.55 million MTPA ethylene

Complex facilities: Ethane cracker plant. Ethylene produced by RLOC is transferred via a 135 km pipeline from Ras Laffan to Q-Chem II and Qatofin derivatives units in Mesaieed. Upon arriving in Mesaieed, 53.5% of ethylene are allocated to Q-Chem II and 46.5% to Qatofin.



*The production figures mentioned above represent the "Permitted Production Capacity"



CERTIFICATIONS:

- Certified on ISO 45001:2018, Occupational Safety and Health Management System
- Re-certified on RC 14001:2015, Responsible Care Management System
- Re-certified on ISO 9001:2015, Quality Management System
- Re-certified on ISO 14001:2015, Environmental Management System
- Re-certified on ISO 17025:2017 for Testing and Calibration Laboratories



MEMBERSHIPS AND ASSOCIATION:

- Mesaieed Industrial City (MIC) Environmental, Safety, Emergency Response & Community Outreach Working Subcommittee
- Gulf Petrochemicals and Chemicals Association (GPCA)
- Responsible Care, Supply Chain, International Trade, Research and Innovation, Procurement and Gulf SQAS (Safety & Quality Assessment for Sustainability)
- Ras Laffan Community Outreach Program (COP) Laffan Environmental Society (LES)
- European Petrochemical Association (EPCA)
- GPCA Industrial Waste Subcommittee



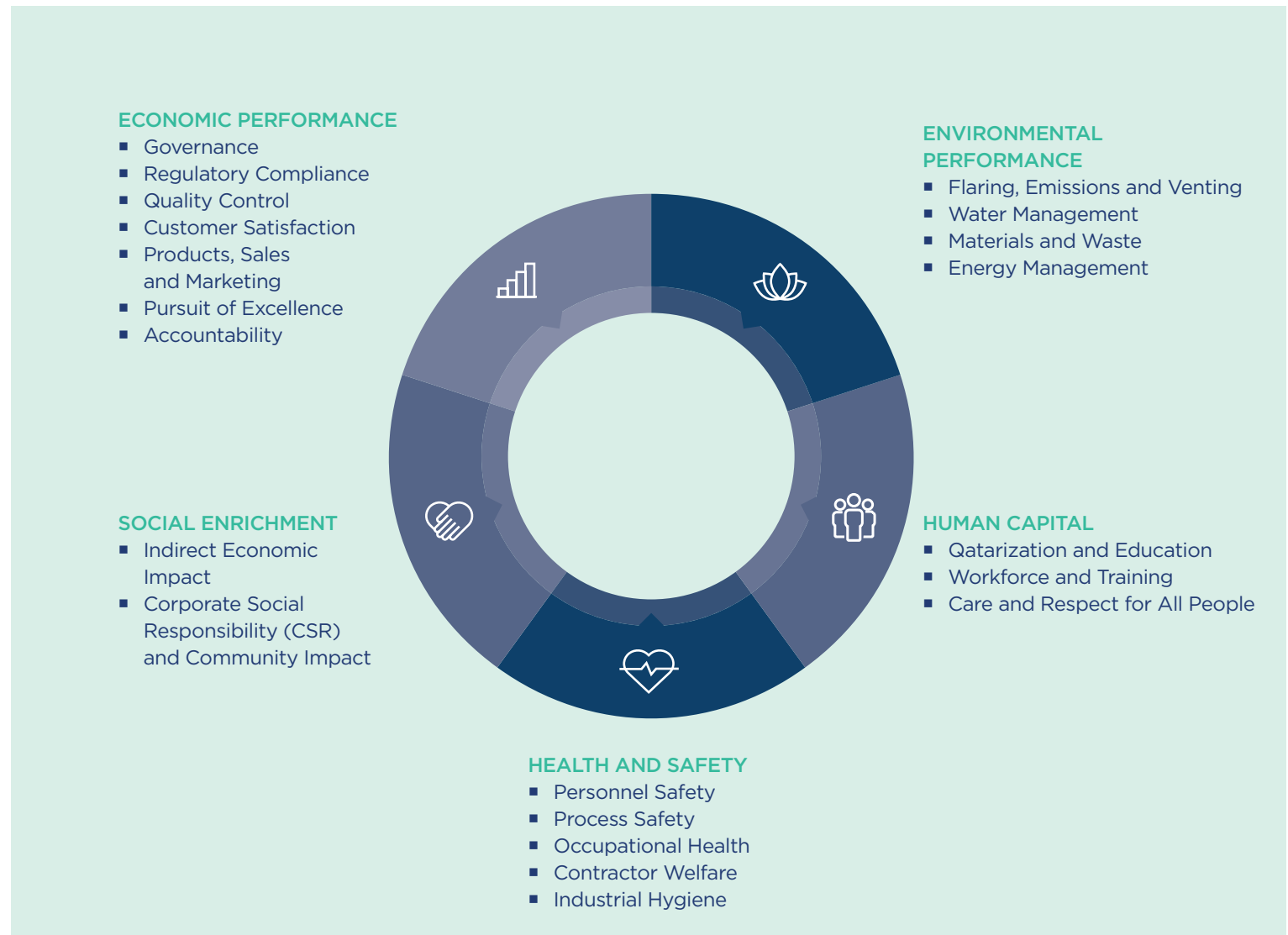
Our Approach to Sustainability

AT Q-CHEM, WE HOLD OURSELVES ACCOUNTABLE TO OUR STAKEHOLDERS AND THE NATION OF QATAR THROUGH OPERATING IN A SUSTAINABLE AND RESPONSIBLE MANNER.

Sustainability is at the core of Q-Chem's vision, mission, and values and has been woven into our long-term business strategy, aligning with the Qatar National Vision 2030.

Our sustainability philosophy is built on Operational Excellence, which means that "sustainability" takes a broader meaning to entail governance and business ethics, customer satisfaction, employee safety and wellbeing, community development, and environmental management. This integrated approach does not only enhance our overall sustainability performance, but it also generates value for our stakeholders and the local economy where we operate.

We believe that engaging internal and external stakeholders is key to our sustainability approach. We aim to create a greater transparency with our stakeholders and a better understanding of our sustainable operational impact through our annual sustainability reports.



Our sustainability framework is aligned with Q-Chem's mission, vision and values.

OUR CONTRIBUTION TO THE SDGS

We understand the intricate relationship between the 17 Sustainable Development Goals (SDGs), and we aim to keep moving towards having a direct impact on all of them to achieve the aspired global sustainable development by 2030.

Below are the top 8 SDGs that are most relevant to Q-Chem and are being significantly impacted by our business.

