YOUR ENERGY TRANSITION PARTNER

SUSTAINABILITY REPORT 2020

قطر للطاقة
QatarEnergy

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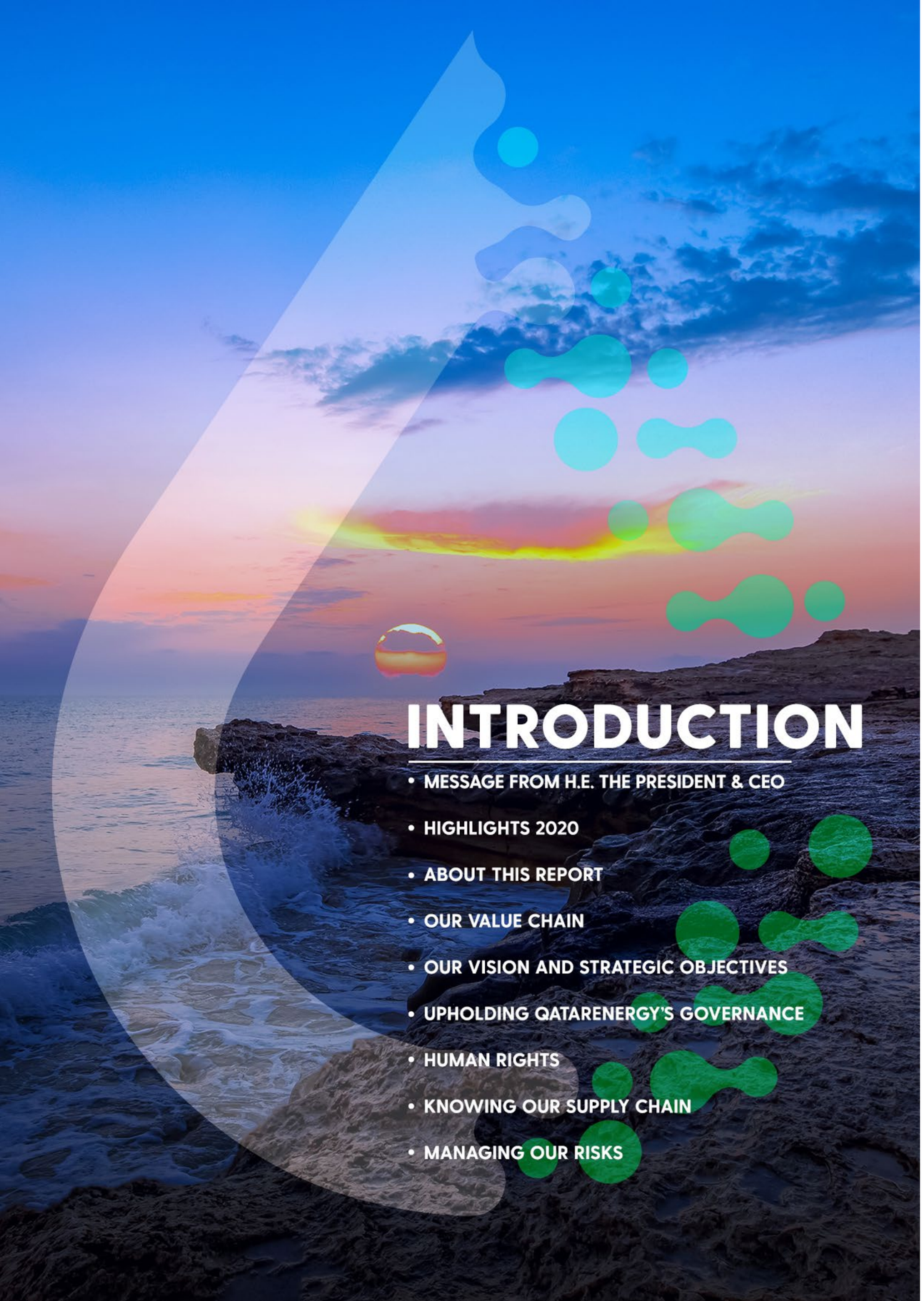

INTRODUCTION

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MESSAGE FROM H.E. THE PRESIDENT & CEO

H.E. SAAD SHERIDA AL-KAABI
Minister of State for Energy Affairs, President & CEO

I am delighted to present the 2020 Sustainability Report of QatarEnergy, which represents the first reporting of our sustainability performance after our rebranding. Guided by the vision and the leadership of His Highness Sheikh Tamim bin Hamad Al-Thani, the Emir of the State of Qatar, we are building on our pioneering role as "Your energy transition partner." The new name and slogan embody our strategic intent to play a key role in the global energy transition and signifies our focus on low-carbon energy.

Climate change remains one of the most pressing challenges of our time, and the State of Qatar has placed climate action as a national priority. As a party to the Paris Agreement, Qatar remains committed to limiting global warming below 1.5 degrees Celsius. QatarEnergy contributes to achieving this goal by facilitating the switch from high carbon emitting sources to cleaner natural gas for electricity and heat generation globally, which remains one of the most cost-effective decarbonization levers.

As the world is moving towards a low-carbon future, it is QatarEnergy's mission to responsibly provide clean and affordable energy domestically as well as globally. As a leading global energy supplier, we aim to facilitate the energy transition by ensuring energy security, political stability, and equal access to affordable energy.
To reduce greenhouse gas emissions, clean technology and behaviour change are vital. Innovations in low-carbon technologies and fuels, such as CCS and hydrogen, require close collaboration between technology and energy players. Furthermore, individual behaviour change – regarding the way we move, eat, consume, and live – is key to proceed on the decarbonization pathway. The energy transition is a shared responsibility and joint endeavour that requires the active collaboration of energy producers, consumers, and policymakers. Climate change and environmental action remains a top priority for our organization moving forward. Being at the heart of the domestic energy sector, QatarEnergy has an ambitious plan to reduce corporate emissions. These plans include, for instance, increasing Carbon Capture and Storage (CCS) capacity, expanding Solar PV power generation, and investing in nature-based solutions. We continue to make steady strides towards our zero routine flaring and methane emissions reductions targets announced last year.

QatarEnergy's climate strategy sets ambitious aims for the future. Those aims include, for instance, reducing our LNG carbon intensity further. Besides investment in innovation and technology, we are aiming to enhance corporate carbon disclosure practices through enhanced measurement and reporting. Furthermore, our environmental efforts go beyond GHG emissions reductions and also cover areas such as water and waste management, biodiversity protection, and air quality enhancements.

Beyond our role in the world's energy transition, we have also increased our effort in responsibly managing our operations by launching various initiatives to safeguard personal safety, maintaining process safety, and driving efficiency, reliability and excellence of our operations. We are pleased to highlight that in 2020, we have fully met the safety performance targets from our operations. At the same time, we continue our efforts to facilitate social and economic development in Qatar. Despite the global challenges in 2020, we have continued supporting projects and communities in line with our corporate social responsibility agenda. Additionally, our Tawteen supply chain program, which aims to promote Qatari vendors, contributed to growing the number of registered local suppliers.

The global COVID-19 pandemic in 2020 has introduced further complexity to our people health & safety and business operations. In times of uncertainty, QatarEnergy has demonstrated agility and adaptability in keeping our people safe while ensuring business continuity. Beyond our organization, we have also stepped up and took on the lead role in navigating the Energy Sector community through the crisis through our vaccination campaign, the introduction of new Life Saving Rules, and various measures implemented in our offshore productions and in our Industrial Cities such as Ras Laffan, Mesaieed, and Dukhan.

As we look to the challenges ahead, we remain committed to play our role and continue our journey to become one of the best energy companies in the world and the energy transition partner of choice.

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

HIGHLIGHTS 2020

CORPORATE DEVELOPMENTS

- Commenced drilling campaign for the North Field East Project.
- Successfully completed the integration of SEEF Limited's (SEEF) operations into QatarEnergy.
- Successfully completed the integration of Qatar Chemical and Petrochemical Marketing and Distribution Company (Muntajat) Q.J.S.C. into QatarEnergy.

CLIMATE CHANGE & ENVIRONMENTAL ACTION

- Advanced towards meeting our midterm climate targets announced in last year's report (e.g., via reduction of carbon intensity in LNG and Upstream facilities, expansion of CCS capacity, increase of solar PV power generation resources, and realization of zero routine flaring).
- Steady progress towards meeting our climate targets (in 2020 ~1.34 Mt of CO2 captured, achieved energy consumption savings of 44 MMscfd 2013-2020).
- Detailed plans for future ramp up of Siraj solar PV power plant and PV capacity in the Industrial Cities.
- Reached agreement to partner up with Chevron and Pavilion Energy to improve GHG emissions accounting and reporting.
- Monitored and conserved Qatar's hawksbill turtles in seven sites, resulting in 193 nests and 13,149 live hatchlings recorded in 2020.
- Upgraded a Sewage Treatment Plant (STP) in Dukhan in 2020 to increase sewage treatment capacity from 3,420 m3 per day to 8,620 m3 per day.

OPERATIONAL RESPONSIBILITY

- Achieved significant personal safety improvements, including a 41% reduction in the Total Recordable Injury Rate (TRIR) compared to our already positive figures in 2019.
- Successfully implemented the '7 Star HSE Audit System' to ensure maintaining appropriate occupational health and safety for contractors.
- Developed and updated several standards essential to maintaining process safety and emergency preparedness, such as the Process Safety Management System (PSMS) Corporate Standard.
- Developed robust occupational health and safety programs, such as the Road Safety Strategy and the Life Saving Rules.

SOCIAL & ECONOMIC DEVELOPMENT

- Maintained our employees' engagement and support efforts, such as by providing 24/7 support on variety of topics through our Employee Assistance Program.
- Continued to engage with local suppliers through the Tawteen programme, successfully awarding ~69% of 2020 procurement contracts to suppliers and contractors based in Qatar.
- Delivered more than 50,000 hours of training to employees such as the Resilience Training Program in 2020 by adopting a virtual classroom approach to adapt to the constraints brought about by the pandemic.

RESPONDING TO COVID-19

- Established the Crisis Management Governance involving our Executive VPs and ~180 personnel to coordinate pandemic response.
- Launched series of initiatives to prevent, detect, manage, and limit the spread of the pandemic, such as proactive testing and case management protocols.
- Planned and launched the roll out of the COVID-19 QatarEnergy vaccination program.

COLLABORATION & PARTNERSHIPS

- Established agreement to reserve LNG ship construction capacity in China to be utilized for QatarEnergy's future LNG carrier fleet requirements.
- Qatar selected as the host country for LNG2025, the 21st International Conference and Exhibition on Liquefied Natural Gas.

ABOUT THIS REPORT

This report highlights our key initiatives, achievements and contribution to a more sustainable energy future. We have shaped this report to share information on the highest priority topics for our organization, including future commitments and ambitions.

At QatarEnergy, our sustainability efforts are focused around three key areas, which make up the pillars of our sustainability strategy and form the structure of this report: Climate Change and Environmental Action, Operational Responsibility and Social and Economic Development.

REPORT SCOPE

This annual Sustainability Report is prepared in accordance with the QatarEnergy Information Classification Standard and is classified as public. The report covers the calendar year from January the 1st 2020 to December the 31st 2020. Unless otherwise noted, the report incorporates the consolidated results of the QatarEnergy Group. The data presented specifically in the Climate Change and Environmental Action section of the report includes QatarEnergy's operated assets and non-operated assets where equity interest is held. All other data covers QatarEnergy operated assets only. Furthermore, we have highlighted some key achievements of a number of QatarEnergy subsidiaries and joint venture operation. Information and data related to the activities and events in some parts of 2021 may also be included in this report.

REPORTING FRAMEWORK

This report has been prepared with reference to the Global Reporting Initiative (GRI) Standards: Core option.These are the internationally recognized standards for sustainability reporting and disclosure. Our GRI Content Index is found in Appendix A.

MATERIALITY

Our report focuses on issues that are important for QatarEnergy and are defined as material issues. As a dynamic company in an ever-changing global landscape, QatarEnergy continually adapts and assesses which topics are material for our organization and community. During 2020, against the backdrop of the COVID-19 pandemic, we took the opportunity to reassess our material topics by focusing on our response to the health and safety of our people and community during the pandemic.

We also conducted a benchmarking exercise of our material topics against our peers and key global reporting bodies to better understand the relevance of our existing topics. This exercise has seen the inclusion of our COVID-19 response as a distinct topic of importance for us as well as consolidating our approach to reporting on some historical topics. These material issues are discussed further in the next section of this report.

STAKEHOLDER ENGAGEMENT

Understanding how we interact with our stakeholders is fundamental to our success in the industry and our community. During 2020 we engaged with our supply chain to better understand the challenges that we face together and how best to respond to such challenges in an effort to work towards improved sustainability performance. This collaboration has identified several common issues, but also a number of successes that continue to shape our stakeholder relations. Furthermore, we have engaged with our internal stakeholders through targeted questionnaires to gauge performance within our own organization and better understand existing views on sustainability and ambitions for the future. For a summary on ways of engagement and our internal stakeholders' expectations and priorities, please see Appendix B.

We are actively collaborating with our technology partners and international peers to investigate and assess various decarbonization technologies and opportunities in the area of clean energy, which will support our long-term ambitions of climate mitigation. This shows our keen obligation towards decarbonizing our LNG and upstream facilities and our continuous commitment to supplying cleaner and more affordable natural gas to meet the global demand. The table below shows our ongoing collaborations with our stakeholders across different priority areas.

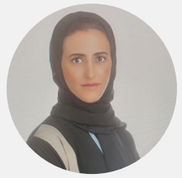
	Environmental sustainability & climate change	Human rights and social responsibility	Safety and technical standards	Technology & Innovation	Transparency & governance
Energy Institute (EI)			✓	✓	
Extractive Industries Transparency Initiative (EITI)					✓
Gulf Petrochemicals and Chemicals Association (GPCA)	✓		✓		✓
International Association of Oil & Gas Produces (IOGP)	✓	✓	✓	✓	✓
IPIECA (global oil and gas industry association for environmental social issues)	✓	✓	✓		✓
Methane Guiding Principles (MGP) Coalition	✓		✓	✓	✓

REPORT ASSURANCE

The information in this report has been prepared internally with validation and verification managed by our department leaders and subject matter experts. Health, Safety, Environmental and Quality information from each operating unit has been reviewed and verified by our Corporate HSE & Quality department. We have also sought limited external assurance of our safety, environmental and greenhouse gas emissions data (of the QatarEnergy companies), through Lloyd's Register – see assurance statements in Appendix F.

Cautionary Message

This report contains statements that may be deemed as "forward-looking statements" that express the way in which QatarEnergy 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. QatarEnergy 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 QatarEnergy's ability to control and therefore do not represent a guarantee that events implied in these forward-looking statements will actually occur. We note that all situations depicted in pictures comply with our strict health protection standards at the respective time.

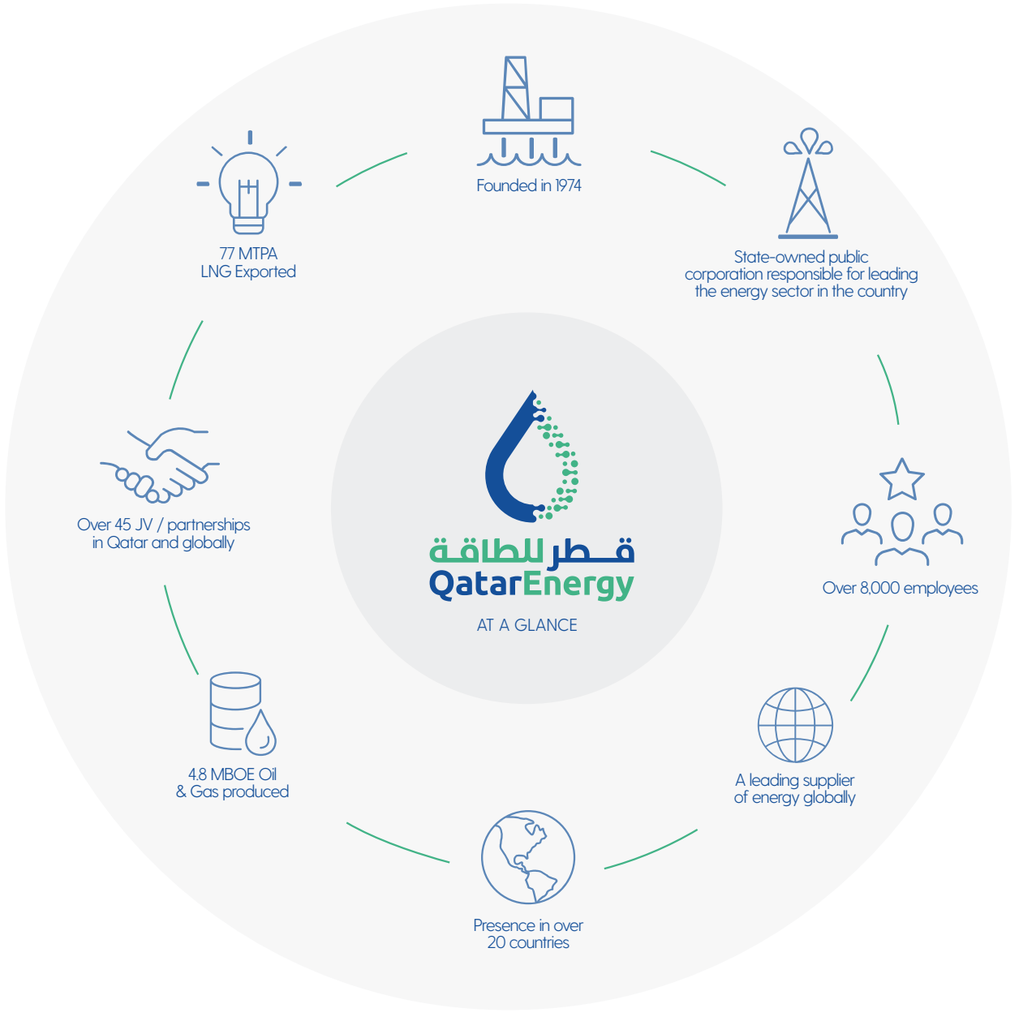


LOLWA KHALIL SALAT
PR & Communications Manager

"Our new brand identity is the embodiment of our message to the world which continues to be that natural gas is an important part of the solution in the global energy transition. As the world's leader in the production of LNG, we aim to meet the challenges of the new business environment with greater dynamism, resilience, and efficiency, as we deliver the safer, cleaner, more flexible and reliable LNG to the world".

Minister of State for Energy HE Saad Sherida Al Kaabi revealing the new QatarEnergy brand in Doha

QATARENERGY AT A GLANCE



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OUR JOURNEY

1974
QatarEnergy is established (previously QP).

1996
Start-up of first liquefied 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.

2011
World's largest and second GTL plant commissioned in Qatar, producing 140 KBPD of synthetic fuels.

2014
Start-up of jetty boil off gas recovery facilities (Achieving 1.6 MTPA CO_2 equivalent reduction).

2019
Announced solar projects of 1.6 gigawatts (GW) capacity by 2025 (800 MW Siraj and 800 MW QatarEnergy Industrial Cities solar power plants).

Start-up of CO_2 sequestration first phase.

Announcements of North Field East (NFE) and North Field South (NFS) expansions bringing Qatar's LNG capacity up to 126 MTPA by 2027 (from current 77 MTPA).

Launch of our 4C Climate Strategy and Roadmap.

Launch of our Code of Conduct.

2020
Announcement of our mid-term climate and portfolio targets.

Establishment and start of operations of QP Trading LLC as a dedicated trading arm of QP.

2021
QP renamed QatarEnergy to be your energy transition partner.

2025
Methane emissions intensity target of 0.2 wt%.

2030
Zero routine flaring.

Solar capacity addition reaching 2 to 4 GW.

25% reduction of carbon intensity in LNG facilities and 15% in Upstream facilities.

