FUELING PROSPERITY THROUGH CLEANER ENERGY

2019 SUSTAINABILITY REPORT

قطر للبترول
Qatar Petroleum

Contents

INTRODUCTION

Welcome to the Qatar Petroleum's Sustainability Report, which outlines our environmental, safety and social performance in 2019 and future ambitions.

Message from H.E. The President & CEO

H.E. Saad Sherida Al-Kaabi
Minister of State for Energy Affairs, President & CEO

Welcome to Qatar Petroleum's 2019 Sustainability Report, which marks ten years of reporting our sustainability performance. Guided by the vision and the leadership of His Highness Sheikh Tamim bin Hamad Al-Thani, the Amir of the State of Qatar, we are building on our pioneering role to create a better and more sustainable future.

At the time of writing this report, Covid-19, only identified as a threat at the end of 2019, had spread around the world and fundamentally changed the world as we knew it. Like most responsible businesses, and in close coordination with the government, QP reacted quickly to protect our people, safeguard our operations and prepare for the future. Covid-19 and the many threats that it poses have further highlighted how connected our world is and the need to think and act sustainably.

When we refer to sustainability, we recognize the complex relationship between people, planet and profit. This is clearly illustrated by the United Nation's Sustainable Development Goals (SDGs), which were developed as "a blueprint to achieve a better and more sustainable future for all". We support the principles behind the SDGs and continue to work towards the positive future that they describe.

Over the last few years, we have all gained a greater understanding about climate change. World opinion has shifted, and a new awareness of individual and group responsibilities has emerged. As one of the world's largest producers of natural gas, we recognize our responsibility to contribute to the debate and to seek new better ways to deliver the energy that the world needs. We believe that meeting the Paris Agreement requires collaborative efforts by all. Hence, we are committed to work alongside all players in the energy sector both in Qatar and internationally to fast track decarbonization of the sector.

Each year, we make considerable progress towards our ambition to provide affordable and cleaner energy for people and our planet responsibly, for a better and prosperous future. Our own vision is "to become one of the best National Oil Companies in the world, with roots in Qatar and a strong international presence." So, as we develop our organization, we naturally take a wider role as a leading actor in the world's energy transition. This is a journey and a responsibility that we share with many, and we are guided by three of the SDGs, namely 'affordable and clean energy', 'decent work and economic growth', and of course, 'climate action'. As a result, our sustainability strategy is clearly articulated around three key pillars:

- Climate Change Mitigation
- Operational Responsibility
- Social & Economic Development

Our key challenge has and always will be to balance our responsibility to Qatar with those of the rest of the world. As a responsible steward of Qatar's energy and a lead contributor to the country's wealth and development, we are committed to growth and raising our LNG production capacity, the cleanest of all fossil fuels. Yet, this must be balanced by increased efforts to operate sustainably and responsibly for the benefit of all.

This starts with the safety and security of people, our communities and the integrity of our operations as a priority. This report highlights our progress and the improvements in key areas of operational responsibility and management. It also acknowledges our challenges as we intensify our efforts to build a world class safety culture with an incident-free, secure, safe and healthy environment for our employees, stakeholders, partners, contractors, and the communities where we operate.

How we treat others is a critical part of being a responsible operator. We are committed to the respect and promotion of human rights and to the highest standards of ethical business conduct. Last year, I was very pleased to release our new Code of Conduct, a comprehensive blueprint that builds on our values and defines our business principles and standards. It illustrates the importance we place on openness, transparency, personal accountability and ethical decision making.

As an energy company, we recognize that we must do our part and act to reduce the impact of climate change, by addressing the whole of our business. This is why we have developed our 4C framework of Consolidating our LNG leading position, Curbing our emissions, Creating low carbon energy and Compensating for residual emissions.

Our Climate Change ambition by 2030 is to cut the carbon intensity of our LNG facilities by 25% and achieve zero routine flaring, and set a 0.2 wt.% methane intensity target by 2025, a significantly more potent gas than CO2 on the short term. Our Climate Roadmap reflects our focus on reducing GHG emissions in our operations, improving our products to help our customers lower their emissions, and creating low carbon businesses that support the energy decarbonization.

In an effort to diversify the production of energy and to increase use of renewable energy, we are part of Qatar's first large scale solar PV plant project. The project is a key pillar to make the FIFA World Cup Qatar 2022™ a carbon neutral event, and over its lifetime will contribute to reducing 26 million tons of CO2 emissions. This project is also a vital part of our efforts to conserve energy and protect the environment in a manner that strikes a balance between the needs of the current and future generations as stipulated by Qatar National Vision 2030. At the same time, we are also taking a proactive role when it comes to the impact of our own operations and where we hold equity and we are currently operating the largest CO2 recovery and sequestration facility in the MENA region.

As the world's largest producer of natural gas, we support the growing interest to reduce emissions along the gas value chain. In 2019, we established a Joint Venture to replace the existing bunker fuel for our ships with LNG, which will significantly reduce the total shipping emissions in the LNG value chain. This will benefit our customers as well as other shipping companies in reducing their carbon footprint.

Being a leader means recognizing our responsibility to create shared value and shape the future through social, economic, educational activities and partnerships. In 2019, we continued to provide access to reliable and affordable energy, created significant shared economic value, innovated in research, and focused our efforts on the development of our people into a world class talent pool.

Throughout all our activities, we remain conscious that we play a critical role in the prosperity and wellbeing of the communities in which we live and serve. This is also why, in an effort to strengthen our transparency and stakeholder engagement, in 2019, we became a supporting member of the Extractive Industry Transparency Initiative (EITI). This will allow us to support and promote transparency throughout the extractive industries, particularly in the MENA region, facilitating public debate and establishing a leadership role.

As we continue in our journey of excellence, we remain committed to bring about further prosperity and shared value for all our stakeholders who were, and will always be, an integral part of QP's success. I invite you to read through our 2019 Sustainability Report to learn more about our progress, our achievements and our plans for the coming years.

Saad Sherida Al-Kaabi
Minister of State for Energy Affairs
President & CEO

About This Report

REPORT SCOPE

Our annual Sustainability Report is prepared in accordance with the QP Information Classification Standard and classified as public. The report covers the calendar year from January 1, 2019 to December 31, 2019 and unless otherwise noted, includes the consolidated results of the QP Group. The data presented in the Climate Change Mitigation section of the report includes QP's operated assets and equity interest held. All other data covers QP assets only. In addition, we highlight key achievements of some QP subsidiaries and joint ventures.

REPORTING FRAMEWORK AND MATERIALITY

This report has been prepared in accordance with the GRI Standards: Core option. This report discloses information on the specific topics that are most material to our organization and our stakeholders. A detailed discussion of these material issues is provided on page 26. Our GRI Content Index is found in Appendix A. In addition, the report follows the reporting guidance of IPIECA, which QP is a member of.

STAKEHOLDER ENGAGEMENT

To thrive in today's oil and gas industry, it is essential that we engage with our stakeholders and continually assess ourselves against their expectations. We have a diverse range of internal stakeholders with whom we interact in many ways. These interactions are crucial to us, identifying and enabling us to respond effectively to sustainability challenges and opportunities affecting our business and operations. For a summary on ways of engagement and our internal stakeholders' expectations and priorities, please see Appendix C.

REPORT QUALITY

The information in this report was prepared and confirmed through a rigorous process, including careful review by relevant departments, senior management and third party verifier. All health, safety, environment and quality information is subject to verification by our Corporate HSE & Quality Department. Lloyd's Register Quality Assurance Ltd has provided limited assurance for our safety, environment and greenhouse gas emissions data presented in this report – see assurance statements in Appendix G.

For feedback and suggestions on our Sustainability Report, please contact us at:

https://qp.com.qa/en/AboutQP/Pages/ContactUs.aspx

Learn more about our activities:

www.qp.com.qa
https://www.facebook.com/qatarpetroleum
https://twitter.com/qatarpetroleum
https://www.youtube.com/user/QPQATAR
https://instagram.com/qatarpetroleum
https://www.linkedin.com/company/qatarpetroleum/

Cautionary Message

This report contains statements that may be deemed as "forward-looking statements" that express the way in which QP intends to conduct its activities. Such statements can 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. QP has made every effort to ensure that the report is as accurate and truthful as possible. However, by their nature forward-looking statements are qualified 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 QP's ability to control and therefore do not represent a guarantee that events implied in these forward-looking statements will actually occur.

QP at a Glance

QP is an integrated national oil and gas corporation that stands at the forefront of efforts for the long-term sustainable development, utilization and monetization of oil and gas resources in the State of Qatar. The company was established in 1974 as the state-owned petroleum company, responsible for the operation, management and development of all oil and gas activities in Qatar, including exploration, production, refining, transport and storage.

1974
- Qatar Petroleum Company is established

1979 – 1981
- We established the first natural gas liquids (NGL) complex in Mesaieed Industrial City (NGL/1 & NGL2 plants) to avoid routine flaring by capturing the associated gas and using it as feed to the petrochemicals complex

1981
- First petrochemical facility, producing 150 kilotons per annum (KTPA) of ethylene and 150 KTPA of low-density polyethylene (LDPE)

1996
- Start-up of first liquified natural gas (LNG) train in Qatar, producing 3.3 million tons per annum (MTPA)

2007
- First large-scale gas-to-liquid (GTL) plant commissioned in Qatar, producing 32.4 thousand barrels per day (KBPD) clean fuels

2009-2011
- LNG mega-train expansion, adding 38 MTPA of LNG

2010
- Launch of the greenhouse gas (GHG) accounting and verification program
- World's largest ethane cracker producing 1,300 KTPA of ethylene and 350 KTPA of normal alpha olefin

2011
- Flare reduction program launched
- World's largest and second GTL plant commissioned in Qatar, producing 140 KBPD of synthetic fuels

2012
- Qatar Hosts UN Climate Change Negotiations 18th session of the Conference of the Parties (COP 18)

2013
- Energy efficiency improvement program launched

2014
- Start-up of jetty boil off gas recovery facilities (Achieving 1.6 MTPA CO2 equivalent reduction)

2015
- Test the performance of GTL diesel in local transport to improve air quality

2016
- State of Qatar signs Paris Agreement

2017
- State of Qatar ratifies the Paris Agreement

2018
- Methane Guiding Principles signed
- Governance, regulatory and compliance gap analysis

2019
- Announcement of Siraj solar project of 800 MW capacity by 2022
- Start-up of first phase CO2 sequestration
- Launch of our Code of Conduct: Shaping Who We Are
- QP became a signatory to the EITI
- Announcing CCS plans (over 7 MTPA by 2027) along with North Field East and North Field South expansions bringing LNG production up to 126 MTPA by 2027
- Launch of 4C Climate Roadmap
- Launch of CNG fueling stations for buses in the Industrial Cities
- Launch of Tawteen
- Smart LDAR leak detection and repair initiative launched

FUTURE 2025
- 0.2 wt% methane intensity
- Renewable capacity addition reaching 1.6 GW

FUTURE 2030
- Zero routine flaring
- Net reduction of 25% in LNG facilities greenhouse gas intensity
- Renewable capacity addition reaching 2 – 4 GW
- Gas share of our portfolio exceeding 90%[1]

1 Gas share based on rich gas production including associated liquids (condensate & NGLs)

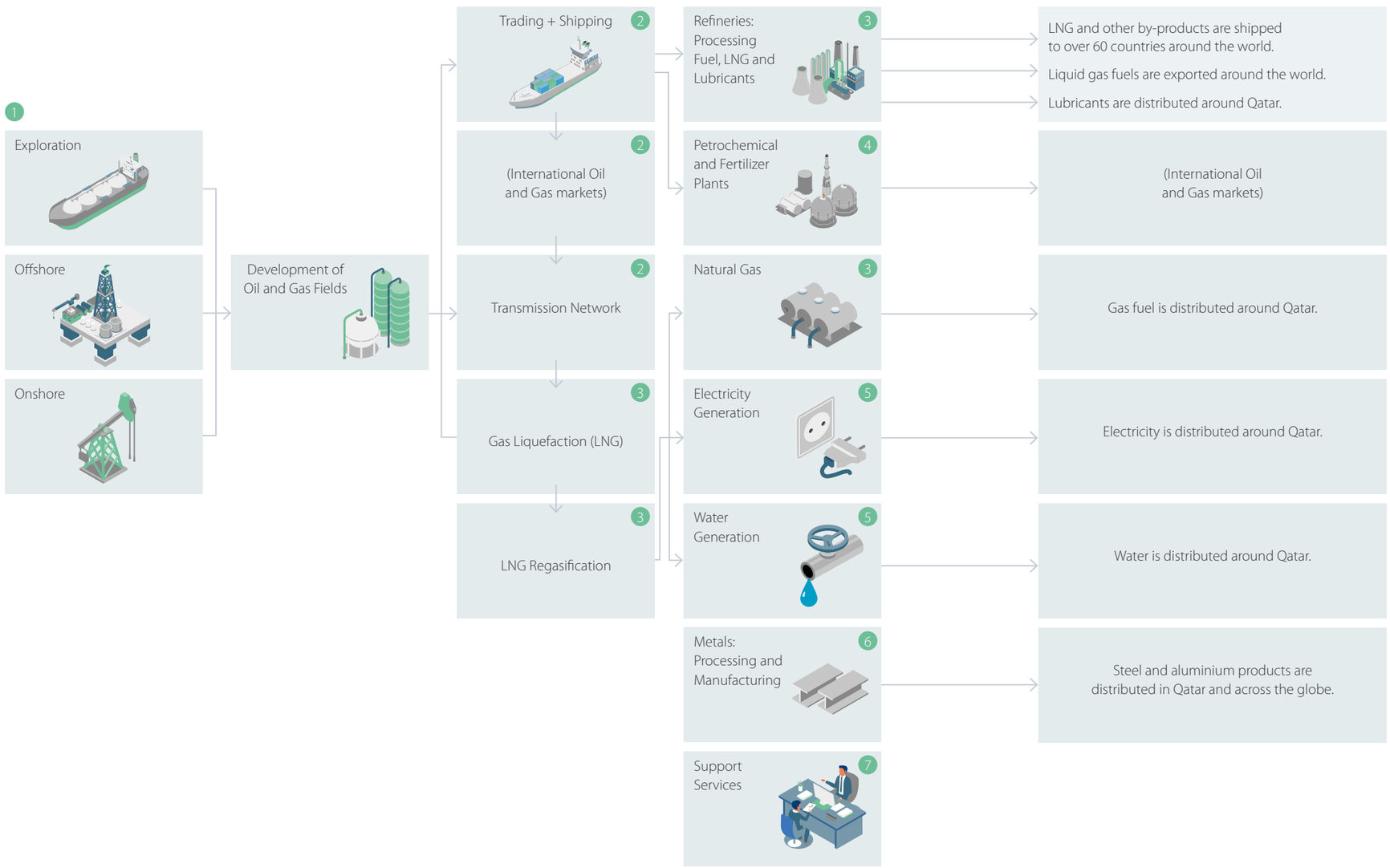
Our Value Chain

We create value by sustainably harnessing Qatar's hydrocarbon resources, converting these into added value downstream products and services, and investing in the development of an integrated energy value chain around the world. The principal activities of QP, its subsidiaries and joint ventures include the exploration, production, local and international sale of crude oil, natural gas and natural gas liquids, liquefied natural gas (LNG), refined products, synthetic fuels, petrochemicals, fuel additives, fertilizers, steel and aluminum.

Exploration, development and extraction of crude oil and natural gas.

Gas processing, refining, distribution of product, storage of hydrocarbons and transportation.

Final products and sales in the Qatari, regional and international markets.



1 EXPLORATION, DRILLING & PRODUCTION
- Qatargas
- North Oil Company (NOC)
- Gulf Drilling International (GDI)
- QP through Exploration and Production Sharing Agreements (EPSAs), Development and Production Sharing Agreements (DPSAs) and Joint Operations.
- QP

2 STORAGE & TRANSPORTATION
- Qatargas
- Woqod (Qatar Fuel)
- Qatex
- QP

3 REFINING & GAS PROCESSING
- Qatargas
- Oryx GTL
- QP

4 PETROCHEMICALS & FERTILIZERS
- Qatar Petrochemical Company (QAPCO)
- Qatar Fuel Additives Company (QAFAC)
- Qatar Vinyl Company (QVC)
- Qatofin Company Limited (Qatofin)
- Ras Laffan Olefins Company (RLOC)
- Qatar Chemical Company (Q-CHEM)
- SEEF Limited
- Qatar Fertilizer Company (QAFCO)
- Gulf Formaldehyde Company (GFC)
- Qatar Melamine Company (QMC)

5 POWER & UTILITIES
- Ras Laffan Power Company (RLPC)
- Mesaieed Power Company Ltd (MPCL)
- Ras Girtas Power Company (RGPC)
- Um Al Houl Power (UHP)

6 METALS
- Qatar Aluminium (Qatalum)
- Qatar Steel

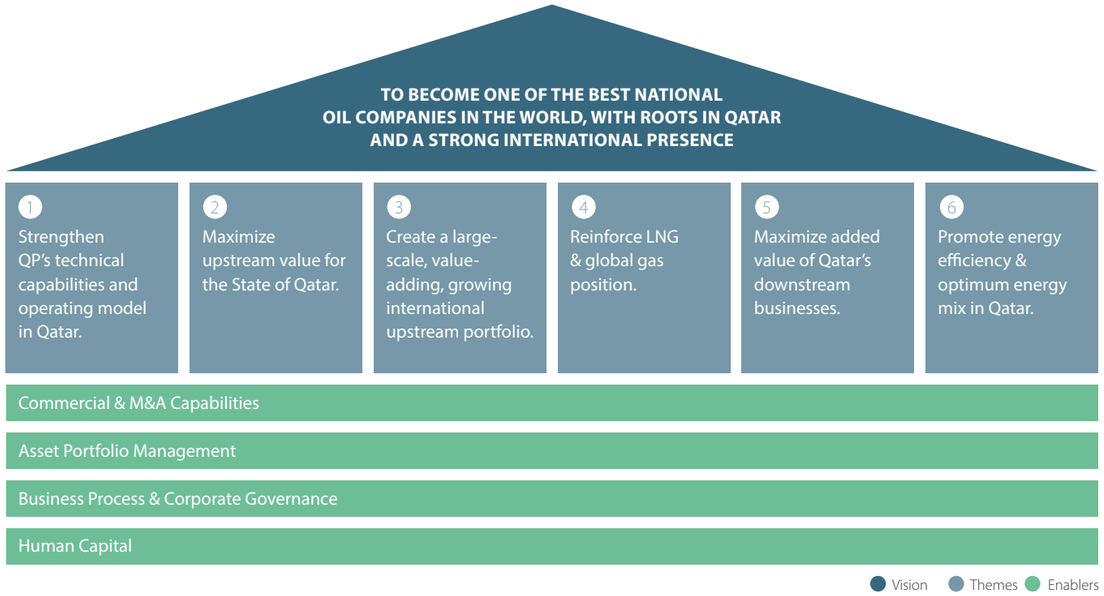
7 SUPPORT SERVICES
- Gasal
- Al-Shaheen Distribution
- Al-Shaheen Weatherford
- Al-Shaheen GE Services
- Gulf Helicopters
- AMWAJ
- Al Koot Insurance & Reinsurance Company
- QP

For equity shares, refer to Appendix H

Our Vision and Strategic Objectives

Our vision is to become one of the best national oil companies in the world, with roots in Qatar and strong international presence.

Our corporate strategy helps us achieve our corporate vision across six 'themes' by leveraging four key 'enablers'. Sustainability is intrinsically linked to many of these areas, particularly strengthening our technical capability and operating model, reinforcing our LNG and global gas position, as well as promoting energy efficiency and the optimum energy mix in Qatar.



STRATEGY ROLLOUT 2019

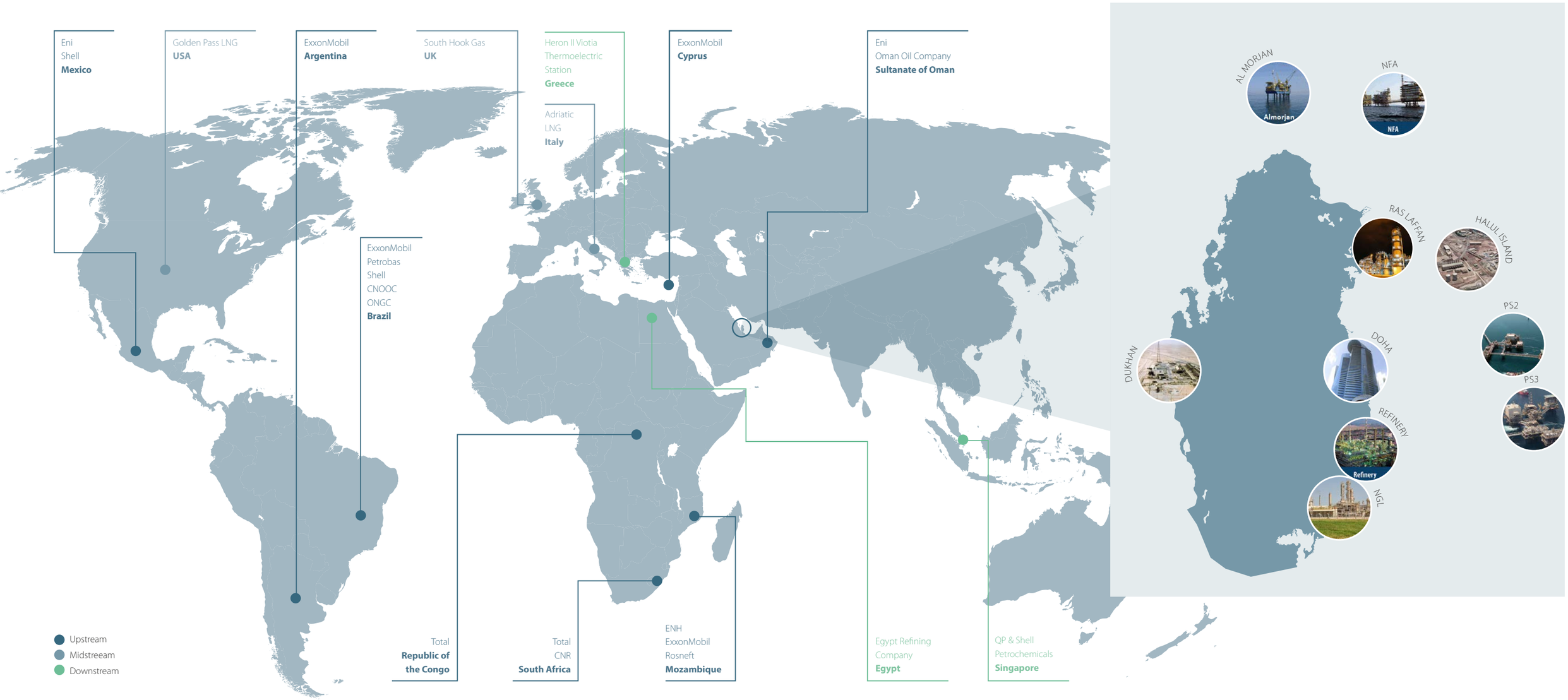
QP Management deliberating on the longer-term direction of the organization during the strategy workshops.

Our Geographic Footprint

Our operations and activities and those of our affiliates are located at various onshore locations in Qatar including Doha, Dukhan, Mesaieed Industrial City (MIC) and Ras Laffan Industrial City (RLIC). We operate in local offshore areas too, including Halul Island, offshore production stations, drilling platforms, Al Rayyan Field and the North Field Alpha (NFA), which is considered the largest single non-associated gas reservoir in the world covering 6,000 km2.

However, our strategy for hydrocarbon exploration and development extends well beyond Qatar. We operate on a regional and international level through exploration and production sharing agreements, and development and production sharing agreements, with major international oil and gas companies.

Our extensive investment portfolio includes assets in North and South America, Europe, Africa and Asia. Although we currently act as a proactive non-operator internationally, we are developing an international basin and hydrocarbon resource-led exploration portfolio, partnering with leading global players.



Jassim M. Al-Marzouqi
Executive VP, Commercial & Business Development

Our ambition is to further consolidate our leadership position in the LNG sector, bringing reliable, affordable and sustainable energy to our customers and partners across the globe. We will continue to work to ensure that our LNG is one of the world's most sustainable energy sources, reducing its carbon footprint as well as methane emissions associated with its use across the entire value chain.

While we are focusing on further increasing our share of natural gas in our overall production mix, we increasingly tap into international investments as an opportunity to further diversify our portfolio ensuring our resilience for the future.

PORTFOLIO RESILIENCE

QP believes natural gas is playing and will continue to play a key role in the energy transition to a low carbon world. It has the lowest greenhouse gas emissions (GHG) of all fossil fuels. To improve the impact further we are committed to reduce the carbon intensity of our LNG across the value chain for production, liquefaction and shipping. Initiatives include reducing methane emissions along the value chain, as well as energy efficiency, flare reduction and carbon capture and sequestration (CCS).

We will continue developing our leadership position in the LNG sector, bringing reliable, affordable and sustainable energy to our customers and partners across the globe. We aim to ensure that QP's LNG is one of the world's most sustainable energy sources, reducing its carbon footprint and the methane emissions associated with its use.

STRATEGY – GAS OPERATIONS

Our strategy focuses on enhancing the use of natural gas as a preferred destination fuel for existing and developing economies, improving the quality of life for their citizens. We recognize for natural gas to be a sustainable and credible destination fuel, we must reduce the environmental impacts associated with its production, transportation and consumption.

There is great uncertainty with the overall speed of the energy transformation, but we are witnessing a clear acceleration of desire to achieve carbon neutrality. This journey will be unique and will take different paths in different parts of the world, but the ultimate destination of meeting the Paris Agreement is clear. Therefore, we are positioning our energy production accordingly to be flexible and adaptable to meet the needs of our customers throughout the world.

STRATEGY - OIL OPERATIONS

Demand for oil will decline in the future, but it still has a role to play in the global energy mix and will remain important for transportation and manufacturing of many essential goods. We will reduce our oil operations' emissions and carbon intensity to meet this near-term demand for oil and refined products in the most sustainable way possible.

Although oil production is a decreasing part of our overall portfolio, it must receive equal attention in the energy transformation ensuring it is being produced, transformed and transported in the most sustainable manner.

RESILIENCY

To ensure our resiliency under all future scenarios, we are increasing our share of natural gas in our overall production mix. By 2030 we are targeting to have more than 90% natural gas production within our portfolio. We are also reducing the carbon intensity of our energy products used by our customers. We will continue identifying and supporting technologies and initiatives which respond to the challenges of climate change.

AMBITION:

90%+

gas share by 2030 is our ambition, while achieving net reduction in the carbon intensity of our upstream and LNG operations[2]

2 Gas share based on rich gas production including associated liquids (condensate & NGLs) as this is a comingled wet gas production stream with liquid hydrocarbon extraction and separation post production.

QP's Governance

We manage our business in alignment with the QP values and the business principles outlined in our Code of Conduct and by engaging with a wider group of stakeholders that are impacted by our business.

OUR VALUES

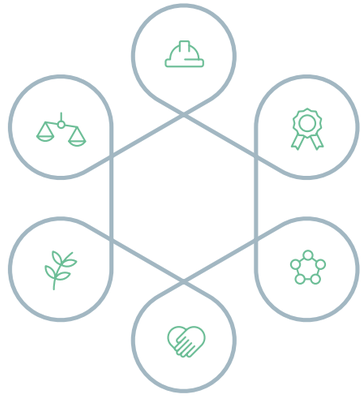
The QP values describe the standards of behavior that shape our corporate culture and will be key to achieving our vision. To cultivate and sustain a strong culture as 'one team', we have developed a set of six core values. These serve as the pillars of our work culture and aim to focus the capabilities, behaviors, and decision-making of our people.

SAFETY

We care for our people and see safety as a priority for everyone. We are committed to an incident-free, secure, safe and healthy environment for our employees, stakeholders, partners and communities where we operate.

INTEGRITY

We place the highest importance on honesty and ethical behavior, always choosing to do the right thing. We value transparency in our dealings with each other and stakeholders. Through this we build strong and successful relationships. We believe results matter, but how we achieve those results also matters.



EXCELLENCE

We continually improve our processes to achieve greater efficiency, productivity and higher performance. We generate and are open to new ideas. We learn from both our successes and mistakes. Each of us is accountable for the quality, efficiency and effectiveness of our work.

RESPONSIBILITY

We are committed to operating in a socially responsible manner, caring for the environment and the communities we impact and our employees. We manage our people and assets responsibly, serving as a catalyst for growth to ensure the prosperity of future generations. We develop everyone for the benefit of QP and the country with a special emphasis on the capabilities of Qataris.

COLLABORATION

We communicate across all areas and levels, sharing information and considering diverse viewpoints to achieve our common goals. We empower others, build ownership, create accountability and enhance cooperation. We recognize and appreciate those who work across teams and groups to achieve our vision and strategy.

RESPECT

We respect our colleagues, stakeholders, partners and communities and act with care and consideration to build trusting relationships. We value our diversity and each individual's contribution.

GOOD GOVERNANCE AND ETHICAL STANDARDS OF CONDUCT

As we continue our journey to become the best national oil company in the world, effective corporate oversight remains the foundation of our success. This includes a commitment to governance and business practices that comply with our own policies and all applicable national and international laws, regulations and conventions. Through our governance and compliance frameworks, we believe we have set clear lines of responsibility around these commitments. These obligations apply to all our employees but most especially to our leaders, business partners and key stakeholders. Staying focused on our commitments, while staying true to our values and standards for business conduct, is the best approach to creating long-term value for the organization.

We have zero-tolerance for corruption, and we implement and enforce various internal controls to counter fraud, bribery, conflicts of interest and other types of unethical or illegal behaviors. We have a whistle-blower hotline in place to receive (on a confidential and anonymous basis) reports of possible non-compliance with internal regulations. All allegations received through the hotline are reviewed in accordance with our internal allegation reporting and management process. Our Internal Audit team plays an integral role in monitoring internal systems and employee compliance. This team provides independent and objective assurance to the Board Audit Committee on the effectiveness of our governance, risk management and internal control practices through a structured program of risk-based audits in accordance with relevant international standards such as the Institute of Internal Auditors Professional Practices Framework (IPPF).