IMPACTED SDG	Q-CHEM'S CONTRIBUTION	IMPACTED SDG	Q-CHEM'S CONTRIBUTION
 SDG 3: Good Health and Wellbeing	<ul style="list-style-type: none"> Promoting employee health programs and encouraging healthy habits Working with communities to improve wellbeing for outside stakeholders 	 SDG 11: Sustainable Cities and Communities	<ul style="list-style-type: none"> Creating genuine sustainability-focused cities with Mesaieed Industrial City and Ras Laffan Industrial City Helping to create more sustainable communities through partnerships with local groups
 SDG 4: Quality Education	<ul style="list-style-type: none"> Promoting education programs for Qatari youth Helping train university students for a career in an impactful industry 	 SDG 12: Responsible Consumption and Production	<ul style="list-style-type: none"> Responsible consumption of natural resources through energy efficiency and renewable energy implementation Production is also becoming more sustainable through operating in an eco-friendly manner and investing in initiatives that aim at promoting renewable energy
 SDG 8: Decent Work and Economic Growth	<ul style="list-style-type: none"> Providing good, quality employment for people in Qatar, with excellent opportunities for professional growth Helping contribute to sustained economic growth in Qatar and the Gulf Region at large 	 SDG 13: Climate Action	<ul style="list-style-type: none"> Taking serious action towards limiting the adverse impacts of our business operations through investing in eco-solutions and innovative technology that enable us to preserve the environment and live up to our perception of "Green" company
 SDG 9: Industry, Innovation, and Infrastructure	<ul style="list-style-type: none"> Q-Chem's products help fuel industry in Qatar and beyond, with innovative new practices to produce less impactful chemicals that can be used to spur further industry and innovation 	 SDG 17: Partnerships for the Goals	<ul style="list-style-type: none"> Q-Chem works with various stakeholders and partners to share the industry knowledge and best practices in pursuit of achieving the National Vision of Qatar (QNV) by 2027, that contributes to and is completely aligned with the the United Nation's (UN) global sustainability agenda for 2030

2020 highlights

Two major turnarounds in 2020 under the theme
**Come Safe, Work Safe,
 Go Safe... We Care For You**

Started the vaccination for all operation-critical personnel



"Operational Excellence Initiative Award"



Completing the **5th annual ERM cycle**



8.3%
Reduction in GHG emissions



Accomplishment of multiple production optimization projects that worth

QAR+80mn

>5 million
man-hours during the turnaround without recordable injuries



14%
reduction in overall costs



0.016
Recordable Injury Rate - the best ever in company's history

12%
reduction in energy consumption



6,000
beneficiaries from our CSR programs



Zero
Tier 1 and Tier 2 process safety events



30%
drop in turnover rate



18%
increase in water recycling intensity



2%
increase in Qatarization



3%
drop in freshwater consumption



>1 million
tons/year the average annual derivative production rate

Zero
occupational and heat-related illnesses



14
CSR projects



120
employees were recognized with long-service awards

150
employees attended the Operational Excellence refresher training sessions



"CPChem President's OE Award"



Zero
fatalities

16%
drop in waste disposal



250
volunteering hours



94%
local procurement



Successfully launched our in-house **ERM application**

Zero
environmental reportable events





+117,000
contractors' training hours



Operational Excellence

HIGHLIGHTS

Completing the
5th annual
ERM cycle 

Successfully launched our
in-house ERM
application 

150 
employees attended the
Operational Excellence
refresher training sessions

PILLARS



Operational Excellence

WE STRIVE EACH DAY TO CONDUCT OUR BUSINESS IN A SAFE, SECURE, INJURY-FREE, AND ENVIRONMENTALLY RESPONSIBLE MANNER. WE ARE COMMITTED TO COMPLY WITH ALL LAWS AND REGULATIONS APPLICABLE TO OUR FACILITIES AND BUSINESS ACTIVITIES, AND WE ALIGN OURSELVES TO INTERNATIONAL BEST PRACTICES SUCH AS THE INTERNATIONAL STANDARD ORGANIZATION (ISO) AND RESPONSIBLE CARE MANAGEMENT SYSTEM (RC).

OPERATIONAL EXCELLENCE

We take pride in striving for Operational Excellence (OE) by doing the right things, in the right way. We take care of our people, our assets, the environment, our customers, and the communities we operate within. Our primary OE focus is to reduce operational risks, translated into having zero injuries and zero

personnel and process safety incidents within our operating facilities with minimal environmental impact.

The framework of our OE System has a total of 28 elements and is designed to meet the requirements of international standards and best practices. OE System has five components, namely as follows:



Q-Chem follows a systematic approach to guide and assess the effectiveness of our OE activities to continuously improve our performance and learn from our experiences. As a further emphasis on operational excellence, members from senior management visit the sites to engage directly with the employees and verify that the workplace is maintained in a safe, reliable, and productive condition. These visits were highly appreciated by employees and contractors who were inspired to fully adhere and comply with the requirements of the OE system.

This year, we have successfully completed the 2020 annual integrated management system surveillance review, conducted by ABS Quality Evaluations through an online remote assessment due to the challenges imposed by the pandemic. Although no major nonconformities were identified during the assessment, we have developed new action plans to address improvement opportunities and keep raising the bar of operational excellence. We have also arranged online OE refresher training sessions, with over 150 employees attending and completing these sessions.

In addition, an annual OE Self Review was also conducted to verify compliance against the work processes implemented; Actions plans were developed and are being tracked for areas where improvement opportunities were discovered.