OUR GEOGRAPHIC FOOTPRINT

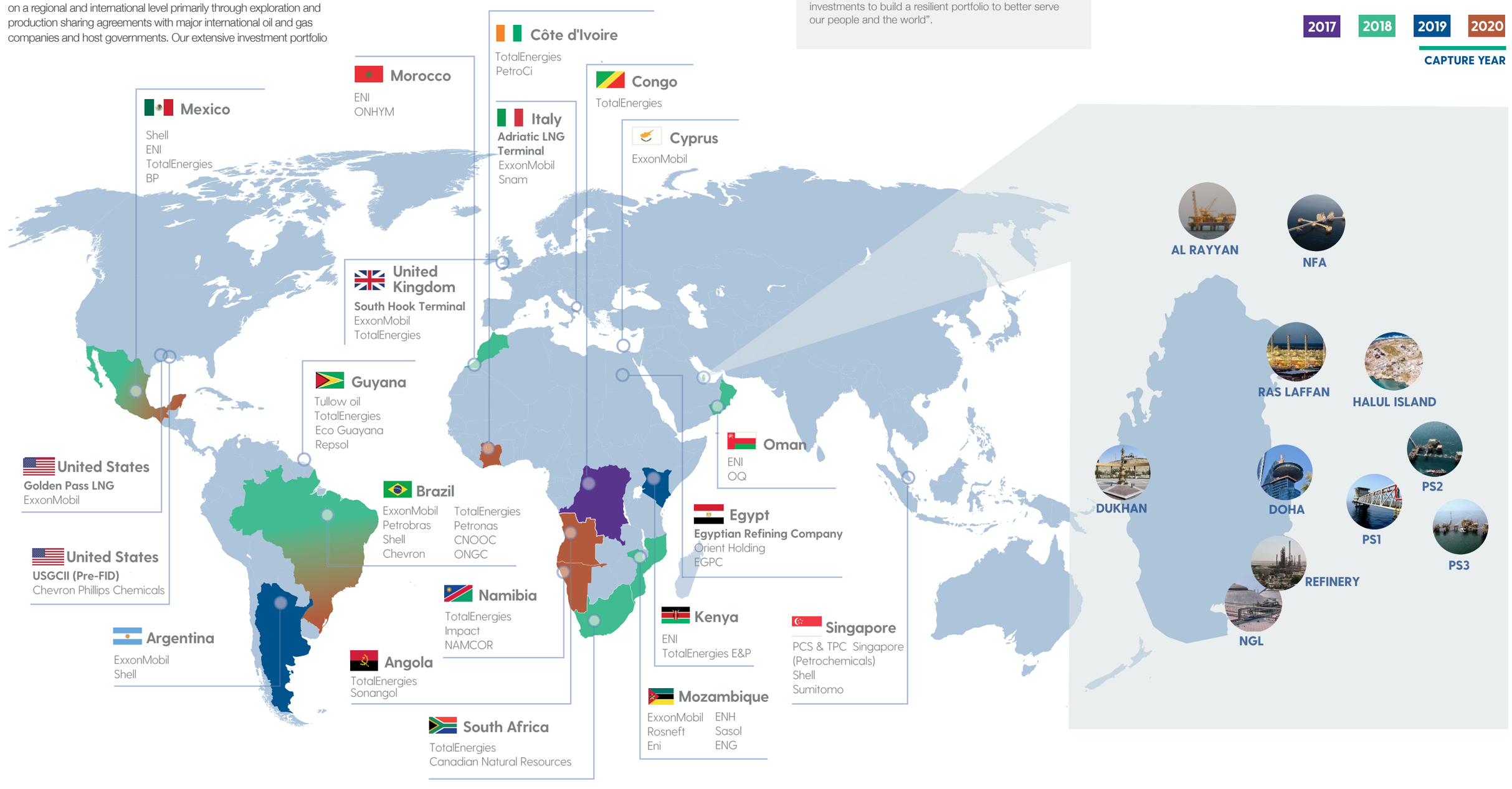
The State of Qatar is home to many of our (and those of our affiliates) onshore assets which are located in Doha, Dukhan, Mesaieed Industrial City (MIC) and Ras Laffan Industrial City (RLC). Within the waters around Qatar, we also operate a number of assets including Halul Island, offshore production stations, drilling platforms, Al Rayyan Field and North Field Alpha (NFA) which is located in the largest single non-associated gas reservoir in the world, covering 6,000 km2, equivalent to about half the land area of the State of Qatar.

Our strategy for hydrocarbon exploration and development extends well beyond the borders of Qatar. We currently have operational interests on a regional and international level primarily through exploration and production sharing agreements with major international oil and gas companies and host governments. Our extensive investment portfolio includes assets in North and South America, Europe, Africa and Asia. Despite acting as a proactive non-operator internationally, we are developing an international basin and hydrocarbon resource-led exploration portfolio, partnering with leading global players.

Furthermore, our geographic portfolio expansion is driven by key strategic and business ambitions, focused on providing the world with reliable, affordable and sustainable energy in the form of LNG. We collaborate with leading energy providers around the globe to ensure playing our part in fuelling the world economy.

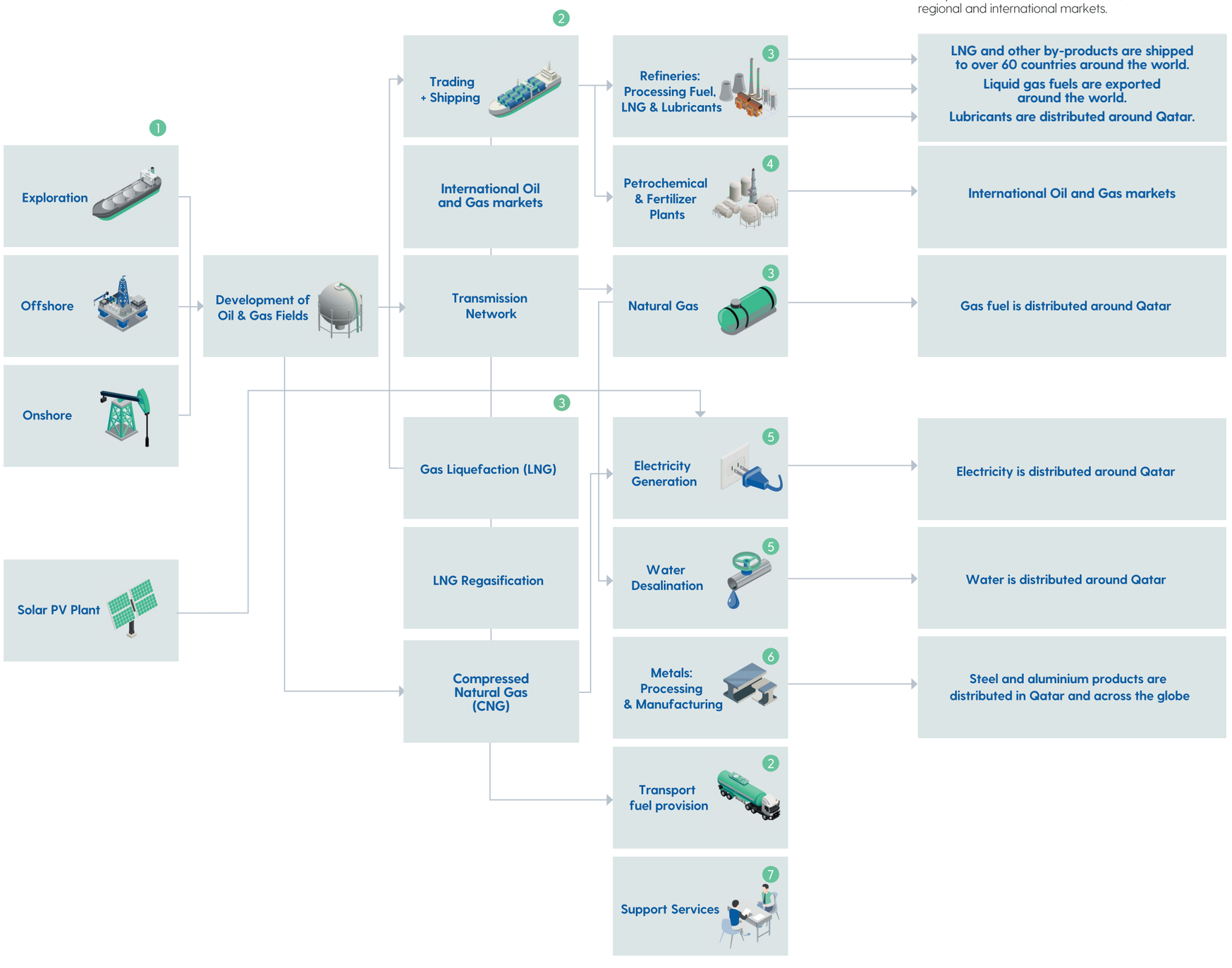
JASSIM M. AL-MARZOUQI
Executive VP Commercial

"QatarEnergy's ambition remains focused on further strengthening our LNG leadership as a means to play a key role in the global energy transition, with our business strategy driving us towards international partnerships and investments to build a resilient portfolio to better serve our people and the world".



OUR VALUE CHAIN

At QatarEnergy, we have worked tirelessly towards establishing a fully integrated value chain that brings value to the State of Qatar through our ability to harness natural hydrocarbon resources. From our initial upstream operations that saw us develop onshore and offshore exploration activities through to active oil and liquid natural gas fields, we have been able to produce and refine a range of everyday necessary products demanded throughout the globe. Furthermore, and in line with our energy transition ambitions, QatarEnergy has also started investing in renewables, solar power plants in particular, as a means to diversify Qatar's energy portfolio.



1 **EXPLORATION, DRILLING & PRODUCTION**
- Gulf Drilling International (GDI)
- QatarEnergy through Exploration and Production Sharing Agreements (EPSAs), Development and Production Sharing Agreements (DPSAs) and Joint Operations.

2 **STORAGE & TRANSPORTATION**
- Qatargas (QG)
- Woqod (Qatar Fuel)
- Qatex
- QatarEnergy

3 **REFINING & GAS PROCESSING**
- Qatargas (QG)
- Oryx GTL
- QatarEnergy

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

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

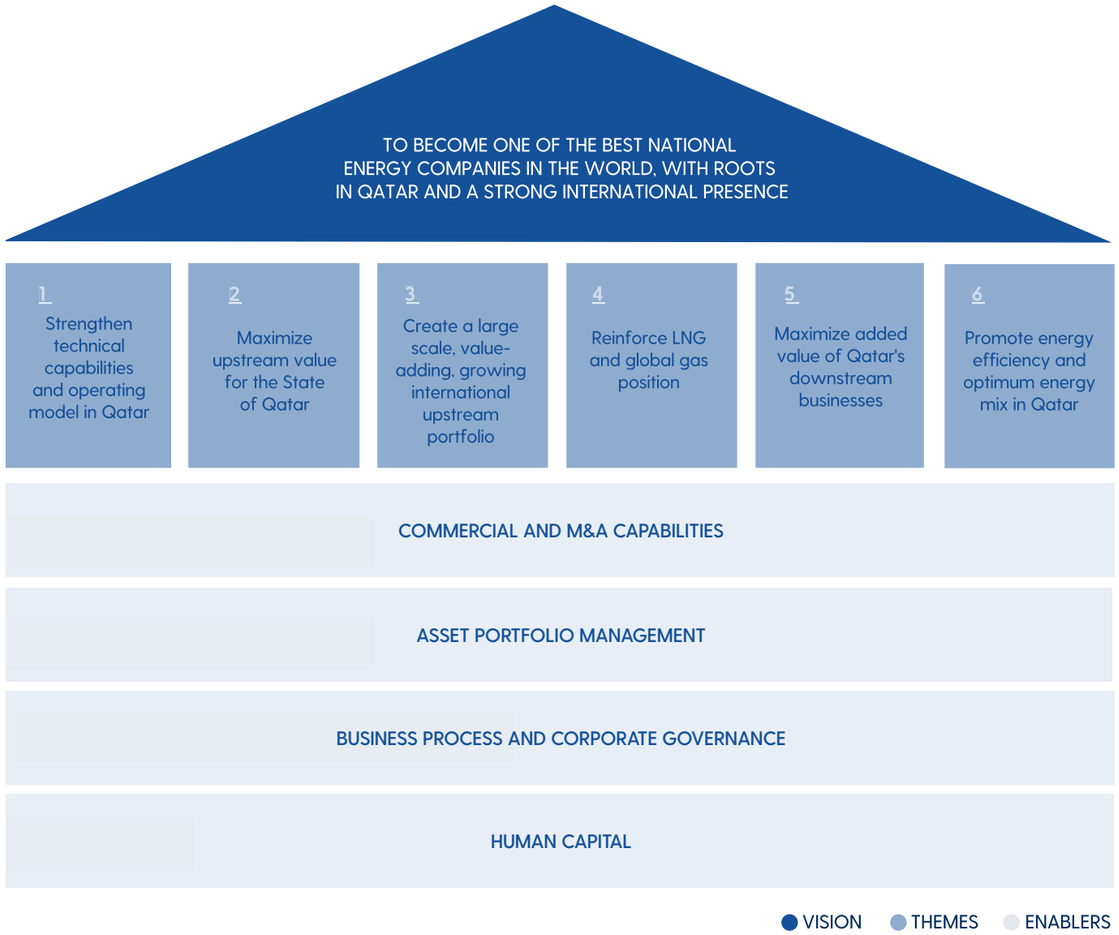
6 **METALS**
- Qatar Aluminium (Qatalum)
- Qatar Steel

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

For equity shares, refer to Appendix G.

OUR VISION AND STRATEGIC OBJECTIVES

As we look ahead into playing a key role in the global energy transition, and to serve as "Your energy transition partner", our vision focuses on becoming one of the best national energy companies in the world, all while retaining our Qatari roots, with a key international presence. We continually seek to develop our vision and objectives by updating these in line with the dynamic environment in which we operate.



UPHOLDING QATARENERGY'S GOVERNANCE

GOOD GOVERNANCE AND ETHICAL STANDARDS OF CONDUCT

Effective corporate oversight remains the foundation of our success as we continue our journey to become one the best national energy companies in the world. QatarEnergy has a strong commitment to good governance and has developed the relevant policies and business practices to comply with applicable national and international laws, regulations and conventions. We have established clear lines of responsibility for these commitments through our governance and compliance frameworks. Obligations are applicable to our leaders, employees, business partners and other key stakeholders.

As part of our governance approach, 2020 saw QatarEnergy establish a new executive committee known as the Business Conduct Committee (BCC). The Committee is comprised of seven members of QatarEnergy's senior leadership team and is chaired by the Executive Vice President (EVP) of Human Capital. The purpose of the BCC is to provide objective executive oversight and report to QatarEnergy's President & CEO on the level of compliance that the organization, and to the extent reasonably possible, its third-party partners, achieve in respect to the applicable laws and standards of conduct. The BCC also provides assurance that the compliance program is effective and adequately resourced to address our compliance risk profile.

Our Code of Conduct and its related policies guide us on how we interact with our stakeholders. We have zero-tolerance for corruption and have adopted various internal controls to counter fraud, bribery, conflicts of interest, money laundering and other types of non-compliant or illegal behaviours. This approach is likewise applied to our compliance with international anti-competition, trade, import/export and sanctions-related regulations and laws. We acknowledge that this is a resource-intensive initiative and continue to develop further procedures to help employees understand the requirements of these complex subject matters.

We have a reporting helpline in place for both internal and external stakeholders. We encourage stakeholders to utilize the helpline and are happy to receive – on a confidential and anonymous basis – reports of possible non-compliance with our internal regulations. All reports received through the helpline are reviewed in accordance with our internal reporting and management process. Furthermore, Our Internal Audit team plays an integral role in monitoring internal systems and employee compliance, in accordance with the relevant standards. This team provides independent and objective assurance to the Board Audit Committee on the effectiveness of our governance, risk management and control practices through a structured program of risk assessment.

Recognising that we are continually seeking to improve our approach to governance, 2021 will see us focus on QatarEnergy affiliated companies' governance mandate. We will look to continue the progress that we have made around organizational governance by extending oversight to the group of companies. This will be achieved by launching the following three initiatives:

Director Engagement: This initiative will focus on the building and management of communications within our network of directors. We will conduct an on-boarding program for all new directors which will be followed by periodic communications throughout the year. We aim to build an active communication exchange where directors can share knowledge, experience and learnings.

Governance Standards: We aim to undertake a separate project to understand the gaps in group governance practices and initiate a journey to improve our practices, including the provision of enhanced guidance and the setting of expectations within group companies.

Learning Management: We will continue to invest in director training programs by developing and offering targeted learning management initiatives. We also aim to create a knowledge repository to provide directors with access to industry best practices, tools and other resources.

OUR BOARD OF DIRECTORS

Our Board of Directors and executive leadership ensure adherence to oversight standards in alignment with the Qatar National Vision 2030, our QatarEnergy 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. For instance, over the past 3 years and under the guidance of our executive leadership, QatarEnergy rolled out an internal governance transformation initiative aimed at addressing key governance gaps, with particular focus on enhancing governance of cross-departmental and functional projects.

QatarEnergy's Board of Directors is composed of the following members who play a vital role in keeping us on track towards achieving our vision 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 bin Ahmed Al-Kuwari
Minister of Finance
(Member)

H.E. Sheikh Mohammed Bin Hamad Bin Qassim Al-Abdullah Al-Thani
Minister of Commerce and Industry (Member)

Mr. Nasser Khalil Al-Jaidah
(Member)

Sheikh Khalid bin Khalifa bin Jassim Al-Thani
CEO of Qatargas (Member)

Mr. Said Mubarak Al Muhannadi
(Member)

OUR CODE OF CONDUCT

Building on the successful launch of our Code of Conduct in 2019, QatarEnergy has continued to communicate our expectations for ethical business conduct. We did this in a number of ways and continue to look to ways to reinforce our standards for principled and accountable behaviors in all of our business practices.

Our Code of Conduct helps us in *Shaping Who We Are*. It sets the expectations for our behaviour, including the actions of our subsidiaries and our network of third-party business partners and associates. Our relationships and how we behave are fundamental to making QatarEnergy a partner of choice, not only here in Qatar, but across the globe as well. We expect our employees, officers, directors and those working on our behalf to comply with our standards and to understand how important our actions are to QatarEnergy's reputation and on-going business success.

هويتنا
SHAPING WHO WE ARE

In 2020, QatarEnergy undertook several employee engagement initiatives including an e-learning program, which targeted compliance topics such as anti-bribery and anti-corruption training to our employees.The employee engagement program also included a series of monthly Ethics Moments that are published on our intranet and reinforced in face-to-face meetings. The Ethics Moments remind employees of the importance of our Code of Conduct with each one being endorsed by a member of our senior leadership team. Ethics Moments cover a wide range of topics, such as "Living and Working in Challenging Times" or "Working as a Team, Embracing Opportunities Together".

Ethic Moment 7 of 2020

Ethics Moment 8 of 2020

Integrity Ambassadors, a team of trained employees appointed from throughout the organization, also help to embed the key ethics and compliance principles by facilitating meaningful conversations at recurring team and departmental meetings. The ambassadors participate in shared learning sessions to ensure in-depth understanding of relevant topics each month. These meetings feature a QatarEnergy subject matter expert who shares his/her knowledge with the ambassadors. The ambassadors leave the meetings with an integrity toolkit that provides them with resources to help guide departmental presentations and ad-hoc employee discussions concerning the principles outlined in the Code of Conduct.

In 2020, we also refreshed our annual e-Code certification process in which employees acknowledge their compliance with the QatarEnergy Code of Conduct and its related business conduct policies. This acknowledgement occurs following the completion of the e-Code which consists of three modules that combine a series of self-reflection questions, key learnings from the content of the Code and the annual Code certification (acknowledgement and sign-off). The self-reflection questions are important because they allow employees to reflect upon compliance-related topics that often fall somewhere in the grey area of ethical decision-making. Videos are incorporated in the module and help employees to understand the perspectives of our senior leadership team.

TRANSPARENCY AND DISCLOSURE

Natural Resource Governance Institute
EITI Extractive Industries Transparency Initiative

During 2020, we continued our work with the Natural Resource Governance Institute (NRGI) and Extractive Industry Transparency Initiative (EITI) with the intention of further improving our reporting and disclosure practices. In conjunction with our desire to be an open and transparent organization, we agreed to participate in several reviews of our public disclosures, engaging with both organizations in terms of their recommended improvement opportunities. In most instances, we responded to these opportunities by enhancing our disclosures in alignment with the feedback we received. In other cases, we continue to dialogue with both the EITI and NRGI as we work towards resolving concerns over the disclosure of commercially sensitive business matters. Additionally, we are working with the NRGI to enhance our transparency journey and eagerly awaited the publication of the results of the 2020 Resource Governance Index in order to monitor our transparency progress over the past years.