OUR BOARD OF DIRECTORS

Our Board of Directors and executive leaders ensure that we maintain our oversight standards in alignment with the Qatar National Vision 2030, our QP values and strategies, and international best practices for organizational governance. With this in mind, we continue to find opportunities to improve our overall governance across the organization. In 2018, we conducted a governance, regulatory and compliance gap analysis. From this, we set up a Governance Transformation Office (GTO) to support improved governance and compliance across the organization. In 2019, we completed the GTO detailed design through organization-wide in-depth process reviews, data analysis and benchmarking of best practices. We then implemented best practices in key areas of the organization.

In line with these process improvements, we established an investment management committee overseeing the business development process. As we are reporting on activity and progress in the year, we also conducted a diagnostic of our asset management practices and designed standards and procedures to align with best practices in this area as well. We also commissioned a project to understand our decision-making culture and took steps to update our policies and procedures framework which will be completed in 2020.

We look to continue the progress that we have made through the GTO. In 2020, we will focus on the implementation of the GTO's recommendations, supported by organization-wide communications and change management programs.

Our Board of Directors is made up of the following directors who play a vital role in keeping us on track to meet our goals and objectives:

H.H. SHEIKH ABDULLAH BIN HAMAD AL THANI
The Deputy Amir
(Chairman of the Board)

H.E. SAAD SHERIDA AL-KAABI
Minister of State for Energy Affairs
(Deputy Chairman and President & CEO)

H.E. ALI SHAREEF AL-EMADI
Minister of Finance
(Member)

H.E. ALI BIN AHMED AL-KUWARI
Minister of Commerce and Industry *(Member)*

SHEIKH KHALID BIN KHALIFA BIN JASSIM AL-THANI
CEO of Qatargas
(Member)

MR. NASSER KHALIL AL-JAIDAH
(Member)

MR. SAEED MUBARAK AL MUHANNADI
(Member)

OUR CODE OF CONDUCT

Throughout our history, we have repeatedly demonstrated our commitment to ethical business conduct. 2019 was the year that we publicly detailed this commitment by publishing our new *Code of Conduct: shaping who we are*. Our new code was launched to all employees in early 2019 with every employee receiving a copy, along with a personalized message from our President and CEO, H.E. Saad Al-Kaabi. The message outlined H.E.'s personal commitment to the Code and the business principles outlined in it.

Our new Code of Conduct is a comprehensive document that defines our shared commitment to ethical business principles and our standards for adherence to them. It guides our behaviors and the principles that establish our culture. It describes the beliefs that we share with the world and against which our actions are judged. Importantly, it provides a roadmap on how we work together and how we work with others. The business practices and the principles outlined in our Code illustrate the importance we place on openness, transparency, personal accountability and ethical decision making. We also expect any employee to speak up when they perceive our actions to be misaligned with its standards.

هويتنا
SHAPING WHO WE ARE

In conjunction with the launch of the Code of Conduct, we hosted an ethical leadership conference for more than 800 members of our leadership team and the CEOs of our joint venture partners and QP Group companies. Titled 'Hawiyyatna' (Arabic for our identity), the event focused on our commitment to ethical leadership and how, as leaders of the organization, it is vital that we create and commit to a culture built on integrity, trust and ethical business conduct. We plan to host similar events regularly to reinforce the importance of the topic and to gauge our progress in embedding our business conduct principles throughout the QP Group leadership team.

We supported the Code of Conduct's launch with a series of messages for our employees, including periodic updates from members of our senior leadership team on the importance of acting with integrity. We also introduced a team of 50+ integrity ambassadors to help embed a culture of integrity throughout the organization. Together with our leadership team, integrity ambassadors have reached out to every part of the organization, spreading the word around the importance of integrity. They are a valuable resource in implementing the code, our core values and our related business conduct policies and procedures.

Code of Conduct launch event demonstrating our commitment to ethical business conduct.

In late 2019, we asked every employee to review a newly launched *E-Code of Conduct*, which outlined key topics in a series of scenario-based training activities. By the end of 2019, all designated employees completed the E-Code of Conduct and acknowledged their compliance with the principles outlined in it. We intend to repeat this exercise annually.

TRANSPARENCY AND DISCLOSURE

In 2019, we celebrated a significant milestone when we became a supporting member of the Extractive Industry Transparency Initiative (EITI). We believe in the promotion of transparency among the extractive industries and will take a leadership role in facilitating public debate on the topic throughout the MENA region.

We also continued our work with the Natural Resource Governance Institute (NRGI) to improve our reporting and disclosure practices. Specific actions included updating our public website to include disclosure of our past year's financial results. We also published our historic annual and sustainability reports, while enhancing our disclosure around our rights, licensing and board governance practices. We further disclosed a register of our partners in terms of our domestic operations. We believe by becoming a more transparent organization, we will attract and retain talented resources and business partners. This will help us accomplish our strategic objectives for long-term sustainability.

EITI Extractive Industries Transparency Initiative

Natural Resource Governance Institute

THIRD PARTY COMPLIANCE

Third parties continue to account for a significant proportion of our organizational compliance risk. With vendors, contractors and partners carrying our reputation globally, in 2019, we enhanced our management of risks associated with third party compliance. We worked to review our relationships with all our key stakeholders, ensuring that we know our partners at every stage of our engagement with them. This includes ongoing review at the pre-approval, engagement and post-engagement time frames, including upon renewal, suspension or termination.

Our Economic Performance

We aim to deliver positive, consistent fiscal performance that generates economic benefits for all our stakeholders and ensures we have sufficient financing and investment to support and grow our oil and gas operations in a responsible manner. To achieve this, we:

- Operate an integrated business model across the value chain.
- Development of downstream value-added industries which can provide stable returns.
- Maintain an oil price mitigation strategy to respond to different oil price scenarios and deploy appropriate measures to mitigate the impact on cash distribution to the State.
- Follow a group cost optimization program with our subsidiaries and joint ventures.

We continued to conduct our business effectively despite the ongoing uncertainty in global energy markets, international economic instability and the continuing economic blockade of the State of Qatar. In 2019, through the implementation of our strategy, we were able to mitigate the impact of these issues and provided a continuous, safe and reliable supply of energy to our global customers. Through our international investment portfolio, including partnerships with some of the world's most influential companies, we have a considerable impact on the national economy, making it vital that revenues and profitability are reliable and predictable irrespective of changes to global energy markets.

One key highlight we would like to emphasize is that we achieved such economic progress without compromising our key value - safety. This statement is corroborated by the fact that benchmarking against the International Association of Oil & Gas Producers (IOGP) shows that our 2019 combined Lost Time Injury Frequency (LTIF) of 0.25 was 4% better than IOGP's 2018 average of 0.26 and our combined Total Recordable Case Frequency (TRCF) was 41% better than the corresponding IOGP's 2018 average of 0.99.

HIGHLIGHTS 2019

In line with our strategic plan to increase production of LNG as it is a cleaner energy source, we stepped up our efforts on North Field East and North Field South (NFE & NFS) projects to develop additional gas from our offshore North Field. When completed and the six LNG mega trains come into operation, Qatar's LNG production capacity will rise by 64% from 77 million metric tons per annum (MMTPA) to 126 MMTPA. This will increase the country's total production capacity from 4.8 to 6.7 million barrels of oil equivalent (MBOE) per day. The new projects will produce about 49 MMTPA of LNG and other associate products and have been designed to achieve about 25% less GHG intensity compared to existing LNG facilities. This capacity increase will strengthen our position as the world's largest LNG producer and exporter, boosting our strategic growth plan.

We assumed management and operatorship of the two offshore oil fields Idd El-Shargi North Dome and South Dome in October 2019, following the expiry of the development and production sharing agreements with Occidental Petroleum of Qatar (Oxy).

To strengthen our competitive position in the downstream sector, we announced the integration of SEEF Ltd., a petrochemical company manufacturing linear alkyl benzene, with QP operations expected to complete in 2020. This will allow us to build world-class operations by optimizing synergies between QP refining operations and SEEF, and to strengthen our resources, talents and capabilities.

We will be starting supply of very low sulfur fuel oil at Ras Laffan Industrial City (RLIC) Port. The marine fuel offering is in advance of the International Maritime Organization (IMO) 2020 regulation for a 0.50% global sulfur limit for marine fuels, which will come into effect 1 January 2020. We are proud to be one of the first countries to limit the availability of marine fuels only to grades that comply with this regulation.

We announced our intention to develop a new world-scale petrochemicals complex at RLIC in partnership with Chevron Phillips Chemical before (CPChem). The project includes the world's largest single unit ethane cracker, able to produce 2.08 million tons of ethylene per year. Its high-density polyethylene (HDPE) plant is also one of the largest in the world, with an annual capacity to produce 1 million tons of blow molding polyethylene and 680 kilotons of bimodal grade and PE-100 pipe grade polyethylene. The plant will use ethane feedstock from four new LNG mega-trains in the NFE project, through an integrated ethane network with the existing ethane supply network system. This project will put Qatar in a leading position among the world's top petrochemical producers. The new grade of polymer product will also support the downstream converter industries in Qatar, diversifying their capability to enhance plastics product. Ras Laffan Petrochemical Project (RLPP) is expected to start its commercial production by Q3-2026.

On an international level, we signed a number of agreements with our partners to extend our operations on a global level, including:

- Agreement with Eni to acquire a 30% participating interest in the Tarfaya Shallow Exploration Permit, a series of 12 neighboring offshore blocks in Morocco.
- Agreement with Eni to acquire a 25.5% participating interest in offshore Block A5A, Mozambique.
- Agreement with CPChem to develop a new world-scale petrochemical project U.S. Gulf Coast II Petrochemical Project in USA (USGC II). It will include an ethylene cracker with a capacity of 2 MMTPA, making it the largest cracker in the world, and 2 high-density polyethylene (HDPE) units with a capacity of 1 MMTPA each. QP signed agreements with Total to farm into 2 exploration blocks in Guyana.
- Agreement with Eni and Total to acquire a 25% participating interest in several blocks located offshore Kenya.
- Agreements with Total to farm into 2 exploration blocks in Namibia.
- Agreement with Fluxys for capacities at Zeebrugge LNG Terminal.
- Shareholder agreement with Shell for cooperation on LNG bunkering services and a 5-year sale agreement to supply a total of 900,000 metric tons of full-range naphtha and plant condensate per year, starting in April 2020.
- Agreement with Wanhua Chemical Group for the sale of 800,000 metric tons of LPG per year over a period of ten years.

FINANCIAL PERFORMANCE

Starting in 2017, we have been engaged in initiatives to bring our financial processes up to a world-class level by adopting the latest technology and standards. Our accounts for 2019 have for the first time been prepared according to the IFRS international standard, leading to a high degree of reliability and transparency.

Our internal finance transformation project is mainly concerned with enhancing the decision-making process by having efficient, reliable, timely and accurate financial information. We have already achieved several milestones throughout 2018 and 2019, and expect to complete the process in 2020.

In 2019, QP has generated a revenue of QAR 108 billion, which is a 9% decrease comparing to 2018. During 2019, we managed to control expenses by a reduction of 6%, compared to 2018.

HIGHLIGHTS 2019

Conducted preparatory work on migrating our systems from SAP ECC to SAP HANA which is to be conducted in 2020.

Compliance with the tax requirements of all jurisdictions where we have operations or investments, including the drafting and filing of a country-by-country report for the first time.

Initiated the Project One Family system to eliminate manual data collection from QP Group companies for financial and management reporting and annual budgeting purposes. The system will provide standardized input templates through a web interface and facilitate consolidated reports for the group. The project's conceptualization and design phase are expected to start in 2020.

Improved the targeted standard for our payment terms to vendors from 45 to 30 days.

Support provided on corporate structuring, tax and insurance to the high volume of new ventures and restructurings both in Qatar and internationally to ensure our interests can be managed effectively.

Modernized a wide range of financial procedures and guidelines, such as accident claims, petty expenses, and authorization of banking transactions, as well as tax compliance.

We had functionally integrated a number of companies with QP, like QPI, QPSPP, SEEF, QPT, and Muntajat and continue to complete the system integration to have one system landscape covering all companies under QP.

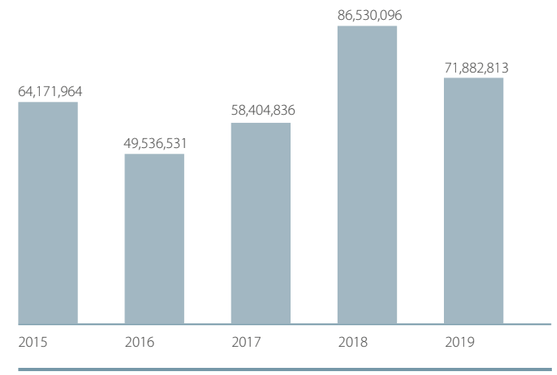
OUTLOOK

Prior to the COVID-19 pandemic, global oil demand was growing at around 1% per annum, gas demand at around 1.5% and LNG demand at around 5%. The crude oil market was relatively stable, with supply and demand reasonably balanced at a price range for Brent ranging between $60-$65 per barrel. Gas markets were oversupplied, as a result of new LNG supplies from the USA and plentiful low-cost supply from US shale gas and tight oil basins, with spot gas prices ranging from around $2.40 per million Btu in the US, to $4.10 in Europe and up to $5.70 in Asia. Even though the share of renewables in energy demand is growing, oil and gas were expected to remain vital products in transportation, power generation and petrochemicals for at least another generation.

The COVID-19 pandemic which began in late 2019 has (at the time of publication) already had tremendous economic impact. Global GDP in 2020 is expected to show a fall of around 4% versus 2019 (compared to expected growth of around 3%) and demand for oil has fallen even more – by around 8% or 8 million barrels per day with transportation demand particularly hard hit.

At this stage it is impossible to predict the medium and long-term economic impact of this crisis, and hence the impact on the supply and demand for oil and gas. However, it remains clear that the growth in renewables will continue, and that the corresponding vital flow of cost-effective oil and gas supplies must continue too, though the speed of change is now even harder to predict.

Net profit for the year
('000 QAR)

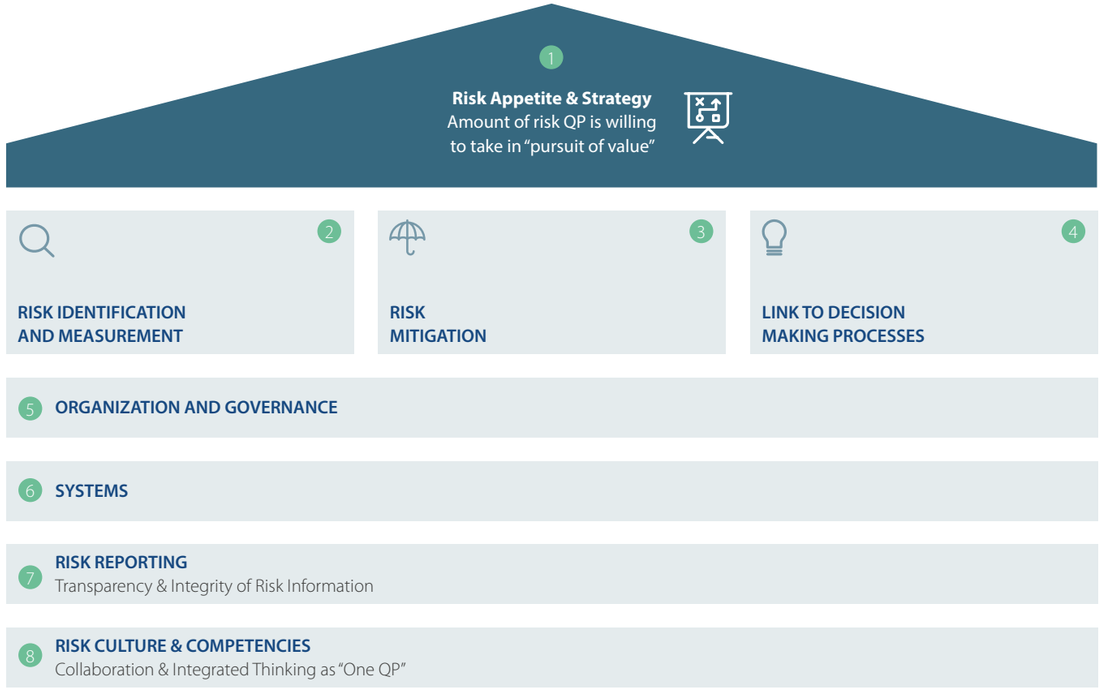


Risk Management

We are committed to managing all risks effectively and transparently. Our enterprise risk management (ERM) process allows us to address risks holistically and systematically across our businesses in a clear, consistent and organized manner. The process sets the foundation for risk-based decision making, while our management systems consist of our policies, standards, procedures, requirements and guidelines including our Enterprise Risk Management (ERM) Policy and Manual.

ERM is a key priority as we work to promote and advance the interests of the State of Qatar domestically and internationally. It is essential in meeting our strategic priorities and performance targets, as well as for sustaining value. Our ERM process is being run in a manner consistent with the ISO 31000 standard and contains eight elements, which address strategic, financial, operational and compliance risks across our business. Our approach identifies key risks based on likelihood and impact and establishes appropriate mitigation measures. Our ERM team reviews and assesses a broad category of risks, including sustainability and climate-related business risks and opportunities. Significant risks to corporate objectives are monitored and reported on a regular basis. A dedicated ERM Policy and Manual sets out our risk strategy and appetite, and an ERM team serves as a center for excellence to provide risk-related advice, guidance and support. Risks are registered and updated regularly to monitor risk profile. We also identify the mitigation actions that are essential to reduce the risk level, and track progress for each action.

ERM Framework



HIGHLIGHTS 2019

In 2019, our ERM process matured through continuous improvements, including the stewardship of top-risk mitigations, and moving risk reporting from other sub-frameworks to establish a complete risk profile. The key achievements were:

- Enhanced assessment quality of top corporate risks through incorporating bow-tie analysis and cross-directorate review.
- Trained more than 150 focal points on our ERM approach, process and tools.
- The corporate health, safety, environment and quality (HSEQ) team streamlined the process for reporting corporate HSE risks into the ERM process, by developing and implementing a relevant standard and associated procedures. The process involved the engagement of all relevant parties to promote a consistent HSE risk identification and reporting approach. The ultimate goal is to identify the top HSE risks that could affect our objectives.
- Initiated coordination with sub-frameworks such as HSE, BCM (business continuity management), projects, supply chain, treasury, and taxes, to capture their top risks in the quarterly senior management report.
- Defined ERM interfaces with the new investment and asset management processes, and developed a risk register for each new investment opportunities.

Our ERM process is essential in keeping People, Assets, and the Environment Safe

SUSTAINABILITY AT QP

Sustainability at QP is built on three main pillars: Climate Change Mitigation, Operational Responsibility, and Social and Economic Development

We believe that real leadership and action are critical to building a healthier, sustainable world. Society is facing unprecedented economic, environmental and social challenges, forcing companies to rethink what they do and how they measure success. That is why we are evolving our business in bold and strategic ways, to ensure that our organization remains resilient and prosperous through sustainable development. We are also finding opportunities to help employees, communities and other stakeholders thrive in times of change.

We are committed to the highest levels of sustainable human, socio-economic and environmental development in Qatar and beyond. Our culture is based on responsible behavior and we integrate sustainability considerations into the way we plan and manage our business activities.

The 2030 Agenda for Sustainable Development and its 17 Sustainable Development Goals (SDGs) serve as a global blueprint to end all forms of poverty, fight inequalities and tackle climate change, seeking dignity, peace and prosperity for people and the planet. To us, the SDGs are an important reference to frame our sustainability actions and set them in a global context. While all the SDGs are relevant to us, we mainly focus on three SDGs in particular throughout this report:

7 AFFORDABLE AND CLEAN ENERGY

GOAL
Ensure access to affordable, reliable, sustainable and modern energy for all.

TARGETS
7.2 By 2030, increase substantially the share of renewable energy in the global energy mix

7.A By 2030, enhance international cooperation to facilitate access to clean energy research and technology, including renewable energy, energy efficiency and advanced and cleaner fossil-fuel technology, and promote investment in energy infrastructure and clean energy technology

8 DECENT WORK AND ECONOMIC GROWTH

GOAL
Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.

TARGETS
8.3 Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small- and medium-sized enterprises, including through access to financial services

8.5 By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value

8.6 By 2020, substantially reduce the proportion of youth not in employment, education or training

8.9 By 2030, devise and implement policies to promote sustainable tourism that creates jobs and promotes local culture and products

13 CLIMATE ACTION

GOAL
Take urgent action to combat climate change and its impacts.

TARGETS
13.1 Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries

13.2 Integrate climate change measures into national policies, strategies and planning

13.3 Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning

On a local level, our sustainability management approach is inspired and closely related to the four pillars of the Qatar National Vision (QNV) 2030 and the Second National Development Strategy (NDS) 2018 - 2022. The table in Appendix D - Alignment With National Sustainability Goals maps our activities against the SDGs on a broader level, and the QNV 2030.

OUR SUSTAINABILITY FRAMEWORK AND STRATEGY

Our sustainability framework aligns our corporate, national and international development objectives to the most relevant sustainability issues in our business. Activities run across our value chain and are consistent with our vision, corporate strategy and core values. Our three framework areas – climate change mitigation, operational responsibility, and social and economic development reflect our focus in the past with our commitment to aid in the move towards decarbonization in the future as a supplier of natural gas.

OPERATIONAL RESPONSIBILITY

Continuous improvement through care and collaboration

SAFETY We see safety as a priority for everyone and are committed to an incident free, secure, safe and healthy environment for our employees, stakeholders, partners and communities where we operate.

PROCESS IMPROVEMENT We are committed to operating in a responsible manner and continually improve our processes to achieve greater performance.

ENVIRONMENTAL IMPACT We are committed to care for the environment and establish measures to minimize the environmental impact of our activities, products and services.

CLIMATE CHANGE MITIGATION

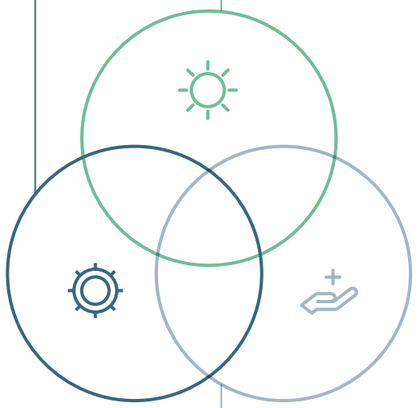
Fast track decarbonization of the energy sector to provide cleaner energy for all

CONSOLIDATE We seek to consolidate our leading position in supplying LNG across the globe by increasing our production, thereby displacing high greenhouse gas (GHG) emitting energy sources such as oil and coal.

CURB We are committed to curbing emissions from our operations through further flare and methane emissions reduction and energy efficiency.

CREATE We aim to create low carbon energy businesses by growing renewable energy capacity, particularly solar projects.

COMPENSATE We will compensate for residual emissions in hard-to-abate sectors for example through intensifying our carbon sequestration capacity within the next decade.



SOCIAL & ECONOMIC DEVELOPMENT

Leverage our strong socio-economic position to drive the energy transition

PEOPLE We seek to develop and invest in a specialized, sustainability-aware workforce that showcases commitment to sustainability and drives a more sustainable energy sector.

COMMUNITY We are dedicated to social responsibility through community contribution and social investment.

ECONOMIC DEVELOPMENT As one of the main pillars of Qatar's economic prosperity, we seek to develop the local economy through our Tawteen program, developing a skilled local supply chain and building a resilient and competitive energy sector in Qatar and beyond.

OUR SUSTAINABILITY GOVERNANCE

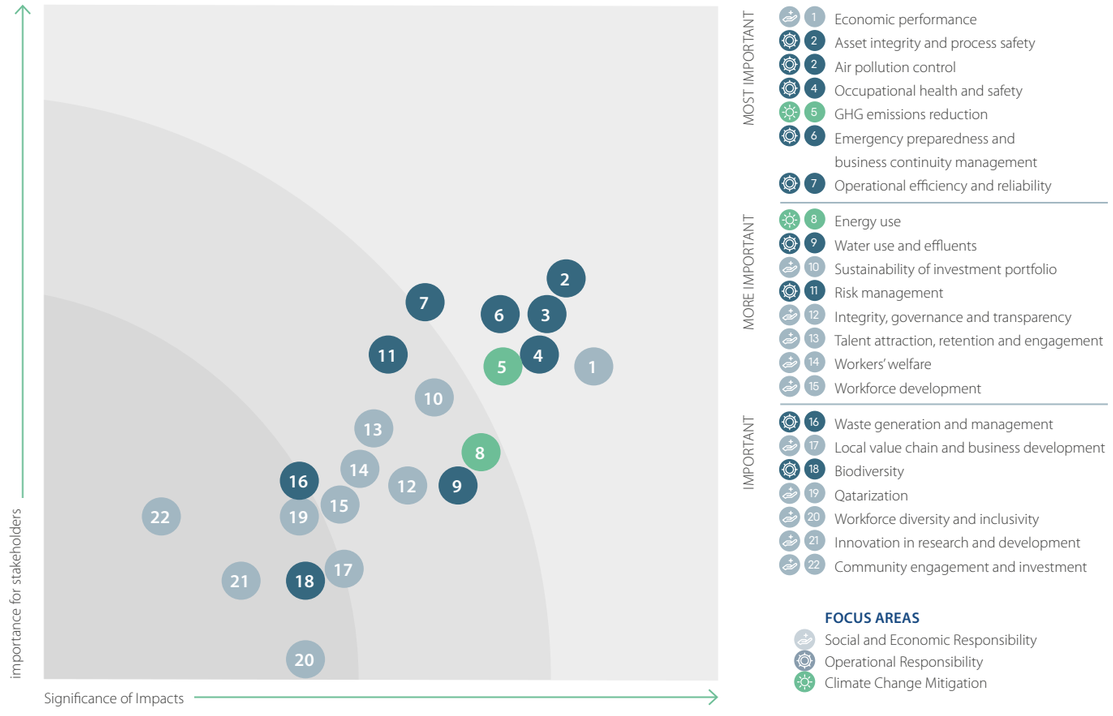
Our sustainability practices have in the past been overseen by our executive leadership team, who receive a quarterly update on our HSE results and other sustainability related initiatives. We recently acknowledged that we need to strengthen our practices in this regard, especially as it relates to a broader oversight of our environment, social and governance (ESG) strategy. Likewise, our President and CEO is committed to QP being recognized as a sustainability leader and has lent his support to ensuring that it happens in a timely manner. As such, we are taking steps to review sustainability best practices, and we anticipate implementing changes in our governance. These will involve creating a dedicated structure of sustainability experts, and a sustainability development council made up of senior executives. Together these individuals will help us realize our sustainability strategy and key deliverables. We look forward to implementing these changes during 2020.

ISSUES THAT MATTER TO US

The successful delivery of both our vision and corporate strategy depends on our ability to identify, measure and manage a range of economic, social and environmental risks and opportunities.

A formal materiality process enables us to identify emerging sustainability topics, both in terms of importance to our business and of highest concern to our internal stakeholders. We capture the resulting priority topics in a matrix, which provides a snapshot of the challenges, opportunities, and connections between them.

Our 2018 assessment identified 22 material topics, illustrated in our materiality matrix below, and reviewed on a regular basis. A full update of materiality, including a survey, will be conducted in 2020.



CLIMATE CHANGE MITIGATION

We are committed to work alongside all players in the energy sector both in Qatar and internationally, to fast track decarbonization of the energy sector.

Climate Change – the Challenge

QP considers climate change as one of the most critical issues of our times, requiring prompt and dedicated action at a global scale. The past decade has witnessed unprecedented economic and industrial growth and considerable improvement in people's living conditions around the globe. However, it harmed the climate, biodiversity, and natural resources. Climate change is now a reality and human induced global warming is increasingly affecting the environment, people and communities worldwide.

The energy sector is the largest source of greenhouse gas emissions, underlining its critical role in climate change mitigation and the need to drive profound changes within the energy systems to accelerate decarbonization. Undeniably, the energy sector is also an engine for economic growth and prosperity, but must continue fueling economic growth while providing clean, accessible, and affordable energy in the most responsible way.

With that in mind, carbon emissions need to be reduced distinctly as the world seeks to move towards a lower-carbon energy system consistent with meeting the climate goals outlined in the Paris Agreement. QP wants to be an active player in this transformative journey by displacing high greenhouse gas-emitting fossil fuel energy with cleaner gas, reducing our emissions, developing low carbon solutions to our customers, and help accelerate decarbonization in society.

Growing Population and Energy Demand

The global population is expected to grow by 1.6 billion, reaching close to 9.2 billion people in 2040[3]. As the population grows, so will energy demand. The energy needs of the global population are set to increase substantially to match living standards aspirations across the globe.

Under the Current Policies Scenario of the International Energy Agency (IEA), energy demand growth will yield an increase in total GHG emissions that will result in a global average temperature exceeding the cap of 2 degrees Celsius. **The difficult challenge faced today by the energy sector is to fulfil future demand while also reducing the global emissions linked to its activities.**

Expected increase in population is the same as creating a

78 million

population country every single year from now until 2040

The Energy Challenge

Energy production and consumption are the largest sources of global GHG emissions. The energy sector accounts for two-thirds of global greenhouse gas emissions, where nearly 60%[4] are attributed to oil and coal combined.

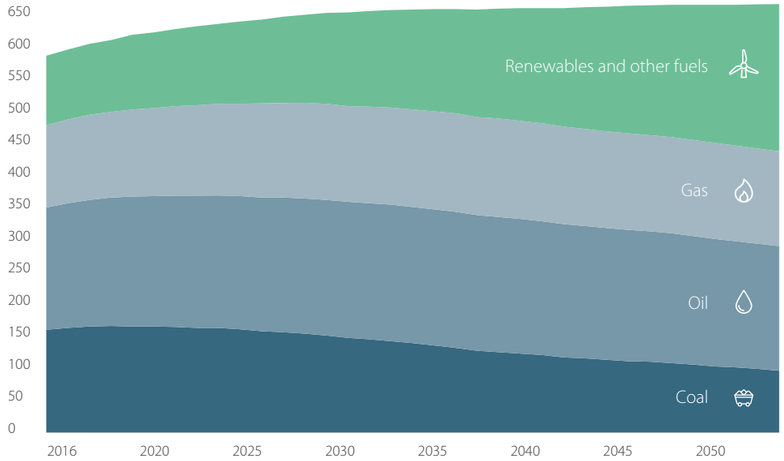
Global GHG emissions today stand at 32 billion tons of energy-related CO2 each year. To limit the rise in global temperature to 2°C, the IEA has indicated that energy-related CO2 emissions need to be reduced to around 18 billion tons a year by 2040, which represents a substantial net reduction of 14 billion tons a year.