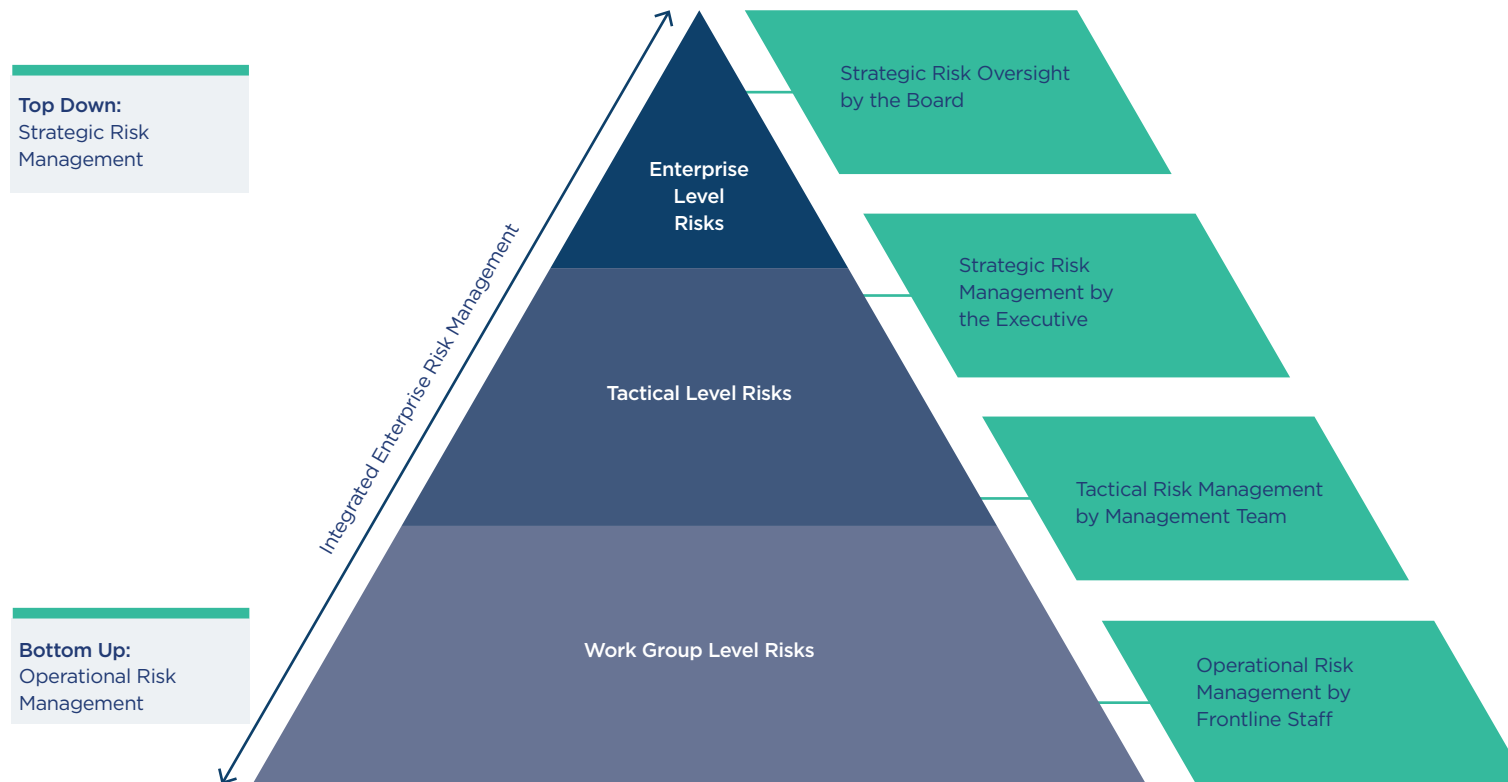
150

employees attended the online OE refresher training sessions

ENTERPRISE RISK MANAGEMENT

We recognize that effective risk management is fundamental to ensuring organizational sustainability.

In line with this recognition, we initiated an Enterprise Risk Management (ERM) process in 2014 that was embedded in all critical business activities, functions and processes. It is an integrated risk management process that combines a "Bottom-Up" Operational Risk management process; and a "Top-Down" Strategic Risk management process.



"TOP-DOWN" STRATEGIC RISK MANAGEMENT

We have embedded a strategic risk management process into the overall process of Strategic Planning with the aim of managing the top risks that could shape future Q-Chem performance. In doing so, we help achieve desired performance metrics that are reviewed and monitored on a quarterly basis by the company's leadership.

"BOTTOM-UP" OPERATIONAL RISK MANAGEMENT

Risk assessments are carried out on an annual basis across the Q-Chem organization. These risks are prioritized, with the most significant risks undergoing review and monitoring once every quarter by the Senior Leadership team, and the Board Business Risk and Crisis Management Committee's for Q-Chem and RLOC. This drives timely and well supported deployment of effective risk mitigation efforts from the bottom to the top of the organization. 2020 saw the completion of our fifth annual ERM cycle, culminating in the development of key risk mitigation plans and the completion of our first iteration of Q-Chem's Strategic Risk Profile. We also developed and executed an effective Pandemic Response Plan in cooperation with the Q-Chem HSE Department.


In the area of digitalization, we developed and successfully rolled out an in-house Enterprise Risk Management application during 2020. We also initiated an improvement project to advance our Business Continuity Management System.

Health and Safety

HIGHLIGHTS


"Operational Excellence Initiative Award" and "CPChem President's OE Award"



Zero 
Tier 1 & Tier 2 process
safety events

2020 Turnarounds: the largest
and safest in Q-Chem's history

>5 million 
man-hours recorded in the
turnaround without recordable injuries

Zero 
occupational and
heat-related illnesses

0.016 
RIR - the lowest in
Q-Chem's history

PILLARS



Health and Safety

SAFETY IS OUR UTMOST CORE VALUE. AT Q-CHEM, SAFETY MEANS HAVING A SAFE AND HEALTHY WORKPLACE, WHERE ASSETS, PEOPLE AND THE ENVIRONMENT ARE ALL PROTECTED.

Safety is the responsibility of every employee working for Q-Chem, as well as every contractor working with us. Every single person involved is empowered with the authority to stop any work they believe is unsafe or could cause any harm.

Q-Chem has a strong history of accomplishments when it comes to safe operations. Since commissioning, we had recorded zero employee or contractor fatalities. 2020 was an additional success to our records, considering the major turnarounds conducted in February and March 2020. We have achieved zero occupational illnesses and zero heat-related illnesses for the 13th year in a row. We also recorded more than 5 million man-hours with zero recordable injuries during the two major turnarounds, and zero Tier 1 and Tier 2 process safety events for the third year in a row.

We are proud to say that our Recordable Injury Rate (RIR) of 0.016 in 2020 was the lowest in history. On top of that, we have received the "Operational Excellence Initiative Award" for the novel knife switch interlocking device that was designed by our safety department.

>5 million ⌚

man-hours in turnarounds
with zero injuries



COVID-19 RESPONSE

At the beginning of the pandemic, and in response to the fast-evolving situations, we activated the Q-Chem Crisis Management Team (CMT) that involved members from Enterprise Risk Management (ERM), Public Relations, and Health and Safety departments, among others as Operations, Technical, Commercial, etc. The "CMT" worked in close coordination with Qatar Petroleum (QP) and followed guidelines established by the Ministry of Public Health (MoPH) to help protect the safety of our employees and other stakeholders.

The CMT formed multiple working groups and worked closely with QP and governmental authorities to prepare for worst-case scenarios including potential curfews. Arrangements were made to split the operations team into two groups, working one week from home and another week from the plant, interchangeably, to minimize the personal contact between employees, while keeping those in administrative jobs working from home. Additional arrangements and measures were taken to ensure timely supply of products to customers with no interruption, based on the level of risk and the changing pandemic phases in Qatar.

Q-Chem's Administration, Human Capital, and Public Relations have been actively

engaged in updating employees and contractors on the pandemic status and the compulsory measures to safeguard everyone from getting infected. A self-assessment tool was developed by our Q-safe team to emphasize the control measures and the precautionary steps that all employees should adhere to in combating the pandemic. The Facility Management Department at Q-Chem implemented stringent measures to maintain social distancing across all the facilities and prevent the spread of the disease. Sanitizers were placed in every location, and employee temperature was monitored regularly. Moreover, work protocols changed drastically, necessitating increased technological and e-learning solutions to work efficiently and provide an added value to the talent development program.

PROCESS SAFETY

Process Safety is one of the critical steps in our priority hierarchy and reliable operations of our plants. Hence even minor Loss of Primary Containment (LOPC) events are reported timely and addressed to prevent escalation which can affect people, our assets and the environment.