HUMAN RIGHTS

The pandemic that began to affect the world in 2020 meant that we, like many, had to adapt and face some of the greatest human difficulties in recent history. Our priority has and always will be the safety and wellbeing of our people and the communities we serve as we ensure the proper working of our operations. In 2020 many people were forced to work remotely. We took steps to provide additional support to ensure our employees' safety and welfare during these difficult times and as outlined in this report (see section "Responding to COVID-19")

HUMAN RIGHTS GOVERNANCE

Ensuring good governance is critical to any significant commitment in human rights. During 2020, our CEO authorized the creation and related directive of a Business Conduct Committee (BCC). The Committee is made up of members of QatarEnergy's executive leadership team, with a mandate to drive the highest standards of business ethics and behavior across QatarEnergy, including those pertaining to compliance with globally recognized human rights standards.

In 2020, the BCC began by establishing an impressive agenda of topics and programs for review. The first agenda item was the review of our standards, policies and governance systems. Following an extensive benchmarking exercise, we created a suite of new or amended organizational and business conduct standards, including a new Human Rights Policy. These newly drafted policies are currently under final review by the BCC and we expect will be approved and implemented in 2021.

HUMAN RIGHTS DUE DILIGENCE AND REMEDIATION

We continue to develop a more transparent culture with an emphasis on a fair and respectful workplace. As part of a greater focus on oversight, in 2020, we promoted our 'Speaking Up' whistleblowing hotline which has resulted in an increase of investigations by our internal audit team. Externally, we respect the human rights of all people impacted by our activities, with particular attention to the rights of more vulnerable people such as migrant workers. We also promote proactive engagement with communities and identify opportunities to optimize positive impacts in ways that are respectful and appropriate to local culture.

We recognize our responsibility for our supply chain and are planning to further engage with suppliers on issues of human rights in 2021. We have already made the commitment that we will only work with others whose standards are the same as ours and have clearly stated that we will not engage in, tolerate or work with business partners who:

- employ children and minors.
- engage in human trafficking or forced, bonded or compulsory labor.
- have employees that are not free to leave their employment after reasonable notice or are required to lodge deposits of money or identity papers with their employer.

LOOKING FORWARD TO 2021

We are on track to launch and embed our new Human Rights Policy in 2021. This, combined with aspects of some of the other new policies, will establish our stance on human rights and our guiding principles. This will be an important milestone for QatarEnergy because not only will it highlight our commitments, but it will also guide decision-making and behavior throughout the organization.

As part of our drive for better governance, we will build on the initial work undertaken by the Business Conduct Committee. A human rights subcommittee will oversee the development and implementation of a detailed framework for human rights at QatarEnergy. This framework will address our human right's governance, risk, impact assessment, due diligence and follow-up, as well as other leading elements of a world-class human rights program. It will be followed by the development of a responsible sourcing code of conduct for our suppliers.

Overall, we look forward to embarking on this initiative and enhancing our current practices to comply with global standards for excellence in this area.

KNOWING OUR SUPPLY CHAIN

Third party business partners continue to account for a significant proportion of our organizational compliance risk. In 2020, we introduced enhanced due diligence procedures and, working with external service providers, we developed methods to ensure a deeper knowledge of our business partners' practices and any risks associated with them. A significant observation from this process has seen the inclusion of new compliance control activities at the pre-operational, operational, and post-operational stages of our relationships. This enables us to review partners at every stage of our engagement with them.

Our compliance control activities are supported by new and upgraded compliance standards and procedures. These new standards are embedded throughout our activities and within our business directorates. Awareness and training initiatives were also rolled-out in the form of focused communications campaigns, the introduction of e-Learning and face-to-face training on pertinent compliance subject matters, including anti-bribery & corruption, conflicts of interest and speaking up. Additional technologies have been provided to the operating groups, especially regarding enhanced due diligence and sanctions screening. We expect to share, align and enhance our third-party due diligence and screening programs throughout the broader network of QatarEnergy affiliated companies for the good of every part of our supply chain.

MANAGING OUR RISKS

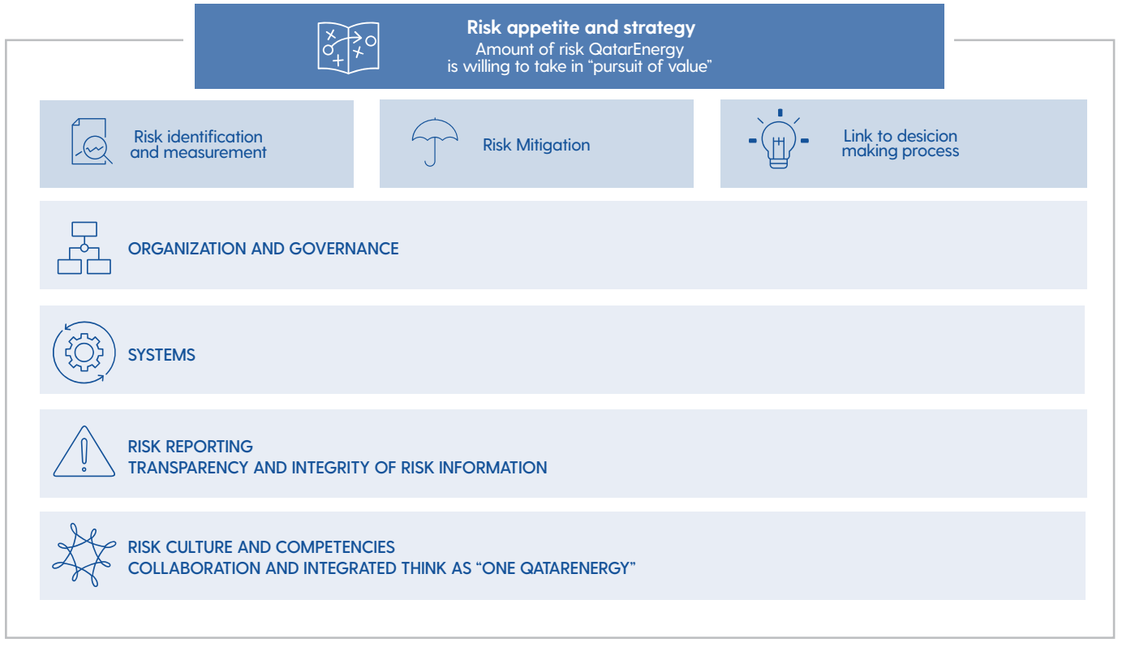
QatarEnergy is committed to managing risks across its business portfolio. Risk management is a priority as we conduct our business activities and pursue energy investments. Our Enterprise Risk Management (ERM) system is key to us achieving this goal. It gives a holistic view on risk exposure and provides the necessary intelligence for decision making and capital allocation.

Our ERM is aligned to the ISO 31000 Standard for risk management. The system itself contains eight fundamental elements that enable us to proactively manage any strategic, financial, operational or compliance risks impacting our value chain. Risks across the company are identified, assessed and periodically reported to provide assurance on effective management of all risks and their implications. This allows for early transparency on risk so that appropriate measures can be taken in a timely manner.

We are constantly evolving and improving our risk culture and capabilities to achieve the right balance between addressing risks and capitalizing on opportunities. We are committed to continuously enhancing our ERM in support of corporate strategy.

In 2020, our ERM has enabled us to quickly assess evolving risks and adapt to new business paradigm. Selected 2020 milestones on this front:

- Enhanced the ERM procedure documentation
- Maintained and updated the Risk Assessment Matrix (RAM) in response to the evolving environment.
- Integrated risk reporting at the enterprise level including inputs from various risk management sub-frameworks (HSE, Project risk management, supply chain, tax, etc.)
- Built robust risk response strategies including an enhanced mitigation tracking process.
- Incorporated ERM within investment and asset management processes.
- Updated our ERM training offering and provided training on an ongoing basis.



SUSTAINABILITY AT QATARENERGY

- UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS
- OUR SUSTAINABILITY FRAMEWORK AND STRATEGY
- OUR SUSTAINABILITY GOVERNANCE
- ASSESSING OUR MATERIAL TOPICS

By focusing on continual innovation and excellence, we at QatarEnergy are committed to the highest levels of sustainable environmental, social and economic development in Qatar and beyond. Our business is based upon responsible and principled behavior and we integrate sustainability considerations into the way we plan and manage our business activities.

UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS (UN SDGs)

The 2030 Agenda for Sustainable Development and its 17 Sustainable Development Goals (SDGs) serve as a global blueprint to end poverty, combat inequalities and tackle climate change, seeking dignity, peace and prosperity for people and the planet. To us at QatarEnergy, the SDGs are an important global reference to guide our own local and international sustainability actions. We firmly believe that by aligning with the globally recognised SDGs, QatarEnergy can showcase its contributions to this important international initiative. While all the SDGs are relevant to us, we focus on three core SDGs and 5 other supplementary SDGs throughout this report. The following figure illustrates the alignment of the SDGs to some activities that QatarEnergy has undertaken:

Most significant SDGs to QatarEnergy's core operations

SDG	GOAL	KEY ACTIVITIES
7 AFFORDABLE AND CLEAN ENERGY	Ensure access to affordable, reliable, sustainable and modern energy for all.	**Solar Energy and LNG Capacity Build-Up:** QatarEnergy is committed to add more renewable capacity in the State of Qatar, with 2 to 4 GW of Solar Power Capacity planned by 2030. Furthermore, we are expanding our LNG capacity to support our partners globally in switching to cleaner energy sources.
8 DECENT WORK AND ECONOMIC GROWTH	Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.	**Tawteen Supply Chain Localization Programme and Energy Exports:** QatarEnergy launched Tawteen to foster local economic development and strengthen the local energy sector in Qatar. On the global level, our exports provide affordable and reliable energy which helps economies to develop.
13 CLIMATE ACTION	Take urgent action to combat climate change and its impacts.	**Decarbonization and Carbon Capture and Storage:** QatarEnergy is building additional carbon sequestration capacities over 9 MTPA to reduce CO2 emissions from our LNG and upstream facilities. Furthermore, we focus on reducing the GHG intensity along the value chain, for instance, by reducing methane emissions.

Further SDGs significant to QatarEnergy's operations

3 GOOD HEALTH AND WELL-BEING	Ensure healthy lives and promote well-being for all at all ages.	**Vaccination Campaign:** Due to the COVID-19 pandemic, QatarEnergy was entrusted to deploy vaccines throughout the Energy Sector community, successfully delivering ~250,000 vaccines.
4 QUALITY EDUCATION	Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.	**Virtual Training Programmes:** QatarEnergy continued to conduct high quality training sessions despite the COVID-19 pandemic by pivoting to virtual classrooms.
12 RESPONSIBLE CONSUMPTION AND PRODUCTION	Ensure sustainable consumption and production patterns.	**Mesaieed Hazardous Waste Treatment Center's Recycling and Reuse:** Transferred 86 tons of shredded plastic waste, 390 tons of crushed metal drums, and 57 tons of cleaned lead acid batteries for recycling and reuse to authorized recycling facilities.
14 LIFE BELOW WATER	Conserve and sustainably use the oceans, seas and marine resources for sustainable development.	**Conserving Qatar's Hawksbill Turtles:** QatarEnergy monitors and conserves these endangered species in seven sites, successfully recording 193 nests and 13,149 live hatchlings in 2020.
15 LIFE ON LAND	Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.	**Nature-based Solutions (NbS):** QatarEnergy continues to seek opportunities in NbS for climate change adaptation and disaster risk reduction, while supporting biodiversity and securing ecosystem services.

OUR SUSTAINABILITY FRAMEWORK AND STRATEGY

Our sustainability framework aligns our corporate, national and international development objectives with the most relevant sustainability issues in our business. It also provides direction for our sustainability activities across our value chain, aligned with our vision, corporate strategy and core values. Our three pillars – Climate Change and Environmental Action, Operational Responsibility, and Social and Economic Development – are a combination of our rich contributions over the past decade. Moreover, they are in line with our forward-looking ambition as a leading supplier of natural gas, a fundamental decarbonization fuel for a sustainable future.

Climate Change and Environmental Action

Climate Change Action

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, while studying our capabilities in carbon capture and storage (CCS) and post-combustion capture projects.

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.

Environmental Action

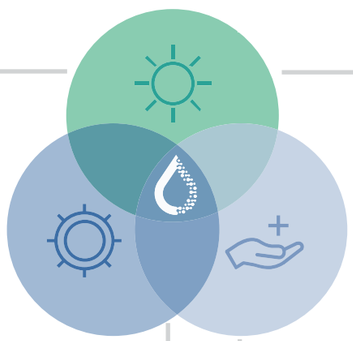
We are committed to care for the environment and establish measures to minimize the environmental impact of our activities, products and services.

AIR QUALITY: We are committed to maintaining good air quality by managing the pollutants from our operations.

WATER MANAGEMENT: We acknowledge the impact that water management has on our local communities and take action to safeguard our water.

WASTE MANAGEMENT: We recognize the importance of the sustainable management of both hazardous and non-hazardous wastes and are committed to the proper management of waste streams.

BIODIVERSITY : We strive to restore, maintain and enhance biodiversity through several initiatives to promote the conservation of Qatar's ecosystem.



Operational Responsibility

Continuous improvement through care and collaboration.

PERSONAL 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.

OPERATIONAL EFFICIENCY AND RELIABILITY: We are committed to maintain efficient and reliable operations through boosting productivity and efficiency.

PROCESS SAFETY AND EMERGENCY PREPAREDNESS: We are committed to operate responsibly and to continually improve our processes to achieve greater performance in a safe manner.

Social and Economic Development

Leverage our strong social and economic position to drive the energy transition.

PEOPLE: We seek to develop and invest in a specialized, forward-looking and diverse workforce that showcases commitment to sustainability and drives toward a more sustainable energy sector.

COMMUNITY: We are dedicated to social responsibility through community contribution and social investments, building a resilient and competitive energy sector in Qatar and beyond.

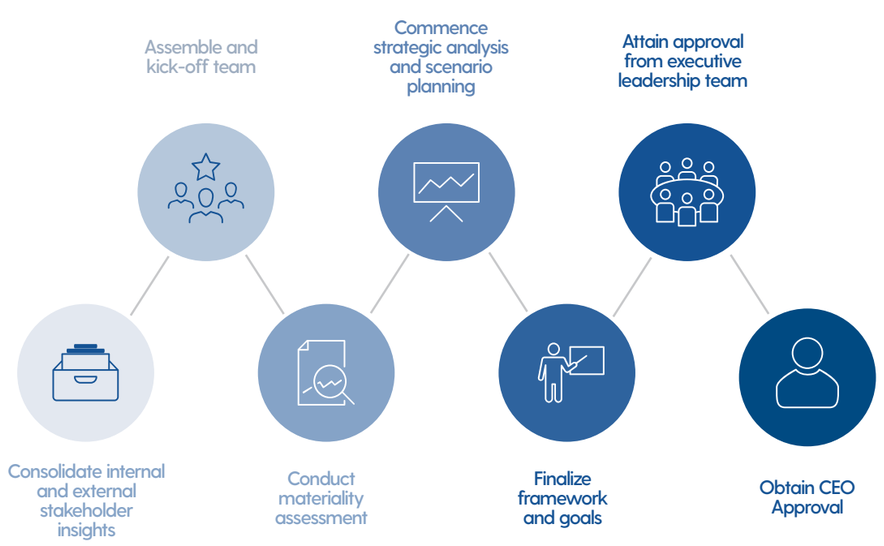
OUR SUSTAINABILITY GOVERNANCE

We are pleased to report that in 2020, we conducted an in-depth analysis of our existing sustainability practices to improve our sustainability governance. This included a refresh of our benchmarking exercise where we compared and analysed the sustainability disclosure practices of several national and international energy companies. We held multiple meetings with many of these companies to seek a better understanding of the key drivers behind their sustainability strategies, the steps taken to implement these strategies and measure the success. At the same time, we engaged several industry advisors to share their perspective on what sustainability best practices look like in today's world. We then took steps to implement some of these best practices in terms of our own aspirations for climate change, health, safety, environment and other social and economic initiatives.

In line with these aspirations, in 2020, we developed a process where a core team was established to review, assess, and monitor QatarEnergy's key sustainability matters such as developing the sustainability strategy, reviewing topics that are material to QatarEnergy and monitoring the execution and implementation of the sustainability-related initiatives, which are required to achieve our targets and goals.

QatarEnergy hosting a Methane Workshop

QATARENERGY SUSTAINABILITY GOVERNANCE PROCESS



ASSESSING OUR MATERIAL TOPICS

At QatarEnergy, we are continually assessing our material topics to ensure that they are relevant to us and our stakeholders and that we can manage them effectively. In 2020, we took on the important task of reviewing our material topics against those of our peers and international sustainability reporting standards. We mapped our topics of concern against this research to identify common themes before developing some recommendations on ways to refresh our own topics. We are pleased to find that the topics that we had historically identified as important to QatarEnergy, were also aligned with our peers and reporting frameworks. As such, we maintained most of the material issues that were previously identified and made some minor adjustments, resulting in the updated materiality matrix below:

MATERIALITY MATRIX

MOST IMPORTANT
1. COVID -19 response
2. Economic performance
3. Process safety and emergency preparedness
4. Air pollution control
5. Occupational health and safety
6. GHG emissions reduction
7. Operational efficiency and reliability
8. Innovation in research and development
9. Biodiversity

MORE IMPORTANT
10. Energy use
11. Water use and effluents
12. Sustainability of investment portfolio
13. Risk management
14. Integrity, governance and transparency
15. Workforce welfare and development

IMPORTANT
16. Waste generation and management
17. Local value chain and business development
18. Qatarization
19. Workforce diversity and inclusivity
20. Community engagement and investment

FOCUS AREAS
- Climate Change and Environmental Action
- Operational Responsibility
- Social and Economic Development

Materiality matrix based on 2019 assessment, but adjusted for COVID-19 response, Biodiversity, and Innovation in research and development.

A NATIONAL PRIORITY AND SHARED RESPONSIBILITY

MR. AHMAD SAEED AHMAD AL-AMOODI
Executive VP Surface Development & Sustainability

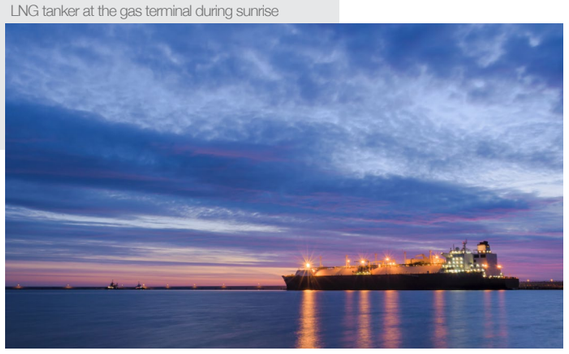
"The energy sector remains a key driver of industrial and economic development. We as QatarEnergy are aware of our responsibility and contribution towards the energy transition. To achieve a clean energy future whilst still providing affordable energy, we are committed to displacing high greenhouse gas-emitting fossil fuels with natural gas, which may halve the emissions from combustion compared to coal, and remains one of the most cost-effective decarbonization levers today.

Taking a lifecycle perspective, we aim to reduce emissions across the entire LNG value chain. We aim to reduce the carbon intensity in the LNG facilities further through expanding solar PV capacity while approaching zero routine flaring.

Beyond helping our partners to excel the energy transition and cutting emissions from our operations, we are increasingly focusing on new energy vectors, such as hydrogen, and innovative technology. The latter includes ambitious plans to expand our carbon capture and storage (CCS) capacity to more than 9 MTCO2 by 2030 and invest in post-combustion CCS as well as nature-based solutions.

In addition to emissions reductions, fuel switching in electricity and heat generation towards natural gas brings significant co-benefits. Local air quality improvements due to lower pollutant emissions is only one example. I am convinced our energy supply will be a piece of the puzzle for a successful energy transition."

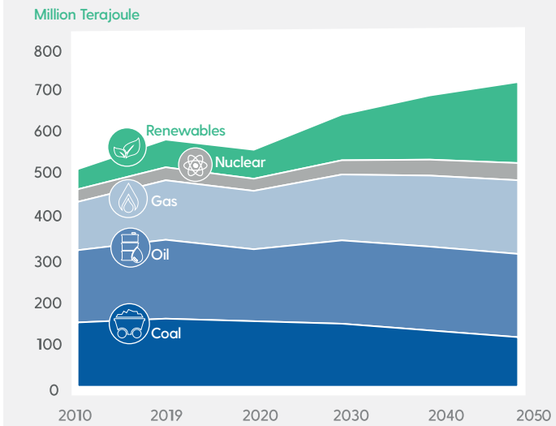
LNG tanker at the gas terminal during sunrise



The science is clear that climate change is one of the most pressing issues of our times. The impacts of rising global temperatures on the planet and the potential impacts of further warming have recently been highlighted by the Intergovernmental Panel on Climate Change (IPCC) Sixth Assessment Report (AR6).[1] The impacts of climate change are already visible around the world and pose a significant threat to the economy, society, and nature. To limit global warming and avoid the worst consequences of climate change, decarbonizing our economies is inevitable. And yet, additional efforts will be required to limit anthropogenic effects on the environment more broadly. Such efforts may include, measures on air quality, water management, waste treatment, and biodiversity enhancement. It is noteworthy that climate change and environmental action share numerous co-benefits and synergies. Our effort to decarbonize operations through flare and methane reduction, as well as energy efficiency measures, reduces both GHG and air pollutant emissions. Likewise, our initiatives to expand renewable energy generation, deploy carbon capture technology and nature-based solutions, sequester carbon while bringing benefits for biodiversity.