To put it in context, retiring around

257

coal-fired power plants would save just 1 billion tons each year[5]

Primary energy demand per fuel
Million Terajoule



Share in 2035 %	Share in 2050 %
25%	34%
23%	22%
32%	29%
20%	14%

Source: McKinsey Energy Insights' Global Energy Perspective, January 2019

3 International Energy Agency (IEA) World Economic Outlook 2019, Table B.1
4 IEA World Energy Outlook 2019, Table 1.1
5 EPA GHG equivalencies

We are not on a sustainable path and unless the energy mix changes, more greenhouse gases will further accelerate climate change. Therefore, the energy mix must evolve in a way that drives down GHG emissions accordingly. As a company, we will continue to do our part by taking steps to consolidate our position as a leading supplier of LNG, an energy source that is considered the cleanest fossil fuel.

Energy Transformation

As global economic activity is projected to more than doubles over the next few decades, the growing middle class will be an increasingly important driver affecting growth and energy patterns globally. According to the IEA's different climate scenarios, the overall energy demand will rise by about 20-35% by 2040. However, there is a growing responsibility to move to a pathway compatible with adhering to the climate goals of the Paris Agreement. To accomplish this goal, a deep transformation of the global energy system is needed across power generation, industry, transport, and other sectors where most energy is consumed and GHG emissions and air pollution are produced.

QP's Role and Commitment

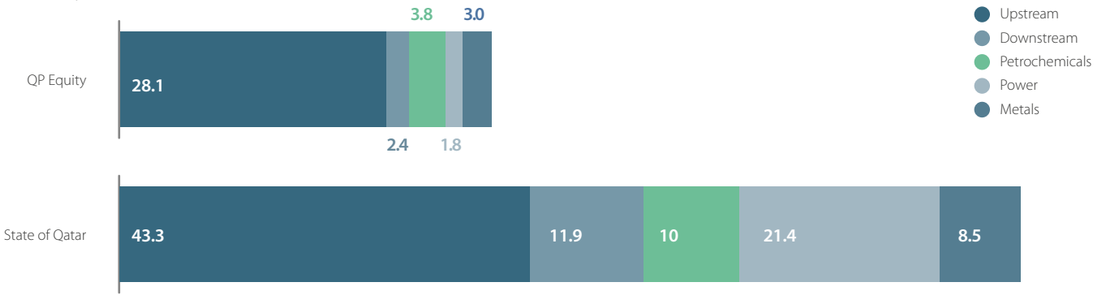
The decades following the discovery of oil saw Qatar undergo a remarkable transformation in terms of economic growth and infrastructure development that has positively transformed its physical, social, cultural and demographic status. Over time, the energy landscape has evolved considerably, now covering a wide variety of industries fueling economic growth domestically but also internationally.

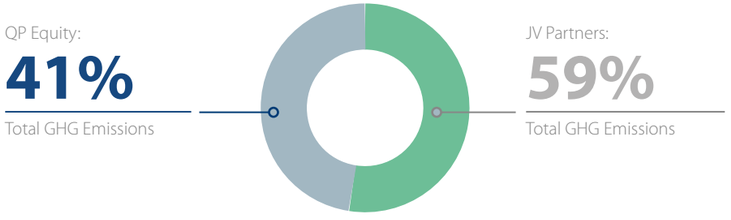
The chart below depicts the total emissions for the energy sector in Qatar encompassing upstream, downstream, petrochemicals, power and metals segments. The total energy- related emissions in Qatar are contributed by more than 20 companies, including our JV partners (as highlighted in the section on Curb Emissions, we report our emissions on an equity share basis). Thereby, we are responsible for about 41% of the total energy-related emissions in Qatar, while other shareholders are responsible for the remaining 59% of GHG emissions.

We believe that meeting Paris Agreement requires collaborative efforts by all. We are committed to continue to work alongside all players in the energy sector both in Qatar and internationally, to fast track decarbonization of the sector. Our climate roadmap highlights how we are tackling climate change and reducing its carbon footprint.

Total Emissions 2019

MtCO2 eq





QP's commitment to Climate Mitigation

We are the main engine for growth and prosperity in Qatar, taking an active role in safeguarding its unique environment and contributing to preserving the planet thereby **working alongside all players in the energy sector both in Qatar and internationally, to fast track decarbonization of the sector to meet Paris Agreement goals**.

Our strategy embraces the transition towards a low carbon industrial landscape and is intended to be flexible and resilient to change. It is designed to grow the energy supply while helping to meet the dual challenge of achieving low carbon operations. This reflects our alignment with the climate targets established by the Paris Agreement, which urges the world to mitigate GHG emissions while alleviating poverty rapidly. Since the launch of its environmental initiatives nearly a decade ago, QP has achieved real momentum across its facilities and those of its affiliates to reduce their carbon footprint. We are continually striving to set ambitious targets, aim to reduce emissions in all our operations and produce clean fuels.

To mitigate GHG emissions from our operations (including our equity partnerships), we focus on increasing energy efficiency and reducing flaring, venting, and other emissions sources. Our sustainability journey traces back more than a decade with many success stories, and is capturing those significant trends that are expected to curb the emissions effectively. We deploy proven technologies, including CCS, and support innovation to leverage technological breakthroughs in the sustainability space. We are furthering the reach of these programs beyond the upstream sector and have a clear roll out plan to the downstream sector and other fully owned and operated facilities. In addition, we have firm commitments towards carbon sequestration and renewables (i.e. solar energy) over the next few years.

QP'S CLIMATE MITIGATION FRAMEWORK

Our primary role in this transition is to provide affordable and cleaner energy for people and our planet responsibly, for a better and prosperous future.

Common seawater facility at Ras Laffan

To ensure a competitive and resilient business model within the energy transformation, and to contribute to the dual societal challenge of providing energy with less emissions, our climate action is tackled under our 4C 'Consolidate, Curb, Create, Compensate' framework, referred to as **climate roadmap**. It reflects our focus on reducing GHG emissions in our operations (including equity partnerships), improving our products to help our customers lower their emissions, and creating low carbon businesses that support the energy transition.

CONSOLIDATE our leading position in supplying LNG across the globe by increasing our production to 126 million tons per annum (MTPA) by 2027, thereby displacing high GHG emitting energy sources such as oil and coal.

CURB emissions from our operations through flare reduction, methane emissions reduction and energy efficiency.

CREATE low carbon energy by growing renewable energy capacity, i.e. solar projects, by 2–4 gigawatts (GW) by 2030.

COMPENSATE for residual emissions through wide deployment of carbon capture and sequestration technology at our facilities.

Our **climate roadmap** sets out new short-, mid- and long-term ambitions to reduce our own GHG emissions and shape our portfolio to be more sustainable. The 4C climate framework will lead to a net carbon intensity reduction of 15% from upstream (baseline year 2013) and about 25% from LNG facilities by 2030 (baseline year 2013), including direct and indirect emissions. Our ambitions of 0.2 wt.% methane intensity target by 2025 and zero routine flaring by 2030 will be achieved as well. By 2030, our portfolio will be over 90% gas-based and we plan to add two to four GW of renewables.

Our vision:
Fueling Prosperity with Cleaner Energy

Themes

Consolidate | Curb | Create | Compensate

Enablers

- Green Innovation & Investments
- Asset Portolio Management
- Business Porcess & Corporate Governance
- Human Capital

Consolidating QP's Leadership

Mr. Ahmad Saeed Ahmad Al-Amoodi
Executive VP, Surface Development

Natural gas plays a decisive role in providing more and cleaner energy around the world. With a growing global population, and the need to fulfil the needs of the power sector, transportation, industrial activities, and other vital sectors, we are committed to making gas a key lever for meeting the growing demands across these segments, while reducing the current emissions resulting from usage of coal and higher emitting fuels.

Where gas intake had increased notably, significant improvements of air quality were also witnessed, minimizing the impact on public health and respiratory diseases linked to particulate matters and other pollutants. We pride ourselves on playing an active role in improving air quality through our LNG exports to more than 20 countries.

We strongly believe in the role natural gas will play in promoting renewables in the future energy mix by complementing wind, solar and other seasonal renewables, to match the supply and demand for low-carbon electricity.

Natural gas will also continue to play a critical role in industrial sectors where demand is predicted to grow, more so in segments where gas – based power generation cannot be easily displaced. These include metals, petrochemicals, cement, and others. Gas usage in transportation, such as LNG shipping and buses, is an area where we expect to see more adoption in the future, given the environmental benefits it offers. CNG for buses in our industrial areas and LNG bunkering are flagship initiatives reinforcing our commitments in these fronts.

We are also committed to reducing the carbon intensity of our LNG operations by cutting methane emissions along the value chain, and other climate mitigation initiatives such as energy efficiency, flare emission reduction and CCS.

OVERVIEW OF QP'S LNG OPERATIONS AND EXPANSION PLANS

Our LNG facilities are comprised of a fully integrated LNG complex with a value chain extending from well-head to loading terminal and serving a wide pool of customers all around the world. We determined to continue its legacy and growth by recently announcing the plans to increase Qatar's LNG production capacity to 126 MTPA by 2027, representing a substantial increase from the current production capacity of 77 MTPA. These major expansion projects (North Field East and North Field South) will enhance our ability and flexibility to meet additional global demand while further boosting our strategic growth plans. **These leading expansion projects will also help the world shift towards less carbon intensive energy.**

We aim to be a world-leader in these critical growth projects and remain focused on achieving the highest standards in the LNG industry to significantly reduce emissions by deploying the best available technologies and practices. We are investing in modern technologies to reduce nitrogen oxide and sulfur oxide (NOx and SOx) emissions by about 50%. We are also making sizeable investments to capture and re-inject CO2 extracted from the feed gas in our LNG facilities, resulting in a 25% reduction in GHG intensity in comparison to existing trains.

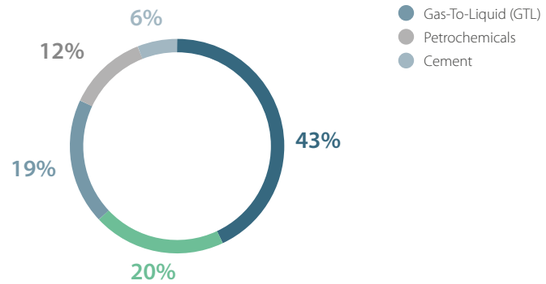
25%
Reduction in NFE's GHG intensity in comparison to existing LNG trains through capturing and re-injecting CO2 extracted from the feed gas.

We are also committed to expanding our LNG facilities internationally. In 2019, QP and ExxonMobil took the final investment decision for a 15.6 MTPA LNG project at Golden Pass, Texas, USA. The facility is expected to start up in 2024 and will contribute to the stable supply of environmentally friendly LNG worldwide from the USA.

THE ROLE OF NATURAL GAS IN DECARBONIZING INDUSTRY

We consider the industrial sector to be crucial for providing vital products for daily lives, from aluminum, steel, and cement to food packaging, paints, and others. However, metals, cement, chemicals and transport industries are also significant consumers of energy and hence emitters of GHG emissions.

Domestic gas consumption breakdown in the industrial sector in Qatar



The chart above highlights the domestic gas consumption in the industrial sectors for 2019. The domestic gas consumption is dominated by the fertilizing industry, consuming more than 40% of the total gas, followed by metals consuming around 20% of gas.

In 2019, the industrial sector accounted for 52% of domestic gas consumption and 19% of total CO2 emissions in Qatar (metals and petrochemicals only). Reducing energy demand and emissions from the industrial sector over the long term, without impacting economic and social development goals, will require effective implementation of energy efficiency strategies, switching to lower carbon fuels and raw materials, and leveraging the best available technologies for GHG reduction.

Our use of cleaner gas in these industries offers an unrivalled advantage to operate at significantly lower GHG emission and pollutant levels compared to those in coal or oil-based industries. Besides, the use of natural gas in industry has other significant benefits:

- Gas almost completely combusts, while coal produces large volumes of ash and slag, which require costly handling and disposal.
- Gas boilers supplied by pipelines do not require on-site fuel storage, loading, or waste disposal.

Natural Gas in Power Generation

The electricity share of total energy demand is around 19% but is responsible for 40% of the overall energy sector's GHG emissions[6]. When generated from lower-carbon energy sources, increased use of electricity will support emission reduction in the power sector, as well as in end-use industries through indirect emissions.

In addition, the combustion of fossil fuels and coal releases several pollutants that negatively affect air quality. We monitor pollutants at affiliated power plants via a continuous emissions monitoring system (CEMS). As of 2019, natural gas remains **the only fuel to be burnt in gas turbines in Qatar**, where pollutant levels are significantly lower than from oil or coal, making natural gas the key to maintaining good air quality. We strive to further enhance the environmental benefits of gas-fired plants, e.g. through lowering NOx emissions, see further details in the section on Other Air Emissions.

Natural gas supports the integration of renewables

CO2 emitted from coal combustion is responsible for about 0.3°C of the 1°C increase in global average temperatures above pre-industrial levels[7], which makes coal, individually, the largest source of global temperature increase. Natural gas emits around half the carbon emissions of coal when used in power generation, making it an ideal partner for intermittent renewables. To this end, **we are fully committed to enable coal–to–gas switching in the power sector while also increasing the share of renewables which have the most significant short-term impact in terms of reducing emissions.**

NATURAL GAS - A BRIDGE OR DESTINATION FUEL?

There are two major viewpoints regarding the role of natural gas in the energy transition, between considering gas a bridge in the transition, which will eventually be phased-out, and considering gas as a destination fuel, which provides a clean energy source needed for the developed world to prosper.

QP firmly supports the view that natural gas is a destination fuel and not only a transitional energy. Indeed, it is a crucial building block of what will be the optimal energy mix in decades to come. Offering clean and sustainable energy for all, gas remains the one most significant source of energy to capture both economic and environmental benefits by achieving a healthy balance between fulfilling global energy demand and the necessity to curb GHG emissions from fossil fuels.

Natural gas is the cleanest fossil fuel, which is an integrated part of the future energy mix. To this respect, switching today's coal into gas would save around 6 billion[6] tons of CO2, making it critical that natural gas and LNG become easily accessible in areas that continue to use coal. The displacement of coal by gas is already underway in some of the top coal consuming countries with increasing efforts to add LNG importing facilities seen recently.

Renewables

While renewable energy technologies have seen a sharp decline in costs over the last decade, and clean energy portfolios are naturally competing with new gas, renewables still have the challenges of costly storage solutions and seasonality. Adequate storage solutions can be costly and remain a crucial challenge to overcome. Gas can play an enabling role towards renewables, and the complementarity between gas and renewables will be a long-term solution that overall delivers a reduction in GHG emissions, offers reliability flexibility and cost-effectiveness.

Due to the challenges faced by renewables, including variability in output depending on season and weather as well as power storage, **we believe that rather than competing with each other, LNG and renewables should be seen as complementary sources of energy.** Together they are expected to form the major source of energy required for residential households in the long term. In addition, even when renewables mature and become widely deployed, natural gas will continue to meet the energy demand for applications that cannot be powered by renewable sources due to considerations such as location, energy density or efficiency.

Furthermore, although the growth of renewables will help lower emissions from the power sector, electricity accounts for only a part of the world's total energy use today. Hence, beyond power generation, **clean energy is also needed for heating and transportation for which natural gas plays a central role.**

Transport

With a growing population, the demand for transport is anticipated to expand. More emissions also cause poor air quality, causing adverse effects on the environment and human health. Meeting the increasing demand for transport while reducing emissions will only be achieved with a variety of solutions and technologies, such as lower-emissions liquid fuels, biofuels, and natural gas. More than ever, we are committed to decarbonize the transport sector by shipping LNG to destinations in a cost-effective, efficient and environmentally friendly way.

1.9 million tons CO2 eq.
per year reduction in our shipping emissions by switching to LNG.

In 2019, QP and Shell entered into an agreement to establish an LNG bunkering venture. The creation of a joint venture company, owned equally by both parties, demonstrates QP's firm commitment to curbing emissions from the transport segment.

In addition, we are actively pursuing to replace our existing bunker fuel for ships with LNG in a phased manner, which will significantly reduce our total shipping emissions in the LNG value chain by around 28%. Once the fleet is converted to LNG, the total CO2 reduction through this initiative will amount to **approximately 1.9 million tons of CO2 eq per year**.

"We see LNG bunkering as a promising solution for the shipping industry in light of a continuously evolving regulatory environment, and as an important opportunity to enhance LNG's position as a clean energy source, particularly in maritime transportation."

H.E. Saad Sherida Al Kaabi
Minister of State for Energy Affairs and the President and CEO of Qatar Petroleum

6 IEA World Economic Outlook 2019
7 IEA Global Energy and CO2 Status Report 2018

Other initiatives launched will also contribute further in reducing GHG emissions from transportation in Qatar, such as using CNG for buses in the industrial cities, using gas-to-liquid (GTL) diesel domestically and adopting the Corporate Average Fuel Economy (CAFE) standards. The section on Decarbonizing Society provides further insights into these projects.

HIGHLIGHTS 2019

LNG Facilities

- LNG facilities produced a record 78.4 MTPA of LNG during 2019.
- We achieved our overall historical best flaring performance during 2019 (0.38% actual vs 2019 operational target of 0.45%).
- We achieved highest ever availability, reliability and utilization performance in the LNG facilities. The overall reliability stood above 98.5% and overall availability at ~97%.
- We successfully started CO2 injection facilities during 2019, with a total CO2 capture potential of 2.2 MTPA of CO2.

Natural Gas Processing Facilities

- Our Natural Gas facilities demonstrated high resilience in achieving record high availability 99% and reliability 100%.
- Our Natural Gas facilities produced a total of 1.4 trillion standard cubic feet (TSCF) (231 Million BOE) of natural gas, 11.1 Million MT of condensate and associated products.
- Natural gas facilities flaring performance was below the operational target of 0.3% of sweet gas produced.
- Natural Gas assets demonstrated high HSE performance with 1 LTI, 1 recordable injury for personal safety and 1 Tier one for process safety.

LNG ships loading facility at Ras Laffan

Curb Emissions

We believe that natural gas has a vital role to play in making the energy system more sustainable in the future. We also acknowledge the importance to reduce emissions from oil and gas facilities to further enhance the environmental advantage that gas has over other high GHG emitting fuels. Our sustainability journey started over a decade ago, including the initiatives in this section below. These initiatives will lead to reducing our carbon intensity despite our ambitious growth plans over the next few years.

GHG EMISSIONS ACCOUNTING & VERIFICATION

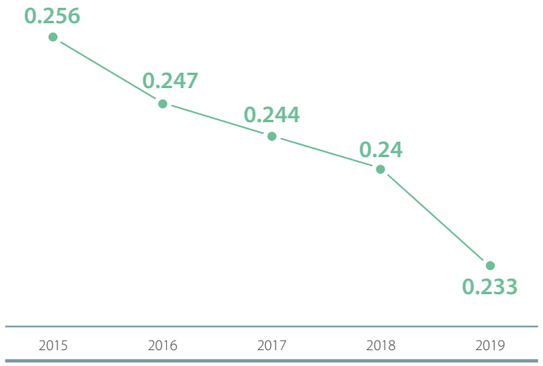
We recognize that Qatar's remarkable economic and industrial development over the last decade has been accompanied by a significant increase in GHG emissions. Ras Laffan Industrial City (RLIC), one of the world's largest industrial cities for production of natural gas and its derivatives, is a major source of GHG emissions. We have implemented an initiative for the monitoring and accounting of GHG emissions for RLIC industries that is auditable, as accurate as reasonably possible, and that will allow authorities to report verifiable GHG emissions that may form a sound basis for possible future permit and emissions trading schemes.

Our well established GHG emissions accounting & verification procedures are based on proven European practices, international standards, and industry-proven guidelines and methodologies. It applies to the GHG accounting, reporting, and verification process that has been carried out at RLIC since 2010. Operators are obliged to report their GHG emissions following our GHG procedure and the European Union Monitoring and Reporting Regulation[8], which is part of the wider European Union Emissions Trading Scheme (EU ETS).

In compliance with our GHG procedure and the requirements of the EU regulations for GHG accounting and reporting, the GHG emissions verification process is carried out by an independent and accredited third party to perform an annual verification process which assesses a single year's CO2 equivalent emissions from a stationary installation.

Upstream GHG Intensity

Million Tons of CO2 equivalent Per Million Tons of hydrocarbon production



HIGHLIGHTS 2019

- All Ras Laffan Industrial City (RLIC) operators under the scope of the GHG emissions verification have received their verification statements from an EU accredited third party verifier with a Reasonable Level of Assurance.
- Mesaieed Industrial City (MIC) Operations submitted its GHG plan and report to meet the EU ETS standards.
- We developed a GHG quantification practice with our operated onshore assets (QP Refinery, NGL and Dukhan). All three onshore sites had their GHG emissions verified by a third party. All received their 2019 verification statements with a Reasonable Level of Assurance.
- We commissioned a project to install a subsea cable from Ras Laffan to Halul Island to supply up to 100 MW of electricity to the island. Besides safety benefits, this will also help reduce our emissions from gas generators.

OUTLOOK

We will ensure that the GHG accounting and verification program encompasses all energy facilities in Qatar, including the remaining offshore facilities currently undergoing the verification process.

FLARE REDUCTION

We take an integrated approach to flaring reduction, with a focus on enhancing operations performance through improvements in operational practices and process control to improve process stability as well as implementing projects.

FLARING AT OUR OPERATED AND NON-OPERATED ASSETS

We launched a flaring mitigation initiative in 2012 for our non-operating facilities in RLIC. Notable initiatives also include incorporation of a passing valves monitoring program to abate fugitive losses as well as implementing projects to enable fuel gas to recycle and reuse during plant shutdowns and start-ups and reduction of fuel gas in flare purge applications.

In 2014, we commissioned the jetty boil off gas (JBOG) facility in Ras Laffan to recover boil-off gas during LNG loading. This project is the world's largest jetty boil-off gas recovery facility. Overall, such initiatives have resulted in successfully reducing the flaring in upstream operating companies in RLIC by approximately 70% for its on-plot facilities, and greater than 90% at the LNG loading area. A total investment of over 900 million USD was dedicated to the flare reduction initiative between 2012 and 2018.

900 million USD

total investment was dedicated to the flare reduction initiative between 2012 and 2018.

8 Commission Regulation (EU) No 601/2012 of 21 June 2012 on the monitoring and reporting of greenhouse gas emissions

We continue to maintain a robust flare management program with targets for continual improvement in flaring reduction. The graph below demonstrates the significant flare reduction achieved over the past decade. Over the years, this program has succeeded in significantly reducing the flaring intensity of our LNG facilities to 0.38% of sweet gas production in 2019.

HIGHLIGHTS 2019

We are exploring the possibility of using Al Khaleej gas in trials to minimize and ultimately stop flaring at Halul.

50% drop in purge volumes at our LNG facilities via purge gas reduction project.

90% reduction in jetty flaring since the commissioning of JBOG facility in 2014.

60% – 70% reduction in flare volumes, which are related to planned turnarounds.

70-80% reduction in leaks through passing valves monitoring program.

JETTY BOIL-OFF GAS (JBOG) RECOVERY PROJECT

During the loading of LNG, part of the -160°C liquid boils off as it comes in contact with the warmer ship tank. Previously, this boiled-off gas was flared at the berth because there was no outlet for the low-pressure gas, resulting in large volumes of gas being flared. The jetty boil-off gas (JBOG) recovery project has been initiated to recover the boil-off gas at six LNG berths and use it as fuel gas in the LNG trains.

The JBOG design consists of a central compression area (CCA), connected to all six LNG berths in the area through a 60-inch collection header. Boil-off gas generated at low pressure during the process of LNG loading is collected via the collection header and routed to the CCA, where it is compressed to 47.5 bar. The compressed gas from the CCA is then sent through distribution headers fitted with custody transfer meters to each LNG producer, where it is consumed as fuel gas.

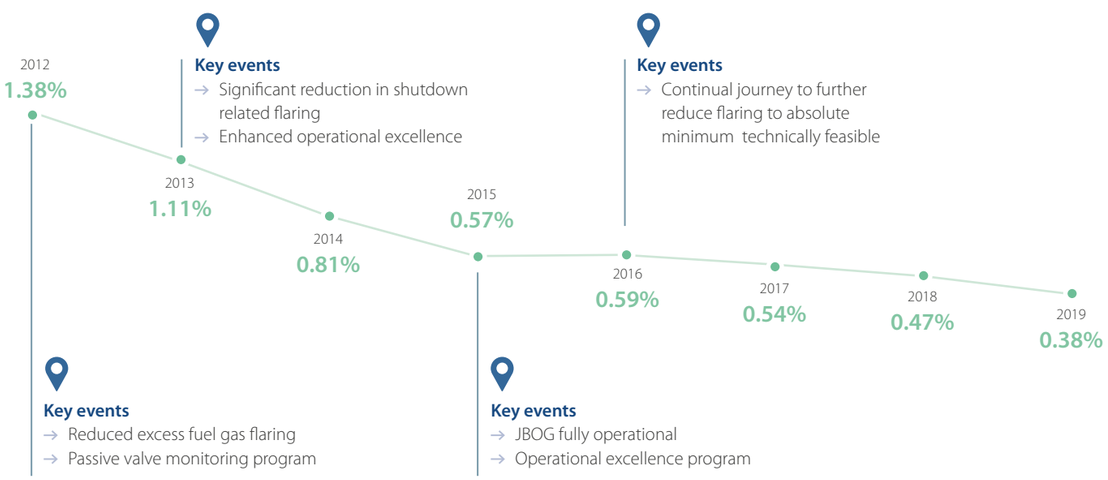
Achievements

- This facility started operations in October 2014 and recovers more than 90% of the boil-off gas previously flared near the jetties.
- The facility reduces CO2 emissions by approximately 1.6 million tons per annum, equivalent to the emissions of 175,000 cars. To date, JBOG recovered about 2.3 million tons of gas since inception.

OUTLOOK

Moving forward, the plan is to consider collective flare reduction projects between assets and evaluation of best available technologies to reduce flaring to the absolute minimum technically feasible. We started rolling out the same initiative to the downstream operating companies' facilities leveraging the expertise already gained in the upstream business during the past years.

Flare reduction for LNG Facilities
(Flared gas volume / Sweet gas production volume)



QP Operator using Infrared cameras for detection of fugitive Methane emissions

Within our LNG operations, we have identified further opportunities for flare reduction through recycle and reuse of fuel gas flared due to routine plant pressure dynamics. Conceptual solutions have been developed and are now at the front-end engineering design (FEED) stage.

We are currently planning to extend our efforts to meet zero routine flaring by 2030 for our offshore facilities. Our long-term aim is to go a step further, reducing flaring in our onshore facilities to the absolute minimum technically feasible which will cover non-routine flaring as well. A USD 170 million investment is fully committed from 2018 until 2021 and will result in a 50% reduction in our flare intensity across Qatar, followed by potential projects to reach the absolute minimum technically feasible flaring in Qatar.

AMBITIONS:

Offshore: Zero Routine Flaring by 2030 (inspired by World Bank Initiative)

Onshore: Absolute minimum technically feasible flaring (including non-routine flaring)

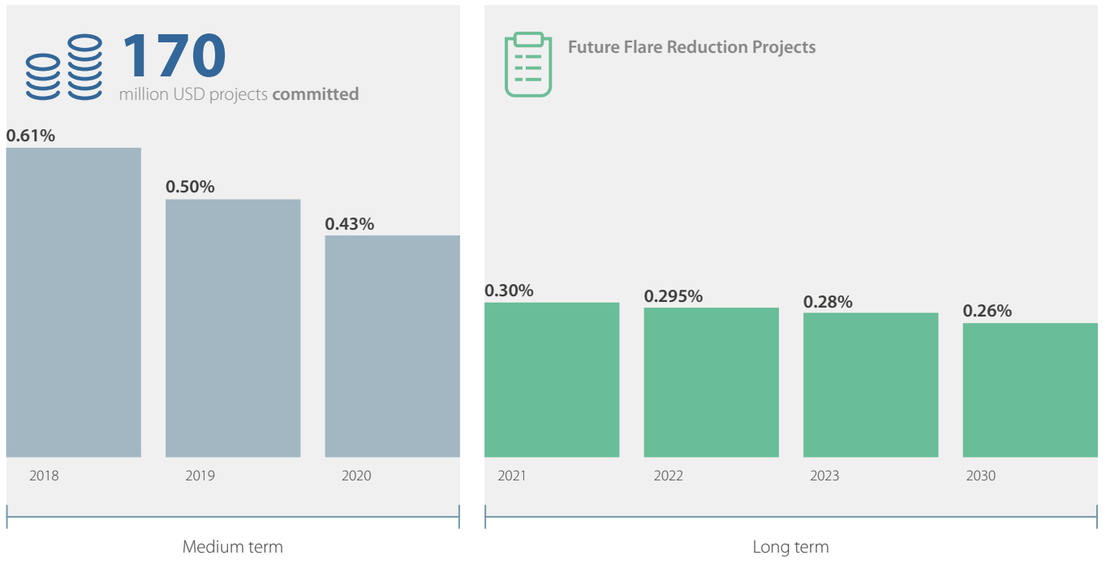
METHANE EMISSIONS REDUCTION

Along with CO2 and N2O, methane is considered the second most damaging GHG causing global warming. Methane has a shorter lifespan in the atmosphere than CO2 but is more potent and has a higher global warming potential. A key part of our climate focus going forward is to track and reduce methane emissions throughout all stages of the natural gas value chain and in all facilities.

We signed a set of guiding principles on reducing methane emissions across the natural gas value chain stretching from production to the final consumer on 22nd March 2018. The principles aim to continuously curb methane emissions, stimulate strong performance across gas value chains, enhance the accuracy of methane emissions data, advance sound policies and regulations on methane emissions, and to increase transparency.

In 2019, we launched the methane focused smart leak detection and repair program (LDAR) in all upstream and downstream facilities, using advanced optical gas imaging (OGI) camera technology to survey and detect the leaks quickly and efficiently. This program also provides best-in-class guidelines for unified LDAR standards for consistent and accurate reporting of methane emissions following international standards.

Qatar current & future flaring performance plan
Normalized vol% of reference gas production



HIGHLIGHTS IN 2019

Implementation of the new methane LDAR guidelines and reporting of emissions begun in all operations

We developed a general LDAR standard to cover wider aspects of LDAR programs such as inspection, repairs, training and plant audits.