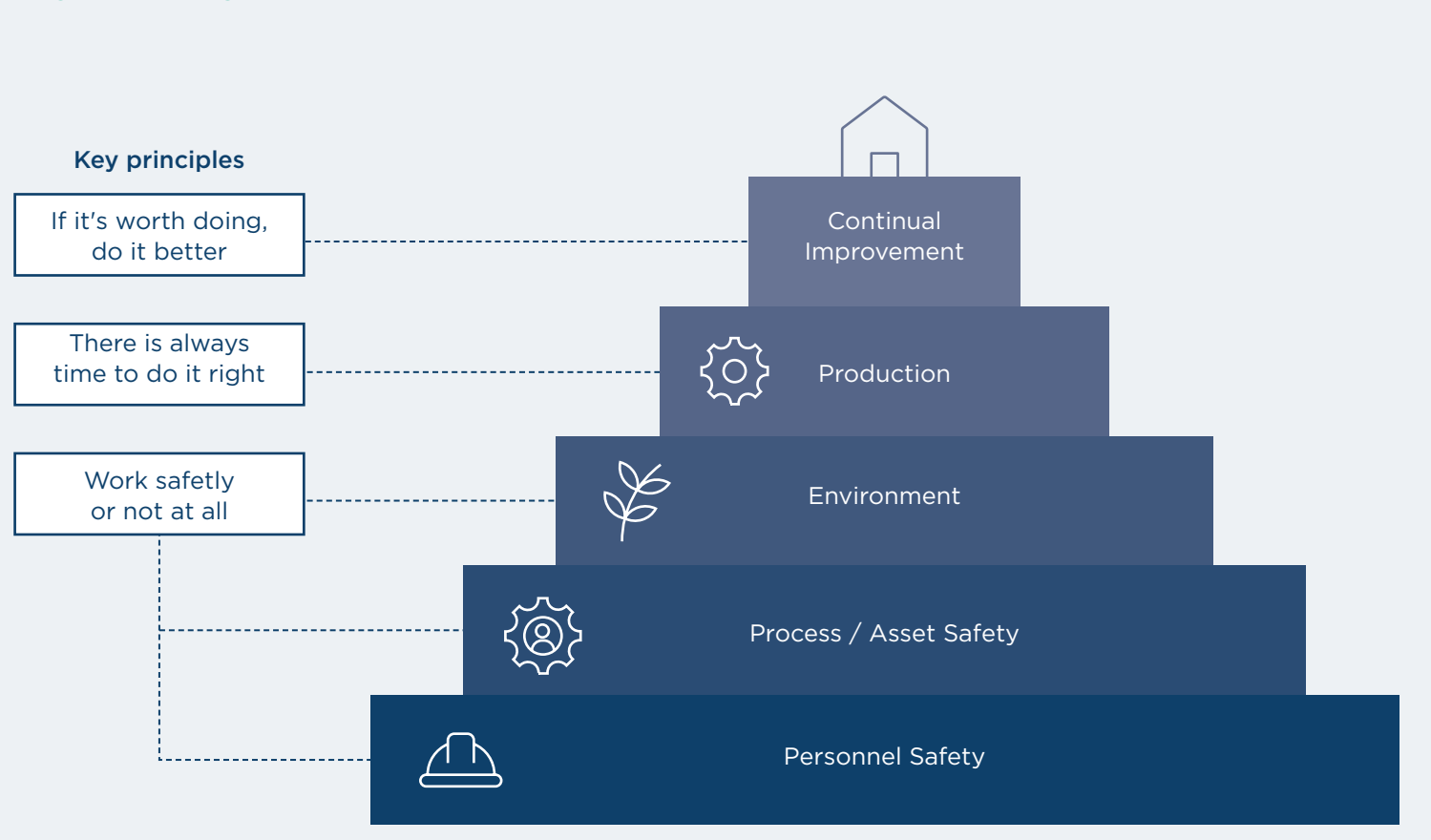
Our safety event rate for tier 1 & 2 per 1 million working hours remained at zero in 2020. Despite the challenges we had due to major turnarounds and the COVID-19 pandemic, Q-Chem managed to complete Mechanical Integrity Covered Equipment (MICE) Preventive Maintenance timely to ensure safe operations. In an effort to have a successful and safe turnarounds, learning experiences from previous turnarounds were shared with employees and contractors under the theme of “Keeping Memories Alive”, which all resulted in having zero Tier 1 and Tier 2 Process Safety events this year.

NUMEROUS PROCESS SAFETY MANAGEMENT INITIATIVES WERE INTRODUCED OVER THE PAST YEAR:

- Expanding our Process Safety Management (PSM) metrics to include Asset Integrity metrics and additional KPIs to ensure business continuity and sustainable PSM performance across all operations.

- Assisting in developing the Tier 3 PSM KPIs for industrial cities, as a member of the “QP led PSM” working group.
- Sharing Center for Chemical Process Safety (CCPS) Process Safety Beacon with employees and contractors on a monthly basis to continuously improve process safety awareness and knowledge.

PRIORITY HEIRARCHY



Q-SAFE PROGRAM

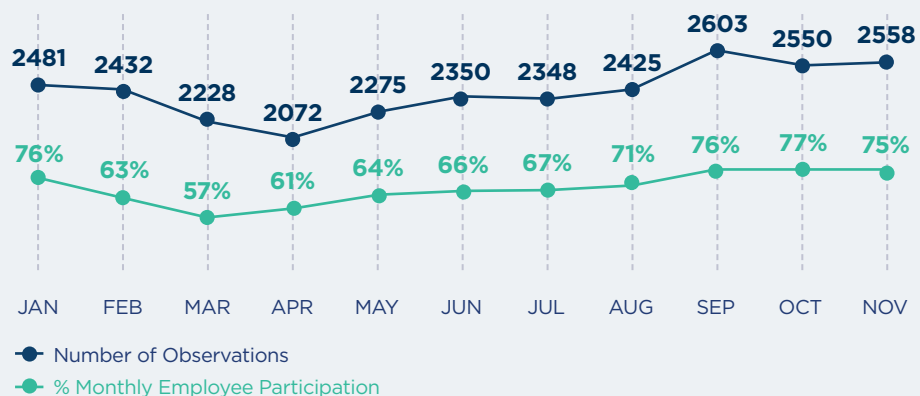
Our Q-Safe program is a behavior-based safety program that helps us refine our behaviors to build and sustain a more robust safety culture among the entire workforce. This is done through observation, reflection, correction, and continuous coaching.

Employees' monthly participation in the Q-Safe program was a respectable 73%, with a total of 27,451 observations being made and more than 4,746 at-risk incidents being ultimately corrected by end of 2020.

As of June 2020, we began recognizing those employees who participated in the observation process with "Observer Magnetic Badges" to promote safety excellence and improve employee participation in the Q-Safe program.

In August, this was followed by starting to distribute a monthly Rolling Trophy for the selected "Q-Safe Team of the Month" who exemplified the best safety participation.

Other Q-Safe achievements from 2020 included the development of a "COVID-19 self-assessment tool" to improve the safety associated with the ongoing COVID-19 guidelines and precautionary measures. We have also invited our non-baseload contractors to participate in the Q-Safe program to demonstrate their hazard recognition skills and to further extend the value of the program. As a result, a total of 356 observations were made and 128 at-risk behaviors were corrected.



HSE AWARENESS

Q-Chem's HSE program is focused on increasing the health and safety awareness of our employees and contractors through training sessions to leverage the workforce's capabilities to handle hazardous situations in a safe and responsible manner, returning to their home safe and sound.

Q-Chem's work from home scheme and social distancing protocols in 2020 necessitated the move to virtual training programs, which resulted in fewer number of training hours delivered for HSE topics. However, contractor HSE training hours doubled over the past year with only a 5% increase in training cost over 2019.

HSE AWARENESS TRAININGS



SEVERAL SAFETY AWARENESS EVENTS WERE HELD DURING 2020:

■ 3-Dimensional Safety Awareness Facility:

To educate people about safe work practices and prevent the reoccurrence of past incidents, Q-Chem established "NEVER AGAIN", a three-dimensional safety awareness facility at Mesaieed demonstrating hazardous situations in an interactive way where everyone can understand the potential risk and its impact.



■ Year-End Safety campaign (YES for 11³):

This campaign was launched in Q4 of 2020 to acknowledge the outstanding year-to-date safety performance and to encourage all employees and contractors to maintain this performance for subsequent years. The campaign included several activities (e.g. toolbox talks, field audits, preceptorial games, online hazard identification contest, and video demonstrations with lessons learned), aiming to refresh their memory with key information and steps to be considered in everyday operations to prevent potential safety incidents.