At the same time, the global energy demand is expected to continue growing as the population approaches 10 billion people[2] around mid-century. To ensure energy security and equal access to energy, gas is expected to remain a key component of the global fuel mix as depicted in the energy demand outlook from the International Energy Agency (IEA) below.

Global energy demand per fuel



Share in 2030 %

Share in 2050 %

World energy supply 2010-2050 (in IEA Stated Policies Scenario). Data based on IEA World Energy Outlook 2021. Biomass and other fuel excluded in illustration

The following sections focus on QatarEnergy's climate change and environmental action, as we remain highly committed to playing our part in the journey towards a more sustainable future. We are committed to continuing our efforts alongside other players in the energy sector – both in Qatar and internationally. Governments, businesses, consumers, and other stakeholders must work collectively and develop action plans and measures to limit environmental impacts.

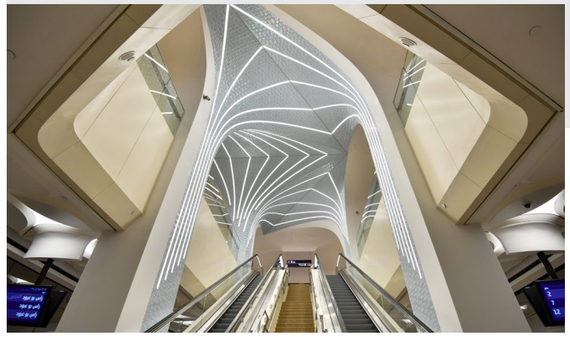
[1] https://www.ipcc.ch/report/ar6/wg1/
[2] https://www.un.org/development/desa/en/news/population/world-population-prospects-2019.html

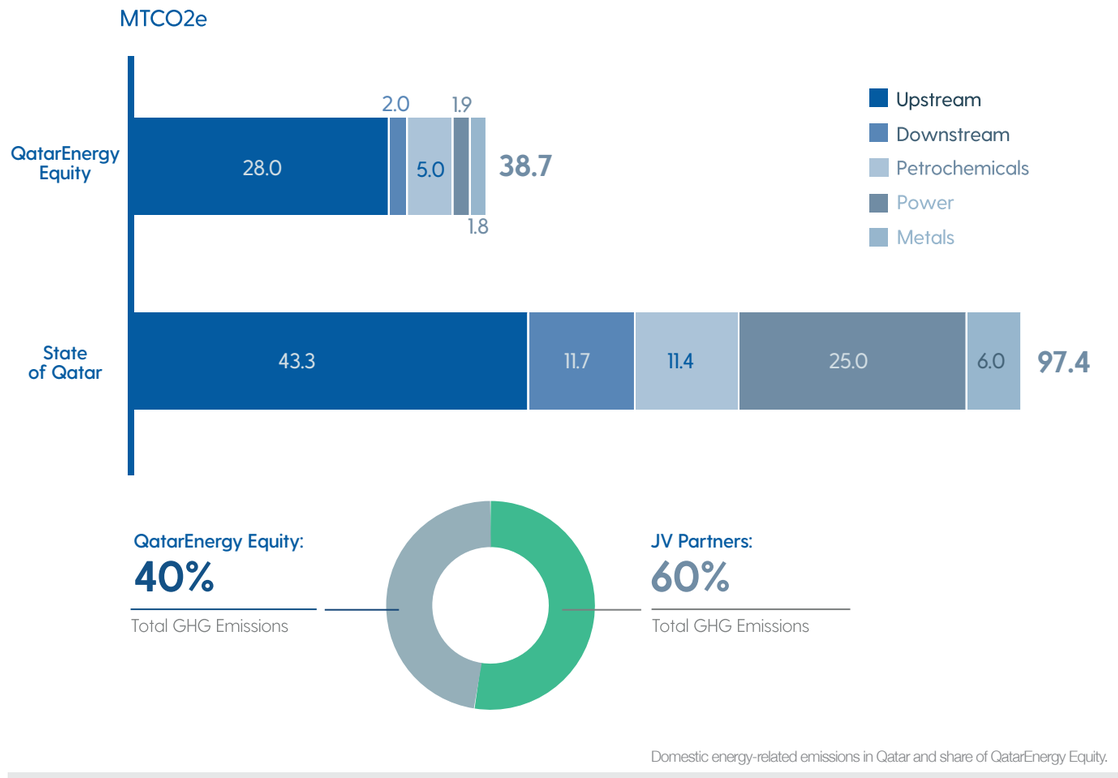
QATARENERGY'S CLIMATE CHANGE ACTION

BACKGROUND

QatarEnergy – as the heart of Qatar's energy sector – is responsible for about 40% of the energy-related emissions in the country. The chart below depicts the total emissions in Qatar encompassing upstream, downstream, petrochemicals, power, and metals segments. The estimated energy-related emissions in Qatar originate from over 20 companies, including our JV partners. It is, therefore, essential that major stakeholders across all sectors take on the shared responsibility and collaborate to reduce emissions on a national level.

Metro station in Doha contributing to reducing greenhouse gas emissions from transportation





Domestic energy-related emissions in Qatar and share of QatarEnergy Equity.

QatarEnergy is committed to providing affordable and cleaner energy to facilitate the transition to a low carbon economy. In that transition, we believe natural gas will continue to play a key role. Managed effectively, natural gas combustion causes the least greenhouse gas emissions (GHG) of all fossil fuels. To reduce emissions further we are committed to reducing the carbon intensity of our LNG across the value chain from production to transportation.

QatarEnergy will continue to develop its leadership position in the LNG sector, bringing reliable, affordable, and sustainable energy to our partners across the globe. Our commitment to climate change action is core to our 4C framework with its 4 components: Consolidate, Curb, Create, and Compensate. The 4C framework captures our efforts to reduce emissions within our operations, provide customers with lower GHG emitting products and move towards a low-carbon business model that supports the energy transition:

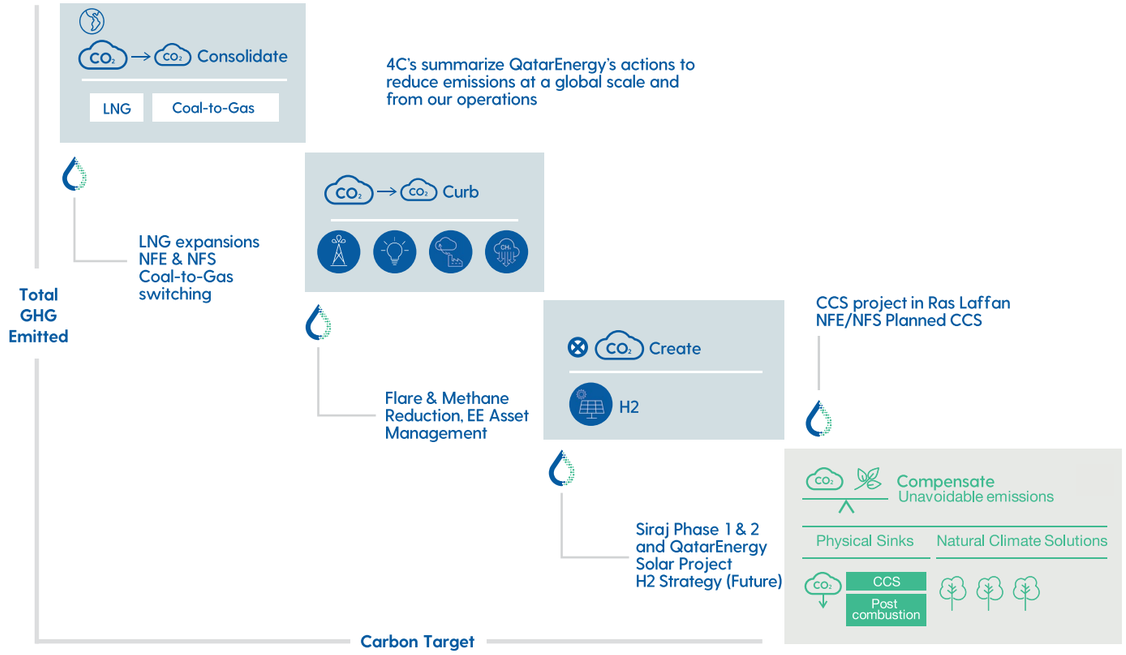
Median of global emissions factors of power generation as provided by the Intergovernmental Panel on Climate Change.

1) CONSOLIDATE: The first element of our 4C framework focuses on making significant strides by addressing emissions on a macro and at scale levels through displacing high emitting sources such as fuel-switching from coal to gas in power generation.

2) CURB: The second element of our 4C framework focuses on QatarEnergy's operations and emissions within our equity holding. We abate emissions by reducing flare volumes and methane emissions further and stepping up our ambitions to increase energy efficiency.

3) CREATE: The third element of our 4C framework focuses on diversifying our portfolio through investments in alternative clean energy sources. Our efforts include expansion of solar PV capacity for electricity generation or development of hydrogen capabilities.

4) COMPENSATE: The fourth element of our 4C framework focuses on compensating for residual emissions. We continue, for instance, to deploy carbon capture and storage (CCS) technology at our facilities and are stepping up efforts to scale-up and accelerate the deployment.



QatarEnergy 4C framework to reduce total GHG emissions. 4C's summarize QatarEnergy's actions to reduce emissions at a global scale and from our operations.

ACHIEVEMENTS AND PLANS

As the transition towards sustainable and low carbon energy is gaining momentum, the recent surge of coal phase-out plans elevates the need for gas as an ideal energy transition solution. LNG, in particular, will continue to exhibit strong growth to meet this demand.

To ensure the lowest possible carbon intensity in our operations and for our partners, the year 2020 marked another milestone on our journey to **(1) consolidate** energy sources and support our partners globally to realize emissions reductions from fuel-switching, **(2) curb** emission during exploration, production, and transmission to reduce emissions along the value chain, **(3) create** alternative low-carbon energy and fuels, and **(4) compensate** remaining emissions.

Mangrove trees in Qatar

CONSOLIDATE

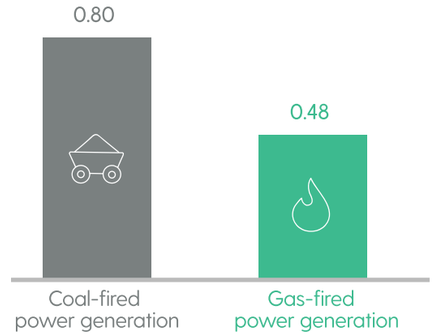
HIGHLIGHTS 2020

■ **Our LNG export volume of 77 MTPA in 2020 may help to abate over 135 MTCO2 emissions by displacing coal in the power sector globally. Coal displacement remains a prime opportunity to abate emissions globally.**

■ **QatarEnergy plans to pilot CNG fuel stations in Ras Laffan and Mesaieed Industrial Cities for the QatarEnergy bus fleet to demonstrate lower carbon fuels in the domestic transportation sector. We see that making structural shifts to our local and global energy production and consumption patterns will yield significant improvements towards climate change mitigation.**

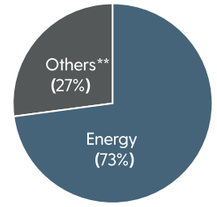
Over the past few years, the global economies have continued to rely on coal for about a quarter of the total energy supply. Such high reliance on coal stresses the need and urgency for switching to lower emissions alternatives.

Emissions factor of coal and gas-fired power generation*
MtCO2e/TWh



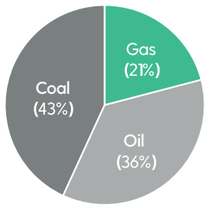
Key Facts

Global annual CO2 emissions by sector



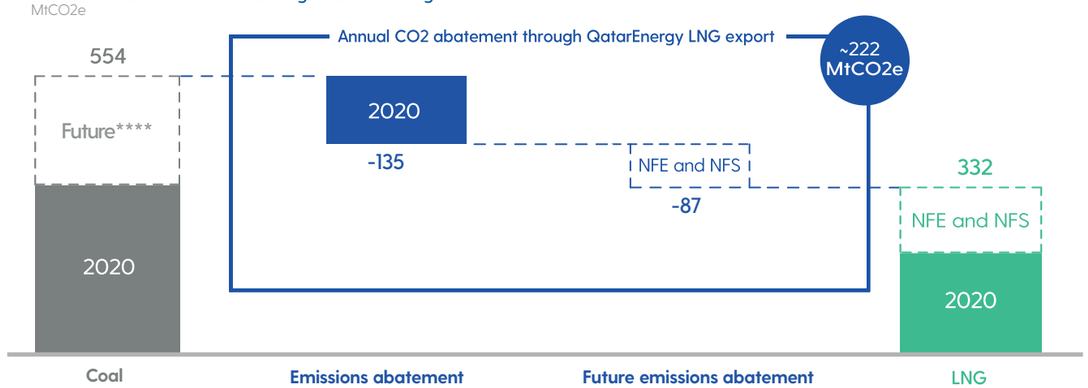
~49 GtCO2e
Global carbon emissions

Global energy-related CO2 emissions by fuel type



~6 BtCO2e
Short term CO2 abatement from coal-to-gas fuel switching in energy sector

Emissions abatement from coal-to-gas fuel switching***
MtCO2e



(*) Median of emission factors for gas refer to lifecycle emissions from combined cycle gas power plants and coal.

(**) Others include Industrial Processes, Agriculture, Land Use Change and Forestry, and Waste.

(***) Emissions calculated based on a power plant efficiency of ~37%, with 2020 LNG production at 77MTPA with equivalent energy production of ~423TWh and NFE and NFS expansion production with additional 49MTPA with equivalent energy production of ~269TWh.

(****) Coal-resultant emissions when producing power equivalent to NFE/NFS export LNG volume converted to Power.

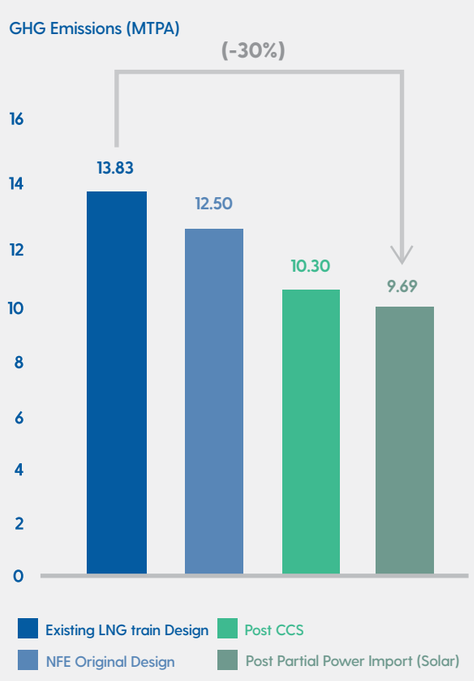
Figures are sourced from Intergovernmental Panel on Climate Change, World Resources Institute study 2016, Our World in Data, IEA World Economic Outlook 2019, and QatarEnergy.

Beyond fuel switching in the power sector, natural gas (CNG) provides an opportunity for additional switching to cleaner fuels within the transportation sector as an alternative to petrol and diesel fuels. CNG has clear advantages of reduced carbon footprint and lower atmospheric pollutants such as particulate matter. CNG as an alternate fuel in the transportation sector has been adopted in several countries.

Qatar and other GCC countries have already made progress in implementing such a transition in the transport sector. QatarEnergy specifically has progressed plans to build a CNG station in RLC and MIC to meet the fuel demand for the bus fleet. An internal FEED (Front End Engineering Design) was carried out, and an EPIC (Engineering, Procurement, Installation, Commissioning) contract was awarded to build the two CNG stations. At the time of writing this report, the CNG stations are under construction, alongside ongoing efforts to convert the bus fleet.

NFE (North Field East Expansion) design building on best sustainability practices:

The RLC Flare Reduction projects introduced between 2012 and 2018 inspired and formed the basis of the NFE design:
As part of the NFE project, a third train with a capacity of 81.6 ton/hr will be added to the existing JBOG facilities. Furthermore, the network will be extended to new berths to recover JBOG gas, which otherwise would be flared. The gas recovery may abate per annum 1 MTCO2eq.The new LNG trains will be supplemented with carbon capture and storage (CCS) technology and solar PV resources, which reduce the overall carbon intensity by about 30% compared to previous generation designs.



GHG emissions reduction though improved design and CCS.
Note: Total numbers above represent four trains.

NFE gas turbines will be equipped with ultra-low NOx combustion upgrades: All NFE gas turbine drivers and gas turbine generators will employ Ultra Low NOx combustion upgrades to their Dry Low NOx (DLN) burners to reduce NOx emissions by 60% (from 25 to 9.7 ppm). Advanced gas path (AGP) and on the Frame 9s, performance improvement packages (PIP) on the Frame 6s, and heat recovery for both Frame 6s and 9s will increase output power and efficiency further. Moreover, the NFE sulphur recovery units compared to existing LNG facilities will improve sulphur recovery rate from 99.25% to 99.9%. NFE design also focuses on water consumption and treatment, targeting 75% recovery or 2125 m3/hr (~11.2 MIGD). To reduce seawater consumption for process cooling and minimize the impact on seawater temperatures through discharge, NFE will be equipped with freshwater cooling towers. This will reduce seawater consumption by 80%).

OUTLOOK:

- Coal-to-gas fuel switching remains one of the most cost-effective levers to decarbonize the power sector.

- The additional LNG supply from NFE/NFS may help to abate over 220 MTCO2e per annum.

- LNG will play a critical role as more and more countries phase out coal in power generation.

- Natural gas fired generation due to its dispatchability and quick response is a potential facilitator of intermittent renewable energy sources such as wind and solar.

CURB

HIGHLIGHTS 2020

■ Working with partners Chevron and Pavilion Energy, QatarEnergy developed a new emissions reporting methodology to ensure consistent and standard emission reporting across the LNG value chain.

■ A 62% reduction in flaring was achieved at Ras Laffan Industrial City since implementation of the flare reduction program (2012).

■ As of 2020, Energy Efficiency initiatives implemented since 2013 have resulted in savings of the equivalent of 44 MMscfd of natural gas consumption.

QatarEnergy aims to reduce its GHG emissions from operations through flare and methane emissions reductions as well as energy efficiency improvements. To achieve our goals, we have implemented several initiatives.

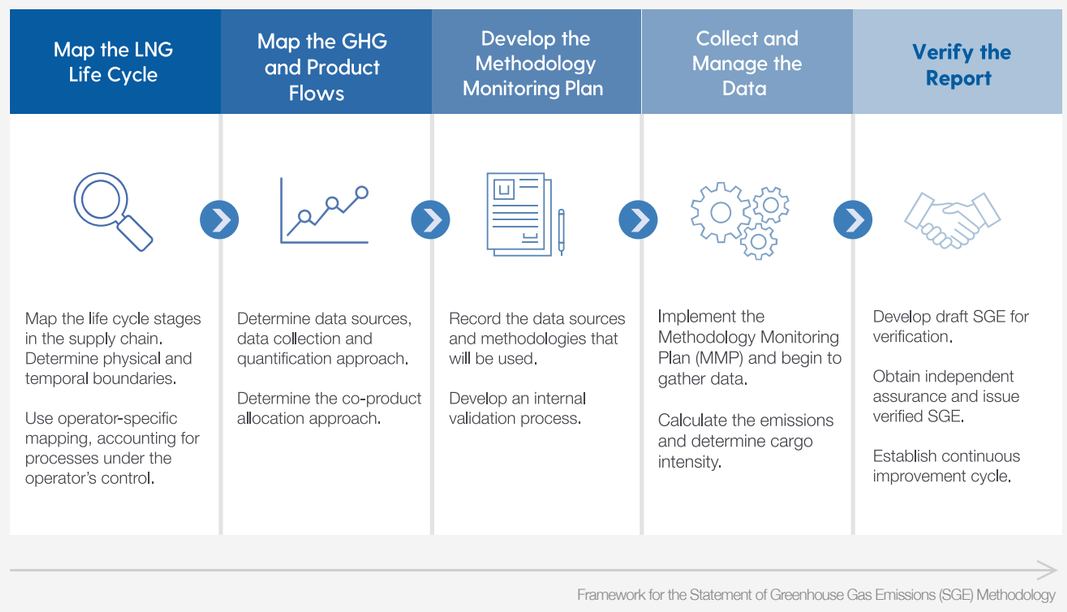
IMPROVING CARBON ACCOUNTING AND REPORTING

We have implemented a new monitoring and accounting process in Ras Laffan Industrial City (RLC).