We hosted a methane workshop in collaboration with leading industry partners including Shell and the Environmental Defense Fund (EDF), to address the opportunities and challenges faced in mitigating methane emissions.

OUTLOOK

We are moving towards a fully integrated fugitive methane monitoring and repair program across all the assets by extending our current non-methane volatile organic compounds (VOC) leak detection and repair program for sources that may be potentially leaking methane. This should reduce the methane intensity to a world-class level where most of fugitive emissions are swiftly mitigated.

- We plan to organize training with all operators in Qatar and the GCC region to leverage our existing collective experience and use best international practices for methane emissions reduction. We will invite all operators to align on a set of criteria to implement LDAR for methane reduction.
- Expand methane emission scope from the well to customers, covering the entire value chain.

AMBITION:

Methane Emissions Intensity Target of 0.2 wt.% by 2025

ENERGY EFFICIENCY

We recognize our role in reducing our impact on climate change not only in production and transportation, but also by ensuring optimum energy efficiency. Enhancing energy efficiency is another key part of our climate strategy aiming to reduce environmental impacts, contribute to improved productivity and lower operating costs. Energy efficiency and conservation also has the potential to extend the availability of natural resources.

ENERGY AND EMISSIONS AT QP ASSETS

We are aiming to become more efficient in the way we extract, refine and further develop hydrocarbons to reduce our energy needs and our GHG emissions. For us, direct energy consumption makes up most of our greenhouse gas emissions. While efficiency gains have a positive impact on the climate, we also directly benefit in terms of lowering our own operational costs. In 2019, our direct energy consumption decreased by about 19%, despite a 3% increase in our production volumes. As a result, our direct energy intensity decreased by 22% in comparison to 2015, while our direct GHG emissions decreased by about 8% compared to 2015.

ENERGY AND EMISSIONS AT QP NON-OPERATED ASSETS

Structural interventions have been carried out to make production activities more energy efficient and we successfully developed an in-house energy efficiency monitoring tool, to monitor energy usage relative to design, and identify areas for improvement. The following charts summarize some of the initiatives implemented.

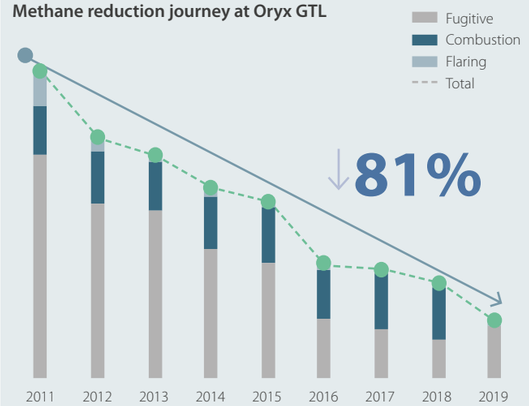
METHANE LDAR PROJECT AT ORYX GTL

Smart LDAR program commenced in 2011 and annual surveys are performed by a competent third party. All gas streams containing ≥ 10% by volume of VOCs or liquid streams containing ≥ 20% by weight of VOCs are monitored. Over the past five years, **80% to 85% of leaks were arrested** immediately after identification.

Highlights 2019

- ORYX GTL pioneered using smart LDAR to reduce fugitive emissions
- ORYX GTL fugitive emissions significantly contribute to methane emissions
- 81% methane emissions reduction achieved since 2011
- New Quantitative Optical Gas Imaging (QOGI) is currently under field study and will enable the detection and quantification of emissions through the camera.

Methane reduction journey at Oryx GTL

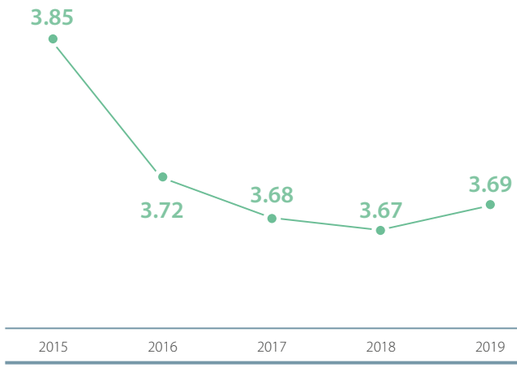


In 2019, in collaboration with Shell and EDF, QP hosted a Methane Workshop for all energy sector companies in Qatar.

HIGHLIGHTS IN 2019

To enable effective monitoring of energy efficiency in our operated sites, we have broadened our focus to hydrocarbon balancing, including fuel gas and flaring. This will ensure we have a clear baseline for tracking energy efficiency improvements, while also helping us focus on loss and metering performance.

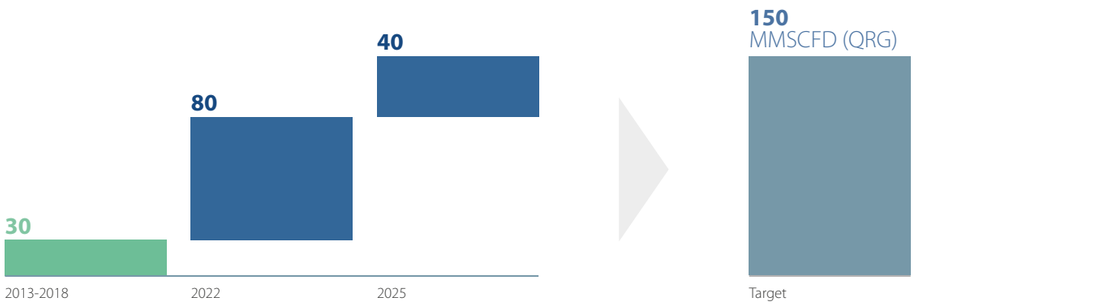
Upstream Energy Intensity
Gigajoule per Ton of production



OUTLOOK

We are pursuing numerous studies into enhancing energy efficiency, which can potentially save sizeable volumes of fuel gas as well as feed gas.

Energy Consumption Saving (QRG)- From 2013 to 2025
MMSCFD (QRG)



CURRENT STATUS

- Seasonal optimization of GTG and Boilers
- Improve Measurement/ Balancing for FG / Steam
- Improve reliability of HRSGs

LONG TERM

- EE Performance. Monitoring in GTL, Downstream & QP assets
- Improve reliability of waste heat recover systems
- Recycle of Excess FG and Off gas

Estimated achieved CO_2 reduction:
0.6 MTPA

Estimated future CO_2 reduction:
2 MTPA

Qatar Reference Gas has a calorific value of 1000 BTU/SCF and is used to normalize the energy saving across facilities

DECARBONIZING SOCIETY

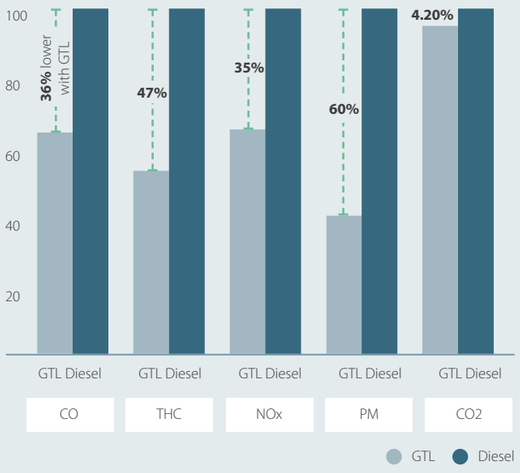
While we are fully committed to reducing emissions from our own operations and where we hold equity, we also understand the need to account for GHG emissions along our value chains to accelerate decarbonizing society. We are focusing on reducing emissions from the use of our products in the transport segment. We are investing in environmentally friendly fuels which can be blended with existing fuels such as jet and diesel to reduce GHG emission from transportation and aviation. When used in light-duty vehicles (LDVs) and aircraft, these fuels can be a cost-effective to reduce CO2 emissions. Two initiatives currently taking place are the GTL jet blending project and the use of compressed natural gas (CNG) fuel within Qatar's industrial cities.

GTL DIESEL

Through the GTL diesel blending project, we are planning to supply environmentally friendly diesel to local markets and achieve diesel supply chain resiliency in the State of Qatar. The use of blended GTL diesel has many positive environmental attributes and will help reduce environmental emissions. Indeed, the use of GTL diesel fuel in vehicles results in large reductions of carbon monoxide, hydrocarbon and particulate emissions without compromising NOx emissions. Furthermore, GTL diesel is an ultra-clean fuel containing virtually no sulfur and no aromatics. It is odor-free with a Cetane number > 70.

Emissions Performance of GTL Diesel

Emissions performance of GTL diesel relative to refinery diesel



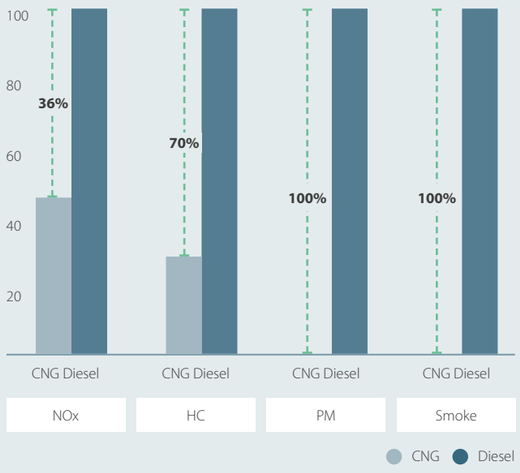
CNG

The use of natural gas as a transportation fuel has grown at an impressive rate over the last few years around the world. It is set to accelerate, given its economic and environmental benefits. CNG offers many advantages over diesel and gasoline fuels for the transportation fleet. It provides substantial savings in operating cost, reduction in emissions and pollutant levels, and extends the life of the engine. Another key health benefit in using CNG fuel is the removal of particulate matters (PM), which are known to be carcinogenic. CNG vehicles do not produce evaporative emissions, as the fuel systems are completely sealed.

We have launched the CNG project to develop natural gas as an alternative transportation fuel and encouraging its use in transportation within industrial areas. As part of this project, we plan a phased replacement of the existing diesel buses currently operating within the industrial areas (Ras Laffan and Mesaieed) with a new purpose-built CNG fleet in a phased manner. The plan also includes the use of CNG buses during the construction phase of future LNG projects. A pilot CNG station is already operational in Doha since 2012 and is used by Mowasalat (local provider for transportation solutions and services) to fuel their CNG fleet.

Emissions Performance of CNG

Emissions performance of CNG relative to refinery diesel



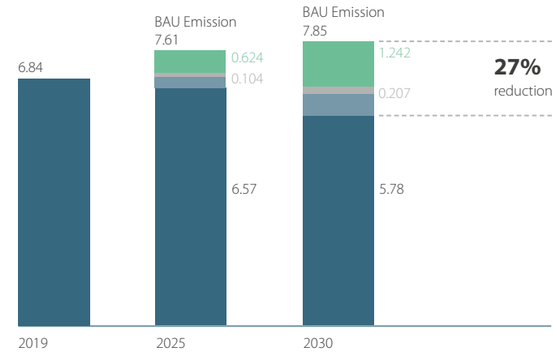
OUTLOOK

Qatar is planning to set corporate average fuel economy (CAFE) standards for road transportation tackling fuel economy and efficiency for all new light duty vehicles (LDVs), assessing tire rolling resistance standards, mandatory retirement for older cars, age restriction on vehicle imports and periodic inspections. We are currently working closely with the authorities for the effective implementation of the CAFE standard in the State of Qatar. Under the business as usual (BAU) scenario the LDVs emissions are set to grow from 6.84 MTPA to 7.85 MTPA. The implementation of CAFE standards is expected to reduce the emissions to around 5.78 MTPA, a figure 27% lower than the projected emissions in 2030. A substantial reduction in gasoline consumption is also expected as a result of this initiative.

- Fuel economy standard for light duty vehicles
- Tires rolling resistance (TRR) standard for Light duty vehicles
- Fuel efficiency (FE) requirements in government procurement
- Age restrictions on vehicle imports
- Fuel economy labels knowledge and awareness
- Awareness and incentives campaigns
- Mandatory retirement for older vehicles
- Periodic inspections optimization

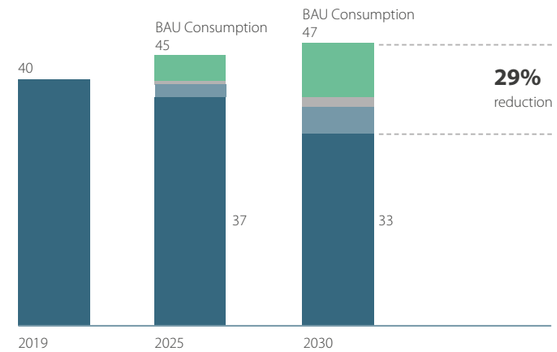
Projected CO2 emission reduction of on-the-road LDVs

(million tons of CO2 per year)



Projected gasoline consumption of on-the-road LDVs

(Kbbls per day)



CNG fueling station at Ras Laffan

Create Low Carbon Energy

Renewables are the fastest-growing energy source in the world and can potentially fulfil between 36% and 67% of global electricity demand by 2040. Solar energy is expected to generate 19% of total global power by 2040 under the sustainable development scenario (SDS)[9]. We quickly adopted renewables, making them a key component of our climate roadmap, leading to a more diverse energy mix by actively promoting the development and introduction of new forms of alternative energy.

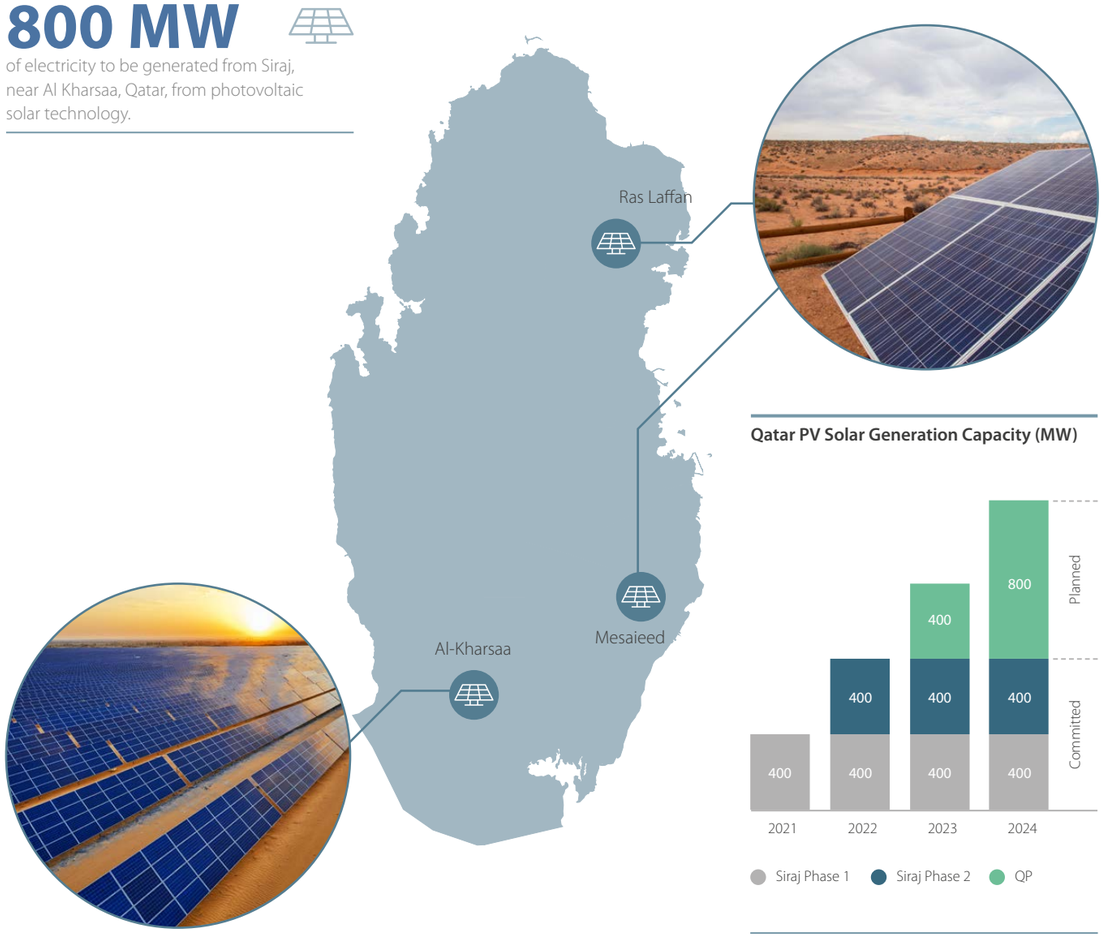
We aim to play a vital role in shaping the future of global energy delivery by developing substantial solar capacity around the region.

Through our interest in the Siraj venture, we have committed to an ambitious solar plant project which is currently under construction and will employ photovoltaic (PV) solar technology to generate 800 MW of electricity near Al Kharsaa, Qatar. The total capacity will be implemented over two phases, with Phase 1 delivering 400 MW in 2021 and Phase 2 scheduled for completion a year later.

Additional PV solar capacity of two 400 MW plants at QP industrial cities is currently in the planning stage and earmarked to come online before 2025. Electricity produced from these plants will be used to supply planned LNG and petrochemical expansion projects.

800 MW

of electricity to be generated from Siraj, near Al Kharsaa, Qatar, from photovoltaic solar technology.



Qatar PV Solar Generation Capacity (MW)

9 IEA WEO 2019

HIGHLIGHTS IN 2019

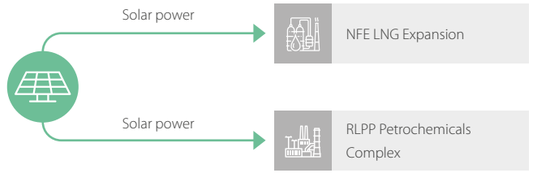
We completed the concept for the Siraj Solar Project, received and evaluated the bids and are currently in undergoing the bid selection process preceding the final investment decision.

We completed feasibility study for the QP Industrial Cities Solar Project, which recommended the suitable PV solar technology. We also secured the land required within RLIC and MIC concession areas and will start screening around grid connectivity.

AMBITION

Our ambition is to increase our renewable capacity by two to four GW by 2030 (including Siraj and QP Industrial Cities projects)

NFE LNG expansion and RLPP upcoming petrochemicals complex will be powered by solar energy from the QP industries Solar Project, thereby reducing our indirect emissions in RLIC.



Compensate Residual Emissions Through CCS

Both the International Energy Agency (IEA) and the Intergovernmental Panel on Climate Change (IPCC) highlighted the prominence of carbon capture and storage (CCS) technology to meet climate targets and the need to fast track their deployment across the industry. We are committed to taking action to manage and reduce our GHG emissions by **compensating** for residual emissions by deploying CCS technology.

1 CAPTURE

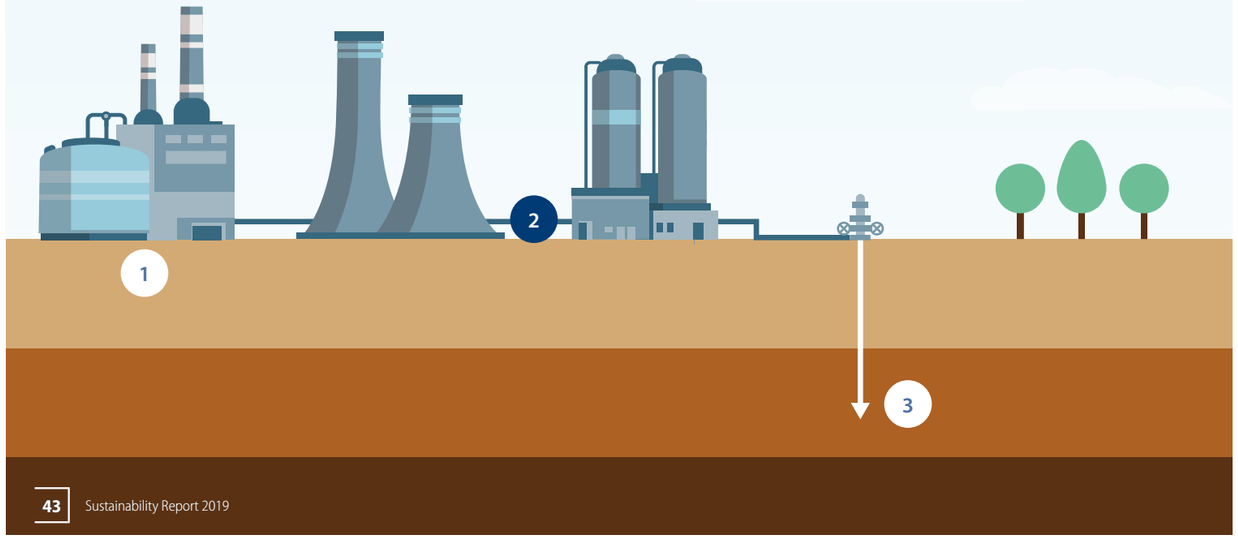
CO2 recovery and sequestration facility capture CO2 from sulphur recovery units and Natural gas facilities

2 TRANSPORT

CO2 in a dense phase will be routed through a pipeline to the injection compressors

3 STORAGE

The CO2 is injected into a dedicated subsurface formation by utilizing existing injection compressors



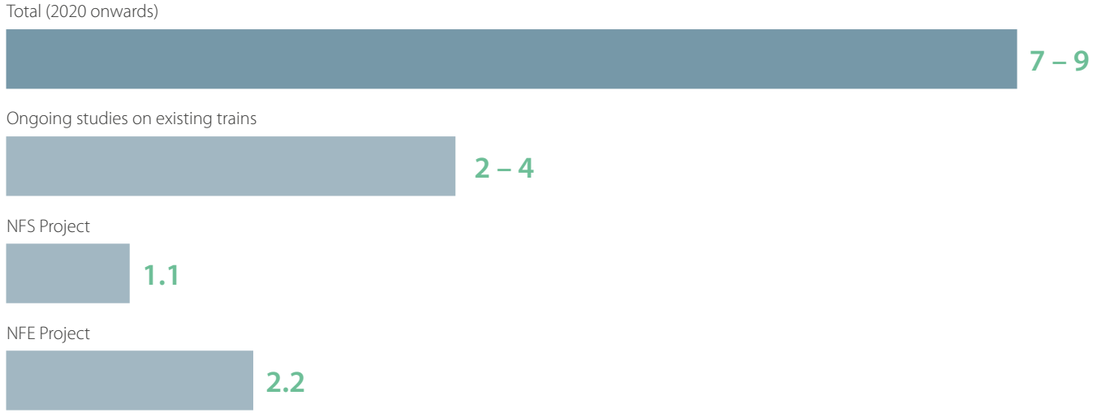
HIGHLIGHTS 2019

In 2019, we successfully inaugurated the largest CO2 recovery and sequestration facility in the MENA region with a design capacity of 2.2 MTPA of CO2. The project aims to capture CO2 from sulphur recovery units and natural gas facilities and injecting it into a dedicated subsurface formation by using existing injection compressors. Since its start-up in February 2019, the project successfully injected ~1.2 million tonnes of CO2 into the reservoir by the end of 2019.

Outlook

- As part of our future carbon capture strategy, a concept select study has been launched to assess capturing CO2 from our remaining LNG facilities. The CO2 will be captured from the LNG trains, and injected into dedicated wells located 8-9 km away from the LNG facilities. The design CO2 capture potential from these facilities is 2 - 4 MTPA based on rated plant throughput.
- We plan to implement the CCS strategy on the upcoming North Field Expansion Projects (NFE and NFS) with a total CO2 capture potential of 3.3 MTPA, and to export CO2 to Dukhan from our LNG facilities via a new 16-inch pipeline, for use in the Dukhan oil fields' enhanced oil recovery (EOR) application.

Future CO2 capture potential
(MTPA)



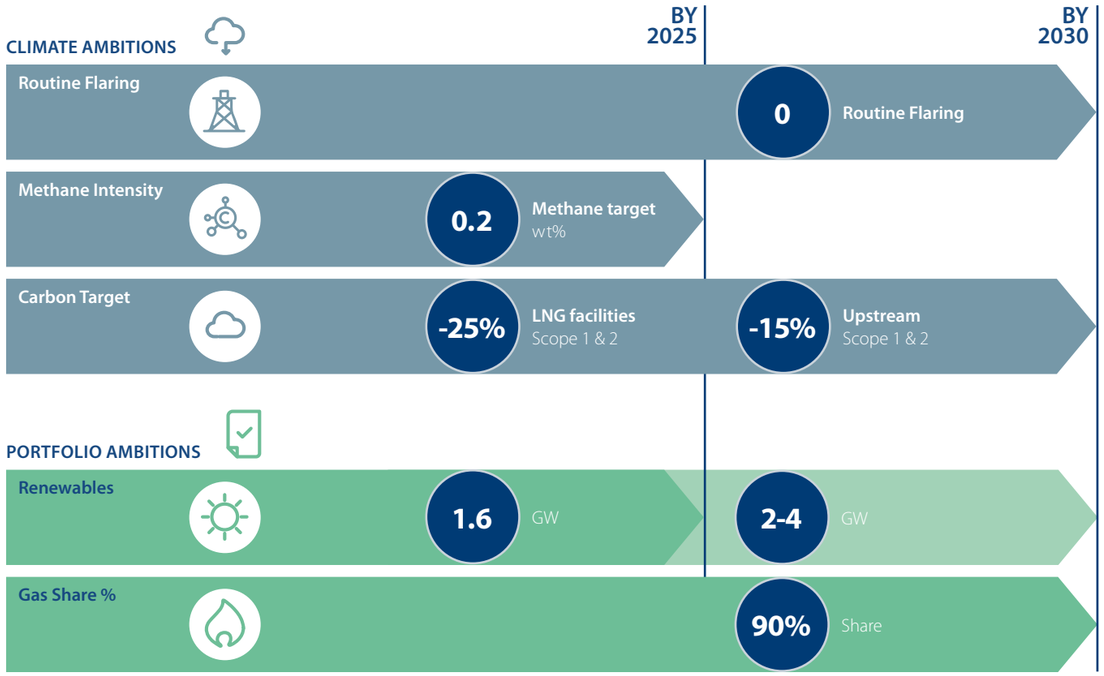
Current CO2 capture facility

Our Climate Ambitions

In response to increasing global energy demand, we will grow our LNG capacity and provide cleaner energy, thereby **consolidating** our leadership position.

By 2030, we expect our upstream production to grow substantially by around 46% taking our production from 4.2 million boe to around 6.1 million boe, along with 28% increase in petrochemicals.

However, when balanced against initiatives to **curb** emissions from our operations, **compensate** our residual emissions and **create** low-carbon energy sources, the carbon intensity of our upstream and LNG operations are expected to be reduced. We aim to achieve a net reduction of about 25% in our LNG facilities carbon intensity for scope 1 and scope 2 emissions by 2030. We will also achieve 15% net reduction in our upstream carbon intensity by 2030.



OPERATIONAL RESPONSIBILITY

We are committed to operating in a socially responsible manner, achieving world-class safety performance, with an incident-free, secure, safe and healthy environment for our employees, stakeholders, partners, contractors and the communities where we operate.

Operational responsibility is a fundamental part of the philosophy of Qatar Petroleum, driving continuous improvement across all our activities.

Exploring, producing and processing hydrocarbons requires careful management of the health, safety and environmental (HSE) risks of our activities. Identifying and mitigating these risks is critical to preventing injuries, illnesses, and incidents, and maximizing our operational productivity to meet economic performance objectives.

We are committed to achieving world-class safety performance, with an incident-free, secure, safe and healthy environment for our employees, stakeholders, partners, contractors and the communities where we operate. We care for our people and see occupational health and safety as a priority for everyone. Our health, safety, environment and quality (HSEQ) management system is based on national and local regulations and certified to the following international standards, which we use to help produce and deliver our products effectively:

- ISO 9001:2015 (Quality Management System)
- ISO 45001:2018 (Occupational Health and Safety Management System)
- OHSAS18001:2007 (Occupational Health and Safety Assessment Series)
- ISO 14001:2015 (Environmental Management System)
- ISO 22301:2012 (Business Continuity Management System)

To achieve our targets of

- Zero fatalities
- Zero major process safety events
- Minimizing our environmental impact
- Supporting and enhancing the biodiversity of the State of Qatar

Our multi-faceted HSEQ strategy rests on the pillars of personal safety, process safety and environment, supported and driven by our systems, procedures and organizational structure.

PERSONAL SAFETY HSEQ	HSEQ leadership that drives a safe and healthy environment for our employees, stakeholders, partners and communities in which we operate.
PROCESS SAFETY	A clear understanding of significant HSE risks with streamlined processes and systems to prevent unplanned incidents and to mitigate the situation if they do occur.
ENVIRONMENT & BIODIVERSITY	A clear, integrated strategy aiming to minimize impact and maximize benefit underpinned by masterplans for air, water, land and biodiversity.
HSEQ EXCELLENCE	Simplified HSEQ systems and procedures that reinforce accountability and responsibility and provide clear and effective data to support improved communication and continuous improvement.
ORGANISATION	A well-designed HSEQ organisational structure supported by clear job families and highly trained, capable employees at all levels of the organisation.

We are committed to operating in a socially responsible manner, caring for the environment, the communities we impact and our employees. We manage our people and assets responsibly, serving as a catalyst for growth to ensure the prosperity of future generations.

Personal Safety

Our utmost priority is to continue to build a workplace safety culture that ensures behavioral and occupational safety of all our workers, employees and contractors. To continuously improve our safety performance, we rely on robust risk management practices, including risk and hazard identification and mitigation measures. We engage our employees and contractors in regular HSE training sessions, toolbox talks and weekly safety moments, to ensure safety information, including learnings from incidents, is cascaded effectively. Our robust occupational health and safety programs, such as our Life Saving Rules and our Road Safety Strategy, reinforce behavioral change and ultimately prevent occupational incidents. We have more safety projects in the pipeline, and are developing improvements to our HSE recognition and learning from incidents processes.

During 2019, our safety performance was mixed. Thanks to the learnings from previous years' incidents, our overall total lost time injury rate (LTIR) decreased slightly by 4%, and even significantly by 55% for employees. We tragically had two fatalities among our contractor workforce. One occurred on Halul Island and the other at our Bul-Hanine offshore field. Thorough root-cause investigations identified opportunities for improvement in the areas of hazard awareness, line of fire, working at heights and heavy logistics risk management. In addition, a companywide deep dive was carried out in partnership with DuPont Sustainable Solutions covering safety behaviors and culture. Over 64% of our staff and contractors took part and helped develop a multi-year improvement program, including projects to reinforce and develop HSEQ leadership while simplifying our HSEQ systems and improving communication.