TURNAROUND 2020

In preparation of the 2020 Turnarounds, more than 4,000 contractors were involved in awareness activities about Q-Chem's safe work practices. These activities revolved around several critical safety aspects for the Turnaround Village at Mesaieed, including:

1. "JOB PACKS" OBSERVATION CAMPAIGN

With the support of the Q-Safe program, detailed job packs were posted at all Permit Tents for Turnaround 2020 along with an observation campaign being conducted under the name "JOB PACKS - 2020".

2. SAFETY INFORMATION CENTRE

Safety videos were continuously shown in the Safety Information Center for visual communication of safety awareness, along with PPE guidelines, informational sign posters, and other safety necessities.



3. "MY 6 BASICS" TENT

"My 6 Basics" tent demonstrated how six basic PPE items are essential for protection.



4,000

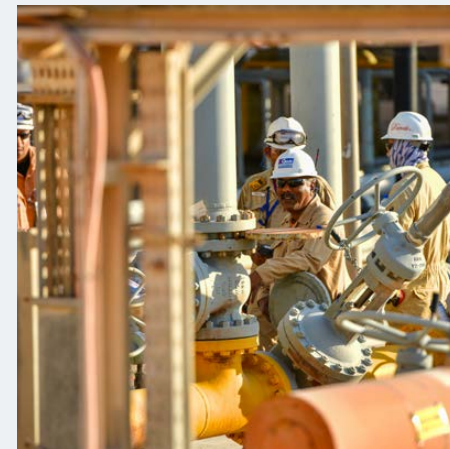


contractors were involved in awareness activities about Q-Chem's safe work practices

2020 TURNAROUNDS: "COME SAFE, WORK SAFE, GO SAFE... WE CARE FOR YOU"

2020 Turnarounds were under the theme "Come Safe, Work Safe, Go Safe... We Care For You". These turnarounds were executed between February and March at both, Mesaieed and RLOC sites, simultaneously, and involved planned maintenance, inspections and activities that were aligned with operational and business objectives.

The two turnarounds were the largest and safest turnarounds in Q-Chem's history; each completed with zero Recordable Injuries, zero Tier 1 & 2 Process Safety Events, and zero Reportable Environmental events. They helped to restore peak operating capabilities and allow for continued safe, reliable, and incident-free performance from all units.



Some of the Best Practices implemented during this TA 2020:

- A song for the theme **"Come Safe, Work Safe, Go Safe... We Care For You"** was written in English, Hindi and Arabic.
- **"Keeping memory alive"** workshop was conducted to focus on previous turnaround incidents and near-misses and learn from these experiences.
- **"Do's and Don'ts"** video was prepared and customized to be included in contractors' training.
- **"Rules to Live By"** poster and video were created to communicate turnaround safety rules.
- **"My 6 Basics"** PPE demonstration and posters were prepared in multiple languages to show the benefits of personal protective equipment.
- **Turnaround Flange Management (TFM)** process was introduced for the first time, consisting of three layers of checks to ensure the right bolts, gaskets, and torquing are applied.

Environmental Stewardship

20

HIGHLIGHTS

69% ↓
decrease in Upstream
responsible events

8.3% ☁
reduction in GHG emissions

31% 🏭
drop in SO₂ emissions intensity

12% ⚡
reduction in energy consumption

3% 💧
drop in freshwater consumption

18% ♻️
increase in water recycling intensity

16% 🗑️
drop in waste disposal

PILLARS



Environmental Stewardship

WE PERCEIVE OURSELVES AS A “GREEN COMPANY” THAT IS COMMITTED TO OPERATIONAL EXCELLENCE IN EVERY ASPECT OF ITS BUSINESS CONDUCT. THUS, WE RELENTLESSLY WORK ON IMPROVING OUR ENVIRONMENTAL PERFORMANCE AND CONDUCT OUR OPERATIONS IN A RESPONSIBLE AND ECO-FRIENDLY MANNER TO REDUCE THE NEGATIVE IMPACTS ON THE VITAL NATURAL RESOURCES OF OUR PLANET (AIR, WATER, LAND AND WILDLIFE).

In 2020, we have reduced our upstream responsible events by 69% in the past 5 years; thanks to close coordination with upstream operations, maintaining the lowest Environmental Reportable Incident Rate (ERIR) in the company's history, with zero company responsible events as well. While the COVID-19 pandemic brought many challenges, exceptional teamwork ensured that we were able to complete all compliance monitoring as per the Consent to Operate (CTO) and Land Lease Agreement (LLA) for 2020.

We continued to improve our environmental performance, spurring innovation and ownership among employees through our effective

Pollution Prevention Programs that have been recently implemented to include environmental aspects, such as flaring reduction, waste minimization, energy optimization, and chemicals management. In addition, we started selecting monthly champions for housekeeping and waste segregation to engage employees in the process of maintaining our facilities clean and tidy. Annual champions were also selected and awarded for their performance in the Leak Detection and Repair (LDAR) program and other other operational and non-operational aspects to increase motivation, maintain good ambient air quality, reduce greenhouse gases, and promote reliable environmental-friendly operations.



GHG AND AIR EMISSIONS

We follow a proactive approach to manage our greenhouse gas (GHG) and other air emissions. Q-Chem continually works on optimizing its processes' efficiency through integrating the best-in-class innovations and practices that lead to lower energy consumption and reduced volumes of negative emissions.

In 2020, the total GHG emissions were reduced by 8.3% over the past year, with SO₂ emissions intensity dropping by 31% compared to 2019. Although there were zero company responsible events, we had four upstream responsible events that caused flaring beyond our control due to interruptions in power and feed supplier that caused unavoidable flaring. This led to an increase in NO_x emissions by 1.8% over the previous year.

Below are some initiatives we introduced in 2020 to reduce GHG emissions:

1. ETHYLENE UNIT COLD SECTION THAWING OPERATION

Thawing the cold section with hot N₂ to remove the hydrates from the system helped us avoid flaring and increase the plant efficiency, keeping the unit at its maximum throughput and energy efficiency.

2. INCREASED ERG FEED RAMP-UP RATE DURING START-UP

Increased Ethane Rich Gas (ERG) feed ramping rate to 40-45 tons/hour without affecting the unit operation, which helped minimizing the acid gas flaring during start-up and the accompanying emissions.

3. GHG ACCOUNTING AND REPORTING TOOL, CALCULATOR, AND MANAGEMENT MANUAL

We have started the development of the GHG Accounting and Reporting Tool, Calculator, and Management Manual for Q-Chem and Q-Chem II, as per the directions of QP and similar to the tool developed for RLOC in 2014.

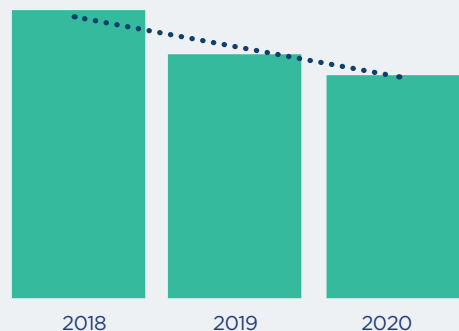
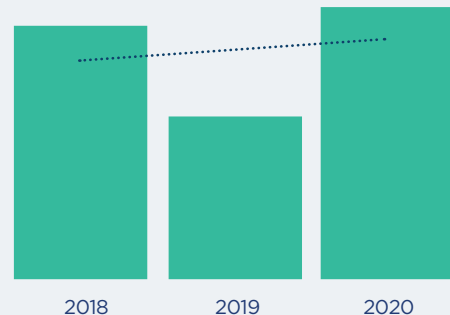
4. FUGITIVE EMISSIONS MONITORING AND REPORTING

Employees are encouraged to report their concerns about odor and fugitive emissions to arrest any potential leak as early as possible, and help reduce nuisance to the nearby communities.