Operators in RLC continue to report their emissions following the QatarEnergy procedure, which is based on the European Union Monitoring and reporting Regulation (EU MRR 2012) supporting the European Union Emissions Trading Scheme (EU ETS).

QatarEnergy, Chevron, Pavilion Energy partnership on Statement of Greenhouse Gas Emissions (SGE) Methodology:

The initiative is one of the first to develop and publish a methodology specifically to quantify the greenhouse gas (GHG) emissions associated with a delivered liquefied natural gas (LNG) cargo. The methodology will provide a measurement, reporting, and verification methodology which compliments common GHG reporting processes to deliver a consistent, verified SGE for each delivered LNG cargo. The SGE Methodology covers operational emissions associated with all life cycle stages from production wellhead to the delivery point, including an incoming ballast voyage and in-port emissions for shipping.



Framework for the Statement of Greenhouse Gas Emissions (SGE) Methodology

REDUCING FLARING AND METHANE EMISSIONS

QatarEnergy continues to focus on flare reduction efforts. The flare management program has significantly reduced the flaring intensity at the LNG facilities. And having committed investments over USD $170 million from 2018 to 2021, QatarEnergy will achieve further reduction in flare intensity across Qatar. In 2020, a 62% reduction in flaring in our RLC facilities compared to 2012 levels was achieved, when we started the flare reduction program. Flare reduction projects developed by a fuel additives company and a fertilizers company will reduce flaring in the near term further. QatarEnergy aims to achieve zero routine flaring by 2030 for its offshore facilities and reduce flaring in its onshore facilities to the absolute minimum technically feasible.

Pearl GTL facility

Pearl GTL Flare and Methane Emissions Management:

In 2020, we elevated our efforts to reduce flare intensity and reached a new all-time low with flaring emissions down over three quarters since the launch of the Pearl GTL program in 2015. The same held true for methane emissions, which have dropped by 99% over the same period.

FLARING REDUCTION

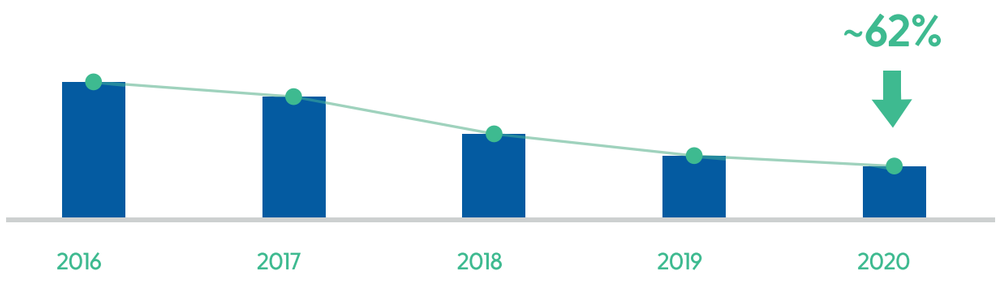
Pearl GTL (gas-to-liquids) is the world's largest plant to turn natural gas into cleaner-burning fuels and lubricants. It is a venture between QatarEnergy and Shell.

Pearl started flare and methane reduction **programs in 2015** and methane LDAR program was **implemented in 2018**.

More than **70% reduction** in flaring GHG emission* over the past six years

A flare abatement plan is in place to **achieve further reduction**

FLARING EMISSION REDUCTION AT PEARL GTL



GHG (CO2, CH4, N2O) emissions reported as per QatarEnergy reporting procedure

In addition to focusing on flare reduction within our operations in Qatar, QatarEnergy has been promoting methane emissions reduction both in Qatar and in the Middle East Region. In 2020, we sponsored the Methane Guiding Principles' (MGP) global outreach programme courses and invited all operators in Qatar and some companies from the GCC to leverage our existing collective experience and use best international practices for methane emissions reduction. As an active member of MGP, QatarEnergy is working with the leaders in the industry in developing a set of policy recommendations and engaging with the European Commission to aid in the development of EU policy proposals for legislative acts to further reduce methane emissions.

Methane Guiding Principles at QatarEnergy HQ

Top-down / Bottom-down

Level 5	Site Level Independent Measurement reconciled with Source Level Measurement.
Level 4	Source Level Measurement
Level 3	Actual Source Level Measurement
Level 2	Simplified Source Measurement
Level 1	Asset/Venture Level Measurement

Pearl GTL current level

METHANE REDUCTION IMPROVEMENT

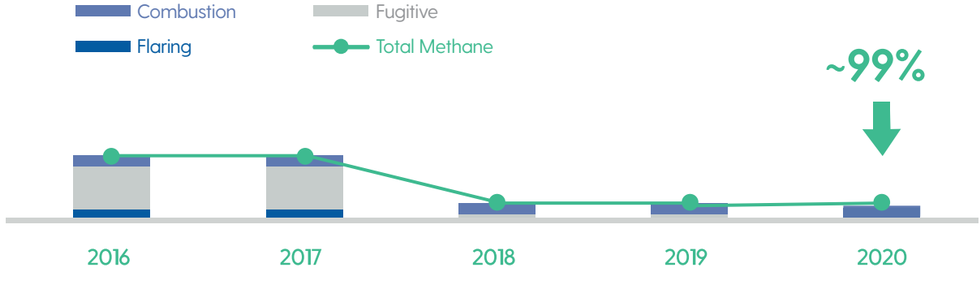
Flaring and fugitive methane* emissions **were reduced by 99%** over the last six years

Pearl GTL **maintains tier 3** dynamic methane LDAR program since 2019.

Pearl GTL currently equivalent to the second phase of the Oil & Gas Methane Partnership (OGMP 2.0) reporting level 3 and **aims to reach the level 5 Gold Standard.**

Pearl GTL **has trialed remote monitoring** of methane emissions leveraging partnership with a satellite-based methane monitoring company

METHANE EMISSION REDUCTION AT PEARL GTL



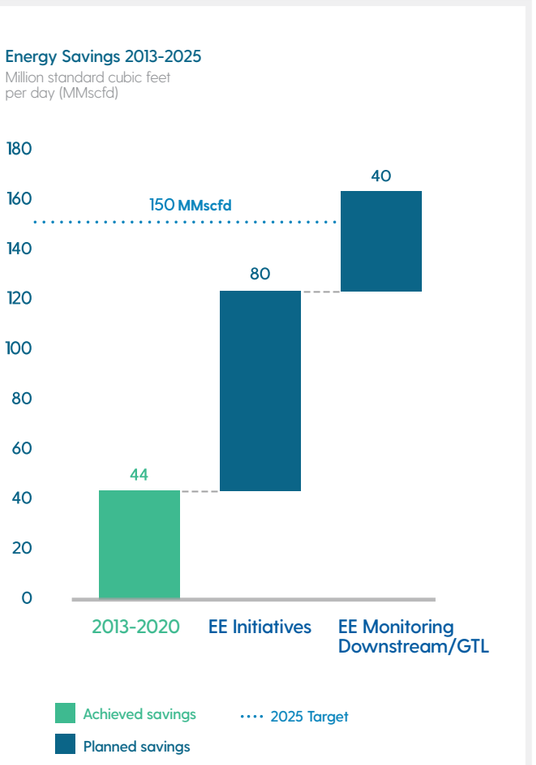
* Fugitive emission reduction driven by change in accuracy methodology and implementation of LDAR program.

ELEVATING ENERGY EFFICIENCY

Elevating energy efficiency represents a key component of our Curb efforts. QatarEnergy has been adopting and implementing energy-efficient technologies in extracting, refining, and developing hydrocarbons to reduce its energy needs and GHG emissions since 2013. As of 2020, we have already achieved energy consumption savings of 44 million standard cubic feet per day (MMscfd).

Looking ahead, we envision optimizing energy efficiency across the value chain further through the implementation of industry proven-best practices and state-of-the-art technology. In this regard, a comprehensive concept select study is currently in progress, with the aim to enhance energy efficiency by fuel/feed gas savings and recycling initiatives in our LNG and sales gas facilities. The study focuses on increasing the efficiency of compressors and gas turbines (GTs) through hardware upgrades, installation of hydraulic turbines in some of the older LNG trains, and by providing the capability to recycle excess fuel gas to the inlet facilities.

The detailed study is currently being finalized on a priority basis with an expected completion target by late 2021. Study results will set the basis and way forward for future energy efficiency strategies within our operated and non-operated facilities. The net fuel/feed gas saving potential from these studies is expected to be 80 MMscfd subject to economic evaluation/ assessment. QatarEnergy has also successfully developed an in-house energy efficiency monitoring tool, to monitor energy usage relative to design specifications, and identify areas for improvement. We expect this tool to yield future savings of 40 MMscfd in downstream activities.



Electrification as a means to improve energy efficiency and lower emissions:

Electrical power supply from Halul to offshore production fields through subsea cables: Halul island receives electrical power from Ras Laffan through subsea cable. In 2020, initiatives were taken to extend electrical power from Halul to offshore production platforms (PS-2 & PS-3). A feasibility study was conducted to assess the power demand for extending the life of MM & BH Fields by another 30 years and sustaining production through the installation of new large-capacity gas lift compressors. The benefits of this project are that the gas turbines for lift gas compressors will be avoided on offshore platforms. Compressors will be electrical motor driven which will result in a clean environment by eliminating criteria pollutant and GHG emissions, utilisation of high-efficiency land power, reduced maintenance, and less manpower.

OUTLOOK:

- The successful partnership with Chevron and Pavilion Energy will improve our GHG emissions accounting and reporting practices.

- Investments of over USD$170 million from 2018 until 2021 to reduce flaring at QatarEnergy Group facilities and we will continue to focus on reducing remaining flare intensity across our operations.

- We will continue our journey towards zero routine flaring by 2030 for our offshore facilities and reduce flaring in our onshore facilities to the absolute minimum technically feasible.

- We will continue to focus on energy efficiency in domestic operations and target tripling our current level of savings by 2025.

Signing ceremony of Siraj Project

CREATE

HIGHLIGHTS 2020

- **Implemented plans to expand solar PV capacity to provide renewable electricity for our operations and diversify our energy portfolio.**

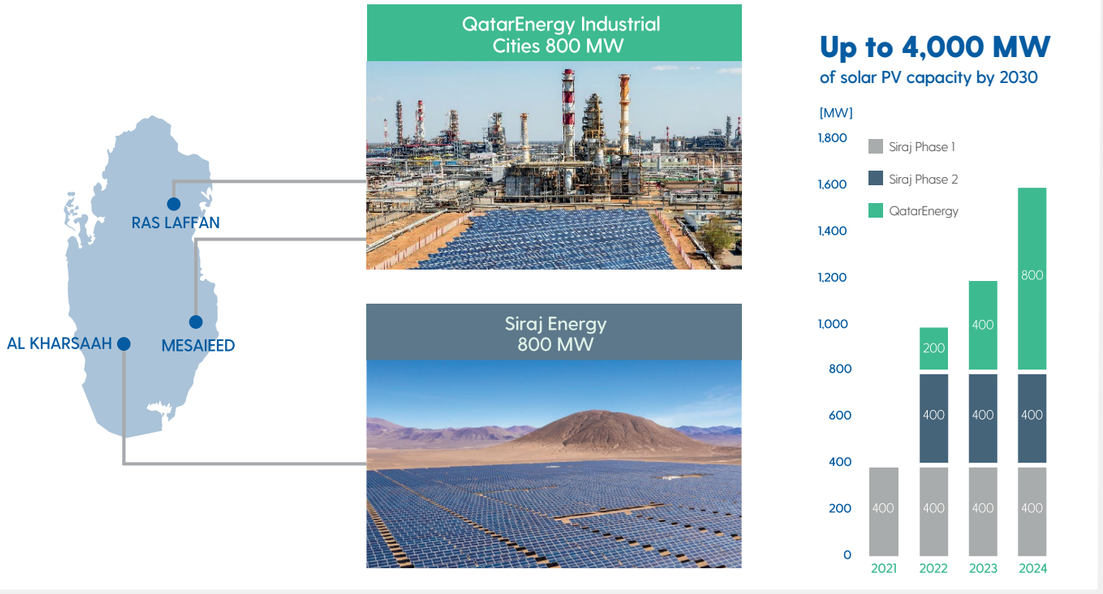
- **Besides our contribution via Siraja to expand solar PV capacity in Qatar, we have detailed our plans to deploy solar PV technology in RLC and MIC.**

- **In 2020, QatarEnergy initiated internal investigations into the viability of Hydrogen and Ammonia as potential energy vectors.**

Under the Create component of our 4C framework, QatarEnergy aims to invest in and expand our alternative energy sources to ensure further diversification into cleaner energy sources. Ongoing investments in solar PV showcase our commitment to develop a diversified energy portfolio to better serve the State of Qatar. As the pace of the energy transition accelerates, we will continue to explore various forms of new and clean energy vectors such as hydrogen and blue ammonia.
In 2020, we initiated working groups to assess the feasibility of Hydrogen production and hydrogen transportation infrastructure development locally and internationally. These efforts will be continued in the future through detailed studies and techno-economic assessments of a Hydrogen hub concept in Qatar.

Expansion of solar PV capacity as a key decarbonization lever:

QatarEnergy continues to expand the solar PV project Siraj near Al Kharsaa. The total capacity will be implemented over two phases, with Phase 1 expected to deliver 400 MW in 2021 and Phase 2 with a further 400 MW in 2022. QatarEnergy is also deploying solar PV in the Industrial Cities to reduce carbon emissions from electricity generation with a further 800 MW planned at these two locations. QatarEnergy has recently stepped up its ambition regarding solar PV expansion to supply power to both new LNG and petrochemical facilities planned in Qatar through additional projects to be realized in the future.



OUTLOOK:

- QatarEnergy will continue to investigate and study opportunities for solar PV and Hydrogen potential.

- We are committed to achieve our updated solar PV capacity expansion targets of 800 MW in 2024.

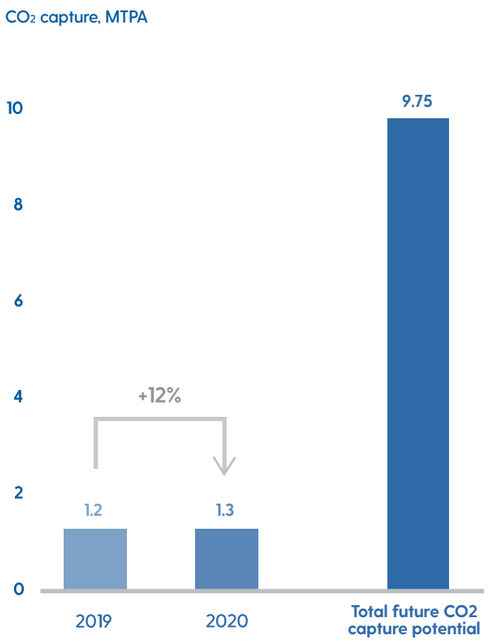
- Our ongoing efforts include detailed studies and techno-economic assessments of a Hydrogen hub concept in Qatar.

COMPENSATE

HIGHLIGHTS 2020

- **In 2020, QatarEnergy has successfully captured and sequestrated ~1.34MT of CO2 from our existing LNG and sales gas facilities located in Ras Laffan.**
- **QatarEnergy continued to investigate incremental CO2 capture from our existing LNG facilities and identified a further ~4.3 MTPA of potential.**

Our Compensate initiatives focus on hard to abate emissions through the use of technology. In 2019, QatarEnergy has 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 aimed to capture CO2 from sulphur recovery units of LNG and sales gas facilities and inject it into a dedicated subsurface formation by using existing injection compressors.



QatarEnergy's CCS ambition:

QatarEnergy successfully captured and injected ~1.34 million tonnes of CO2 from its LNG and Sales Gas facilities in Ras Laffan. The CCS facility is the largest CO2 capture and sequestration facility in the MENA region. Since its inception back in 2019, the project has captured ~2.54 million tonnes of CO2.

As part of our ongoing carbon capture strategy, QatarEnergy is progressing with studies to capture CO2 from remaining LNG facilities, with FEED award expected in 2022. The design CO2 capture potential from these new facilities is ~4.3 MTPA.

QatarEnergy aims to lead the CCS initiatives in the region through deployment of state-of-the-art technologies and best practices. QatarEnergy has embarked on a plan to enhance collaboration and R&D efforts in the areas of pre and post combustion CO2 capture with leading service providers/OEMs.

In the future, captured CO2 from the LNG facilities will be utilised for Enhanced Oil Recovery (EOR) purposes. The first phase of this project will be commissioned in 2023 and the entire project shall be completed in 2026. Based on pilot project results, a sector-wide development scheme will be initiated and implemented.

OUTLOOK:

- QatarEnergy aims to retain its technology leadership position regarding CCS initiatives in the region through research and deployment efforts.

- We continue to investigate carbon removal technologies beyond CCS via nature-based solutions such as blue carbon projects.

- We plan to invest in solid and reliable natural sinks projects worldwide to reduce our emissions further.

QG1 was established in 1984 to produce LNG and related products from its three trains

OUR CLIMATE CHANGE AMBITION

Protecting the environment is a core commitment and part of a wider responsibility enshrined in our corporate values and operational standards. Our recently launched Sustainability Strategy demonstrates our commitment and sense of responsibility as a major energy producer to move towards achieving our announced targets.

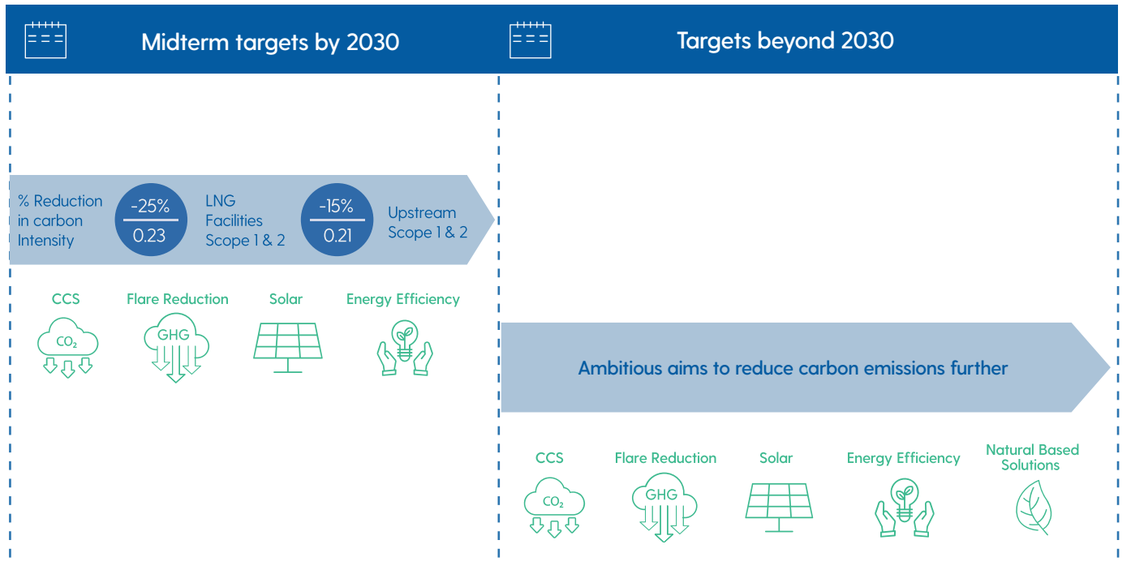
Since the launch of its environmental initiatives nearly a decade ago, QatarEnergy has achieved real momentum in reducing carbon emissions across its facilities and those of its affiliates. In 2020, QatarEnergy established ambitious yet realistic emission reduction targets for 2030 of 25% reduction in GHG intensity of our LNG facilities and 15% reduction in GHG intensity of our upstream facilities compared to 2013 levels. In 2021 we announced further aims for the future. The key levers and focus areas to achieve our aims include:

- **Expansion of solar PV capacity** within the State of Qatar up to 4 GW by 2030.
- **Investments in carbon capture and storage (CCS)** at our LNG facilitiesto reach over 9 MTPA of CO2 capture and storage in Qatar by 2030.
- **Implementation of energy efficiency measures** in our LNG and Upstream facilities to achieve a 25% reduction in GHG intensity in our LNG facilities and 15% in our Upstream facilities by 2030.
- **Piloting nature-based carbon sinks** for climate change mitigation and adaptation. Initiatives such as our Blue Carbon plans will also support biodiversity and secure ecosystem services. Furthermore, we plan to reduce our emissions by investing in solid and reliable natural sinks projects worldwide.