55%
reduction in lost time injury rate (LTIR) for employees

HIGHLIGHTS 2019

In early 2019, we conducted a safety culture survey to assess the state of our safety culture maturity. The survey included a questionnaire complemented by focus group sessions covering 11 Directorates and 5 locations. We received 7,087 responses equating to approximately 64% participation from our employees and contractors. Findings reinforced that we are a strong organization composed of highly experienced individuals, who take great pride in our work. It also showed that over the years, our safety culture has been noticeably improving; however, like all great companies, there is room to grow further. Because of this feedback, improvement projects have been developed to make our safety culture even stronger, including:

- Simplifying and relaunching a standardized set of Life Saving Rules
- Implementing a clear and standard safety recognition process
- Enhancing and simplifying our incident investigation process
- Strengthening and simplifying our risk management system and tools

A total of 192 sessions on road safety awareness were conducted for staff in our Corporate HSEQ Department, Legal Department, Mesaieed Operations Department and Transmission and Distribution Department. The sessions aimed to improve awareness of road safety risks, defensive driving techniques, and presented global and local statistics related to traffic accidents and fatalities.

A companywide heat stress management program was supported by Mesaieed Industrial City (MIC), which conducted a heat stress prevention campaign from 1 May to 30 September, covering heat stress prevention and management with employees, contractors and visitors. Furthermore, the Drilling and Completion Department integrated a real time heat stress monitoring system into daily operations.

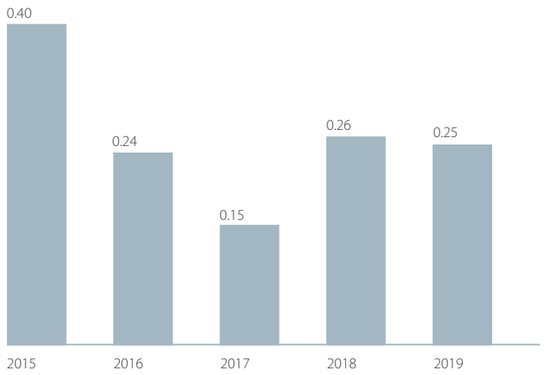
MIC held its 7th Municipal Compliance Awareness Session under the slogan of "Our Actions are our Future", in collaboration with the Ministry of Public Health (MOPH), the Ministry's Central Food Laboratory (CFL) and major hospital service stakeholders. Around 120 stakeholders attended seven technical sessions, including on MOPH's latest food safety requirements, infection prevention and control, integrated food safety and environmental protection. Eight regulatory compliance awards were handed over to food establishments to honor their excellent performance.

We conducted our annual campaign to minimize the spread of influenza viruses, providing flu vaccination at our medical centers and frontline clinics to all employees. On World Hypertension Day, our Healthcare Department conducted an awareness campaign on hypertension prevention and control.

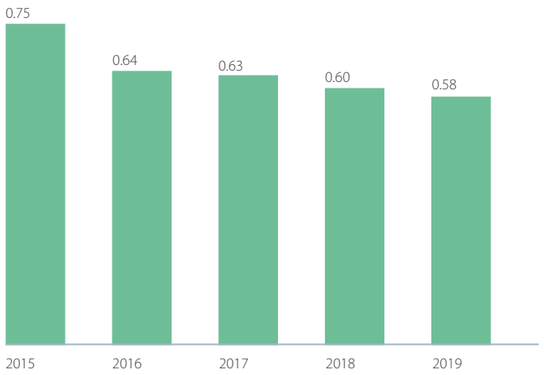
Our seven star audit system was well implemented in Ras Laffan Industrial City (RLIC). All contractors were audited and measured against the Managing HSE in Contracts Regulations, and winners were identified based on scoring.

We held a safety workshop involving guest lectures from various asset operators. The theme was "Lead with Safety" and 102 participants attended the workshop.

Total lost-time injury rate (LTIR) of employees and contractors
(per 1 million working hours)

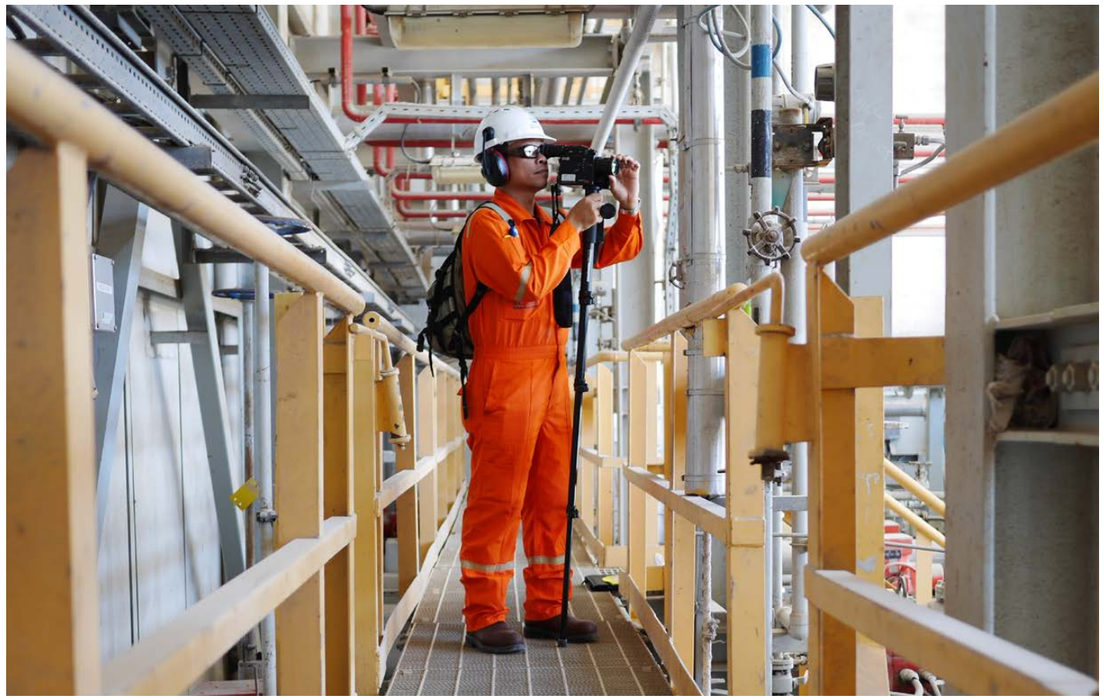


Total recordable injury rate (TRIR) of employees and contractors
(per 1 million working hours)



Total fatalities
(employees and contractors)

2015	2016	2017	2018	2019
0	1	0	0	2



A QP operator wearing PPE kit during an inspection activity, ensuring safe and healthy working conditions

Operational Efficiency And Reliability

Safe, reliable and efficient operations are key to ensuring our continuing business success and effective resource management. Cutting down on operational costs, based on risk assessment, allows us to achieve operational excellence and increase resource availability for the sustainable development of the State of Qatar.

Having sustainable operations is an unwavering commitment of QP. We are continuously improving the tools, systems and processes that will sustain and grow our production, streamline operations, and optimize resource consumption, while helping us lower our costs.

We always seek to improve our operational performance, developing clear strategies in our quest for operational excellence. One of these initiatives is the Operations Excellence Program, launched in 2016. The program aims to exploit synergies between our four main upstream and downstream operations – Idd El Shargi, Mesaieed and Refining Operations – and establish a successful collaboration by applying standardized industry best practices and sharing knowledge and expertise. Driven by the motto of "doing the right thing in the right way, every day", this initiative is a major business transformation to be rolled out over a five-year timeframe, closing the gap with best-in-class industry.

HIGHLIGHTS 2019

Operational excellence is fundamental to everything we do. We thrive to run our assets as safe, reliable and efficient every day. We search for ways to improve the efficiency of these existing assets, look for opportunities to develop new facilities, and seek new partnerships and collaborations that will enhance our production and optimize our operations.

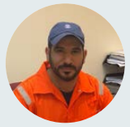
The Tatweer project's transformation journey to improve project management is progressing to the implementation stage. Rollout sessions on these procedures have already been conducted for project engineering staff.

The Operations Engineering Division under Dukhan Operations has successfully completed the upgrade to the latest version of the distributed control system and supervisory control and data acquisition system used on Khuff plants in the Dukhan Field. The upgraded server and console systems are now equipped with all the enhancements that use the Industrial Internet of Things and the current technologies in control systems. This will improve plant reliability, as well as provide a more adaptable production platform. Cyber security is embedded in all phases of the new upgraded system's life cycle. The other benefits include higher productivity through enhanced software functionality and improved system availability, performance and reliability.

Our Project Directorate launched the pilot for our project engineering competency framework. The framework's goal is to enhance the skills of the project engineering and project services communities, enabling us to deliver projects faster, cheaper, and with high quality. To ensure the successful implementation of the competency framework, the assessment process is being piloted with a small group of employees. The pilot will be implemented over a four- to six-month period with 15 employees from the Project and Project Services Departments. The lessons learned from this initial stage will be incorporated into the program prior to its full implementation across the organization next year.

An Offshore Operators Forum (OOF) industry survey found that the use of unmanned aerial vehicles, or drones, in the offshore industry enhances the ability to inspect inaccessible and difficult sites, visualize emissions and monitor safety, while minimizing the risks to personnel and assets. Hence, the OOF has established three sub-groups to explore potential usage opportunities, and is also planning a joint operational excellence program for the marine logistics sector.

To improve efficiency in offshore logistics and capitalize on cost savings, the Joint Air Operations Center (JAOC) was established as the first such center in Qatar, and one of only a few in the global oil industry. JAOC provides a full live overview and controls the complete logistics cycle of offshore personnel, while also enhancing offshore emergency response coordination, safety and security.



Saloum Muhawish E. A. Al-shammari
Head of Control Systems

Our upgraded DCS server and console systems are now equipped with all the enhancements using State-of-the art Internet of Things technology in our control systems.

With these upgrades in place we are able to see higher productivity and improved system availability, performance and reliability. Cyber security is also embedded in all phases of the new upgraded system's life cycle.

Asset Integrity and Process Safety Management

In our industry, it is vital to guard against major incidents that could arise from the release of hazardous materials and energy, potentially harming employees, the public, the environment and our assets. As one of the leading companies in the petrochemical and oil and gas industries, we have worked diligently to develop and implement robust process safety and asset integrity management systems to mitigate these risks.

Asset integrity and process safety are key components of our overall safety management system, focusing on preventing and containing major hazards such as fires, explosions and releases of hazardous material.

We continue to implement programs on asset integrity management and process safety management, helping ensure adherence to Qatar's Decree-Law No. 4 of 1977, and aligned with global standards and industry best practices. If major incidents do occur, we have detailed emergency procedures to respond to them, as detailed in the section Emergency Preparedness and Business Continuity. We test these procedures regularly to ensure that they are understood, suitable, effective and up to date. We collect, collate and analyze key performance indicators relating to process safety, which gives us an insight into the performance of our management systems.

Our focus in 2019 was to improve the reporting and recording of process safety incidents by providing training and raising the awareness of our employees. As a result, the total number of loss of primary containment events recorded was 22% higher in 2019 in comparison to 2018. This was mainly due to increased awareness and vigilance, as well as improved reporting and investigation of minor leaks, such as weeps and seeps. Our aim is to continue and further enhance this program in 2020 through the definition and monitoring of additional KPI's to help assess the robustness of our Process Safety and Asset Integrity management systems.

HIGHLIGHTS 2019

The Tatweer pilot project for commissioning and handover was implemented for two projects in Dukhan. The aim is to achieve well testing compliance of 97%, including replacing the old 3-phase test separators at all degassing stations at Dukhan operations. We also installed 74 additional lift slots on 17 manifolds, which was completed on time and without any process ambiguity, already showing significant improvement.

The Dukhan Production Facilities Upgrade project was initiated to sustain production through the existing facilities, with several enhancements to handle higher produced water volume and more efficient gas handling. A new secondary produced water treatment system will be installed in all seven degassing stations to treat the produced water. The associated gas compressors at four stations will be re-wheeled to operate at a lower gas rate and optimize the operation of the compressors.

We completed baseline hazard and operability and safety integrity level studies for six existing Dukhan production facilities. Based on the findings we will update our major accident hazards risk register and scenarios.

Several Tier 2 exercises were successfully conducted at Dukhan Township, including a major structural fire scenario at Dukhan English School, a mutual aid exercise with the Cuban Hospital and a large emergency exercise at the Support Facilities chemical warehouse to demonstrate a methane spill.

Tier-3 level emergency exercise was successfully conducted in Mesaieed Operations Tank Farm area. The exercise, which was conducted jointly with Refining operations, MIC, BC, IT, PR and external parties, was addressing a full fire surface in one of our crude oil tanks and covered all aspects including communications, operational activities, firefighting, logistics supplies, evacuation and congregation of employees at muster points. The purpose of this exercise was to test the response readiness with the top priority to ensure the safety of our employees and contractor personnel.

To protect offshore platforms from fishing boat incursions into restricted offshore zones and to mitigate potential related risks, a dedicated patrol and support department was established in coordination with the concerned national forces (as per Law 8 of Year 2004).

Safeguarding the Environment

Nabeel Mohammed A R Al-Buenain
Executive VP, HSE & Business Services

Environmental sustainability plays a key role in sustainable development and has been at the heart of the industrial transformation in Qatar over the past few decades with firm commitment to international initiatives.

We recognize the environmental impacts of the oil and gas industry and believe that continuous improvements and responsible environmental management can prevent and mitigate environmental risks. Hence, we are committed to improving our environmental footprint and enhancing the resilience of biodiversity in the State of Qatar and host countries where we operate.

We recognize the need to safeguard our local environment and minimize the pollution that is inherent to oil and gas activities. In recent years, Qatar has experienced changes in its infrastructure, including continuous development and upgrading of its major operational cities. Environmental preservation is at the heart of our industrial transformation in Qatar, with a firm commitment to international initiatives. At QP, we are demonstrating leadership in minimizing our environmental impact and protecting the biodiversity of the State of Qatar through multi-year masterplans.

OTHER AIR EMISSIONS

Addressing local air quality issues is increasingly important to the communities, governments and our stakeholders, driven mainly by public health concerns. To this end, we monitor our air emissions closely via continuous emission monitoring systems and implement measures to mitigate the potential impact of activities on the surrounding community.

We track emissions released into the atmosphere from upstream and downstream facilities and work to reduce air pollution from operations. This includes making investments to lower emissions of nitrogen oxides, sulphur oxides and volatile organic compounds that are released during oil and gas production and processing.

We achieved significant success in NOx and VOC management in our LNG facilities, which can be attributed to NOx reduction projects such as retrofits of turbines and boilers with low NOx technology and robust LDAR programs. The LDAR program provides surveillance for VOC components, leading to necessary repairs in identified VOC leakage sources. Improved LDAR monitoring and repair operations have led to a substantial reduction in VOC emissions. Recognizing the importance of reducing VOC in the atmosphere, we have established LDAR programs at most of our facilities. We expect VOC emissions to further decrease in the coming years as a result of our efforts to reduce fugitive emissions, flaring and venting overall.

HIGHLIGHTS IN 2019

Mesaieed Operations started the second phase of the LDAR program. This involves monitoring all components for which repair works were carried out during phase one. Throughout 2019, 53% of the components were assessed, out of which 2.71% were identified as potential leak points. All of them were registered for repair in our LDAR database and are subject to re-monitoring. Once all repairs are completed, the total number of potential leak points will be reduced to below 2%, meeting the CTO-recommended US EPA requirements.

We continue to monitor the emissions from the Halul incinerator stack periodically. All parameters monitored, including SO2, HCl, dioxins and furans, were below the limits.

Refining Operations also implemented their annual LDAR program as per CTO. In 2019, 208 leaks were identified, a reduction of 50% from 2018, despite the wider coverage of the survey. 48% of the leaks were repaired in 2019.

An Acid Gas Recovery Plant (AGRP) was commissioned in Dukhan to remove H2S from produced Khuff gas and to provide sweet gas to consumers. This will help maintain facility integrity and reduce environmental impacts.

THE USE OF SUSTAINABLE DESIGN CRITERIA FOR THE BUILT ENVIRONMENT

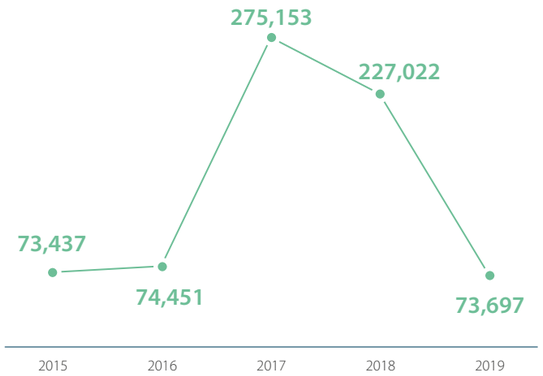
We have introduced the Global Sustainability Assessment System (GSAS) for the design and construction of buildings. A recent example is the QP Refinery Laboratory currently under project development, which is expected to achieve a two-star GSAS rating upon completion.

The Global Sustainability Assessment System (GSAS) is a Qatari developed, performance-based system for rating green buildings and infrastructures. The primary aim of GSAS is to create a sustainable built environment that minimizes ecological impacts and reduces the consumption of resources while addressing the local needs and environmental conditions specific to the region.

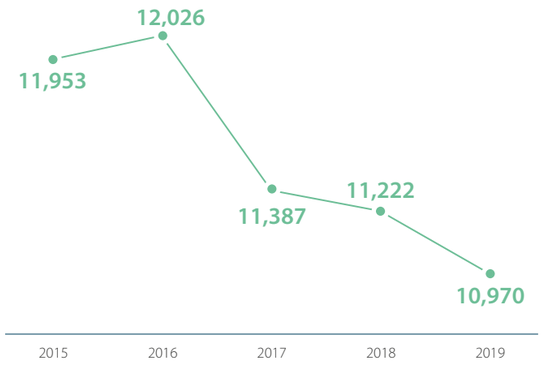
Conceptual design image of the QP Refinery Laboratory

AIR POLLUTANTS – QP ASSETS

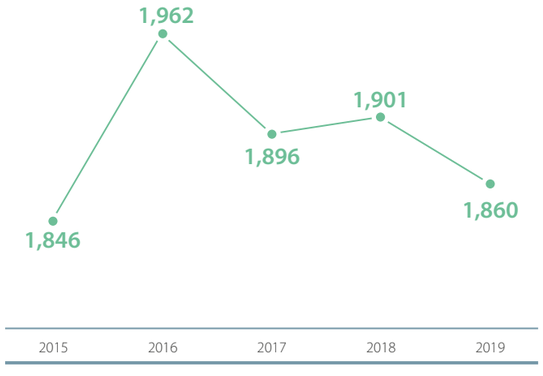
SO2 emitted
(tons)*



NOX emitted
(tons)*



VOC
(tons)



* Values changed (SO2, NOx due to change in methodology for the years 2015-2018) compared to 2018 Sustainability Report (SR).

AIR CAPACITY STUDY AT MESAIEED INDUSTRIAL CITY

Qatar in general, is very prone to elevated ambient air pollutant concentrations due to its location in a region dominated by oil, gas and petrochemical industries. In MIC specifically, due to the number of air emission sources and continuous development in the area, it is important to assess and report ambient air quality regularly. Therefore, an air capacity study was conducted at MIC to quantify the emissions generated by industries and facilities located within the industrial city.

The study included the development of a comprehensive emission inventory of pre-defined air pollutants from MIC industries. A total of 468 sources (stacks, vents, flares, tanks and fugitive sources) were subject to emission estimation, and the ambient air quality was checked from five ambient air quality monitoring stations located in different parts of the MIC. During this study, we identified hotspots for potential air quality monitoring and detected any non-compliance to National and International ambient air quality standards. A qualitative risk assessment was carried out to identify the health risks associated with pollution levels.

The main results of the study were:

- In a normal operational scenario: nitrogen oxides (NOx) was the major pollutant in MIC followed by sulfur dioxide (SO2). NOx and SO2 ground level concentrations met national standards.
- In abnormal and emergency scenarios, SO2 was the major pollutant and its ground level concentration exceeded national and international standards.
- Particulate matter (PM10) ground level concentration did not comply with environmental standards in all scenarios, due to the natural source of dust from sand dunes in the Mesaieed area.
- Ammonia (NH3) and hydrogen sulfide (H2S) ground level concentrations met all environmental standards in all scenarios.

The study concluded with an airshed management plan to improve and preserve air quality in MIC:

- Perform monthly monitoring of ambient air quality for chlorine (Cl2) and HCl to check their levels close to medium-sized industries in MIC.
- Relocate some of the existing measurement stations for both upwind and downwind areas to better capture the emission effects from MIC industries.
- Evaluate the performance of bag filters in certain plants and identify improvements for loading and unloading of materials.
- Conduct regular environmental audits to check compliance with the outlined processes and verify the data.

WATER MANAGEMENT

Operating in on one of the least water-secure regions in the world, careful management of the water we use for our processes such as drilling, refining, gas processing and producing electricity is a necessity. Most of our water is desalinated sea water and our systems are designed to efficiently use and minimize our total water consumption.

Water discharge and ground water are closely monitored to minimize environmental impact. To meet all local regulations and environmental standards, we operate water treatment facilities at each of our sites and run various water management and environmental protection programs.

HIGHLIGHTS 2019

As per direction of the Ministry of Municipality and Environment (MME), we conducted an environmental impact assessment (EIA) for our treated industrial wastewater, cooling seawater and brine discharge to sea at MIC. From this, we prepared a model to illustrate the existing discharge regime and impact on the receiving water bodies. The results will help us meet the regulatory requirements and support the national policy of near zero liquid discharge to sea.

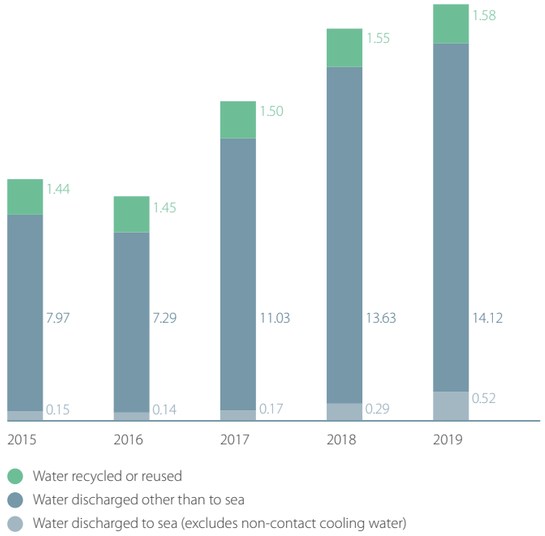
We started a new central effluent water treatment project in 2019, due to be completed in mid-2024. The project will treat all effluent water generated from the natural gas plants to irrigation water quality. The expected volume of 363 m3 of treated water per day will be used for irrigation and landscaping, helping reduce overall freshwater consumption and water cost.

An initiative to monitor freshwater use at Halul Island installed water meters at every accommodation and building. Investigating the findings revealed leakages of old water lines, which we replaced. In addition, the wastewater treatment plant helps save 100 m3 of fresh water by using treated wastewater for landscaping and irrigation on the island.

New treated sewage effluent supply lines were commissioned at RLIC to extend the scope of the network. In addition, the wastewater treatment plant was refurbished to support early requirements of NFE projects.

MIC carried out a feasibility study to identify and remedy the cause of flooding observed in the area since 2012. The study identified that elevated groundwater was a key part of this problem, and a groundwater drainage network, pumping stations and flow meters will be installed to the existing treated sewage effluent network.

Water Discharge Performance
(million m3)



WASTE MANAGEMENT

Qatar has set a national objective to increase the percentage of waste diverted from landfill by reducing waste creation through design, or reusing and recycling waste once it is created. We continue to seek opportunities to reduce, reuse and recycle materials, as closing the loop will help avoid negative environmental outcomes, and in many cases, will lead to cost savings or new forms of revenue. As an oil and gas producer, we generate both hazardous waste and non-hazardous waste.

Our hazardous waste includes oily sludge, wastewater, naturally occurring radioactive materials (NORM) and heavy metals amongst others. We carry out periodic inspections of our hazardous waste facilities and ensure strict regulatory compliance with the Ministry of Municipality and Environment (MME) requirements for NORM waste handling, transportation, treatment, storage and disposal.

Our non-hazardous waste made up 91.4% of our total waste in 2019. It includes paper and other urban solid waste, as well as drilling waste from onshore and offshore operations, which we consistently manage across our operations and send to waste treatment centers for further handling. Over the past five years, our total waste increased by 166%, while our waste recycling increased by 170%. Overall, we recycled 22.6% of our hazardous waste in 2019, and 1.4% of our non-hazardous waste. All hazardous waste, from the industrial cities and QP Operations, was successfully disposed of in compliance with the Consent to Operate (CTO) requirements and local environmental regulations.

91.4%
of our total waste in 2019 was non-hazardous

HIGHLIGHTS 2019

We continued to carry out our comprehensive NORM assessment program at MIC. Since 2018, a total of 1,200 points at our NGL Complex were assessed to identify potentially elevated NORM levels. In addition, several NORM surveys were conducted before and during shutdown. The monitoring data shows that no elevated levels of NORM were recorded in MIC.

MIC transferred 38 tons of hazardous waste, including transformer oil, cooking oil and recovered oil, as well as 53 tons of incinerable hazardous waste, for recycling and reuse to a private waste recycling facility. While meeting local regulations, this also helped save 228,000 QAR of disposal cost.

MIC also conducted an environmental awareness campaign under the slogan 'team up to clean up' in September. The campaign aimed to raise MIC contractors' environmental awareness and ensure compliance with environmental protection standards and procedures. Contractors with good housekeeping and environmental performance received award certificates.

Dukhan Operations initiated and completed the periodic survey of wellhead NORM waste to measure NORM accumulation in wellheads since the pilot baseline survey in 2014-2015. The survey aimed to identify wellheads with NORM contamination, assess the magnitude of external gamma dose rate at contaminated wellheads, and review worker protection requirements. The survey started in August 2018, covered 608 active wellheads and was completed in October 2019.

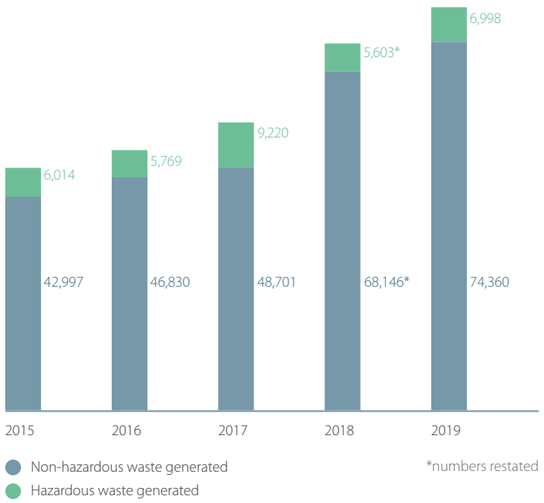
We continued our project to upgrade the treatment capacity of our Dukhan sewage treatment plant, more than doubling its capacity from 3,420 m3 per day to 8,600 m3 per day to meet rising demand. The expanded capacity will help handle current overcapacity and meet additional MME treatment requirements for increased water demand from Dukhan township and other users. The treated effluent will continue to be used for landscape irrigation, improving the landscape within the Dukhan township. Project completion is scheduled to be in mid-October 2020.

A 5-year contract for the disposal of oily sludge and unidentified waste from Dukhan fields was awarded to dispose of all wastes which are not accepted by MIC hazardous waste treatment center. A total of 2,211 drums oily sludge were removed, and all the accumulated waste from Dukhan was disposed of by 30 March 2019.

OUTLOOK

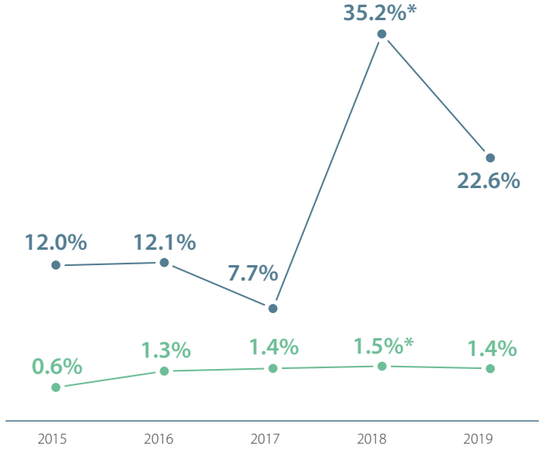
Going forward, we will be working on a strategy to recover and recycle plastic solid waste.

Waste Generated[10]
(tons)



*numbers restated

Non-hazardous waste recycled[10]



*numbers restated

10 Waste is quantified using a weigh bridge. The weigh bridge is calibrated regularly, and a recent internal audit verified this. Where there is no access to a weigh bridge, volumes are used, and weights estimated based on averages and waste densities (for specific wastes).

BIODIVERSITY

We are working on several initiatives to promote the conservation of Qatar's ecosystem, sustainable use of natural resources, and raise public awareness around Qatar's National Biodiversity Strategy and Action Plan (NBSAP). We conduct marine eco-surveys every three years to assess the environmental impacts from our offshore oil and gas facilities, and invest in initiatives to protect wildlife and enhance biodiversity in Qatar. Most of our environmental initiatives support Qatar's rich marine biodiversity, especially at Halul Island, which is home to the most beautiful coral reefs in Qatar.

HIGHLIGHTS 2019

We continued our efforts to support the wildlife on Halul Island through ongoing management of a dedicated conservation area designed to enable indigenous animals to live freely in their natural environment.

We continue to monitor our 48 artificial reef balls located at Halul Island and are pleased to report that they have proved highly successful in enhancing the habitat for fish and other marine organisms.

Our continuous marine ecological surveys ensure sustainable development on the marine life surrounding our operations. These surveys assess water quality, sediment quality, biota toxicology, benthic infauna, zooplankton and phytoplankton. The knowledge this project creates will predict the impact of the operational activities, and highlight effective mitigation measures to protect marine habitats.