8.3%

reduction in total GHG emissions



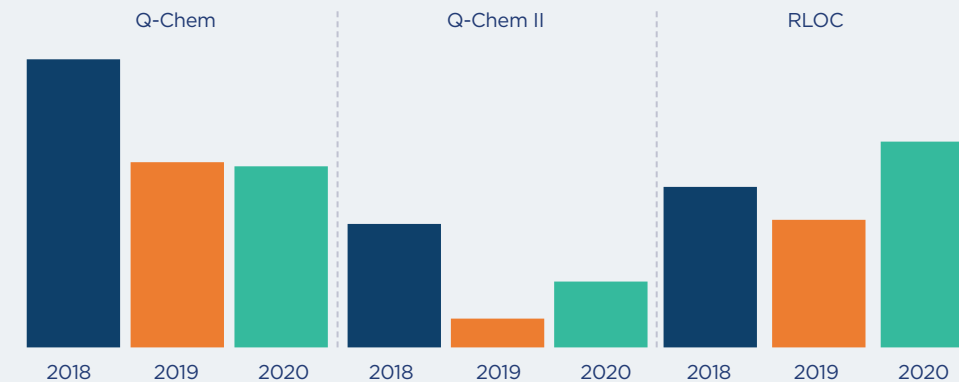
NATURAL GAS INTENSITY
(M³/TON OF PRODUCTION)FLARING INTENSITY DURING
NORMAL OPERATION
(M³/TON OF PRODUCTION)SO₂ AND NO_x EMISSIONS INTENSITY (TONS/1000 TONS OF PRODUCTION)

In an effort to reduce our GHG emissions, we contracted with a consulting firm in 2019 to assess opportunities to optimize energy and minimize flare losses. Q-Chem implemented a plan based on this study in 2020 to improve performance across operations in line with industry best practices and our own Operational Excellence Management System. We plan to continue improving utilities and energy efficiency to minimize GHG emissions, costs, and energy in the processes, without causing adverse impacts on production or reliability.

31%

reduction in SO₂ emissions intensity

ETHYLENE FLARING (%)



* Ethylene flaring figures for Q-Chem II and RLOC includes 2020 Turnarounds

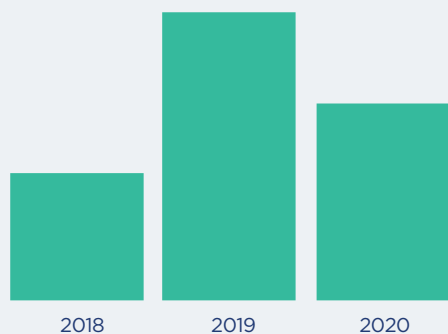
ENERGY

As part of our operational excellence, we aim to reduce energy usage and improve energy efficiency throughout all of Q-Chem's operations.

Q-Chem's total energy consumption for all operations dropped 12% in 2020, with energy intensity also dropping a respectable 2% over last year. This was a result of several initiatives implemented to optimize energy consumption:

- Commissioning a new primary dryer for the ethylene unit, which improved the energy efficiency and overall flaring.
- Reducing run time on chillers connected to the Acid Gas Removal Unit (AGRU), where electrically-operated chillers were made shutdown during night shifts, thus reducing electrical power usage and energy consumption.

ENERGY INTENSITY (GJ/TON OF PRODUCTION)

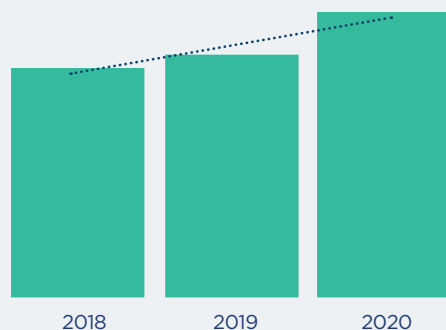


WATER

Given the water scarcity issue in our region, we understand the importance of water conservation and the efficient management of water sources.

In line with this, we continue to increase our treated wastewater recycling, while moving forward towards our aim in reaching near zero liquid discharge in the near future. Therefore, our 2020 water performance was aligned with this strategy, reducing freshwater consumption and water discharged to sea by 3% and 10%, respectively, while increasing water recycling intensity by 18% over last year.

WATER RECYCLING INTENSITY (M³/TON OF PRODUCTION)



18%

increase in water recycling intensity in 2020



WASTE

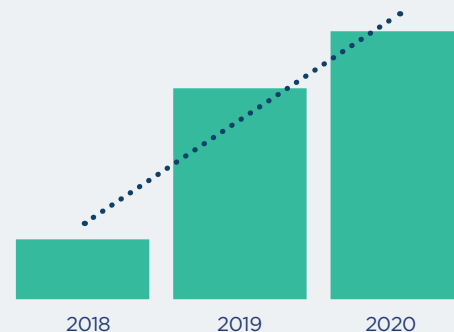
Managing waste, much like managing water, is one of our top environmental concerns and focus areas. Q-Chem witnessed a remarkable improvement in waste generation and handling this year.

We managed to decrease waste disposal by 16%, which reflected in a 2% drop in waste intensity. Simultaneously, we worked on increasing the percentage of waste recycled out of total waste generated to achieve a rate that is 27% higher than last year. It is worth mentioning that there were no spills recorded in 2020.

Our waste management system was enhanced this year with many projects that resulted in huge waste reduction and cost savings, naming few of these projects:

- Reusing approximately 5,000 UN-rated drums that covered our demand of drums for the entire 2021, thus, saving QAR 0.91 million.
- Sludge drying and incineration to reduce waste volume.
- Diverting ~100 tons of melted derivatives from offsite incineration to offsite reuse facilities.
- Cost optimization initiatives for contractor expenses, where QAR 150,000 were saved from the monthly expenses of both, Q-Chem and Q-Chem II, and around QAR 60,000 were saved from RLOC's monthly expenses.

RECYCLED WASTE AS PERCENTAGE OF TOTAL WASTE GENERATED



5,000

UN-rated drums reused

2020 TURNAROUNDS WASTE MANAGEMENT

In support of the efforts to have a safe and cost-effective waste disposal method at Q-Chem II, an innovative waste management plan was put in place and implemented successfully with the following results in 2020:

100%

of waste was disposed of safely

Zero

liability risk was taken on

50%

overall disposal cost saving

50%

drum cost saving by reusing applicable drums




Human Capital


26

HIGHLIGHTS

1,035 
total workforce

2% 
increase in Qatarization rate

32 
different nationalities
among the workforce

120 
employees were recognized with
long-service awards

30% 
drop in turnover rate

+117,000 
contractors' training hours

PILLARS



Human Capital

EMPLOYEES ARE AN INTEGRAL PART OF THE SUCCESS OF ANY BUSINESS. WE ARE ALWAYS SEEKING TO ATTRACT AND RETAIN HIGH-CALIBRE OF TALENTS, INVESTING IN THEIR DEVELOPMENT AND WELFARE AND PROVIDING THEM WITH A SAFE AND NURTURING ENVIRONMENT WHERE THEY CAN GROW AND CONTRIBUTE TO THE OVERALL SUCCESS OF THE COMPANY.