LONG TERM CLIMATE ASPIRATIONS

Beyond bold yet realistic 2030 targets, QatarEnergy has ambitious long-term climate aspirations. Therefore, we are exploring innovative solutions to achieve our aspirations in a world with rising demand for cleaner fuels. These solutions include additional measures to reduce the carbon intensity of our operations, for instance, through energy efficiency measures and reduced flaring and methane emissions. Furthermore, we aim for a more diversified product portfolio by investing in new energy vectors, such as hydrogen, and expanding renewable energy generation as Qatar is blessed with geographically favourable conditions for solar PV. Lastly, to compensate for unavoidable emissions, we aim to deploy additional Carbon Capture and Storage capacity and explore nature-based carbon sinks to offset our corporate emission via high-quality projects domestically and worldwide. **QatarEnergy is planning to announce advanced climate aspirations in the near future.**

Taken together, our climate aspirations will yield significant emission reductions locally, and we will support our partners globally in our role as "Your energy transition partner."



QatarEnergy roadmap to reduce GHG emissions.

QATARENERGY'S ENVIRONMENTAL ACTION

BACKGROUND

QatarEnergy is committed to be a responsible steward of the environment as we consistently seek to minimize any pollution incidents associated with our activities. The Qatar National Vision 2030 aims to strike a balance between developmental needs and the protection of Qatar's natural environment, including land, sea, and air. Furthermore, it emphasizes the importance of an effective legal framework and the environmental institutions that can serve as the guardians of Qatar's environmental heritage.

QatarEnergy is at the forefront of contributing to achieving the objectives of Qatar. At QatarEnergy, we are demonstrating leadership in protecting the environment of the State of Qatar through multi-year masterplans. In 2020, QatarEnergy began working on several targeted environmental masterplans that will be finalised in 2021 with immediate implementation of elements expected in 2021.

Beyond the developments we have undertaken in Climate Change, we are committed to improving the state of the environment in the other domains such as Air Quality, Water Management, Waste Management and Biodiversity.

ABDULAZIZ J AL-MUFTAH
Executive VP Industrial Cities

"At QatarEnergy, we see value in all facets of the environment including Climate Change, Air Quality, Water Management, Waste Management and Biodiversity. We are committed to play an active role and have taken tangible steps to ensure we integrate environmental considerations into our operations in our Industrial Cities. We initiate important studies such as the Mesaieed Industrial City's Air Capacity and Odour Study in 2020 and translate these insights into the way we operate."

ACHIEVEMENTS 2020

AIR QUALITY

HIGHLIGHTS 2020

■ **Following the expansion of the corporate Leak Detection and Repair (LDAR) standard in 2020, QatarEnergy's repair rate reached 52% versus 44% in the previous year.**

■ **The Relative Accuracy Test Audit (RATA) on QatarEnergy's Continuous Emission Monitoring Systems (CEMS) showed that they are in line with international best practices in offering accurate emissions data.**

QatarEnergy is committed to maintaining good air quality by managing emissions from our operations. Our emissions include criteria pollutants such as oxides of nitrogen (NOx), oxides of sulfur (SOx), particulate matter (PM), volatile organic compounds (VOCs), and hazardous air pollutants. We understand the effects of these pollutants and thus scrutinize them continuously. Specifically, we use Continuous Emission Monitoring Systems (CEMS) to measure our emissions and air quality monitoring stations in the industrial cities to monitor our ambient air quality. We also regularly analyse the performance of our upstream and downstream facilities to verify that the safeguards designed to reduce air pollutants are in place and functioning well.

In line with our commitment, QatarEnergy has further invested to reduce our emissions of NOx, SOx, and VOCs from oil and gas production and processing. In 2020, SOx emissions have continued to decrease due to the improved reliability at the upgraded Sulphur Recovery Plant at NGL-3 (Mesaieed Operations) and the successful repair of the Tail Gas Treatment Unit (TGTU) resulting in less frequent unplanned outages. At the same time, we witness an increase of NOx and VOC emissions compared to 2019 levels. The increase resulted from expanding the reporting scope with new sources.

In addition, QatarEnergy has expanded the corporate LDAR standard across our mid, downstream and upstream assets. In 2020, the QatarEnergy refinery LDAR identified 165 points, 20% less than what was identified in 2019, along with a repair rate of 52% in 2020, 8% above that of 2019. Furthermore, we assessed all CEMS within QatarEnergy to ensure alignment with local regulations and US Environmental Protection Agency (US-EPA) Title 40, Code of Federal Regulations, Part 60 (40 CFR Part 60). In 2020, all CEMS passed the independent third-party inspection requirements, which demonstrates that they are operated in line with international best practices to offer accurate emissions data.

Mesaieed Industrial City's (MIC) Air Capacity and Odour Study in 2020:

As part of the study, MIC developed a comprehensive emissions inventory and quantified emissions generated by end-users located within the industrial city. A dispersion model was run using air dispersion modelling software (CALPUFF) to determine long-range transport patterns of generated pollution. Subsequently, exceedances to National and International Ambient Air Quality Standards were highlighted and a qualitative risk assessment was conducted to identify the health risks associated with pollution levels in MIC. As a result of this study, potential air quality monitoring station hotspots were evaluated, and an Airshed Management Plan was developed to improve the air quality by instituting necessary controls.

To further enhance operational excellence at existing industrial facilities in MIC, an odour study was implemented to understand the present status of odour levels, sources, and the extent of influence areas to bring about the required improvements to tackle odour nuisance. As a result of the study, four major components were subsequently adopted – 1) Odour Patrolling, 2) Odour Sampling and Analysis, 3) Odour Modelling and 4) Qualitative Risk Assessment. Furthermore, an Odour Management Plan was developed to assess the odour and mitigation mechanisms to address odour issues within MIC.

OUTLOOK:

- While QatarEnergy has achieved several successes in managing our emissions of NOx, VOCs and SOx along with improvements in leak detection, we continue to seek areas of further improvement.

- NOx, and SOx emissions will vary on an annual basis due to operational limitations such as unplanned equipment outages and downstream issues.

- However, we are committed to work on and implement ways to reduce both NOx and SOx emissions as part of out initiatives to reduce fugitive emissions, flaring and venting.

Environmental data presented in this section is specific to QatarEnergy operated assets and not sector.

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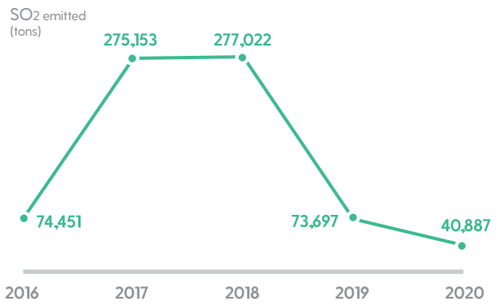
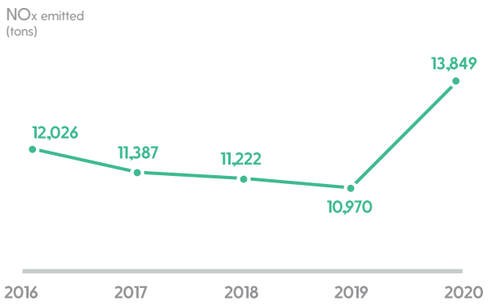
Air Pollutants - QatarEnergy Assets





Halul production island

Environmental data presented in this section is specific to QatarEnergy operated assets and not sector

WATER MANAGEMENT

HIGHLIGHTS 2020

■ **We developed a new environmentally compliant centralized wastewater and sewage treatment plant that maximizes efficiency at Halul Island to accommodate the increasing population.**

■ **QatarEnergy has emphasized the assessment of Treated Industrial Water (TIW) at Mesaieed Industrial City through Net Zero Liquid Discharge (NZLD) or Zero Liquid Discharge (ZLD) studies on brine discharge.**

■ **We upgraded the Sewage Treatment Plant (STP) in Dukhan in line with environmental requirements, thus allowing for treated sewage effluent to be used for landscape irrigation in the Dukhan township and several other areas.**

Water management in general and the use of freshwater in operations in particular is of critical importance to the energy sector. At present, most of the water used in QatarEnergy's operations is based on desalinated sea water. Our systems have been designed to efficiently use and minimize our total water consumption. In 2020, QatarEnergy developed a new wastewater collection network and treatment facility to accommodate the increasing population of Halul Island. The 600 m3/day facility utilizes environmentally compliant and innovative technologies and maximizes efficiency by using lifting stations to pump collected wastewater to higher ground to account for the varying topography in Halul.

Moreover, in 2020, we continue to ensure that the water we return to the environment is thoroughly treated and cleaned to meet all relevant local regulations and environmental standards. Water discharge and groundwater are closely monitored to minimize environmental impact, while produced and process water are treated at onsite wastewater treatment facilities. In line with this, we have placed greater emphasis on the industries in MIC to assess the impact of discharging Treated Industrial Water (TIW) into the sea such as by developing NZLD or ZLD facilities. To enable this, an Environmental Impact Assessment (EIA) is put in place to verify the project's benefits from reducing discharges before a model is developed to assess the existing discharge and the spread of discharges within receiving waters.

Furthermore, we have upgraded the Sewage Treatment Plant (STP) in Dukhan, increasing its sewage treatment capacity by 152% to 8620 m3 per day. The new facility employs an advanced Sequencing Batch Reactor (SBR) system, producing treated sewage effluent that is compliant with the requirements of local authorities. This has allowed for the treated sewage effluent to be used for landscape irrigation in the Dukhan township and several other areas.

OUTLOOK:

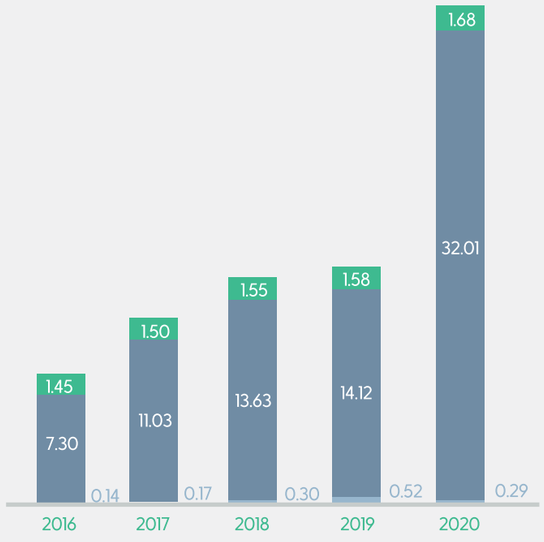
- QatarEnergy acknowledges the impact that water management has on our local communities and the importance of water conservation and recycling in our operations.

- In line with our commitment, we seek to continue spreading the awareness of water management amongst our staff, contractors and, communities in QatarEnergy.

Effluent Water Treatment Plant for NGL

In 2020, QatarEnergy commissioned a feasibility study and concept optimization to identify effluent sources and find the most suitable effluent treatment units in line with environmental requirements. As a result of the study, QatarEnergy proposed the launch of an Effluent Treatment Plant in NGL-3 and 4, SRU and M/s SNC Lavlin. Through this project, QatarEnergy has been able to meet full compliance with the requirements of environmental authorities. Specifically, it allows for the reuse of treated water for irrigation and landscaping, while avoiding and mitigating adverse impacts on the marine environment from the discharge of untreated wastewater to the sea. Furthermore, it has also resulted in ripple economic benefits as a result of cost savings from reduced water consumption due to substitutes from treated water.

Water Discharge performance
(million m3)



WASTE MANAGEMENT

HIGHLIGHTS 2020

■ **775 tons of BELCO Catalyst from refineries were successfully recycled at a leading cement company in 2020 instead of disposing it at a hazardous waste treatment centre as done in 2019.**

■ **All hazardous waste from QatarEnergy's industrial cities and operations was successfully disposed of in compliance with local environmental regulations and the requirements as set out in the Consent to Operate (CTO).**

Waste management has been identified as one of the most urgent environmental priorities in Qatar and we place a strong emphasis on the sustainable management of both hazardous and non-hazardous wastes. In line with the national agenda, QatarEnergy continuously seeks opportunities to reduce, reuse and recycle materials from our operations. To enable this, we have developed an integrated system for waste separation, safe transportation, recycling, waste disposal and promoting environmental awareness. These initiatives tend to not only result in resource recovery but also lead to cost savings or new forms of revenue in many cases.

As an energy producer, QatarEnergy generates both non-hazardous and hazardous wastes, with non-hazardous wastes accounting for over 70% of total wastes generated in 2020. Our non-hazardous wastes include paper, other urban solid waste, as well as drilling waste from onshore and offshore operations. We consistently manage these wastes across our operations and send them to waste treatment centres for further handling. In 2020 Mesaieed Industrial City Domestic Solid Waste Management Center recycled 159 m3 of paper, 37 m3 of metal, and 181 m3 of plastic after collection by a contractor. This process allows for the sustainable management of wastes.

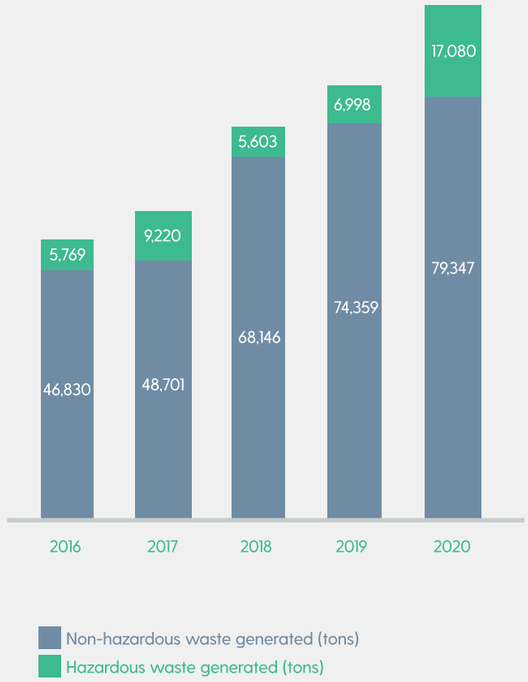
Meanwhile, our hazardous wastes include oily sludge, wastewater, naturally occurring radioactive materials (NORM) waste, and toxic heavy metals amongst others. We carry out periodic inspections of our hazardous waste facilities and ensure strict regulatory compliance within the requirements of local authorities for waste handling, transportation, treatment, storage, and disposal. All hazardous waste, from the industrial cities and QatarEnergy's operations are successfully disposed of in compliance with the Consent to Operate (CTO) requirements and local environmental regulations. In 2020, Mesaieed Industrial City Hazardous Waste Treatment Centre (HWTC) received 2460 tons of hazardous waste from QatarEnergy operational facilities for treatment and further disposal to Class I & Class II landfills. This allows for the sustainable treatment and responsible management of hazardous wastes to limit the impact to the environment.

OUTLOOK:

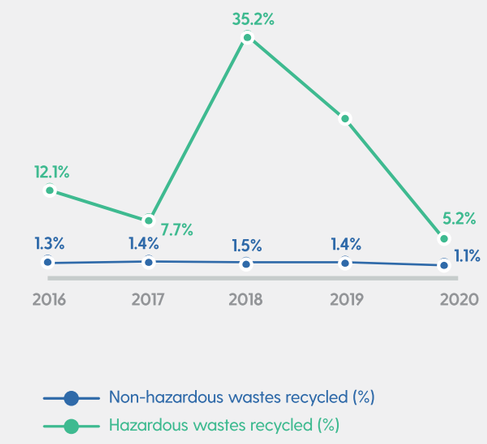
- Moving forward, we will continue to sustainably manage our wastes in line with the environmental regulations, along the waste hierarchy, and in compliance with requirements set out in the CTOs.

- At the same time, we will continue to actively seek opportunities for further enhance resource recovery to approach a circular economy.

Waste generated
(tons)



Wastes recycled
(%)



BIODIVERSITY

HIGHLIGHTS 2020

- **Retained full commitment to protecting Qatar's endangered species, in line with Qatar's National Biodiversity Strategy and Action Plan (NBSAP)**

- **In 2020, a total number of 193 hawksbills turtle nests were recorded with an estimated total number of 13,149 live hatchlings.**

QatarEnergy is in full support of Qatar's National Biodiversity Strategy and Action Plan (NBSAP) that was finalized in October 2004. Based on an assessment of the status of biodiversity in the country, Qatar's NBSAP identified a total of 11 strategic goals as illustrated in the diagram.

QatarEnergy strives to restore, maintain, and enhance biodiversity through several initiatives to promote the conservation of Qatar's ecosystem, encourage the sustainable use of natural resources, and raise public awareness around Qatar's 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.

Despite the COVID-19 pandemic, QatarEnergy has retained its full commitment to protecting Qatar's endangered species. QatarEnergy continued to monitor and conserve Qatar's hawksbill turtles in seven sites of the state namely – Ras Laffan Industrial City, Ras Rikken, Umm Taes, Al Gharrya, Fuwairit, Al Marrouna and Sheraouh Island. The monitoring program involves aspects such as tagging, satellite tracking, DNA analysis and a public awareness campaign. In 2020, a total number of 193 nests were recorded with an estimated total number of 13,149 live hatchlings. All in all, the results of this season are promising for the conservation of the indigenous turtle population, trending towards stable long-term survival.

Hawksbill turtles in Qatar

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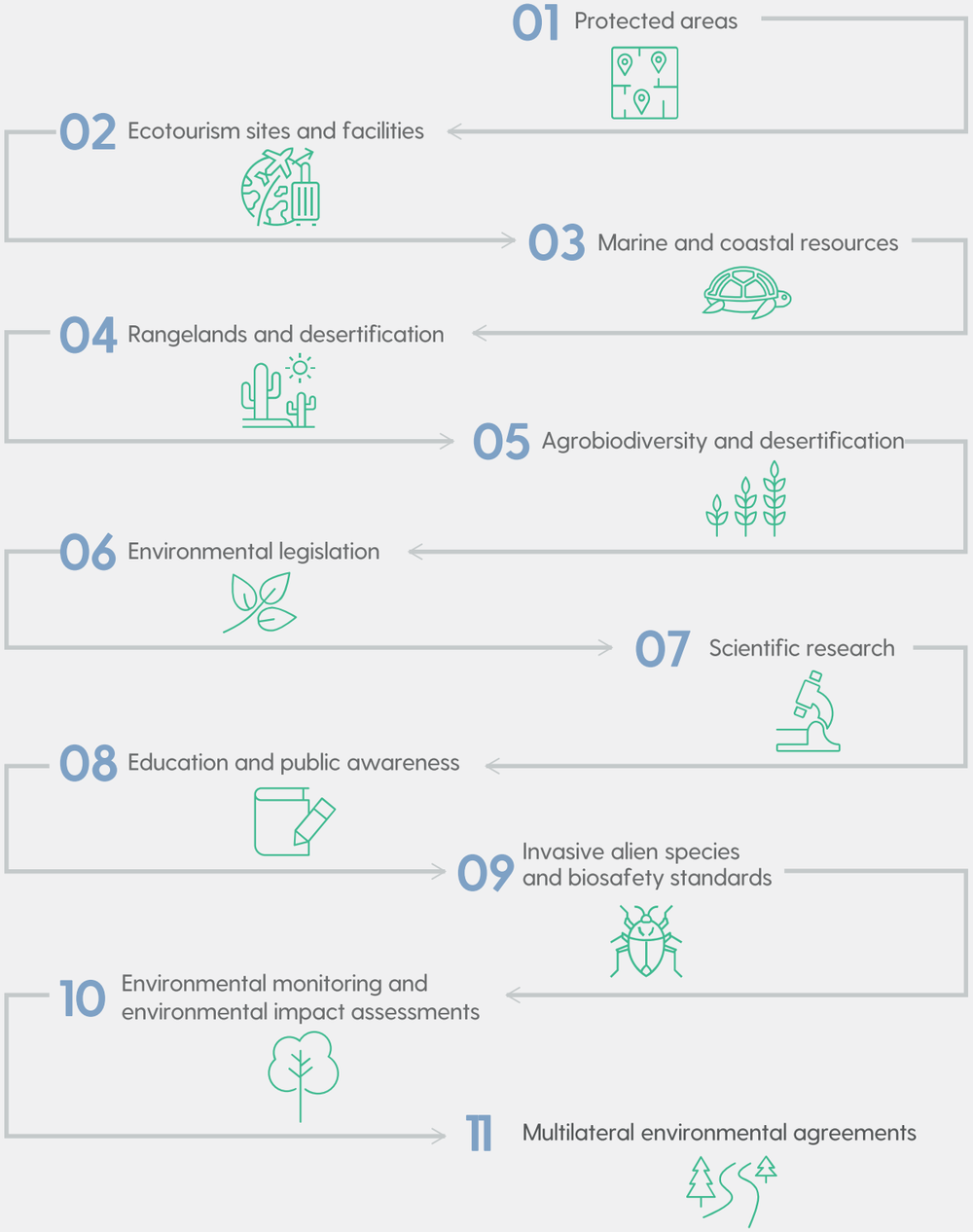
Qatar's National Biodiversity Strategy and Action Plan (NBSAP) identified a total of 11 strategic goals under the following titles



OUTLOOK:

- As we move forward, QatarEnergy continues to prioritize efforts in the biodiversity domain.