In 2019, we conducted a marine ecological survey[11] project for three offshore locations at 98 sampling stations. Results show that all parameters for water quality across most sampling stations were within the Qatar national standard. Some water samples registered minor concentrations of nutrient parameters; however, all results were within the adopted local and international standards. In addition, a video survey at all production stations assessed the presence of benthic fauna and flora, phytoplankton species, zooplankton species and fish diversity to ensure a healthy environment for all species around production stations.

In compliance with MME legal requirements[12], protecting Qatar's hawksbill and green turtles is a key focus. We continue to support the project to monitor turtles and hatching activities in RLIC as well as seven other locations across Qatar. This is providing valuable scientific information through tagging, satellite tracking, DNA analysis and monitoring in line with the standards of the Marine Turtle Specialists Group (MTSG) of the International Union for the Conservation of Nature (IUCN).

RLIC established a unique program to protect juvenile turtles, by catching the turtles close to the industrial seawater intake. Here, the turtles are cleaned of barnacles and tagged before released back to sea. In 2019, we caught and released 194 turtles as part of the program bringing the total to 1,015 since 2011.

We are actively supporting the Ballast Water Management Convention to protect the local marine environment from invasive species. All ships entering RLIC and MIC ports are required to exchange or treat their ballast water outside the regional organization for protection of marine environment sea area.

We continued our Halul Island coastal erosion and shoreline protection projects. The project aims to protect the existing infrastructure at Halul Island from coastal erosion and flooding of low-lying coastal areas. It includes constructing several costal erosion and shore protection schemes around the Island's coastline and is close to completion.

FISH RESCUE

Our fish rescue event is a unique and ongoing environment conservation program at RLIC, demonstrating our core value of responsibility since its inception in 2013.

The event was a result of the port expansion and development project, when many fish were trapped in the sea water lagoon that formed between the reclaimed land at the old and new north breakwater of RLIC port.

Ever since, a team of QP-RLIC employees leads a voluntary initiative to rescue the trapped fish. Last year, more than 40 grouper fish, locally known as hamour, were rescued and successfully released into open water. More than 480 Grouper fish have been rescued to date.

The fish rescue team is highly appreciated and recognized for their effective participation in this unique environmental initiative.

Two QP employees taking part of the fish rescue event at Ras laffan, demonstrating care and responsibility.

11 The marine ecological survey comes in line with the State of Qatar's environmental laws and shall comply with the country's environmental standards as well as QP specifications and guidelines regarding waste management and environmental incident reporting.

12 This project also comes within the framework of the efforts of the Ministry of Municipality and Environment (MME) to preserve wildlife, in accordance with the Ministerial Resolution No. (37) of 2010 on the conservation of turtles and seabirds from extinction.

RAISING ENVIRONMENTAL AWARENESS

To raise our employees' awareness of environmental protection, we started a campaign to avoid the use of plastic bottles.

In conjunction with the launch of the new Code of Conduct and the completion of the E-Code, we took steps to distribute environmentally friendly, re-usable water bottles to our entire employee base.

Employees received their water bottle along with an infographic outlining our commitment to the environment and the responsible use of plastic water bottles. Employees likewise were told about the importance of re-using their bottle as opposed to discarding plastic water bottles that take many years to decompose and often contain harmful chemicals that release millions of tons of CO2.

Emergency Preparedness and Business Continuity

Operational incidents, external developments or natural disasters can strike at any time, with the potential to cause serious disruption to our business. Maintaining a business continuity management system (BCMS) enhances our resilience to address any business interruption.

We take comprehensive efforts to prevent incidents that could compromise safety and to address business disruptions. Our BCMS includes crisis management, emergency preparedness and response, business continuity planning and information technology resilience. An integrated fire and rescue emergency response plan and related resources are available and considered top QP emergency response priorities. We dedicate resources to developing and implementing the BCMS, so that in the case of an event, we can:

- Respond in a timely and effective manner and minimize any potential business disruption
- Provide accurate information to public authorities about remediation actions taken to protect or re-establish health, safety and environment
- Continue with the delivery of products and services

We regularly test and run exercises on the system's effectiveness against pre-defined requirements. By identifying the top HSEQ risks, we are able to manage those risks and prioritize the actions that are required to manage them to an "as low as reasonably possible level" (ALARP), while monitoring the performance and effectiveness of the current control and mitigation actions.

HIGHLIGHTS 2019

The emergency preparedness and response units delivered national-level large-scale exercises to protect critical oil and gas infrastructure including a one-day crisis management exercise with full participation of H.E. the President and CEO as well as the entire Executive Leadership Team.

We used helicopters for about 26,500 flying hours in 2019 to carrypeople safely to and from facilities, onshore and offshore

SOCIAL AND ECONOMIC DEVELOPMENT

We recognize our responsibility to enhance the potential for our employees and increase economic opportunities for the people of Qatar and the other locations in which we have economic interest.

We are all looking to fulfil our potential and make our lives and the world around us better. Creating educational and economic opportunity is key to the welfare of society and the economy, and the sustainable growth of businesses. As one of the largest employers in Qatar, we seek to attract the best talent, in order to achieve a high level of leadership skills that ensure the achievement of our sustainability strategy for decades.

We are regarded as an employer of choice in our home market. We are also aware of our responsibility as a major contributor to the local economy, shaping the future of our country and its people through our economic activities but also our ongoing support for our local communities.

Going forward, we will focus on our efforts to deliver our sustainability roadmap through leading initiatives across three pillars: people, community and local and economic development.

HUMAN RIGHTS

The promotion and protection of human rights is one of the policy pillars of the State of Qatar, a current member of the UN's Human Rights Council, and as such, Qatar believes that human rights, peace, security and safety are interconnected and mutually reinforcing. As the National Oil Company of Qatar and the largest employer in the country, QP is committed to respect, protection and promotion of human rights.

QP is guided by the Qatar National Vision 2030. The National Vision for development addresses key human rights dimensions in areas such as education, health, the environment, labour, the empowerment of women, children's rights and development. Building on existing commitments from the State of Qatar and its 2017 agreement with the International Labour Organization (ILO) to substantially reform the Kafala system, QP has put in place procedures and controls in relation to the payment and travel of contractor staff, which reflect these commitments.

In 2019, QP launched its Code of Conduct, reinforcing its commitment to ethical business practice. The QP Code of Conduct includes a commitment to uphold international standards on human rights, and in 2020 QP will be developing and adopting a Human Rights policy that is inspired by the UN's Guiding Principles on Business and Human Rights.

QP's aim is to continue our progress on human rights, in Qatar and everywhere it operates around the world.

The third Mustaqbalna 2019 event under the theme of "Resourcefulness" was an opportunity to bring together over 300 associates with the company's executive leadership team to discuss QP's strategy, business plan and future direction

Taking Care of Our People

When it comes to people action, managing our talents and ensuring wellbeing of our employees and collaborators is critical to our success. Education plays a major role in that.

DEVELOPING OUR TALENT

Our approach is to attract and develop top talent, and motivate them to perform at their best to deliver our corporate and sustainability strategy. We aim to build a bridge between vocational education and sustainability issues through creating a workforce which regards sustainability as an integral part of its job. Therefore, we seek close partnerships with the educational sector to include sustainability aspects into education and training programs. Our Talent Strategy entails:

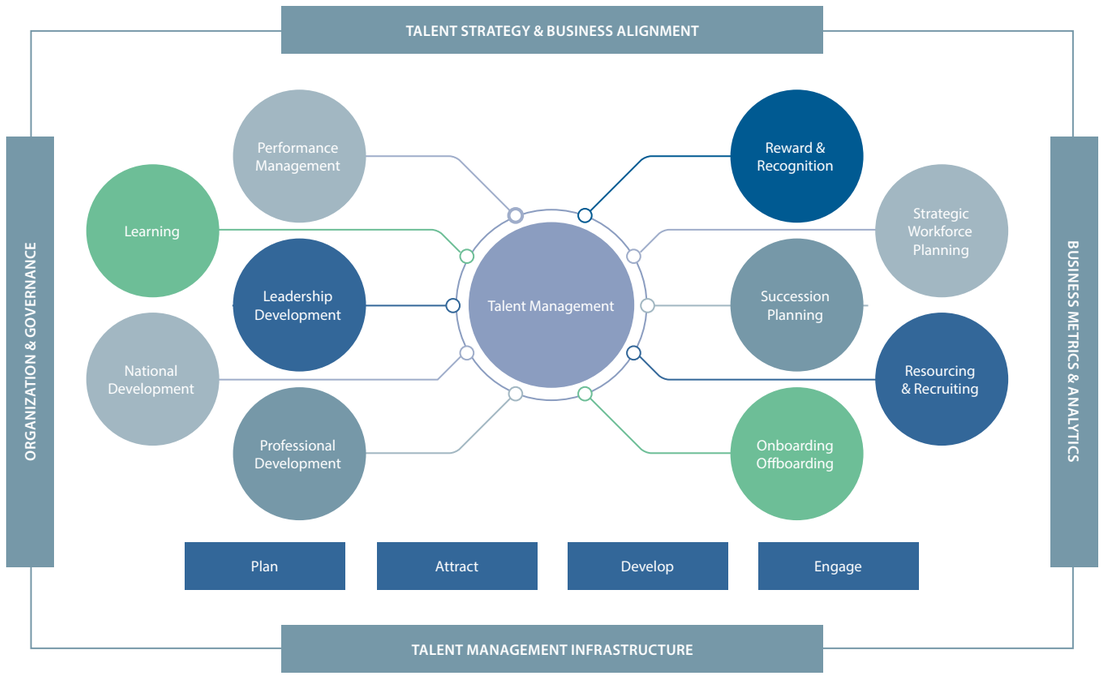
PLAN for our future, so we have the right people with the right skills at the right time and ensure we remain competitive in a changing world.

ATTRACT the best talent locally and globally.

DEVELOP all our people to ensure we have a highly capable team, with the skills and experience to make our vision become reality.

ENGAGE our employees to inspire high performance and work towards our common goals.

Our QP People Agenda helps us achieve sustained performance within the company through developing structures, processes, systems, policies, people and culture. The main ambition is to build and connect all elements of talent management and ensure they are aligned to international standards. Its scope includes workforce, succession and replacement planning, resourcing and recruitment, onboarding and off-boarding, leadership development, professional development, learning, performance management and engagement and rewards.



SUBSURFACE DEVELOPMENT AND EXPLORATION OPEN HOUSE POSTER SESSION

On September 23, young professionals were invited to present their department's main activities to a QP-wide audience under the theme of "Sustaining Excellence".

The annual poster session provides an overview of our business in Qatar and abroad, its challenges, and our integrated approach to optimizing our onshore and offshore oilfields. It also allows young professionals to fine-tune their presentation skills and gain confidence in their chosen discipline.

Posters included the Dukhan Asset Plan (Present & Future), Well Operations & Surveillance, CO2 Well Tracer Pilot for Dukhan Gas Lift Wells, Dukhan Gas Lift System Pressure Oscillation Impact & Mitigation, Introduction to Geomechanical Modeling as a Guide to Redevelopment (EWF), Dukhan Khuff Reservoir Case, Dukhan - Vertical Seismic Profile (VSP), Dukhan Khuff Permian-Triassic Stratigraphy, Core & Petrography and Super Giant Dukhan Field is Big Data.

A young professional presenting a technical poster to His Excellency during the Open House poster session event.

LEADERSHIP AND PROFESSIONAL DEVELOPMENT, LEARNING AND SUCESSION PLANNING

At QP, we believe that talent management starts with competent, effective leadership. Our leaders must drive our strategic priorities, champion change and inspire and develop the next generation of leaders and professionals to reach our goals. Hence, we continuously seek to further enhance leadership competencies, learning and culture change through several activities.

We also put great emphasis on our leading role in talent management in the Energy sector of Qatar. We are dedicated to advancing knowledge and learning as important tools for the development of our corporation and the Sector. To do so, we support vocational learning to provide technical and administrative training to young Qataris and new trainees through a variety of internationally recognized vocational programs, including a diploma program, technical certificate program and fireman certificate program, in addition to workplace learning.

We strongly focus on professional development as an investment to enhance our technical capabilities. This is key to our business strategy and key to the careers of our employees. As part of our approach, every job is part of a job family. These communities, that cut across organizational boundaries, consist of people doing similar work activities that require a common set of competencies, such as petroleum engineering, mechanical engineering or management. For each job role within a job family there is a list of professional competencies that relates to the skills, knowledge or experience that employees need in a particular job role.

Based on the job roles, we develop and implement a mix of learning solutions (on the job training, formal learning programs etc.) which enable employees to close any competency gaps and thereby improve their performance. We provide and maintain professional training resources and facilitate local and overseas training. These programs are available in a variety of delivery methods from traditional and virtual classrooms to instructor-led or self-paced methods. There is a two-level training evaluation system to ensure continual development and high-quality training services. In 2019 we delivered more than 206,000 training hours, that is an average of 24 hours of training per employee and double the amount of training they received four years ago.

206,000
training hours delivered to employees

To ensure we have candidates ready and able to fill leadership and other critical positions whenever it becomes necessary, we identify internal talent who are "ready now" or who will be "ready soon" for further development. Our senior leaders endorse the succession plans, which highlights the strong commitment to developing the next generation of talent. Succession planning is a key input to resourcing for any vacant position.

HIGHLIGHTS 2019

We completed the cascading of our strategy and values to all our employees to ensure everyone is aware of our direction and the behaviors required for us to achieve our Vision, reaching 97% of our employees in over 200 workshops.

We completed four pilot leadership programs based on our strategy, competencies and values, engaging more than 700 leaders across the company.

Based on rigorous evaluation and recommendations from our leaders, we developed a new Leadership Development Strategy (2020-2024) that is closely aligned to our corporate strategies.

We launched the project management and the commercial job families. As part of the introduction, we launched the competency assessment and validation process. Other job families will follow in 2020.

Using our new technology, Employee Central, we initiated the personal development planning process. All senior employees were asked to discuss and agree development objectives and learning solutions with their supervisor and capture those in a personal development plan.

To support this process, a new Learning Management System went live in 2019, which all employees can search to identify a suitable learning solution to close any competency gaps. At the end of 2019, more than 20,000 logins were registered on a monthly basis and more than 12,000 courses were completed.

We continued the roll out of succession planning to several Directorates. These plans will provide input to the development planning for employees who have been identified as 'ready soon' candidates. In 2020 and 2021, remaining Directorates will be included, whilst others will conduct their second cycle.

OUTLOOK

- We will be focusing our training efforts around energy transition, sustainability innovation, working together with local partners and updating our internal internships and trainings to focus on these topics.
- We will continue to enrich our learning management system with additional e-learning materials, formal training and other learning solutions.

KNOWLEDGE SHARING LECTURE PROGRAM (MAERIFA)

To ensure knowledge transfer between young professionals and subject matter experts, MAERIFA sessions provide an excellent networking opportunity and expose young professionals to different departments and directorates within the company.

MAERIFA is an in-house program that facilitates broad multi-disciplinary technical and business knowledge sharing from subject matter experts to the enthusiastic new generation via weekly one-hour sessions. The sessions cover a wide range of topics in the form of 45 minutes presentations and 15 minutes for questions and answers. Sessions are open and extremely collaborative. Presented materials are made available via shared drive for future reference. During Phase 4, 28 weeks of lectures were provided up to Q2 2019, Phase 5 includes 27 weeks of lecture programs up to Q2 2020.

Phase 4 of the program was updated to include technical and engineering lectures such as 'CO2 Well Tracer', 'Developing Khuff Reservoir' and 'Onshore Facilities Overview', 'Value Enhancement' and 'Oil and Gas Demand'. Phase 5 saw more external experts, including from Al-Attiyah Foundation and a senior economist from QNB, contributing to our program. MAERIFA will continue in 2020, with new material in all disciplines such as operations, engineering, drilling, finance or information technology.

A MAERIFA knowledge sharing session providing a networking platform for young professionals and stimulating their learning

QATARIZATION

Under the leadership of H. H. Sheikh Tamim Bin Hamad Bin Khalifa Al-Thani, Amir of the State of Qatar, and upon the directive from the Minister of Energy and Industry back in the year 2000, the first comprehensive Strategic Qatarization Plan has been developed for the energy and industry sector. Specifically, the Quality Qatarization program aims to develop Qataris to a standard comparable to their counterparts around the world. This program also benefits the wider Qatari economy, as Qatari employees are later able to transfer their knowledge outside QP.

In support of the Qatar National Vision 2030, Qatarization is an integral part of Qatar Petroleum's strategic workforce planning and another key element of our talent strategy. Our 5-year workforce plan ensures that the right positions are available at the right time for our Qatari talent. It also enables us to assess demand for Qatari nationals over the planning period, and to design recruitment and development plans to meet that demand. It emphasizes developing Qataris for key, sensitive positions at QP by applying competency-based, not time-based, training and development.

To promote Qatarization, our Learning and Development Department manages the intake of most Qataris and coordinates core training through a variety of programs. Some Qataris join the company as either senior or junior staff, depending on their qualifications, as a direct hire or in a development capacity, where they receive a tailored development plan targeted for a future position.

To measure our progress in supporting the Strategic Qatarization Plan, we regularly monitor, review and update our internal plans and provide regular updates to an overseeing, industry-wide steering committee and sub-committees dealing with recruitment and training and development. Key features of our Qatarization approach are:

- Attracting, recruiting, training and preparing Qatari high school and university students to assume posts in QP and the energy and industry sector in general.
- Supporting the recruitment, educational sponsorship and development of Qatari nationals
- Managing educational sponsorships for Qatari students and our trainees.
- Designing oil and gas competency-based vocational, academic and professional training programs in collaboration with our functional leaders and in line with strategic priorities and objectives.
- Facilitating the placement, career progression and professional development of Qatari nationals in line with our Qatarization plans.
- Delivering development programs on effective leadership and design individual development plans for our future leaders as part of the corporation's leadership development framework.

HIGHLIGHTS 2019

Aiming to develop a larger pool of academically and technically certified nationals with qualifications for required specializations, we and energy sector companies continued in 2019 to offer scholarships for academic and vocational programs for eligible Qatari students and employees to pursue educational degrees, certificates and training programs in the fields of petroleum, other engineering disciplines and specialized programs.

We continued and improved the Ta'sees project, which targets National graduates who join as associates. Ta'sees is a 'push' training program that focuses on developing the employee's behavioral and effectiveness skills. In addition, it aims to spread awareness on our values and the history of the oil and gas industry in Qatar. This program was developed to improve the knowledge of new employees about the oil and gas industry, increase their awareness of our operations, enhance individual effectiveness skills, and raise their awareness of our core values.

The development programs of all senior staff developees (staff under development) were reviewed, enhanced and standardized. These associate development plans were all transferred to the new Learning Management System, greatly facilitating oversight and support.

To support Qatarization across the energy sector, we organized the 19th Annual Qatarization Review Meeting, to recognize companies for their accomplishments in the field of Qatarization. 35 companies are participating in the Strategic Qatarization Plan.

We held our third Mustaqbalna 2019 event under the theme of "Resourcefulness", bringing together over 300 associates and the company's executive leadership team to discuss QP's strategy, business plan and future direction. One of the highlights was the QP 2029 Expo, where teams of Associates worked together to showcase their visions for QP in 2029, focusing on our value chain upstream, LNG and downstream while taking into account challenges such as climate change and population growth. On Day 2, each team had the opportunity to present its vision to the leadership team, and a winning team was honored.

The development of nationals is a key component of QP's corporate strategy. This includes both nationals working for QP as well as other nationals, typically students. Every year, Qatar Petroleum offers secondary school leavers the opportunity to undertake further studies, fully sponsored by QP. Students are selected for vocational studies or university studies. On completion of their studies, students typically join QP or another company in the Energy sector. In addition, QP organized a summer camp in 2019 titled, "An Introduction to Oil and Gas" for secondary school students.

In 2019, QP invested

QAR 68 million

in Education Sponsorship for nationals.

EMPLOYEE ENGAGEMENT AND WORFORCE WELFARE

As part of our QP People Agenda, we seek to enhance the affiliation of employees with QP and their commitment to collaborate thereby leading to increased performance. Employee welfare entails everything from services, facilities and benefits that we provide to our employees to benefit their health and well-being, and ultimately motivate them to be productive and conduct their work with care.

Our People Portal is a user-friendly platform that provides a single source for all services and information related to human resources and learning and development. It also serves as the gateway to our new cloud-based human capital software Employee Central, where every employee can access all HR services; such as leave requests, the performance management system and more. In 2019, multiple videos were made available through this portal, enabling employees to easily familiarize themselves with new processes or programs launched.

We provide all employees and their dependents with extensive health care services in all its locations, including general practice, laboratory, radiology, pharmacy and dental clinics. Ambulance, paramedic and emergency response capabilities ensure we can quickly respond to emergencies and treat any injuries with speed and care.

To support Qatarization across the energy sector, we organized the 19th Annual Qatarization Review Meeting, to recognize companies for their accomplishments in the field of Qatarization.

Abdulaziz J Al-Muftah
Executive VP, Industrial Cities

At QP, we value the contribution of our employees and contractors in delivering our vision for clean energy. We adopt the highest standards on health, safety, hygiene and provide social and support programs to ensure the wellbeing of our workers. We ensure that our contractors adopt fair recruitment and remuneration practices.

We plan construction of a new Workers Village with the highest standards for our upcoming development projects in Ras Laffan Industrial City.

WORKFORCE WELFARE

We consider workforce welfare as of the utmost importance and take all reasonable steps to ensure the highest standards of employee wellbeing. We respect the rights of our workforce and people working at our sites, including those working through contractors and suppliers. These commitments are included in our Code of Conduct and Human Rights Policy. We are committed to the highest standards of health, safety, and wellbeing of workers and recognize the worker's contribution in delivering our long-term vision for a cleaner energy sector. All our workers are protected by our Workers' Welfare Standards, ensuring all individuals contributing to the delivery of our projects are treated with respect and dignity. Throughout their assignment, we strive to make their experience a positive one, implementing robust health and safety working standards on-site while ensuring that they enjoy clean and comfortable living accommodation. A dedicated grievance hotline, forums, and interviews make sure our workers are heard and respected.

clean and comfortable living accommodation. A dedicated grievance hotline, forums, and interviews are in place to make sure our workers are heard and respected.

HIGHLIGHTS 2019

The annual continuous service award ceremony was held at our headquarters in West Bay, bringing together employees from various directorates, departments and nationalities. In 2019, a total of 1,075 employees were acknowledged for having completed 10 years or more of service for QP. 16 employees were awarded for 40 years of serving QP and one employee for an outstanding 45 years at QP.

Our HSEQ Department in Dukhan organized a worker's welfare forum on November 14, attended by a total of 165 participants from QP, business partners and contractors. The theme of the forum was "committed to excellence in protecting workers' wellbeing" with the objective to discuss current health related challenges, such as food safety, lifestyle diseases, medical rehabilitation and return to work, fitness to work requirements, wellness facilities as well as indoor air quality.

NFE TEMPORARY WORKERS' ACCOMMODATION CAMP

The NFE Temporary Workers' Accommodation Camp, currently under construction, will be a top-notch facility following the latest requirements on health and safety. The Camp facilities incorporate all elements of worker welfare, accommodation, recreation, food safety, and worker consultation. During the construction period, we expect to have a very diverse and large community of people from all over the world, contributing to the success of our projects (NFE & NFS).

The workers will have access to recreational facilities at their accommodation sites, including a recreation hall, a gymnasium, Internet café, places of worship, outdoor movie theatre, library, shops, swimming pool, tennis and volleyball courts as well as a cricket field. These facilities will provide ample opportunity for exercising, recreation and worship, taking into account the diverse background (in terms of nationality, gender and religion) of the workers. The camp will feature temporary offices, warehousing, workshops, lunch tents and facilities, and catering services will be providing nutritious, balanced meals by cultural preferences of a diverse workforce. High quality medical services will be available on-site, including counseling services. Means for camp residents to register comments or grievances about camp and living conditions in a manner free from reprisal or consequences will also be made available.

The training programs offered will aim to boost workers' experience and knowledge and enhance their employability in the future by providing relevant project exposure. Recognition will be given, as and when appropriate to promote a safety.

Our Support to Society

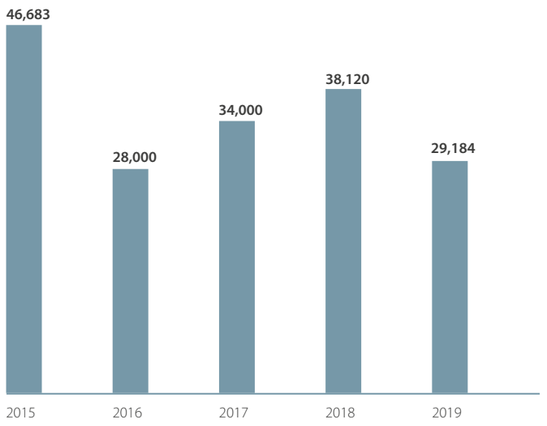
Qatar has experienced strong industrial expansion over the past decade, and it is our obligation to ensure the environment is preserved and that we approach this challenge as an opportunity to establish leadership in the area. Our philanthropic investments will continue to support local communities in a wide variety of ways and create a sustainable, long-term social impact. Our corporate social responsibility actions include:

- Consulting with community members to identify local needs and concerns.
- Collaborating with community partners such as non-profit organizations and schools to support programs related to culture and heritage, the environment, safety and health awareness and sports development.
- Inspiring and engaging our people to support our community activities.
- Implementing a wide range of social development projects as a member of the RLIC Community Outreach Program.
- Launching initiatives related to community development, environmental protection and road safety.
- Sponsoring regional and international events focusing on aspects of the energy sector.

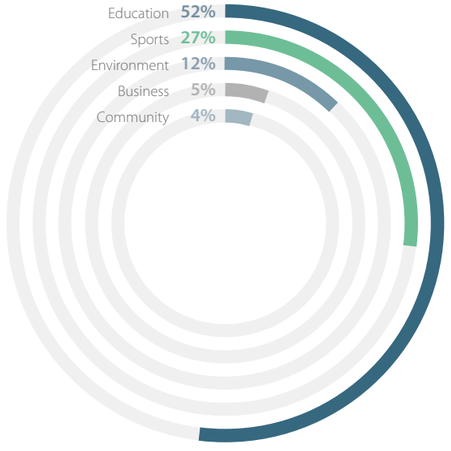
In line with our commitment, QP has continued to support projects that benefit a large number of people, including many local communities. The projects sponsored in 2019 mainly focused on education and training, sports, environmental protection as well as community and business development.

We continue to promote and support sport events locally and within the region

Expenditure towards CSR projects
('000 QAR)



Percentage of Spending on



HIGHLIGHTS 2019

We were again among the major sponsors of the Qatar National Day 2019 celebrations, consistent with our aim to continuously promote and contribute to preserving the country's culture and heritage. Various activities were held around our locations, including sports activities for our employees and workers in the industrial cities.

We continued to support the programs and activities of Teach for Qatar as well as the research centers of Qatar University as part of our long-standing commitment towards the education, training and professional development of Qatari nationals.

We signed up as a major sponsor of the annual Katara Traditional Show Festival, which aims to highlight Qatar's rich maritime traditions, and sponsored the pearl diving and traditional fishing competitions.

We continued to play a leading role in promoting sports development locally and within the region with our support of the 24th Arabian Gulf Cup - Qatar 2019 as the official sponsor, Al Kass Sports Channel, and the Qatar Police Sports Association.

In 2019, we provided support to agricultural development and environmental management in Qatar as we sponsored the AgriteQ & EnviroteQ exhibition, organized by the Ministry of Municipality and Environment.

With our leading role in the RLIC community outreach program, we spearheaded the implementation of projects related to the continued growth and development of communities in Qatar's northern areas. Among the projects completed in 2019 were:

- A road safety awareness campaign targeting high school students.
- The Bedar initiative, benefiting expatriate workers, in partnership with the Ministry of Interior.
- The Magad Al Duha project to reach out to female retirees and the elderly.
- The Al-Bairaq program in partnership with Qatar University, engaging students in science workshops and activities.
- Financing the construction of a swimming pool exclusively for women at the Simaisma Youth Club.
- Continued sponsorship of the first team of the Al Khor Sports Club for the season 2019-2020.
- The beautification of the Al Khor entrance, the fencing of meadows in Al-Ghuwareya, and the improvement of parks and playgrounds through the Al Baraha Project (phase 1).

The Healthcare and Corporate HSEQ department conducted a three-day blood donation campaign in partnership with Hamad Medical Corporation's Blood Donor Center at the QP Headquarters. The campaign was a success, with many donors from QP and neighboring offices taking aprt in the initiative.

During the Tawteen initiative launch event to stimulate the local economy to support the energy sector's supply chain in Qatar

Local Economic Contribution

QP has been a main pillar of the economy of the State of Qatar for almost half a century. Going forward, we seek to further develop our social and economic contribution to foster local economic development to strengthen the local energy sector. Our Tawteen initiative is leading the development of Qatar based vendors and service providers, with an increasing number of registered suppliers based in Qatar. The program is based on three pillars, with the ambition to build a resilient and competitive energy sector in Qatar.

توطين TAWTEEN

INVESTMENT OPPORTUNITIES	~100 investment opportunities across the Energy sector which serves to drive the localization agenda Tawteen
IN-COUNTRY VALUE (ICV)	ICV sets forth the rules and requirements of in-country values into the procurement ways of working and has an impact on the end-to-end supply chain
LOCAL SUPPLIER DEVELOPMENT	Initiative aimed at promoting collaborative relationships between suppliers and Energy companies to share information, improve business processes and support technical/ business development.

As a result, QP and other energy companies in Qatar are changing their internal procurement and finance processes, terms and conditions. Ultimately, suppliers and contractors who are contributing the most to the local economy will acquire a commercial advantage. The program primarily aims to foster the development of the energy sector's local supply chain and to expand small and medium enterprises' base in Qatar.

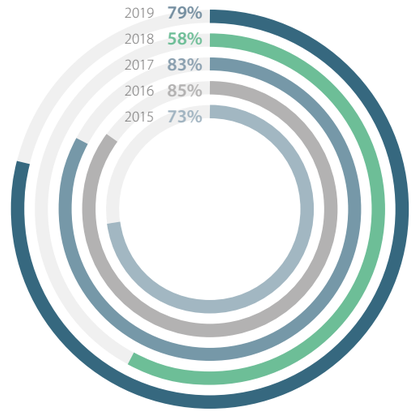
The program currently offers investment opportunities for a range of fields, including engineering services, maintenance, repair, and overhaul, digital technologies, subsurface, chemicals and metals, as well as light equipment, business services and others. It will be extended to more fields in the future. Overall, the program aims to create more than 5,000 white collar jobs and add QAR 8-9 billion additional value to the local economy, translating to a GDP growth of 1.6%.