NURTURING THE BEST TALENTS

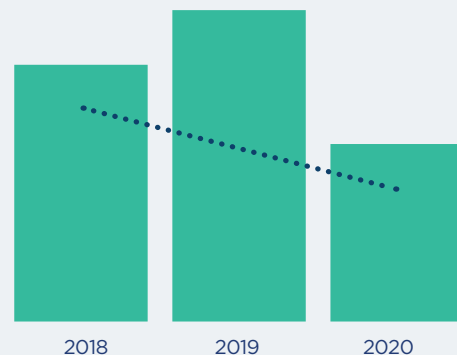
Since our employees are our greatest asset, we always aim to cultivate a culture of care and respect at Q-Chem, to maintain a healthy environment for every employee, and to attract and retain the best talents who are a perfect fit for our organization's values and vision. Therefore, we strive to maintain low employee attrition rates across all levels of the organization, in addition to attracting the most qualified and talented candidates through our dedicated "Talent Stewardship Committee".

With the man-power optimization approach implemented at Q-Chem in the recent years, our total number of employees dropped to 1,035 employees in 2020. We have 32 different nationalities among our workforce, reaffirming our belief in how diversity can enrich the working environment.

Furthermore, we managed to reduce the voluntary turnover rate by approximately 30% over 2019 due to our continuous retention efforts along with engagement and enablement activities.

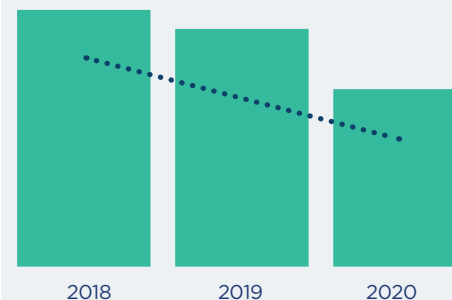
Our internal selection process provides career paths for both national and expatriate employees and we always prioritize existing employees as potential candidates for career development.

TOTAL WORKFORCE



This year, almost 20 employees took advantage of their Individual Development Plans (IDPs) to progress within the company, successfully moving to a new position with brilliant performance results.

TURNOVER RATE



QATARIZATION

In alignment with the QNV 2030 and in support of the National Development Strategy, Qatarization continues to be one of Q-Chem's key commitments. In 2020, we introduced the Qatarization Steering Committee that will be responsible for applying the Qatarization strategy to identify and accelerate the development of Qataris and expand the capabilities of the Q-Chem workforce.

We offer a wide range of capacity-building programs to prepare, attract and develop Qatari nationals for careers at Q-Chem. We also foster younger Qatari individuals so that they may eventually benefit from our initiatives. We believe our efforts have resulted in a dynamic and dedicated team of professionals who pursue a common goal and, in doing so, we are contributing to their own growth, professional development and integrity. In 2020, we increased our Qatarization rate by 2% over last year.

QATARIZATION RATE



TAQDEER AWARDS

We believe that the hard work, dedication and diligence of long-standing employees are key contributors to Q-Chem's prosperity and sustainability. As a gesture of gratitude, we celebrate their long-serving contributions and company loyalty with appreciation certificates and long-service bonus.

In 2020, 120 employees were recognized with long-service awards. We are very proud that 55% of our entire workforce have been with Q-Chem for over 10 years, and nearly 94% for more than 3 years. This is testament to our employees' satisfaction and our relentless efforts to retain a loyal workforce that fit well with Q-Chem's culture and values.

55%



of our entire workforce have been with Q-Chem for over 10 years

TRAINING AND DEVELOPMENT

Our comprehensive talent management program is focused on having the right people with the right skills, in the right place at the right time, towards achieving Q-Chem's vision. We aim to develop our employees and prepare the next generation of Q-Chem leaders, with a huge focus on Qatari nationals.

In 2020, training hours dropped immensely due to the remote working conditions and cost reduction plans in response to the pandemic. Internship programs and scholarships were all

reduced as well, with some events being postponed or cancelled as per the mandated regulations. However, we focused more on key initiatives including:

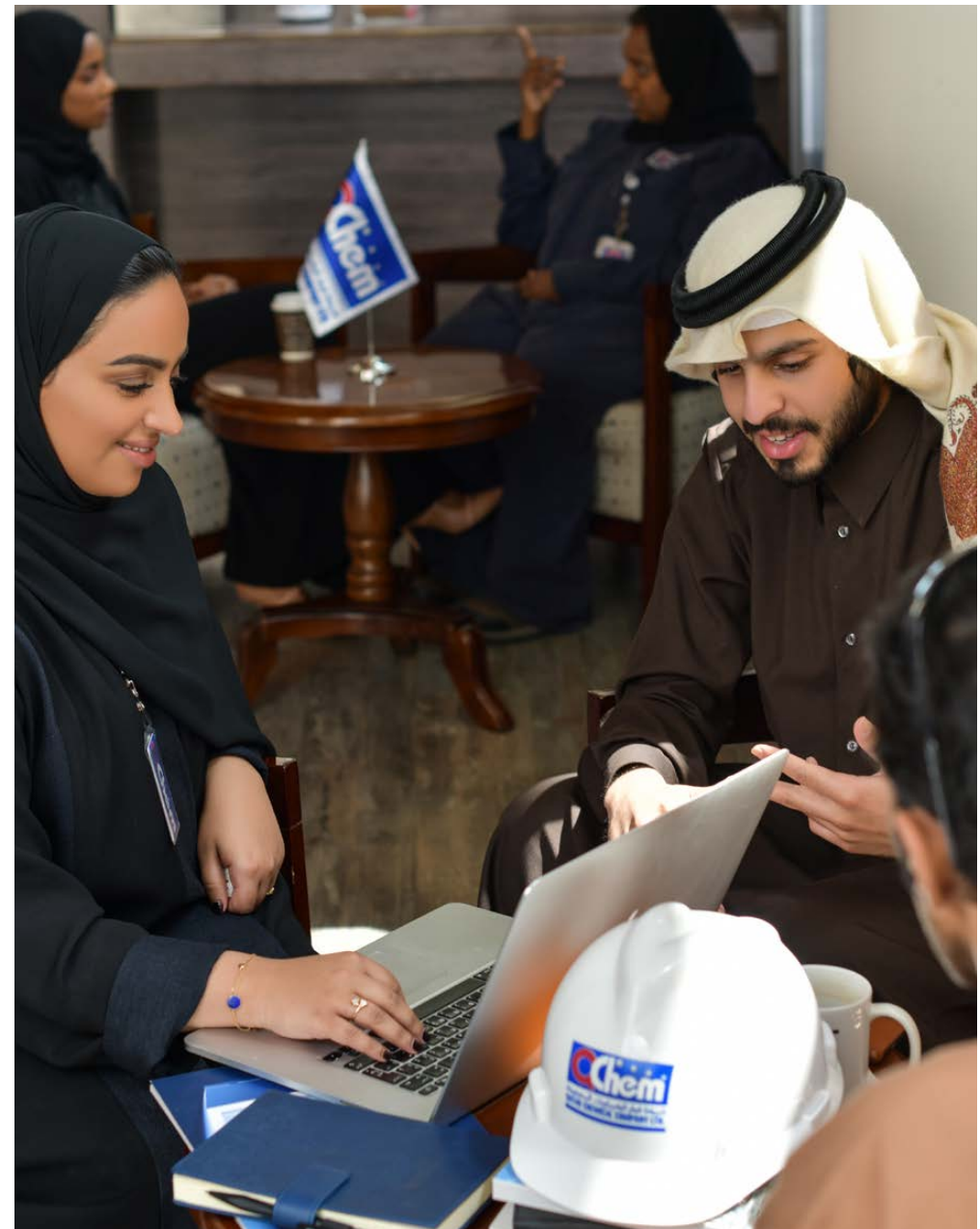
- Development of nationals
- Setting up the foundations of successions planning
- Launching the Knowledge Sharing program to support the training and development of internal employees
- E-learning solutions to adopt to the remote working scheme

At Q-Chem, contractors' training has an equal emphasis as well. We follow a rigorous safety compliance and training mechanism that aligns with OSHA Operational Excellence and ISO standards. While planning for the 2020 Turnarounds, we worked on digitalizing the compliance training scheduling, evaluation and certification, to ensure the full adherence of contractors to our strict safety code and to ensure successful and safe turnarounds. More than 117,000 hours of training were provided to our contractors, resulting in the outstanding performance we had in the biggest turnarounds in Q-Chem's history.