- We seek to continue understanding and minimizing our impact on biodiversity to ensure we safeguard our endangered species.

OUR ENVIRONMENTAL AMBITION

QatarEnergy will continue championing environmental initiatives. As a responsible steward of the environment, we will continue enhancing our environmental masterplans and contribute to the wellbeing of our key focus areas. We will strive to improve our management of Air Quality, Water Management, Waste Management, and Biodiversity while reinforcing the importance of sustainable management. Moving forward, QatarEnergy continues to be fully supportive of Qatar's environmental ambitions and seeks to find ways to actively contribute in the years ahead.

RLC Turtle Beach Cleanup

HIGHLIGHTS 2020

- **Achieved significant personal safety improvements, including a 41% reduction in the Total Recordable Injury Rate (TRIR) and a 52% reduction in Lost Time Injury Rate (LTIR) compared to 2019.**
- **Successfully implemented the '7 Star HSE Audit System' to ensure maintaining appropriate occupational health and safety for contractors.**
- **Developed and updated several standards essential to maintaining process safety and emergency preparedness, such as the Process Safety Management System (PSMS) Corporate Standard.**

Beyond Climate Change and Environmental Action, Operational Responsibility is another key pillar of QatarEnergy's sustainability strategy. In QatarEnergy, we regard safety at work as a top priority. As such, we work diligently towards embracing a positive and safe culture throughout our day-to-day operations to protect our employees, visitors, contractors and the communities around us. We recognise that the industrial sector in which we operate, is exposed to several potentially high-risk activities. As such, we place paramount emphasis to ensure that our standards are in line with the highest oil and gas safety standards.

Our Health, Safety, Environment and Quality (HSEQ) Management System is based on national and local regulations and has been certified to the following international standards, which we use to guide ourselves in producing and delivering our products effectively:

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

QatarEnergy's HSEQ Management System prioritizes several key facets and guides us to ensure that we operate as safely as possible to keep our people and surrounding environment protected from operational hazards. These anchors allow us to manage our people and assets responsibly, serving as a catalyst for growth to ensure the prosperity of future generations:

- Personal Safety
- Operational Efficiency and Reliability
- Process Safety and Emergency Preparedness

PRACTICING PERSONAL SAFETY

QatarEnergy aims to influence the behaviours of our front-line workforce, so that they are confident in recognising and reporting hazards and following safe systems of work and good practices. We maintain continuous dialogue with our employees and contractors through regular HSE training sessions, toolbox talk and weekly safety moments, to ensure safety information, including learnings from incidents, are cascaded across the organisation effectively. These mechanisms serve to reduce the inherent risks associated with our day-to-day operations.

We have also developed robust occupational health and safety programs, such as our Road Safety Strategy and updated Life Saving Rules as shown below. These programs reinforce behavioural change and ultimately help us to prevent occupational incidents.

LIFE SAVING RULES

Permit to Work
Work with a valid permit when required

Lifting Operation
Plan lifting operations and control the area

Working at Heights
Protect yourself against a fall when working at height or overwater

Transport Safety
Obey transport safety rules

Personal Protection Equipment
Wear the required Personal Protective Equipment

Smoking
Only smoke in designated areas

Line of Fire
Position yourself and others out of the Line of Fire

Gas Hazards
Follow hazardous area requirements

Safety Critical Equipment
Bypass safety critical equipment only with approval

In 2020, QatarEnergy saw significant improvement in our safety performance. Specifically, there was a substantial decrease of the 2020 combined Lost Time Injury Rate (LTIR) by 52% and in the Total Recordable Injury Rate (TRIR) 41% compared to 2019. Moreover, QatarEnergy saw accidents having less of an impact on productivity in 2020. In particular, the combined number of workdays lost due to accidents for QatarEnergy employees and contractors decreased by 48% in 2020 as compared to 2019.

52% Decrease in Lost Time Injury Rate (LTIR) in 2020 compared to 2019.

41% Decrease in Total Recordable Injury Rate (TRIR) in 2020 compared to 2019.

48% Decrease in Workdays Lost due to Accidents in 2020 compared to 2019.

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In 2020, we launched specific safety projects such as 'Safety Observations Card' (SOC) and we revamped contractors' HSE management process to enhance the safety culture across the entire organization. These continuous efforts have helped us achieve zero work-related fatalities being recorded from our operations.

ZERO

Work-related fatalities recorded from QatarEnergy operations.

While the COVID-19 pandemic has undoubtedly played a part in the positive performance, due to strict work control measures, these improvements are largely attributed to accumulated knowledge within QatarEnergy and the successful implementation of systems such as the '7 Star HSE Audit System'.

7 STAR HSE AUDIT SYSTEM

The 7 Star HSE Audit System involves an in-depth examination of contractor's Health and Safety Management Systems and associated arrangements. The audit focuses on the key aspects of managing occupational health and safety in the workplace and offers a structured path towards continuous improvement. Specifically, the HSE audit system employs a clear process to score contractors on their HSE levels:

01 Review contractors' health and safety management documentation

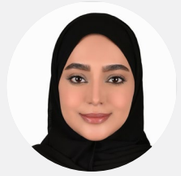
02 Interview management, staff and other relevant parties

03 Conduct site tour, inspection and operational sampling

04 Rate contractors HSE scope (low / medium / high)

05 Offer recommendations on potential improvement

Operators wearing PPE's at QatarEnergy plants

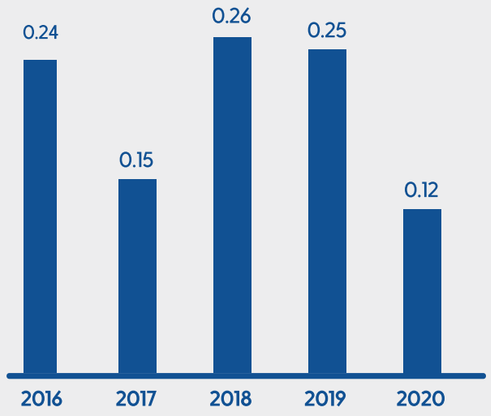


MARYAM ABDULAZIZ AL-JABER
Head of HSEQ Assurance & Audit

"The 7 Star HSE Audit System truly embodies the high value we QatarEnergy place on the health and safety of our people. It has also greatly changed the way we collaborate with our contractors to ensure a safe workplace environment for all individuals. Contractors are now more aware of their occupational health and safety risk levels through a structured process with tangible recommendations from which to tap on to further improve."

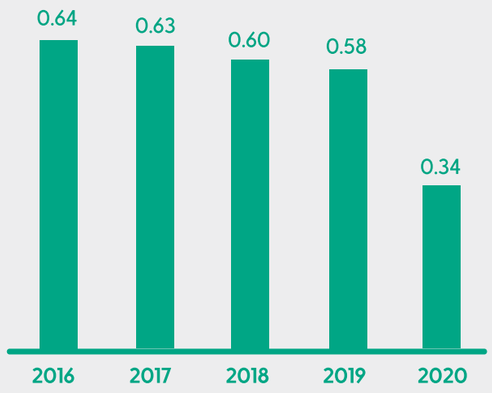
Total lost-time injury (LTIR) of employees and contractors

(per 1 million working hours)



Total recordable injury rate (TRIR) of employees and contractors

(per 1 million working hours)



TOTAL FATALITIES

2016	2017	2018	2019	2020
1	0	0	2	0

Collaboration at a control room of QatarEnergy refinery

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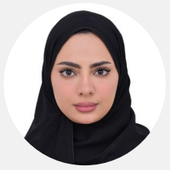
MANAGING OPERATIONAL EFFICIENCY AND RELIABILITY

Operational failures have a severe impact on any business through non-productive time, project delays and cost overruns. QatarEnergy seeks to ensure continuous business success through safe, reliable, and efficient operations. QatarEnergy continues to invest in practices and technologies that improve our safety, production efficiency, reliability, and maintenance execution. We continue to enhance our processes and systems and we engage with our stakeholders to identify and manage risks.

QatarEnergy has developed clear strategies to achieve operational excellence. For instance, in 2016, we launched the Operations Excellence Program, which aims to exploit synergies between our main upstream and downstream operations – Idd El Shargi, Mesaieed and Refining Operations. This program seeks to 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 the best-in-class in the industry.



AHOOD YOUSUF J AL-SHEREEM
Strategic Planning Analyst,
Operations Dukhan

"QatarEnergy places an emphasis on smooth operations and plays an active role in enhancing our capabilities to benefit our network of customers and stakeholders. In particular, the Operations Excellence Program launched in 2016 has truly allowed us to enhance our operational efficiency in the upstream and downstream sector significantly. My team and I are able to draw synergies in our daily operations, thus improving our workflow."

SUCCESSFUL INTEGRATION OF MUNTAJAT INTO QATARENERGY

In 2020, QatarEnergy successfully completed the integration of Qatar Chemical and Petrochemical Marketing and Distribution Company (Muntajat) Q.J.S.C. into QatarEnergy.

- **Process:** The integration journey involved several QatarEnergy functions comprised of a large team working closely with Muntajat counterparts to ensure a smooth integration or people, processes and systems with minimum impact to its customers. Due to COVID-19 restrictions the integration journey became more challenging and had to be completed virtually.

- **Successful Integration:** This integration managed to achieve workforce synergies on Day 1 and will continue to leverage QatarEnergy's existing core and support functions infrastructure to drive more people, process and systems related synergies. This integration marks another step towards achieving one of QatarEnergy's strategic objectives of becoming a leader in the global downstream industry.

- **Moving forward:** Through this integration, QatarEnergy aims to continue expanding its global reach, further strengthen its downstream capabilities by establishing a centre of excellence for the downstream business in Qatar and pooling the commercial, technical and financial capabilities of both QatarEnergy and Muntajat and by leveraging higher efficiencies in the deployment of our human and financial resources.

MAINTAINING PROCESS SAFETY AND EMERGENCY PREPAREDNESS

QatarEnergy prioritizes process safety and emergency preparedness which is an important lever to achieve operational responsibility. Accordingly, we have developed our systems in our operating sites in line with national and international best practices, putting in place measures to ensure our risks are kept to a level that is 'as low as reasonably practicable' (ALARP). These systems allow us to manage risks associated with operational hazards such as fires, explosions and releases of hazardous material.

In case of unforeseen events, in which major incidents do occur, we have in place detailed emergency procedures. These procedures are regularly tested to ensure that they are understood, suitable, effective and up to date. We also carry out inspections, test equipment, apply sound engineering principles, and implement robust operating practices of our assets. Furthermore, we collect, collate and analyse key performance indicators relating to process safety, which gives us an insight into the performance of our process safety management system.

From a reporting perspective, the focus in 2020 has been on ensuring high data quality and that our Process Safety Incidents (PSIs) are reported accurately. In 2020, we reported 3 Tier 1 incidents and 6 Tier 2 incidents, with performance in this area plateauing in 2019 and 2020. Despite carrying out the required checks and verification to ensure data accuracy, we believe there remains opportunities for improvement in recognition and reporting of PSIs. To bring about improvements in the reporting process, we are undertaking the following steps:

- Launching the new standard on incident reporting and communicate to all concerned parties.
- Revamping the SAP HSE module to adopt the Process Safety Incidents events and classification.
- Embedding process safety culture within the organisation.

QatarEnergy staff at site operations

HIGHLIGHTS 2020

Process Safety Management System (PSMS) Corporate Standard

An updated PSMS Corporate Standard was published and disseminated to all QatarEnergy staff in 2020. To support the rollout and ensure full understanding, training programmes and awareness and implementation workshops were conducted for staff. Subsequently, a Process Safety Community was established to follow up on the progress of the implementation of PSM System standard activities.

Management of Change (MoC) Standard

The MoC standard was also published and disseminated to all QatarEnergy staff. The concerned departments in QatarEnergy conducted a gap analysis to identify the actions required to comply with the requirements of the corporate standard. A Process Safety Community was also established to follow up the progress in the implementation of MoC standard rollout activities.

Corporate Major Accident Hazards Management (MAHM) Standard

The Projects Directorate of QatarEnergy has commenced the development, design, and operation of the MAHM Standard. Meanwhile, the Operations Directorate has also started a consultancy project for the development of the baseline Operation MAHM Reports. In line with this, the QatarEnergy Drilling department started updating the SoW in contracts with drilling contractors to request the development of MAHM Reports and to develop bridging documents accordingly. A Process Safety Community is also following up the progress in the implementation of MAHM standard activities.

STRIVING FOR OPERATIONAL EXCELLENCE

In line with QatarEnergy's operational directorate mission to operate in a manner that is "safe, reliable and efficient" and to be acknowledged as a world class operator, we have put in place a rigorous process to continuously improve our processes to ensure operational responsibility.

MR. AHMAD SAIF AL-SULAITI
Executive VP Operations

"In line with our aim to 'do the right thing in the right way everyday', QatarEnergy is committed to continue harnessing our capabilities to deliver in an efficient, reliable yet safe manner. While we continue to perform well in our personal and process safety, while maintaining efficiency, we are dedicated to continue assessing our performance and readily put forth improvements as we go forward. Specifically, we are dedicated to achieve zero fatality and to further reduce the injuries in QatarEnergy from existing 2020 levels."

CONTINUAL IMPROVEMENT OF OPERATION EXCELLENCE PROGRAMME

In 2016, QatarEnergy initiated an Operation Excellence (OE) journey. This journey is defined as a multi-year programme, which aims to see a systematic improvement of Operational Responsibility.

The OE model as seen below, is a platform which focuses on three pillars: People, Process and Technology, with 13 OE improvement initiatives in progress. The programme delivery focuses on gap closure with "best in class" industrial standards. The aim is that in the coming years this programme will be further integrated in routine operations, to be evolved into a continual improvement (CI) process, keeping aligned with the latest best industrial developments.

These initiatives are facilitated by a manager from one of the operation assets, leading a team of Subject Matter representatives from all assets and coached by an OE expert. Specifically, some initiatives have an inter-directorate collaboration with representatives from these directorates. As integrated part of the CI process, a deep dive review on OE progress took place in 2020, with two reputed international consultants. The outcome was that significant progress has been made, with opportunities for further enhancement identified.

Moving forward, QatarEnergy seeks to further integrate all 13 initiatives into four main workstreams – (1) Capacity and Culture, (2) Asset Integrity and Process Safety, (3) Reliability and Maintenance Execution and (4) Production Excellence. The Reliability and Maintenance Execution Process will also be commencing further testing at production sites to seek ways for further improvement.

QatarEnergy Staff at QatarEnergy refinery

OE MODEL

OE MODEL INITIATIVES AT REFINING, MESAIEED, ONSHORE AND OFFSHORE OPERATIONS:

People – Organization capabilities (5 initiatives)		Process – Work process management (8 initiatives)		Technology – Equipment supporting IT (6 initiatives)	
O1	Reorganization, optimization	P1	Process safety and behavioral safety management	T1	Performance, reporting, management & KPIs
O2	Competitive development and assessment	P2	Asset integrity management	T2	Integrated Management system
O3	Leadership, talent management (under VH)	P2A	Turnaround management	T3	Electronic PTW
O5	Front line staff alignment and engagement	P3	Reliability Improvement	T4	Asset management system
O5	Employee survey	P4	Safe, reliable and efficient operations (ESP)	T5	Production excellence (IOF)
		P5	Maintenance planning and execution	T6	Deeper standardization
		P6	Value enhancement		
		P7	Energy & environmental improvement		

Indicated initiatives under consideration

QatarEnergy's PSMS was based on the international CCPS (Center for Chemical Process Safety) standard, which is used by IOC and NOC's. This standard is based on 20 pillars, which include Hazard identification and risk analysis and MoC standard.

SOCIAL & ECONOMIC DEVELOPMENT

- TAKING CARE OF OUR PEOPLE
- CONTRIBUTING TO SOCIAL AND ECONOMIC DEVELOPMENT
- BROADENING OUR CONTRIBUTION

HIGHLIGHTS 2020

- **Maintained our Employee Engagement, despite the pandemic challenges, through support and resilience programs, such as the 24/7 Employee Assistance Program, providing individual care on a variety of topics**

- **Continued to engage with local suppliers through the Tawteen programme, successfully awarding ~69% of 2020 procurement contracts to suppliers and contractors based in Qatar.**

- **Delivered more than 50,000 hours of training to employees in 2020 by adopting a virtual classroom approach to adapt to the constraints brought about by the COVID-19 pandemic.**

TAKING CARE OF OUR PEOPLE

In QatarEnergy, we value our people and see our human capital as the foundation which enables us to achieve our Vision and Corporate Strategy. We are nurturing a highly capable workforce through robust talent attraction and development programmes while ensuring employee engagement and welfare in an environment that is diverse and inclusive. We strive to provide a safe and positive working environment for our people and to collectively deliver our strategy and live our values of Safety, Excellence, Collaboration, Respect, Responsibility and Integrity every day.

These steps are strongly in line with our QatarEnergy People Agenda as illustrated below. Our QatarEnergy People Agenda helps us achieve sustained performance within the company through developing structures, processes, systems, policies, people and culture. One of the ambitions of the People agenda is to build and connect all elements of talent management, in line with best practices. Our different talent processes are being aligned through a central talent management governance, which covers the complete life cycle of talent management, from the planning phase to the Attraction, Development and Engagement of our talent.

TALENT STRATEGY AND BUSINESS ALIGNMENT

DEVELOPING A CAPABLE WORKFORCE

TALENT ATTRACTION

At QatarEnergy, we recognize the impact a capable workforce can bring and are committed to attract the right talent. As such, we continually review how we operate, communicate and engage with our workforce to make sure we are valuing and respecting the expertise, skills, backgrounds, and experiences of our diverse team. We regularly review and refine our policies and procedures related to our talent-management processes. We provide excellent opportunities for individuals from diverse background and nationalities who are looking to join us and develop their careers across multiple disciplines. At the same time, we are committed to invest in mechanisms in the workplace to ensure inclusion of all employees.

ABDULAZIZ MOHAMED AL-MANNAI
Executive VP Human Capital

"QatarEnergy is committed to go the extra mile to hire the best people for our organization. We have taken on an active role in reaching out to a global and local network of potential employees and seek to continue enhancing our outreach methodologies. Furthermore, we continue to invest in our existing employees to encourage continuous development and high retention. Our success is dependent on the presence and excellence of our people, and we are committed to support them throughout the way."

TALENT DEVELOPMENT

Beyond attracting the right talent, our continuous success depends on our ability to continually develop our people. We support our employees' personal and professional goals by providing them with suitable learning and development opportunities, accompanied by a safe and healthy workplace environment to serve as a conducive place. By adopting these mechanisms, we strive to build a strong and empowered workforce.

Training

At QatarEnergy, we acknowledge the value of training programmes in strengthening our employees' skills. These programmes help to improve capabilities, boost morale and in turn lead to retention. We offer a wide range of training opportunities that strengthen the technical skills of employees across different roles in the company.

Specifically, we regard every job as part of a 'job family' that cut across organizational boundaries and consist of employees that engage in similar work activities that require a common set of competencies, such as petroleum engineering, mechanical engineering or project management. We then develop and implement both 'on the job' training and formal learning programs as per the 'job family', thus enabling employees to close any competency gaps efficiently. Furthermore, we employ a two-level training evaluation system to ensure continuous development and high-quality training services.