Suppliers who want to do business with us must meet a number of clear criteria, which include commitments associated with health, safety, environmental protection and governance. In 2019, we spent approximately QAR 11.64 billion in procuring goods and services, 79% of which was awarded to suppliers and contractors based in Qatar.

Abdulaziz Al-ansari
Manager, Supply Chain Localization

We have launched the Tawteen initiative to stimulate the local economy to support the Energy sector's supply chain. Tawteen will increase local demand creation through the In-Country-Value (ICV) program and through offering long-term procurement commitments. These will accelerate development of local Small and Medium Enterprises with programs focused on capability building, technical and commercial support tailored to establish and grow their businesses in Qatar.

Percentage of Spending on



APPENDICES

APPENDIX A

GRI Standards Content Index

GRI Standard	Disclosure	Page number(s) and/or URL(s)
GRI 101: Foundation 2016		
General Disclosures		
GRI 102: General Disclosures 2016	Organizational profile	
	102-1 Name of the organization	Qatar Petroleum
	102-2 Activities, brands, products, and services	7-8
	102-3 Location of headquarters	Doha, Qatar
	102-4 Location of operations	13-14
	102-5 Ownership and legal form	QP is a state-owned public corporation
	102-6 Markets served	13-14
	102-7 Scale of the organization	13-14, 19-20, 68
	102-8 Information on employees and other workers	61-65, 82
	102-9 Supply chain	9-10
	102-10 Significant changes to the organization and its supply chain	No significant changes.
	102-11 Precautionary Principle or approach	21-22
	102-12 External initiatives	13-14, 18, 66-67, 79-80, 98-99
	102-13 Membership of associations	18
	Strategy	
	102-14 Statement from senior decision-maker	3-4
	Ethics and integrity	
	102-16 Values, principles, standards, and norms of behavior	11-12, 15-16, 18
	Governance	
	102-18 Governance structure	16-17, 75-76
	102-22 Composition of the highest governance body and its committees	17, 75-76
	102-23 Chair of the highest governance body	17
	Stakeholder engagement	
	102-40 List of stakeholder groups	77-78
	102-41 Collective bargaining agreements	No law to support collective bargaining
	102-42 Identifying and selecting stakeholders	77-78
	102-43 Approach to stakeholder engagement	77-78
	102-44 Key topics and concerns raised	77-78
	Reporting practice	
	102-45 Entities included in the consolidated financial statements	6
	102-46 Defining report content and topic Boundaries	6
	102-47 List of material topics	26
	102-48 Restatements of information	55, 82
	102-49 Changes in reporting	No significant changes to report scope and boundaries
	102-50 Reporting period	Jan 1 - Dec 31, 2019
	102-51 Date of most recent report	2018
	102-52 Reporting cycle	Annual
	102-53 Contact point for questions regarding the report	6
	102-54 Claims of reporting in accordance with the GRI Standards	6
	102-55 GRI content index	70-73
	102-56 External assurance	86-97

Material Topics		
GRI 200 Economic Standard Series		
Economic Performance		
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	19-20
	103-2 The management approach and its components	19-20
	103-3 Evaluation of the management approach	19-20
GRI 201: Economic Performance 2016	201-1 Direct economic value generated and distributed	19-20
Indirect Economic Impacts		
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	68
	103-2 The management approach and its components	68
	103-3 Evaluation of the management approach	68
GRI 203: Indirect Economic Impacts 2016	203-1 Infrastructure investments and services supported	9-10, 35,37, 68, 52-5, 83
	203-2 Significant indirect economic impacts	68, 35, 37, 52-57, 66-67, 83
Procurement Practices		
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	68
	103-2 The management approach and its components	68
	103-3 Evaluation of the management approach	68
GRI 204: Procurement Practices 2016	204-1 Proportion of spending on local suppliers	68, 83
Anti-corruption		
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	16, 18
	103-2 The management approach and its components	16, 18
	103-3 Evaluation of the management approach	16, 18
GRI 205: Anti-corruption 2016	205-1 Operations assessed for risks related to corruption	16
	205-2 Communication and training about anti-corruption policies and procedures	16
GRI 300 Environmental Standards Series		
Energy		
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	28-29
	103-2 The management approach and its components	28-29
	103-3 Evaluation of the management approach	28-29
GRI 302: Energy 2016	302-1 Energy consumption within the organization	37-38, 81
	302-3 Energy intensity	37-38, 81
	302-4 Reduction of energy consumption	37-38, 81
Water and Effluents		
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	54
	103-2 The management approach and its components	54
	103-3 Evaluation of the management approach	54
GRI 303: Water and Effluents 2018	303-1 Interactions with water as a shared resource	51, 54
	303-2 Management of water discharge-related impacts	54
	303-4 Water discharge	54, 82
Biodiversity		
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	56
	103-2 The management approach and its components	56
	103-3 Evaluation of the management approach	56
GRI 304: Biodiversity 2016	304-2 Significant impacts of activities, products, and services on biodiversity	56
	304-3 Habitats protected or restored	56
Emissions		
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	30-31, 34-37
	103-2 The management approach and its components	30-31, 34-37
	103-3 Evaluation of the management approach	30-31, 34-37
GRI 305: Emissions 2016	305-1 Direct (Scope 1) GHG emissions	81
	305-2 Energy indirect (Scope 2) GHG emissions	81
	305-4 GHG emissions intensity	34, 81
	305-5 Reduction of GHG emissions	31-32, 40,81
	305-7 Nitrogen oxides (NOX), sulfur oxides (SOX), and other significant air emissions	39, 53, 81
Waste		
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	54-55,
	103-2 The management approach and its components	54-55
	103-3 Evaluation of the management approach	54-55
GRI 306: Waste 2020	306-1 Waste generation and significant waste-related impacts	54-55
	306-3 Waste generated	55, 82
	306-4 Waste diverted from disposal	55, 82
GRI 400 Social Standards Series		
Employment		
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	61-65
	103-2 The management approach and its components	61-65
	103-3 Evaluation of the management approach	61-65
GRI 401: Employment 2016	401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees	61-65
Occupational Health and Safety		
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	46-47
	103-2 The management approach and its components	47
	103-3 Evaluation of the management approach	47-49
GRI 403: Occupational Health and Safety 2018	403-1 Occupational health and safety management system	47-48, 50-51
	403-2 Hazard identification, risk assessment, and incident investigation	47-48, 50-51, 58
	403-3 Occupational health services	47-48, 51
	403-5 Worker training on occupational health and safety	48, 50-51
	403-6 Promotion of worker health	48, 50-51, 58
	403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	48, 51, 58
	403-9 Work-related injuries	49, 82
	403-10 Work-related ill health	49, 82
Training and Education		
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	61-64
	103-2 The management approach and its components	61-64
	103-3 Evaluation of the management approach	61-64, 82
	404-1 Average hours of training per year per employee	62, 82
GRI 404: Training and Education 2016	404-2 Programs for upgrading employee skills and transition assistance programs	62-64
Local Communities		
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	66
	103-2 The management approach and its components	66
	103-3 Evaluation of the management approach	66
GRI 413: Local Communities 2016	413-1 Operations with local community engagement, impact assessments, and development programs	66-67
	413-2 Operations with significant actual and potential negative impacts on local communities	66-67

APPENDIX B

Our Organizational Structure

INDUSTRIAL CITIES (VI)

- Manage land, infrastructure & services
- Emergency response coordination
- Environmental monitoring & firefighting
- Medical services & security

INTERNAL AUDIT (IA)

- Provide independent and objective assurance to the QP Board Audit Committee on the effectiveness of QP's governance, risk management, and control practices through a risk-based audit program

HUMAN CAPITAL (VH)

- Attract, retain and develop human capabilities required to support QP's strategic imperatives
- Promote & direct change management initiatives
- Deliver IT services and infrastructure

FINANCE & PLANNING (VF)

- Direct all finance-related matters
- Direct the development of corporate strategy and unified annual corporate planning and budgeting process linked to performance management

COMMERCIAL & BUSINESS DEVELOPMENT (VC)

- Direct & manage the formulation of LNG, upstream & downstream business strategy
- Direct negotiations & renegotiations and renewal of all commercial agreements
- Identify, evaluate & lead commercial execution of new business opportunities across the oil & gas value chain

HSE & BUSINESS SERVICES (VB)

- Direct the development of HSE & governance to drive optimum HSE & Q performance across QP
- Direct the governance of business services (Healthcare & Facility Management)

SUBSURFACE DEVELOPMENT & EXPLORATION (VU)

- Direct & manage all QP domestic & international upstream & downstream assets, both operated & non-operated
- Ensure sustainable plateau of production
- Ensure gas supply to power generation & crude / condensate to refineries
- Provide technical advice on international upstream acquisition/ divestment

CEO OFFICE (CO)

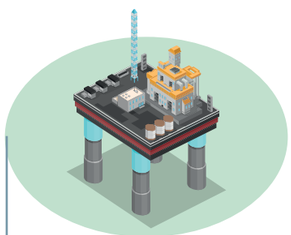
- Manage QP's corporate communications, public relations & CSR
- Direct various services for privatized companies controlled by QP & listed on the Qatar Stock Exchange
- Provide secretarial support for leadership committees of QP and QP affiliates

LEGAL (LC)

- Provide high quality, accurate and timely legal advice and support on all legal risks
- Provide General Secretariat services to the Board and its Sub-committees

MARKETING (VM)

- Market & sell regulated and non-regulated products including crude oil & QP share of GTL specialty products on behalf of QPSPP
- Supply the domestic market with petroleum products & supply feedstock to QP's downstream projects
- Provide shipping and ship chartering services
- Provide governance and marketing.
- Serve the State of Qatar's interest in OPEC

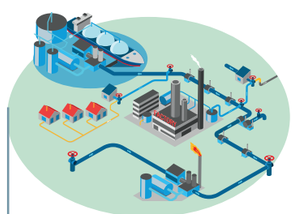


SURFACE DEVELOPMENT (VS)

- Ensure collaboration between QP & its JV/ EPSA/ DPSA partners.
- Provide technical oversight, driving excellence and best practices in HSE & operational efficiency and asset integrity.
- Plan, monitor and manage project development activities for surface facilities, both upstream and downstream
- Manage surface facilities

PROJECTS, ENGINEERING & PROCUREMENT SERVICES (VP)

- Direct the execution of oil & gas and infrastructure & civil projects
- Develop and provide engineering expertise to maximize value from QP-operated & JV assets.
- Direct the management of an integrated supply chain



OPERATIONS (VO)

- Direct QP-owned operational assets in a safe, efficient and reliable manner
- Ensure the uninterrupted supply of oil, gas and refined products to meet the needs of the State of Qatar

APPENDIX C

Stakeholder Engagement

STAKEHOLDERS	WAYS OF ENGAGEMENT	STAKEHOLDER EXPECTATIONS AND PRIORITIES
Employees	■ Performance appraisals ■ Recognition and awards programs ■ Feedback systems ■ Internal newsletters (QP Pulse) ■ Email, QP website and intranet ■ Corporate events ■ Training and development opportunities ■ Regular departmental meetings ■ Town halls	■ Safe and secure working conditions ■ Competitive salary and benefits ■ Access to personal and career development opportunities ■ Open and transparent communications ■ Managers who are supportive and listen ■ Responsible and ethical business practices
Contractors and Suppliers	■ QP website – Supply Management ■ Bidding and tendering process ■ Collaborative monitoring of project delivery ■ Surveys ■ Audits and site visits ■ Incident reports and investigations	■ Support and opportunities for local suppliers ■ Fair contract bidding and awarding practices ■ On-time payments ■ Good working conditions ■ Ethical business dealings ■ Collaboration to ensure workers welfare
Government / Regulators	■ Representation on the Board of Directors and its advisory committees, including regular board meetings ■ Regular reporting on corporate performance ■ Interaction and regular communication with regulatory agencies ■ Qatar e-government website ■ Corporate publications ■ Environmental permit applications	■ Executive reporting on the management of hydrocarbon resources ■ Contributing to social and economic development and quality of life in Qatar ■ Environmental protection ■ Sustainable and strong financial performance ■ Development of national talent ■ Compliance with laws and regulations ■ Compliance with national environmental standards ■ Compliance with applicable regional and international standards, protocol and conventions ■ Emergency preparedness ■ Business continuity ■ Safe, reliable and efficient operations ■ Input to policy and regulatory development ■ Protection of all basic international human rights for all relevant stakeholders ■ Timely reporting of performance
Subsidiaries, Joint Ventures and wider Energy and Industry Sector	■ Exploration and Production Sharing Agreements ■ Development and Production Sharing Agreements ■ Joint Venture and related Agreements ■ Creating synergies among the facilities ■ Technical Services and License Agreements ■ Subsidiary web portal ■ Regular meetings, workshops and dialogue ■ Shared initiatives ■ Conferences and industry events ■ Reporting ■ Cost sharing agreements ■ Joint crisis and emergency preparedness exercises ■ Sponsorship collaborations ■ Papers in energy-related publications ■ Drilling Operations Incident Review Committee ■ Management of industrial cities ■ Land lease and permit to work system	■ Joint working, shared knowledge ■ Development of best practices ■ Reduced capital and operating costs ■ Elevation of industry standards ■ Sharing of technical data, knowledge and expertise ■ Leadership of industry-wide initiatives ■ Collaboration to address emergencies ■ Effective management of industrial cities ■ HSE support in general and Emergency Response, Fire & Rescue services
Investors	■ Annual reports ■ Press releases and newsletters ■ Website ■ Presentation and liaison with Credit Rating Agencies (Fitch, Moody's, Standard & Poors) ■ Presentation to the International Monetary Fund (IMF) ■ State of Qatar Bond prospectuses ■ Exploration and Production Sharing Agreements ■ Development and Production Sharing Agreements ■ HSE performance (Environment and safety incidents record)	■ Clearly defined corporate governance ■ Proactive risk management ■ Business continuity ■ Transparency and disclosure ■ Cost effective operations ■ Attractive range of future investment opportunities ■ Strong financial performance ■ Reduction in GHG emissions ■ High HSE performance with c lean environmental and safety records ■ Efficient transaction processing and transfer of funds to the State of Qatar
Clients	■ Marketing and sales discussions ■ Contracts and agreements ■ Customer satisfaction surveys ■ Feedback through ongoing sales engagement	■ Reliable and efficient operations ■ High-quality products at acceptable prices ■ Excellent customer service ■ Business continuity
Communities (non-profit organizations, educational institutions, community members)	■ Research initiatives ■ Public reports ■ One-to-one meetings ■ Community partnerships and charitable initiatives ■ Media relations activities ■ Career fairs, school visits and internships ■ Community Outreach Program ■ Social media ■ Conferences and workshops	■ Assistance to educational institutions in preparing students to enter the workforce ■ Scholarship grants ■ Technical support to promote research and innovation ■ Investment in community and social development ■ Development of national talent ■ Employment opportunities ■ Regular engagement with local communities ■ Minimal environmental impacts ■ Safe operations ■ Positive impacts on local communities ■ Investment in infrastructure ■ Compliance with laws and regulations ■ Timely access to accurate company information ■ Emissions mitigation plan

APPENDIX D

Alignment With National Sustainability Goals

ENVIRONMENTAL DEVELOPMENT Management of the environment such that there is harmony between economic growth, social development and environmental protection.		
A Balance between Development Needs and Protecting the Environment	Sustainable environment	▪ Managing and measuring our environmental footprint, from energy consumption to responsible use of water, materials and natural habitats ▪ Investing in various energy savings and energy efficiency programs. ▪ Establishing alternate renewable energy resources such as solar power plants.
	Reducing emissions	▪ Continually finding opportunities to reduce our direct and indirect GHG emissions, including through investment in cleaner forms of energy (e.g., LNG, GTL technologies, clean energy/renewable energy and CNG) and adopting industry best practices. ▪ Monitoring the GHG accounting, reporting and verification for all companies operating in Ras Laffan Industrial City. ▪ Introducing a blended diesel in Qatar with up to 50% ultra-low Sulphur GTL diesel. ▪ Continually assessing options to retrofit or replace equipment to reduce NOx emissions.
	Cleaner water and improved waste management	▪ Ensuring water stewardship through efficient and responsible use of water, including operating water treatment facilities at each of our sites. ▪ Managing effluents and waste, including through recycling programs and periodic inspections of our hazardous waste facilities. ▪ Upgrading the capabilities of our Dukhan Sewage Treatment Plant. ▪ Establishment of a comprehensive hazardous waste management center in MIC and industrial non-hazardous waste management facility, in addition to domestic waste transfer station in RLIC.
	Conservation of biodiversity	▪ Investing in local community initiatives such as a five-year fish rescue project in RLC and a state-wide turtle conservation effort. ▪ Conducting marine eco-surveys at regular intervals to assess the environmental impacts of our operations. ▪ Undertaking two major coral relocation and monitoring projects around offshore Halul Island and Ras Laffan Industrial City. ▪ Maintaining established forest and animal conservation areas in RLIC.
	An increasingly environmentally aware population	▪ Creating environmental awareness through activities such as QP's Waste Recycle Awareness event and Turtle Beach Clean Up Day.
	Promoting sustainable environmental practices	▪ Organizing hands-on campaigns such as tree plantings that engage both employees and citizens in environmental stewardship.
	Improved governance and outcomes	▪ Fostering strong ethics, compliance and transparency practices through a range of organizational policies (including the development of separate, stand-alone Environmental and Sustainability documents) that align with the principles outlined in our Code of Conduct and our related Ethics and Compliance Framework. ▪ In partnership with the Global Board Center of IMD Business School in Switzerland, offering the High-Performance Boards Program covering key aspects of corporate governance. ▪ Communicating and embedding QP's business conduct principles as outlined in its Code of Conduct through a series of employee awareness campaigns & initiatives.
HUMAN DEVELOPMENT Development of all its people to enable them to sustain a prosperous society.		
An Educated Population	Education and training	▪ Supporting vocational learning to provide technical and administrative training. ▪ Offering non-technical education programs to help employees improve their performance and develop skills.
	Improving knowledge transfer mechanisms	▪ Supporting youth and new professionals through work-integrated learning programs and internships, such as our new knowledge sharing lecture program.
A Healthy Population: Physically and Mentally	Nurturing a healthy population	▪ Maintaining a Health, Safety, Sustainability and Environmental Policy and providing ongoing safety training, workshops, and communication. ▪ Supporting sector compliance with health requirements. ▪ Providing health education for employees, which they can then share with their families.
	Managing occupational health and safety information to monitor and assess the health status of all employees	▪ Launching a new Safety Excellence Initiative to better coordinate safety-related initiatives across QP. ▪ Offering various employee wellness initiatives, such as our bi-annual healthy lifestyle forums, to promote mental, physical and emotional well-being. ▪ Providing occupational hygiene programs and procedures to help prevent occupational illnesses. ▪ Implementing programs like Asset Integrity Management and Process Safety Management, which reflect our commitment to protecting human life and the natural environment by a safe and reliable operation of assets. ▪ Having procedures in place such as protocols and alarm management systems to prevent and contain major hazards such as fires, explosions, and toxic clouds.
A Capable and Motivated Workforce	Increased and diversified participation of Qataris in the workforce	▪ Implementing the Strategic Qatarization Plan, an industry-wide initiative to develop Qataris to a standard comparable to counterparts globally. ▪ Supporting the recruitment, educational sponsorship, and development of Qatari nationals. ▪ Cultivating business opportunities with local suppliers and contractors in Qatar. ▪ Leading the annual Qatarization Review Meeting for the Energy and Industry Sector, to recognize companies for their accomplishments around Qatarization. ▪ Applying performance-based training and development. ▪ Building leadership capability through leadership programs for top, mid-level and frontline leaders with a focus on development of nationals. ▪ Conducting events/programs such as Mustaqbalna and Tas'ees, which aim to engage and develop Qatari nationals.
SOCIAL DEVELOPMENT Development of a just and caring society based on high moral standards, and capable of playing a significant role in the global partnership for development.		
Social Protection	Social protection	▪ Practicing corporate social responsibility and being transparent about our social, economic, and environmental impacts through annual sustainability reporting. ▪ Hosting a Workers' Welfare-Contractors Awareness Forum to enhance awareness around workers' welfare. ▪ Consulting with community members to identify local needs and concerns. ▪ Collaborating with community partners such as non-profit organizations and schools to support programs related to culture and heritage, health awareness and sports development.
A Sound Social Structure	Enhancing public safety and security	▪ Providing employees and contractors with ongoing Health, Safety and Environment training. ▪ Maintaining business continuity plans and management. ▪ Investing in various public infrastructure projects, such as the construction of a new primary school in Dukhan Township.
ECONOMIC DEVELOPMENT Development of a competitive and diversified economy capable of meeting the needs of, and securing a high standard of living for, all its people for the present and for the future.		
Sound Economic Management	Development of economic infrastructure	▪ Investing in national energy and industry companies. ▪ Supporting innovation in research and development. ▪ Improving operational efficiency and reliability. ▪ Cultivating business opportunities with local suppliers and contractors in Qatar.
Responsible Exploitation of Oil and Gas	Efficient use of natural resources, which includes energy, oil and gas	▪ Improving efficiency to increase resources available for the sustainable development of the State of Qatar.
	Reducing oil and gas costs to maximize efficiency	▪ Reducing the offshore logistics and operating costs for the industry via the Offshore Operators Forum (OOF), a common platform to promote operational excellence in offshore functionalities in terms of HSEQ performance, operating costs, as well as the availability and reliability of upstream assets ▪ Promoting anti-bribery and anti- corruption measures.
Suitable Economic Diversification	Building a diversified economy	▪ Attracting foreign investment into Qatar and expanding Qatar investments across the world. ▪ Cultivating business opportunities with local suppliers and contractors in Qatar. ▪ Focusing on innovation to identify new market/product potential (e.g., alternate, cleaner fuels).

APPENDIX E

Performance Data

	2015	2016	2017	2018	2019
Progression Towards Lower Carbon Emissions					
Emissions[13]					
Total Greenhouse gas emissions (GHGs) - Equity Basis					
Scope 1 - Direct total GHGs (million tons CO2eq)	34.02	33.46	33.28	34.70	33.69
Scope 2 - Energy indirect total GHGs (million tons CO2eq)	0.94	1.19	1.22	1.34	1.69
Total Greenhouse gas emissions (GHGs) - Operated Basis					
Scope 1 - Direct total GHGs (million tons CO2eq)	5.44	5.16	4.56	4.48	4.99
Scope 2 - Energy indirect total GHGs (million tons CO2eq)	0.11	0.34	0.35	0.43	0.76
Total Greenhouse gas emissions (GHGs) from LNG facilities - Equity Basis					
Scope 1 - LNG facilities (million tons CO2eq)	22.88	22.23	22.61	22.05	21.30
Scope 1 - LNG facilities, exported energy (million tons CO2eq)	0.04	0.07	0.07	0.09	0.08
Scope 1 - LNG, sequestration (million tons CO2eq)	0.48	0.47	0.48	0.48	0.56
Scope 2 - LNG facilities (million tons CO2eq)	0.42	0.42	0.41	0.42	0.43
Total Greenhouse gas emissions (GHGs) Breakdown by Sector - Equity Basis					
Scope 1 - Upstream (incl. LNG facilities) (million tons CO2eq)	28.31	27.23	27.06	28.58	27.47
Scope 1 - Downstream (refining, GTL & terminals) (million tons CO2eq)	2.04	1.98	2.25	2.08	2.24
Scope 1 - Petrochemicals (million tons CO2eq)	3.67	4.25	3.97	4.03	3.98
Scope 2 - Upstream (incl. LNG facilities) (million tons CO2 equivalent)	0.57	0.59	0.58	0.70	1.02
Scope 2 - Downstream (refining, GTL & terminals) (million tons CO2eq)	0.05	0.27	0.32	0.31	0.35
Scope 2 - Petrochemicals (million tons CO2eq)	0.32	0.33	0.32	0.33	0.32
Greenhouse gas emissions (GHGs) Intensity					
Upstream (incl. LNG facilities) (million tons CO2eq /million tons hydrocarbon production)	0.256	0.247	0.244	0.240	0.233
LNG facilities (million tons CO2eq /million tons hydrocarbon production)	0.314	0.315	0.310	0.307	0.299
Downstream (refining, GTL & terminals) (million tons CO2eq /million tons hydrocarbon production)	0.225	0.235	0.191	0.171	0.190
Petrochemicals (million tons CO2eq /million tons hydrocarbon production)	0.604	0.629	0.586	0.614	0.612
Flaring					
Flaring (upstream, Operated & Non-Operated) (million tons CO2eq)	2.21	2.37	2.60	2.46	2.12
Flaring (upstream, Operated & Non-Operated) (MMSCF hydrocarbon flared)	38,260	39,724	40,728	35,409	30,507
Flaring (LNG) (MMSCF hydrocarbon flared)	29,217	26,558	24,442	21,091	16,894
Flaring Intensity (LNG) (MMSCF hydrocarbon flared / MMSCF sweet gas production, %)	0.57	0.59	0.54	0.47	0.38
Other Emissions					
SO2 emitted (tons)*	73,437	74,451	275,153	227,022	73,697
NOX emitted (tons)*	11,953	12,026	11,387	11,222	10,970
VOC (tons)	1,846	1,962	1,896	1,901	1,860
Methane intensity (LNG facilities) (% of sweet gas)	0.20	0.22	0.25	0.21	0.19
** Values changed (SO2, NOx due to change in methodology for the years 2015-2018) compared to 2018 SR.*					
Energy					
Direct energy consumption (GJ) (Opeartaed assets)	81,253,165	68,247,488	63,162,260	61,247,627	65,703,102
Upstream (incl. LNG facilities) (gigajoules per ton production)	3.85	3.72	3.68	3.67	3.69
Refining & GTL (gigajoules per ton production)	1.54	1.49	2.05	1.26	1.38
Chemical plants (gigajoules per ton production)	20.29	20.68	20.45	20.37	21.35

13 Prior to 2019, QP used the SANGEA™ software to quantify and report its greenhouse gas (GHG) emissions. The software includes the GHG calculation methodologies from both API Compendium 2009 and related subparts of the US EPA MRR (Subparts C, P, W and Y). In 2019, QP onshore assets followed the EU ETS Monitoring and Reporting Regulation (MRR) to quantify and report GHG emissions. The GWPs (global warming potentials) used in 2019 were based on the 4th Assessment Report of the IPCC with 100-year time horizon.

Water Management[14]					
Water discharged other than to sea (m3)	7,974,250	7,298,345	11,030,714	13,630,788	14,122,336
Water discharged to sea (excludes non-contact cooling water) (m3)	151,084	136,007	168,510	295,105	522,935
Water recycled or reused (m3)	1,438,093	1,453,878	1,501,936	1,552,201	1,578,736
Waste Management					
Total waste generated during the year (tons)	49,012	52,599	57,921	73,749*	81,357
Non-hazardous waste generated (tons)	42,997	46,830	48,701	68,146*	74,360
Hazardous waste generated (tons)	6,014	5,769	9,220	5,603*	6,998
Total waste recycled (tons)	980	1,290	1,379	3,017	2,647
Non-hazardous waste recycled (tons)	256	592	668	1,043	1,062
Hazardous waste recycled (tons)	724	698	711	1,974	1,584
Percentage of non-hazardous waste generated	87.7%	89.0%	84.1%	92.4%	91.4%
Percentage of hazardous waste generated	12.3%	11.0%	15.9%	7.6%*	8.6%
Percentage of non-hazardous waste recycled	0.6%	1.3%	1.4%	1.5%*	1.4%
Percentage of hazardous waste recycled	12.0%	12.1%	7.7%	35.2%*	22.6%
**numbers restated*					
Safeguarding Our Workforce and Operating Safely					
Safety of Our Workforce					
Employee headcount	N/A	8,682	8,468	8,142	8,536
Total employee work hours	20,715,363	18,051,393	17,599,470	16,364,732	16,092,008
Total contractor work hours	67,448,687	72,154,510	62,158,310	59,225,391	54,599,800
Employee lost time injuries	8	2	4	9	4
Contractor lost time injuries	27	20	8	11	14
Total lost-time injury rate (LTIR) of employees and contractors) (per 1 million working hours)	0.40	0.24	0.15	0.26	0.25
LTIR of employees (per 1 million working hours)	0.39	0.11	0.23	0.55	0.25
LTIR of contractors (per 1 million working hours)	0.40	0.28	0.13	0.19	0.26
Employee total recordable injuries	18	9	12	16	11
Contractor total recordable injuries	48	49	38	29	30
Total recordable injury rate (TRIR) of employees and contractors (per 1 million working hours)	0.75	0.64	0.63	0.60	0.58
TRIR of employees (per 1 million working hours)	0.87	0.50	0.68	0.98	0.68
TRIR of contractors (per 1 million working hours)	0.71	0.68	0.61	0.49	0.55
Total fatalities	0	1	0	0	2
Employee fatalities	0	0	0	0	0
Contractor fatalities	0	1	0	0	2
Work related illnesses (per 1 million hours worked)	N/A	0.07	0.19	0.22	0.28
Heat stress events (employees and contractors)	N/A	4	14	13	13
Growing Our Talents					
Training hours	N/A	106,649	117,056	193,073	206,005
Average hours of training per employee	N/A	12.28	13.82	23.71	24.13
Process Safety and Asset Integrity					
Number of Tier 1 process safety incidents	0	3	2	1	1
Number of Tier 2 process safety incidents	0	0	10	8	8
Number of Tier 3 process safety incidents	250	400	645	525	632

Tier 1 and Tier 2 : As per IOGP Report 456, an unplanned or uncontrolled Loss of Primary Containment is deemed to be a tier 1 or a tier 2 incident based on the severity of the harm or damage caused, and the amount of material released.
Tier 3: Most incidents are classified as tier 3 incidents, which consist of minor leaks of oil, gas, hydrocarbons, other chemicals and water.

14 The minimum standards set for the quality of effluent discharge are according to the State Environmental Standards and Consent To Operate (CTO) permit requirements of each different operations and work location. All types of water and effluent are treated to meet CTO requirements and treatment facility are designed according to the same limits. Our discharged limit for water parameters are governed by environmental regulations and CTO requirements. However, we have some incidents of non-compliance with discharge limit due to upset in operations.