117,000+



hours of training provided to our contractors



Social Enrichment

29

HIGHLIGHTS

14 
CSR projects

6,000 
beneficiaries from our CSR programs

250 
volunteering hours

8th
consecutive year of the National
Sports day at Al-Reem club

PILLARS



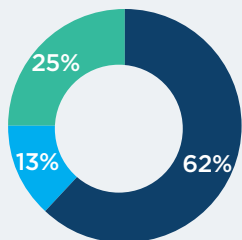
Social Enrichment

AS A RESPONSIBLE CORPORATE CITIZEN, OUR CORPORATE SOCIAL RESPONSIBILITY (CSR) PROGRAM IS A VITAL PART OF OUR SUSTAINABILITY STRATEGY, WITH STRONG PARTNERSHIPS IN PLACE TO HELP IMPLEMENT EFFECTIVE CSR ACTIVITIES WITH AN EXTENDED IMPACT THAT GOES BEYOND OUR ORGANIZATION TO REACH THE LOCAL COMMUNITY AND THE NATION AS A WHOLE.

Our CSR focus is largely in the area of providing educational opportunities and initiatives for Qatari youth, with a lower but still significant focus on both sport and health initiatives for people of all ages.

In 2020, the number of community events dropped due to COVID restrictions, recording a total of 14 community, educational, health, and sports events that provided around 250 volunteering hours, with a large-base impact covering more than 6,000 beneficiaries.

COMMUNITY OUTREACH



- Educational initiatives
- Health initiatives
- Sport initiatives

Before the onset of the pandemic, we organized the National Sports Day for the 8th consecutive year at Al-Reem Club. The event had an array of indoor and outdoor activities that suited all ages and genders to raise awareness about the importance of sports and fitness, promoting an active and healthy lifestyle for the entire family. This is one of our most important yearly events that directly supports Q-Chem's CSR program and contributes towards achieving Qatar National Vision 2030.



Additionally, we donated 1,000 t-shirts to Mesaieed Middle School and Al Noor Institute for the Blind on the National Sports Day to encourage physical activity and increase awareness on the benefits of maintaining a healthy lifestyle.



Q-Chem has also donated office supplies such as printers and network hardware to the following three charities:



QATAR CHARITY

Carries out programs to fight global poverty



EID CHARITY

Provides relief and subsidies, along with medical assistance to disadvantaged people.



QUODORAT CENTER

Helps youth through guiding their energy to achieve more comprehensive societal development



Economic Performance and Product Responsibility

31

HIGHLIGHTS

14% 
reduction in overall costs

94% 
local procurement

PILLARS



Economic Performance and Product Stewardship

OUR ECONOMIC PERFORMANCE IS CRITICAL TO Q-CHEM'S OPERATIONAL SUCCESS, GIVEN THAT OUR ORGANIZATION IS PART OF AN ENERGY INDUSTRY VALUE CHAIN THAT BEGINS WITH ENERGY EXPLORATION AND CONCLUDES WITH HIGH-VALUE PETROCHEMICAL EXPORTS.

As part of our commitment towards our shareholders to maintain a profitable business that generates long-lasting value, we will be constantly looking for ways to increase our operational and cost efficiency through our integrated approach of monitoring and managing economic performance that focuses on three main areas:

PRODUCTION AND SALES

Though 2020 saw a reduction in oil prices and sales revenues due to the unprecedented global pandemic, Q-Chem's overall production outlook was less affected than many other major companies, even with the added challenge of going through a 45-day turnaround in the beginning of the year. Furthermore, the average annual derivative production was not affected by 2020 numbers, remaining above 1 million tons per year, which confirms our financial stability as a company.

FISCAL RESPONSIBILITY

Fiscal responsibility enhances our ability to deliver maximum profitability to shareholders, which has led to a strong record of profitability over the years. In 2020, we undertook various measures to reduce overall costs by 14% compared to the budget to adapt to the decline in prices. Regular audits and analyses of our fiscal performance were conducted in alignment with best practices and the regulatory requirements of the State of Qatar.

ECONOMIC IMPACT

Our production has more than tripled since our first year of operation in 2004. We generate valuable revenue that deeply contributes to the State of Qatar's overall wealth, economic and industrial development. Furthermore, as an employer of more than 1,000 individuals with an operating budget above QAR 1.6 billion, Q-Chem creates many economic opportunities for Qatar through employment and procurement. »





Local procurement of materials and services accounted for 69% of total procurement spending in 2020, with an increase of 33% in the budget of local service contracts. We have also initiated and completed multiple projects this year with a budget of more than QAR 80 million to optimize the production, enhance the safety of our people and assets and ensure compliance with environmental regulatory requirements. Looking forward, we have projects in the pipeline spanning over the next three years with an additional budget of around QAR 900 million to help us achieve our vision of sustainable and reliable economic performance.

In support of the QNV 2030, we always focus on increasing the local content in our procurement practices through leading the Supply Chain Localization Program “TAWTEEN”, along with the “In-Country Value (ICV)” incentive program. One of 2020 highlights in this area was qualifying a local supplier to manufacture Bulk Sacks in Qatar using locally produced ingredients. Furthermore, we have engaged three local-based manufacturing suppliers into our business following our 4Cs program (Category, Consolidate, Commit and Contract).

QAR 80m

spent to optimize the production, enhance the safety of our people and assets and ensure compliance with environmental regulatory requirements

PRODUCT STEWARDSHIP

Our efforts have been focused on keeping our company and our products up to international standards and accreditations. We are committed members of the Gulf Petrochemicals and Chemicals Association (GPCA) Responsible Care and Gulf Sustainability & Quality Assessment System (SQAS) initiatives, with all our facilities being certified with ISO 14001 Management and RC 14001 Responsible Care standards. A Product Risk Management Team (PRMT) is in place to help us proactively manage the adverse impacts of poor handling of our products inside or outside the boundaries of our facilities. The PRMT is responsible for addressing the safety impacts of all new and existing products. The team also provides trainings to support risk evaluation and management, while ensuring that information on the safe use and handling of our products is always provided to meet our customer requirements.

In the spirit of continuous improvement, several audits involving product responsibility were conducted throughout 2020, including: A risk survey; the CPChem OE Review and Safety Cultural Assessment; the RC and ISO review; the Process Safety Cultural Assessment. Results of these audits and reviews were largely positive and reflected our continued pursuit of excellence in the area of safety performance.