Creating Prosperity and Our Social Responsibility					
Economic Performance					
Crude oil production (barrels per day)	232,540	234,697	230,394	228,707	245,812
North Field Alpha Lean Gas (KMMBTU/day)	558	652	681	694	681
Total refinery throughput (barrels per day)	109,786	117,772	113,264	101,656	110,078
Total revenue ('000 QAR)	99,160,599	88,003,196	95,217,970	118,507,388	108,331,608
Total expenses ('000 QAR)	72,297,226	54,098,208	55,872,271	73,637,723	69,415,662
Net operating profit ('000 QAR)	26,863,373	33,904,888	39,345,699	51,457,387	45,097,330
Share in profits of joint ventures and associates ('000 QAR)	55,188,508	29,432,091	34,104,224	48,934,617	39,158,605
Net profit for the year ('000 QAR)	64,171,160	49,536,531	58,404,836	86,530,096	71,882,813
Local Economic Contribution					
Total procurement spending ('000 QAR)	5,810,000	8,740,000	11,460,000	8,350,000	11,640,000
Total procurement spending on suppliers based in Qatar ('000 QAR)	4,230,000	7,420,000	9,500,000	4,820,000	9,200,000
Percentage of local procurement spending (%)	73%	85%	83%	58%	79%
Number of registered suppliers	8,882	9,530	10,194	10,055	5,268
Number of registered suppliers based in Qatar	3,783	3,960	4,102	4,262	2662
Percentage of Qatari registered suppliers (%)	43%	42%	40%	42%	51%
Support to our Society					
Amount spent for CSR projects (QAR)	46,683,000	28,000,000	34,000,000	38,120,000	29,184,350

APPENDIX F

Acronyms

AGRP	Acid Gas Recovery Plant
ALARP	As low as reasonably possible level
BAU	Business As Usual
BBL/D	Barrels Per Day
BCM	Business Continuity Management
BCMS	Business Continuity Management Systems
BCP	Business Continuity Plan
BH	Bul Hanine
BPC	Business Planning and Consolidation
BTU	British Thermal Unit
CAFÉ	Corporate Average Fuel Economy
CAPEX	Capital Expenditure
CCA	Central Compression Area
CCS	Carbon Capture and Storage / Sequestration
CDM	Clean Development Mechanism
CEMS	Continuous Emissions Monitoring Systems
CEO	Chief Executive Officer
CER	Certified Emission Reductions
CFA	Chartered Financial Analyst
CFL	Central Food Laboratory
CIF	Collective Investment Scheme
CNG	Compressed Natural Gas
CO2eq	Carbon dioxide equivalent
CSR	Corporate Social Responsibility
CTO	Consent to Operate
DCS	Distributed Control System
DPSA	Development and Production Sharing Agreements
EDF	Environmental Defense Fund
EE	Energy Efficiency
EIA	Environmental Impact Assessment
EITI	Extractive Industry Transparency Initiative
ELT	Executive Leadership Team
EOR	Enhanced Oil Recovery
EPA	Environmental Protection Agency, USA
EPSA	Exploration and Production Sharing Agreements
ERM	Enterprise Risk Management
ESG	Environment, Social & Governance
EU ETS	European Union Emissions Trading Scheme
EV	Electric Vehicle
FEED	Front End Engineering Design
FG	Fuel Gas
FIFA	Fédération Internationale de Football Association
GDP	Gross Domestic Product
GHG	Greenhouse gas
GRI	Global Reporting Initiative
GSAS	Global Sustainability Assessment System
GTL	Gas-To-Liquid
GTO	Governance Transformation Office
GWPs	Global Warming Potentials
H.E.	His Excellency
H2S	Hydrogen Sulfide
HAZMAT	Hazardous Materials
HCl	Hydrochloric Acid
HDPE	High Density Poly Ethylene
HSEQ	Health, Safety, Environment and Quality
ICV	In-Country-Value
IEA	International Energy Agency
IFRS	International Financial Reporting Standards
ILO	International Labor Organization
IMO	International Maritime Organization under acronyms
IOGP	International Association of Oil & Gas Producers
IPCC	Intergovernmental Panel on Climate Change
IPIECA	Global oil and gas industry association for advancing environmental and social performance
IPPF	Institute of Internal Auditors Professional Practices Framework
ISO	International Organization for Standardization
IUCN	International Union for Conservation of Nature
JAOC	Joint Air Operations Center
JBOG	Jetty Boil-off Gas
JV	Joint Venture
KAHRAMAA	Qatar General Electricity and Water Corporation
KBPD	Thousands Barrels per day
LDAR	Leak Detection and Repair
LDV	Light Duty Vehicle
LNG	Liquefied Natural Gas
LPG	Liquefied Petroleum Gas
LTIR	Lost-Time Injury Rate
MBOE	Million Barrel of Oil Equivalent
MENA	Middle East and North Africa
MIC	Mesaieed Industrial City
MIS	Mesaieed International School
MMBTU/D	Million British Thermal Units per Day
MME	Ministry of Municipality and Environment
MMSCFD	Million Standard Cubic Feet per day
MMSCM	Million standard cubic meters
MMTPA	Million Metric Tons Per Annum
MOPH	Ministry of Public Health
MRO	Maintenance, Repair, and Overhaul
MtCO2 eq	MIllion tons of CO2 equivalent

MTPA	Metric ton per annum
MWp	Mega Watt Peak
NBSAP	National Biodiversity Strategy and Action Plan
NDS	National Development Strategy
NFA	North Field Alpha
NFE	North Field East
NFS	North Field South
NGL	Natural Gas Liquids
NH3	Ammonia
NORM	Naturally Occurring Radioactive Materials
NOx	Nitrogen oxide
OE	Operational Excellence
OGI	Optical gas imaging, under acronyms
OHSAS	Occupational Health and Safety Assessment Series
OOF	Offshore Operators Forum
OXY	Occidential Petroleum of Qatar
P&ID	Piping and Instrumentation Diagram
PDP	Personal Development Plan
PFD	Process Flow Diagram
PM10	Particulate Matter 10
PR	Public Relations
PV	Photovoltaic
QAR	Qatari Riyal
QNB	Qatar National Bank
QNV	Qatar National Vision
QOGI	Quantitative Optical Gas Imaging
QP	Qatar Petroleum
QRG	Qatar Reference Gas
RLIC	Ras Laffan Industrial City
RLIC COP	RLIC Community Outreach Program
RLPP	Ras Laffan Petrochemical Project
RSA	Regional Organization for Protection of Marine Environment Sea Area
SCF	Standard Cubic Foot
SDGs	Sustainable Development Goals
SO2	Sulfur dioxide
SOC	Safety Observations Conversation
TBT	Toolbox Talks
TRCF	Total Recordable Case Frequency
TRIR	Total Recordable Injury Rate
UN	United Nations
VOC	Volatile Organic Compound
WEO SDS	World Energy Outlook Sustainable Development Scenario
WHO	World Health Organization

APPENDIX G

Assurance Statements

ASSURANCE STATEMENT RELATED TO GHG EMISSIONS INVENTORY FOR 2013-2019 PREPARED FOR QATAR PETROLEUM

TERMS OF ENGAGEMENT

This Assurance Statement has been prepared for Qatar Petroleum.

Lloyd's Register (LR) was commissioned by Qatar Petroleum to verify its Qatar Gas Direct and Indirect (Scope 1 and 2) Greenhouse Gas (GHG) emissions from its Ras Laffan Industrial City (RLC) for the period 01 Jan 2013 to 31 Dec 2019, as disclosed in its Sustainability Report 2019.

RLC comprises Qatar Gas Operating Company – North site (previously known as Qatar Gas Operating Company) and Qatar Gas Operating Company – South site (previously known as RASGAS or Ras Gas Company Limited).

MANAGEMENT RESPONSIBILITY

Qatar Petroleum management was responsible for providing the verification opinions/ statements from KIWA and SGS, summarized yearly GHG emission inventories for Scope 1 for the period 01 Jan 2013 to 31 Dec 2019.

Qatar Petroleum management was responsible for providing the Scope 2 GHG inventories, data and information for the period 01 Jan 2013 to 31 Dec 2019 and maintaining effective internal controls over the data and information disclosed. LR's responsibility was to carry out an assurance engagement on the Scope 1 and Scope 2 GHG emissions for this period in accordance with our contract with Qatar Petroleum.

Ultimately, the Report has been approved by, and remains the responsibility of Qatar Petroleum.

LR'S APPROACH

Our verification has been conducted in accordance with ISO 14064–3:2006, *'Specification with guidance for validation and verification of greenhouse gas assertions'* to provide assurance that GHG data as presented in the Report have been prepared in conformance with the following criteria:

- ISO 14064–1:2006, *'Specification with guidance at the organizational level for quantification and reporting of greenhouse gas emissions and removals.'*
- API Compendium 2009 for Greenhouse Methodologies for Oil and Gas Industries,
- Greenhouse Gas protocol on Corporate Accounting and reporting (Revised edition, Jan 2015) as developed by WRI/WBSCD for calculating and reporting GHG emissions.
- Qatar Petroleum Accounting and Reporting Procedure for RLC Greenhouse Gases

To form our conclusions the assurance engagement covered the following activities:

- In view of the current covid-19 circumstances and travel restrictions, used information and communication technology to share, view and discuss on process, data collection, collation and control.
- Reviewed QP GHG Accounting and Reporting procedures, GHG Accounting and Reporting Plan and Quality Management plan for Qatar Gas
- Reviewed verification opinions expressed by KIWA (2013-17) and by SGS (2018-2019) for Scope 1 emissions carried out to a reasonable level of assurance against EU MRR 2012 to confirm summarised information within the Sustainability Report 2019 aligns with it.
- Sampled GHG inventories for Scope 2 emissions based on strategic and risk analysis conducted and verified data through cross-checking calculations, fuel composition, emission factors as well as alternate calculations.
- Interviewed relevant staff of the organization responsible for managing GHG emissions data and records

LEVEL OF ASSURANCE & MATERIALITY

The opinion expressed in this Assurance Statement has been formed based on a limited level of assurance and at a materiality of the professional judgment of the Verifier.

LR'S OPINION

Based on LR's approach nothing has come to our attention that would cause us to believe that the total direct GHG emissions and energy indirect GHG emissions disclosed by Qatar Petroleum in its Sustainability Report 2019 for Scope 1 and Scope 2 GHG emissions for the period 01 Jan 2013 to 31 Dec 2019, as summarized in the tables below, are not materially correct.

LR'S RECOMMENDATIONS

Qatar Petroleum should:

- Have a standardized methodology for accounting and reporting of Scope 2 emissions by RLC.
- Apply a common grid emission factor across all facilities for calculation of Scope 2 emissions based on electricity import.
- Periodically review accuracy of calculated pump factors used in calculation of Scope 2 emissions due to pumping of sea-water for cooling and desalinated water.

Signed
Usman Haider
LR Lead Verifier
On behalf of
Lloyd's Register Qatar LLC

Dated: 30 Oct 2020

LR reference number: QAT00000050

Table 1: Summarised GHG data for QGN[1] for years 2013-2019

Calendar Year	Scope 1 Tonnes CO2e	Scope 2 Location-Based[2] Tonnes CO2e
2013	20,010,351	616,850
2014	18,654,205	596,624
2015	18,608,970	591,559
2016	18,367,711	606,643
2017	19,112,406	633,837
2018	18,481,144	674,704
2019	18,353,166	658,952

Notes:
1. QGN – Qatar Gas Operating Company Limited - North Site
2. Scope 2, Location-based is defined in the GHG Protocol Scope 2 Guidance, 2015.

Table 2: Summarised GHG data for QGS for years 2013-2019

Calendar Year	Scope 1 Tonnes CO2e	Scope 2 Location-Based[2] Tonnes CO2e
2013	17,544,109	520,581
2014	16,806,989	404,412
2015	17,514,367	366,753
2016	16,835,729	375,119
2017	16,750,120	358,666
2018	16,655,809	350,537
2019	15,547,466	383,102

Notes:
1. QGS – Qatar Gas Operating Company Limited - South Site
2. Scope 2, Location-based is defined in the GHG Protocol Scope 2 Guidance, 2015.

Table 3: Summarised GHG data for QG-LNG for years 2015-2019

Calendar Year	Scope 1 Million Tonnes CO2e QP Equity Basis	Scope 2 Location-Based[1] Million Tonnes CO2e QP Equity Basis
2015	22.8771	0.4190
2016	22.2293	0.4220
2017	22.6135	0.4116
2018	22.0480	0.4199
2019	21.3012	0.4316

Notes:
1. Scope 2, Location-based is defined in the GHG Protocol Scope 2 Guidance, 2015.

Table 4: Summarised GHG data for Qatargas GHG sequestration for 2019

2019 Qatargas GHG sequestration (Scope 1)	Million Tonnes CO2e Total	Million Tonnes CO2e QP Equity Basis
Total	1.2	0.61
LNG only	0.81	0.56

Notes:
1. Scope 2, Location-based is defined in the GHG Protocol Scope 2 Guidance, 2015.

ASSURANCE STATEMENT

The Assertion of Environmental & Safety Parameters
for the calendar year 2019 prepared by:

Qatar Petroleum
QP Assets ((QP refinery (MIC, Qatar), QP NGL complex (MIC, Qatar), QP O&GP (Dukhan, Qatar), QP Offshore (Qatar))

has been verified by Lloyd's Register Qatar LLC in accordance with:

LRQA procedures

as conforming to the requirements of IPIECA
The assurance has been formed on the basis of a limited level of assurance
and at a materiality of the professional judgment of the Verifier

Signed:
Usman Haider
Lead Verifier
On behalf of Lloyd's Register Qatar LLC

Date: 30 Oct 2020

LR reference number: QAT00000050

This summary is not valid without the full Assurance Statement attached on pages 2 to 5 to which it applies.

ASSURANCE STATEMENT RELATED TO CY 2019 ASSERTION OF ENVIRONMENTAL & SAFETY PARAMETERS PREPARED FOR QATAR PETROLEUM

TERMS OF ENGAGEMENT

This Assurance Statement has been prepared for Qatar Petroleum.

Lloyd's Register was commissioned by Qatar Petroleum to assure its Assertion of Environmental & Safety Parameters in its Sustainability Report 2019 for the calendar year 2019, (hereafter referred to as "the Report") that relate to QP Assets.

MANAGEMENT RESPONSIBILITY

Qatar Petroleum management was responsible for preparing the Report and for maintaining effective internal controls over the data and information disclosed. LR's responsibility was to carry out an assurance engagement on the Report in accordance with our contract with Qatar Petroleum.

Ultimately, the Report has been approved by, and remains the responsibility of Qatar Petroleum.

LR'S APPROACH

Our verification has been conducted in accordance with LRQA procedures, to provide assurance that data & information as presented in the Report is true and fair.

To form our conclusions the assurance engagement was undertaken as a sampling exercise and covered the following activities:

- In view of the current covid-19 circumstances and travel restrictions, used information and communication technology to share, view and discuss on process, data collection, collation and control.
- Reviewed the QP Environmental performance indicators and cross checked through monthly performance reports & data checks by run reports from online systems & software applications in implementation.
- Reviewed the QP Safety performance indicators and cross checked through monthly performance reports & data checks by run reports from online systems & software applications in implementation.
- Interviewed relevant staff of the organization responsible for managing the environmental & safety performance and records.

LEVEL OF ASSURANCE & MATERIALITY

The opinion expressed in this Assurance Statement has been formed based on a limited level of assurance and at a materiality of the professional judgment of the Verifier.

LR'S OPINION

Based on LR's approach nothing has come to our attention that would cause us to believe that the values of environmental & safety parameters as disclosed in the Sustainability Report 2019 and as summarized in Annex-UHX-1 & Annex-UHX2 are not materially correct.

Signed

Dated: 08 Oct 2020

Usman Haider
LR Lead Verifier
On behalf of
Lloyd's Register Qatar LLC

LR reference number: QAT00000050

Due to inherent limitations in any internal control, it is possible that fraud, error, or non-compliance with laws and regulations may occur and not be detected. Further, the verification was not designed to detect all weakness or errors in internal controls so far as they relate to the requirements set out above as the verification has not been performed continuously throughout the period and the verification carried out on the relevant internal controls were on a test basis. Any projection of the evaluation of control to future periods is subject to the risk that the processes may become inadequate because of changes in conditions, or that the degree of compliance with them may deteriorate.

The English version of this Assurance Statement is the only valid version. Lloyd's Register assumes no responsibility for versions translated into other languages.

Annex-UHX-1 - Environmental Parameters

Indicator	Unit	Total for CY2019
Water discharged (to Sea)	m3	522,935
Water discharged (other than Sea)	m3	14,122,336
Water recycled or reused	m3	1,578,736
SO2 emitted	Tonnes	73,697
NOx emitted	Tonnes	10,970
VOC	Tonnes	1,860
Total waste generated during the year	Tonnes	81,357
Non-hazardous waste generated	Tonnes	74,360
Hazardous waste generated	Tonnes	6,998
Total waste recycled	Tonnes	2,647
Non-hazardous waste recycled	Tonnes	1,062
Hazardous waste recycled	Tonnes	1,584
Percentage of non-hazardous waste generated	Percentage	91.4%
Percentage of hazardous waste generated	Percentage	8.6%
Percentage of non-hazardous waste recycled	Percentage	1.4%
Percentage of hazardous waste recycled	Percentage	22.6%
Direct energy use	GJ	65,703,102
Direct GHG emissions (scope 1)	Tonnes CO2 eq	4,985,687
Indirect GHG emissions (scope 2)	Tonnes CO2 eq	759,525
Flaring	mmscf	12,125

Annex-UHX-2- Safety Parameters

Parameter	Quantity
QP Employees	
Fatalities (FAT)	0
Lost Workday Cases (LWC)	4
Restricted Work Cases (RWC)	3
Medical Treatment Cases (MTC)	4
Total Recordable injuries (TRI)	11
Lost Time Injuries (LTIs)	4
No. Of Lost Work Days	21
Workhours	16,092,008
Fatality rate (FAT per Mmhrs)	0.00
LTI rate (LTIF)	0.25
TR injury rate (TRIR)	0.68
Lost day rate (per Mmhrs)	1.30
Tier 1 PSE	1
Tier 2 PSE	7
Tier 3 PSE	630
Contractors	
Fatalities (FAT)	2
Lost Workday Cases (LWC)	12
Restricted Work Cases (RWC)	6
Medical Treatment Cases (MTC)	10
Total Recordable injuries (TRI)	30
Lost Time Injuries (LTIs)	14
No. Of Lost Work Days	202
Workhours	54,599,800
Fatality rate (FAT per Mmhrs)	0.04
LTI rate (LTIF)	0.26
TR injury rate (TRIR)	0.55
Lost day rate (per Mmhrs)	3.70
Tier 1 PSE	1
Tier 2 PSE	8
Tier 3 PSE	632

ASSURANCE STATEMENT

The GHG Assertion
for the calendar year 2019 prepared by:

Qatar Petroleum

has been verified by Lloyd's Register Qatar LLC in accordance with:

ISO 14064-3:2006[1]

as conforming to the requirements of

ISO 14064-1:2006[2]

The assurance has been formed on the basis of a limited level of assurance
and at a materiality of the professional judgment of the Verifier

Scope of GHG emissions All Assets	Million Tonnes CO2e Total	Million Tonnes CO2e QP Equity Basis
Direct GHG emissions (Scope 1)	95.23	37.49
Energy indirect GHG emissions (Scope 2, Location-based)	5.01	2.69
Total	100.24	40.18

Note 1: Scope 2, Location-based and Scope 2, Market-based are defined in the GHG Protocol Scope 2 Guidance, 2015.

Signed:

Date: 30 Oct 2020

Usman Haider
Lead Verifier
On behalf of Lloyd's Register Qatar LLC

LR reference number: QAT00000050

This summary is not valid without the full Assurance Statement attached on pages 2 to 5 to which it applies.

1 ISO 14064:2006 Greenhouse gases — Part 3: Specification with guidance for the validation and verification of greenhouse gas assertions
2 ISO 14064:2006 Greenhouse gases — Part 1: Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals

ASSURANCE STATEMENT RELATED TO GHG EMISSIONS INVENTORY FOR CALENDAR YEAR 2019 PREPARED FOR QATAR PETROLEUM

TERMS OF ENGAGEMENT

This Assurance Statement has been prepared for Qatar Petroleum.

Lloyd's Register was commissioned by Qatar Petroleum to assure its Greenhouse (GHG) Emissions Inventory for the calendar year 2019, (hereafter referred to as "the Report").

The Report relates to direct GHG emissions and removals and energy indirect GHG emissions from facilities owned and operated or under equity control by Qatar Petroleum listed in Annex 1.

An equity-based approach towards consolidation was used by Qatar Petroleum. The equity percentages used were those provided by Qatar Petroleum and have not been verified.

MANAGEMENT RESPONSIBILITY

Qatar Petroleum management was responsible for preparing the Report and for maintaining effective internal controls over the data and information disclosed. LR's responsibility was to carry out an assurance engagement on the Report in accordance with our contract with Qatar Petroleum.

Ultimately, the Report has been approved by, and remains the responsibility of Qatar Petroleum.

LR'S APPROACH

Our verification has been conducted in accordance with ISO 14064–3:2006, 'Specification with guidance for validation and verification of greenhouse gas assertions' to provide assurance that GHG data as presented in the Report have been prepared in conformance with the following criteria:

- ISO 14064–1:2006, 'Specification with guidance at the organizational level for quantification and reporting of greenhouse gas emissions and removals.'
- API Compendium 2009 for Greenhouse Methodologies for Oil and Gas Industries,
- Greenhouse Gas protocol on Corporate Accounting and reporting (Revised edition, Jan 2015) as developed by WRI/WBSCD for calculating and reporting GHG emissions.
- International Petroleum Institute Environmental Conservation Association (IPIECA) Petroleum Industry Guidelines for Reporting Greenhouse Gas Emissions, 2011,

To form our conclusions the assurance engagement was undertaken as a sampling exercise and covered the following activities:

- In view of the current covid-19 circumstances and travel restrictions, used information and communication technology to share, view and discuss on process, data collection, collation and control.
- Reviewed QP GHG Accounting and Reporting procedures, GHG Accounting and Reporting Plan and Quality Management plan for Qatar Gas and Companies reporting their GHG as per the EU MRR methodology as well as other relevant methodologies applied by joint venture operating entities.
- Sampled GHG inventories based on strategic and risk analysis of the following entities: Qatar Gas, QAFCO, QAPCO, Qatar Steel, QATALUM, MPCL, QEWC, South Hook and TEPC Congo.
- Verified data of sampled GHG inventories through cross-checking calculations, fuel composition, emission factors as well as alternate calculations to a limited level of assurance.
- For Qatar Gas, verified Scope 1 GHG emissions based on external verification statements available from independent verifier and cross-checked the summation of total emissions.
- Interviewed relevant staff of the organizations responsible for quantifying GHG emissions and managing data and records

LEVEL OF ASSURANCE & MATERIALITY

The opinion expressed in this Assurance Statement has been formed based on a limited level of assurance and at a materiality of the professional judgment of the Verifier.

LR'S OPINION

Based on LR's approach nothing has come to our attention that would cause us to believe that the total direct GHG emissions, GHG removals and energy indirect GHG emissions disclosed in the Report as summarized in the Tables below are not materially correct, except for the following qualifications:

- Not all entities followed the QP GHG Accounting and Reporting procedures.
- The GWPs used to calculate emissions from CH4 and N2O were not consistent across all assets.
- A common grid emission factor was not used across all assets in Qatar for the calculation of Scope 2 emissions based on electricity imported.

The differences caused by these qualifications are not material.

Signed

Dated: 30 Oct 2020

Usman Haider
LR Lead Verifier
On behalf of
Lloyd's Register Qatar LLC

LR reference number: QAT00000050

Annex 1

Assets in QATAR
Qatargas (QG)
Qatar Fertiliser Company (QAFCO)
Qatar Fuel Additives Company (QAFAC)
Qatar Petrochemical Company (QAPCO)
Qatar Chemical Company (Q-Chem) (MIC & RLC, Qatar)
Dolphin Energy (DEL)
Pearl GTL
Oryx GTL
Qatar Petroleum Refinery (QP Refinery)
Qatar Steel (Qsteel)
Qatar Aluminium (Qatalum)
Umm Al Houl Power Company (UHPC)
Qatar Power Company (QPower)
Ras Girtas Power Company (RGPC)
Mesaieed Power Company Ltd (MPCL)
Ras Laffan Power Company (RLPC)
Qatar Electricity and Power Company (QEWC)
QP Natural Gas Liquids Complex (NGL Complex)
QP O&GP (Dukhan)
QP Offshore (Qatar)
North Oil Company (NOC)
Qatar Petroleum Development Co. Ltd. (Japan) (QPD)
Assets INTERNATIONAL
South Hook LNG (Terminal), UK
QPI and Shell Petrochemicals (Singapore) Pte Ltd (QSPS)
North Adriatic LNG (Terminal), Italy
Parque das Conchas (BC-10, Brazil)
Total E&P Congo (TEPC)

Table 1. Summary of Qatar Petroleum, GHG Emissions Inventory 2019 calendar year

Scope of GHG emissions All Assets	Million Tonnes CO2e Total	Million Tonnes CO2e QP Equity Basis
Direct GHG emissions (Scope 1)	95.23	37.49
Energy indirect GHG emissions[1] (Scope 2, Location-based)	5.01	2.69
Total	100.24	40.18

Note 1: Scope 2, Location-based is defined in the GHG Protocol Scope 2 Guidance, 2015.

Further Breakdown of above overall Figures as below:

Scope of GHG emissions Split Qatar / International Assets	Million Tonnes CO2e Total	Million Tonnes CO2e QP Equity Basis
GHG emissions - State of Qatar Assets (Scope 1 + Scope 2, Location-based)	95.19	39.06
GHG emissions - International Assets (Scope 1 + Scope 2, Location-based)	5.05	1.12
Total	100.24	40.18

Further Breakdown of above overall Figures as below:

Scope of GHG emissions By Sector	Million Tonnes CO2e Total	Million Tonnes CO2e QP Equity Basis
Upstream Sector Direct GHG emissions (Scope 1)	44.51	27.47
Downstream Sector Direct GHG emissions (Scope 1)	11.87	2.24
Petrochemicals Sector Direct GHG emissions (Scope 1)	11.01	3.98
Total	67.39	33.69
Upstream Sector Energy indirect GHG emissions (Scope 2, Location-based)	1.46	1.02
Downstream Sector Energy indirect GHG emissions (Scope 2, Location-based)	0.44	0.35
Petrochemicals Sector Energy indirect GHG emissions (Scope 2, Location-based)	1.01	0.32
Total	2.92	1.69

2019 Qatargas GHG sequestration[2] (Scope 1)	Million Tonnes CO2e Total	Million Tonnes CO2e QP Equity Basis
Total	1.2	0.61

Note 2: GHG sequestration is applicable in QG South, through removal of CO_2 present in the feed (inherent CO_2) during processing in the onshore LNG production facilities.

This Assurance Statement is subject to the provisions of this legal section:

This Assurance Statement is only valid when published with the Report to which it refers. It may only be reproduced in its entirety.

Lloyd's Register Group Limited, its affiliates and subsidiaries, including Lloyd's Register Qatar LLC, and their respective officers, employees or agents are, individually and collectively, referred to in this Legal Section as 'Lloyd's Register'. Lloyd's Register assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant Lloyd's Register entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract.

Due to inherent limitations in any internal control, it is possible that fraud, error, or non-compliance with laws and regulations may occur and not be detected. Further, the verification was not designed to detect all weakness or errors in internal controls so far as they relate to the requirements set out above as the verification has not been performed continuously throughout the period and the verification carried out on the relevant internal controls were on a test basis. Any projection of the evaluation of control to future periods is subject to the risk that the processes may become inadequate because of changes in conditions, or that the degree of compliance with them may deteriorate.

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APPENDIX H

Equity Shares

Sr. No.	Operator Ventures	QP's Effective Share As at 31 Dec 2019
1	QG – LNG Companies	Refer below
	AKG	AKG-1: 0% AKG-2: 20%
	Barzan	93%
	Laffan Refinery	51%
	Laffan Refinery 2	84%
2	Dolphin Energy	0%
3	QAFCO	Refer below
4	QAFAC	25.5%
5	QAPCO	Refer below
6	Q-Chem	Refer below
7	The Petrochemicals Corp of Singapore Pte Ltd Tetra Chemicals (Singapore) PTE Limited.	24.5% 14.7%
8	Pearl GTL	0%
9	Oryx GTL	51%
10	QP Refinery	100% owned by QP
11	Qatar Steel	51%
12	Qatalum	25.5%
13	UHPC	5%
14	QPOWER	0%
15	RGPC	15%
16	MPCL	20%
17	RLPC	10%
18	QEWC	0% Treated as Investment in FVOCI (Note 1)
19	NGL Complex	100% owned by QP
20	QP O&GP (Dukhan)	100% owned by QP
21	QP Offshore	100% owned by QP
22	NOC	70%
23	Qatar Petroleum Development Co. Ltd. (Japan) (QPD)	0%
24	South Hook LNG Terminal	67.5%
25	North Adriatic LNG Terminal	22.0245%
26	BC-10 (Brazil)	23%
27	TEPC (Congo)	15%

Note 1: QP purchased QEWS stocks for dividends but does not have direct management participation.

Table B: QP Shares in QG LNG Ventures, QAFCO, QAPCO, and Q-Chem in 2019

Ventures	QP's Effective Share As at 31 Dec 2019
QG1 Upstream	65%
QG1 Downstream	65%
QG2	67.50%
QG3	68.50%
QG4	70%
QG3&4	69.25% (Note 2)
RLI	63%
RLII	67.05%
RL3	70%
QAFCO	38.25%
QMC	62.95%
QAPCO	40.80%
QATOFIN	25.97%
QVC	62.07%
Q-Chem	34.08%
Q-Chem II	34.08%
RLOC	31.04%

Note 2: QG3&4 are identical (in capacity) LNG ventures and are operated by QG as a single operation. Therefore, the combined equity for QG3&4 for the purposes of accounting and reporting GHG emissions is 69.25%.

01. Introduction | 02. Sustainability at QP | 03. Climate Change Mitigation | 04. Operational Responsibility | 05. Social and Economic Development


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