We engage in-house professional training resources and provide both local and overseas training to our staff. While these programs are typically available in a variety of delivery methods, we are increasingly adopting virtual classrooms modes with instructor-led or self-paced methods in view of the pandemic. On that note, we have also adapted swiftly to the COVID-19 situation by converting a significant number of courses to a virtual offering, allowing us to still offer a substantial amount of training to our employees. As such, despite the challenges presented by the pandemic, we were still able to conduct more than 50,000 hours of training for our employees.

50,000+ | Training hours delivered to employees in 2020.

Leadership and Professional Development and Succession Planning

At QatarEnergy, we regard talent management as a top priority for the organisation. Our leaders commit a significant amount of time towards strengthening the talent pool of QatarEnergy and see talent management as a central and critical part of their role as a leader. Successful talent management and leadership development is achieved through a bespoke mechanism involving knowledge-exchange, actions, reflection and the alignment between the personal needs of the individual and the overall needs of the organisation.

One of the fundamental aspects for any organisation's long-term health is the choice and cultivation of its future leaders. Succession planning and leadership development are two important parameters to create a systematic and long-term process for managing the talent roster across the organization. This will also serve to ensure that we have candidates who are ready and able to fill leadership and other critical positions whenever it becomes necessary.

VIRTUAL WEBINAR CAMPAIGN FOR LEADERS

In 2020, we hosted The Resilience Webinars in response to the QatarEnergy's Executive Vice President's request for more support for our people in the midst of COVID-19 pandemic. The program was specifically designed to develop personal resilience to help participants manage current and future crises at home and at work. The program has since been adapted for internal use, with each webinar edited down to a 20-minute video for bite-sized access. Moreover, an accompanying workbook has also been developed to reproduce the learning opportunities afforded to the participants of the program. This program is called Resilient QatarEnergy and has been made available to all QatarEnergy employees.

Qatarization

Our Qatarization program is done in line with our national strategy of developing a competent Qatari workforce through education and training. Under the leadership of H.H. Sheikh Tamim Bin Hamad Bin Khalifa Al-Thani, Emir of the State of Qatar, and upon the directive from the Minister of Energy and Industry, we are continuously improving our comprehensive and long term approach through a very involved process in which the whole energy sector participates in.

The Plan involves a six-month and annual update, plus an annual review. These developments are led by an industry-wide Steering Committee supported by two committees dealing with recruitment, training and development. To measure our progress in supporting the Strategic Qatarization Plan, we regularly monitor, review and update our internal plans and provide regular updates to the relevant committees.

Specifically, the Qatarization program aims to develop local talents to a standard comparable with best-in class talents globally. The program also aims to attract, develop, motivate, and retain local talents resulting in a high calibre Qatari work force to a world-wide standard, and extending valuable career opportunities with a promising future. This program also benefits the wider Qatari economy, as Qatari employees are later able to transfer their knowledge outside QatarEnergy.

Our Learning and Development Department also coordinates coaching through a variety of programs. In detail, the key features of our Qatarization approach are as follows:

1) Attract, recruit, train and prepare Qatari high school and university students for future roles in QatarEnergy and the energy and industry sector in general.

2) Support the recruitment, educational sponsorship and development of Qatari nationals.

3) Manage educational sponsorships for Qatari students and our trainees.

4) Design 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.

5) Facilitate the placement, career progression and professional development of Qatari nationals in line with our Qatarization plans.

6) Deliver development programs on effective leadership and design individual development plans for our future leaders as part of the corporation's leadership development framework.

We see the value of Qatarization and have continued to improve our programs in 2020. For instance, we continued and improved the Ta'sees project which is a 'push' training program that supports national graduates who join as associates in enhancing their behavioural and effectiveness skills. Moreover, we reviewed, enhanced and standardized the development programs of our University Graduate Associates. These associate development plans were all transferred to the new learning management system, greatly facilitating oversight and support.

ALMAHA MOHAMMED I. AL-MOHANADI
Cyber Security Threat Intelligence Engineer

"QatarEnergy has given me several important opportunities that I am thankful for. Specifically, the Qatarization program has sponsored me through my education journey and equipped me with the necessary training and development opportunities to be ready for my role in the firm. This strong network of opportunities has given me the confidence to succeed in my job."

Ambition

Moving forward, we seek to continuously reinforce QatarEnergy's values including our sustainability ambition into our training and development efforts as well as in our onboarding programs. We will also seek to elevate the developmental opportunities by enhancing the digital journey in human capital by relaunching our internal portal and deploying self-service kiosks. We will also be launching a 'Global Mobility Program' in support of QatarEnergy's strategy of a strong international presence which will provide our people international experience and exposure to different cultures.

ENHANCING EMPLOYEE ENGAGEMENT AND WELFARE

EMPLOYEE ENGAGEMENT

As part of our QatarEnergy People Agenda, we seek to enhance the relationship of employees with QatarEnergy and their commitment to collaborate. Employees that are engaged find greater satisfaction in their professional accomplishments, which results in higher retention. As such, we have launched a host of meaningful initiatives to engage our employees effectively. These initiatives emphasize the supportive culture that QatarEnergy continues to actively provide:

Employee Assistance Program (EAP): The EAP is an anonymous hotline for all staff, which provides independent 24/7 access to a range of professional support services including, telephonic and face to face counselling, legal and financial guidance, and wellness coaching that can assist with issues that could potentially impact job performance, health, mental and emotional well-being.

People Portal: Our People Portal is a user-friendly platform that provides a 'one-stop-shop' 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.

EWELINA ZOFIA JUSZKIEWICZ
Development supervisor,
Learning & Development

”QatarEnergy culture leverages its staff diversity in a way that allows each of its employees to engage in a more and more collaborative manner. Through the various continuous improvement initiatives, we regularly see that our well-being is respected and prioritized.
That’s what makes this company an ever enriching family, one that we are all proud to be a part of.”

ABDULAZIZ HAIDAR ASGHAR ALI AL-KHARAZ
Sr. Camp Services Supervisor
HSE (MIC)

“QatarEnergy truly embodies the spirit of a company that prioritizes the welfare and wellbeing of its employees. I have personally benefitted significantly from the wellness programs put in place to improve my personal health and wellbeing. The events organized by the team at QatarEnergy is an opportunity for me to evaluate and make a conscious effort to live a healthier life. This has enabled me to not only do better at my job, but also live a more dynamic life on a day to day.”

WORKERS' WELFARE

We regard workforce welfare with utmost importance, and we are fully committed to take all reasonable steps to provide high standards of employee welfare. We respect the rights of our workforce and people working at various sites, including those working under our contractors and suppliers. These commitments are included in our Code of Conduct and Human Rights Policy. Furthermore, 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.

We actively seek to improve our culture on workers’ welfare in order to ensure that 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.

Employee welfare initiatives include a range of things like services, facilities and benefits that we provide to our employees to not only positively affect their health and well-being, but also encourage them to be productive and conduct their work with care. In 2020, we have taken active steps to ensure we provide our employees with these important welfare benefits:

Healthcare: 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.

Wellness Programs: We also provide a wide range of wellness programs, including periodic medical check-up for early detection, dietician clinic, weight loss and smoking cessation programs as well as a travel health clinic. In addition, we organize regular health events tailored to employee interests and needs that include educational activities and screenings in order to raise their awareness and empower employees to change their behaviour.

QatarEnergy Privilege Program: As part of the many benefits we offer our employees, the QatarEnergy Privilege Program offers our staff special discounts for products and services from a wide range of companies. These exclusive discounts are posted on our intranet, thus giving companies the opportunity not only to promote their products and services but also to further widen their customer base and to boost their sales in the process.

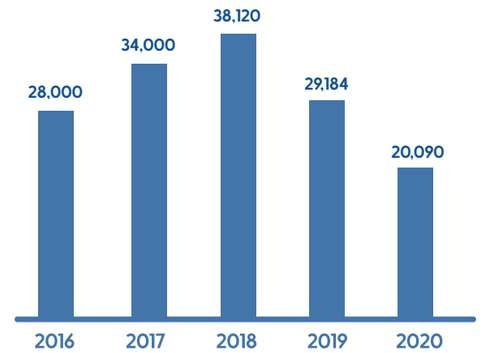
CONTRIBUTING TO SOCIAL AND ECONOMIC DEVELOPMENT

QatarEnergy recognizes the importance of Corporate Social Responsibility (CSR). On that thread, we prioritize CSR and take on targeted actions to further our contributions in this area by:

- Applying sustainable development principles to continue economic development while protecting the environment and providing a better quality of life;
- Integrating economic, environmental and social aspects into all business decisions;
- Achieving sound environmental performance by minimizing the impacts of our activities;
- Seeking better ways to manage natural resources, use less energy and reduce emissions; and
- Complying with applicable national and international environmental legislation and subscribing to best management, technology and environmental procedures and standards.

In line with our commitment, QatarEnergy has continued to support projects and local communities. The projects sponsored in 2020 mainly focused on education and the community. For instance, QatarEnergy offers secondary school leavers the opportunity to undertake further studies by sponsoring their studied. Students are selected for vocational studies or university studies. On completion of their studies, students typically join QatarEnergy or another company in the Energy sector. Additionally, we have been actively supporting projects related to sports and physical training in order to encourage our people to adopt a healthier lifestyle.

Amount spent for CSR projects
('000 QAR)



Beyond corporate level activities, we have also initiated several environmental initiatives through our industrial cities. For instance, we sponsored programs such as school or community environmental awareness and education, conducted environmental workshops, tree planting, marine debris removal and many others to conserve and protect natural habitats and species such as mangroves, marine turtles, reem gazelles, houbara bustards and ostriches.

FOSTERING LOCAL ECONOMIC DEVELOPMENT VIA TAWTEEN

QatarEnergy seeks to further develop our social and economic contribution by fostering local economic development to strengthen the local energy sector. Our Tawteen Supply Chain Localization Program leads the development of Qatari vendors, with an increasing number of registered suppliers based in Qatar. This program is led by QatarEnergy, with the participation of all the other companies operating in this sector in order to achieve three primary objectives:

- Support the realization of the Qatar National Vision 2030 by attracting companies engaged in knowledge and technology-based businesses.
- Support the growth and diversification of Qatar’s economy.
- Establish sustainable and competitive in-country suppliers to meet the requirements of Qatar’s energy sector.

Tawteen is based on three pillars, with the ambition to build a resilient and competitive energy sector:

A — Investment Opportunities

~100 investment opportunities across the Energy sector which serves to drive the localization agenda for Tawteen.

B — In-Country Value (ICV)

ICV sets forth the rules and requirements of in-country value into the procurement ways of working and has an impact on the end-to-end supply chain.

C — Local Supplier Development

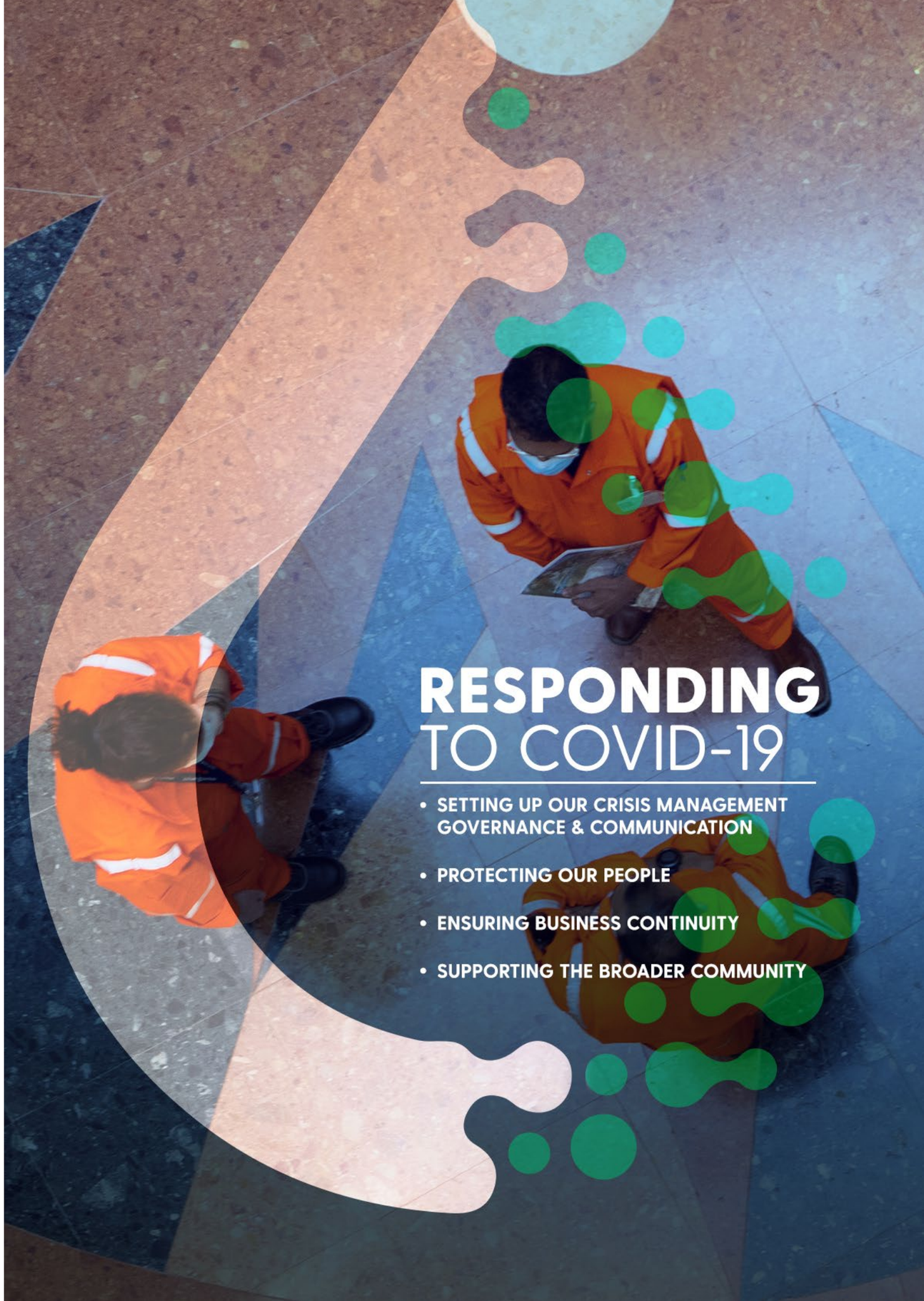
Initiative aimed at promoting collaborative relationships between suppliers and Energy companies to share information, improve business processes, and technical/ business development support.

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%.

Sustainability considerations cover how we engage with our suppliers. We have stringent pre-qualification processes in place to ensure all our trade partners and suppliers meet our HSE and quality assurance criteria. We ensure that all our vendors are registered with us and pre-qualified, ensuring a fair and transparent tendering process that meets international health, safety, environmental protection and governance standards. In 2020, we spent approximately QAR 9.2 billion in procuring goods and services, 69% of which was awarded to suppliers and contractors based in Qatar.

BROADENING OUR CONTRIBUTION

We recognize that the future success of QatarEnergy is closely linked to the strong support of our communities. With that, we continue to bring our communities along the journey with us by increasing awareness on the importance of the energy transition in Qatar and beyond. In addition, we continue to play our part in giving back to the society by supporting social and economic developments in key geographies we operate in. This includes channelling the energy we provide to the betterment of infrastructure and lives around the globe. QatarEnergy is committed to driving growth in a sustainable manner for our people, the planet and our communities.



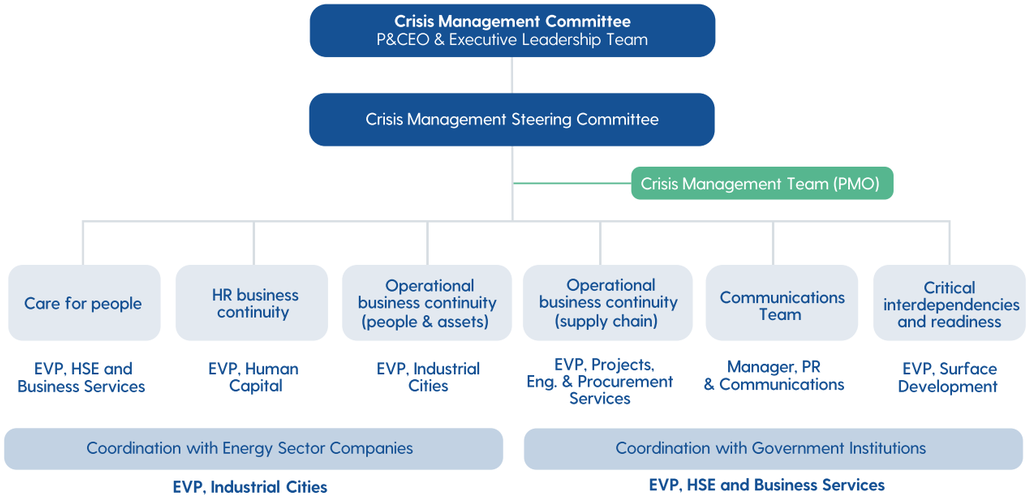
HIGHLIGHTS 2020

- **Established the Crisis Management Governance involving our Executive VPs and ~180 personnel to coordinate pandemic response.**
- **Launched series of initiatives to prevent, detect, manage, and limit the spread of the pandemic, such as proactive testing and case management protocols.**
- **Led the deployment of the COVID-19 vaccines to ~90% of individuals within the energy sector in the state of Qatar.**

SETTING UP OUR CRISIS MANAGEMENT GOVERNANCE & COMMUNICATION

As the coronavirus pandemic broke out across the globe, the threat on the health and safety of our employees and the broader community, along with ensuring business continuity quickly became our primary concern. Facing the constantly evolving pandemic situation, we promptly reacted by establishing our Crisis Management Governance to coordinate response throughout the Energy Sector across the State of Qatar. The governance was spearheaded by the Crisis Management Steering Committee which consist of key Executive VPs. The directions provided were then translated into swift actions through various task forces involving ~180 personnel.

CRISIS MANAGEMENT GOVERNANCE STRUCTURE



Navigating this crisis would not be possible without the support and cooperation of our entire community. As such, we had to come together and ensure that all employees and collaborators alike, are supportive of the same principles. Ensuring transparent, timely and clear communication is key in alleviating anxiety caused by the uncertainty of the crisis. We set up a dedicated communication task force to ensure the executive leadership's direction are translated into an aligned and consistent messaging throughout our organization and the broader Energy Sector community.

MARIANA DIAZ CASTRO
Content Developer & Corporate Communication
Public Relations & Communication

"Communication played a key role in navigating through COVID-19 crisis. Our communications team worked very closely with the leadership to ensure efficient flow of information both from top to the entire organization along with ensuring feedback from our people on the ground are efficiently relayed back to the key decision makers".

PROTECTING OUR PEOPLE

Protecting the health and safety of our people has always been the key priority of our response. We have decisively launched a number of initiatives to prevent, detect, manage, and limit the spread of COVID pandemic in our facilities:

Prevention through redefining the work environment
We undertook swift action to adjust the working environment with the goal of preventing & minimizing the spread of the virus. Initiatives such as setting up 'work from home' arrangement across various facilities, closing access to common-use facilities, and introducing a variety of social distancing measures.

Prevention through increasing awareness
We conducted multiple awareness sessions and distributed circulars & informative posters across our facilities to educate and provide constant reminder of safety & health protocol such as social distancing.

HEALTH ADVISORY
PROTECTING YOURSELF AND OTHERS

MEETINGS
Meetings or conferences should be restricted to a maximum of 25 attendees physically present in one room in any of our work locations.

DETAILS
For all meetings, the details and contact numbers of participants should be recorded and retained for future reference.

CONFERENCE CALLS
For meetings with fewer attendees, consider carefully whether the meeting is required or whether conference calls or emails are acceptable alternatives.

GREETINGS
Refrain from handshakes and any form of greeting that involves physical contact.

DISTANCE
Where possible, sit at least one meter (3 feet) apart from each other. In a meeting room, leave one chair empty between you and the surrounding colleagues.

SAFETY
Provide a safety brief on the measures taken to make this meeting/event safe for participants.

HSE & BUSINESS SERVICES

Proactive testing strategy to allow early detection & tracking
We set up and ramped up our testing capabilities which enabled us to conduct over 100,000 tests. The early detection allowed us to curb the spread of the virus and prevent outbreaks across the broader Energy Sector in the State.

COVID TESTING AND TRACKING CAPABILITY

- Procured **three testing machines** and **~100K swab testing kits.**
- Launched **six frontline clinics** across QatarEnergy and sector.
- Set up **IT infrastructure** to process and manage test bookings.
- **Mobilized ~25 people** to **manage testing** and **tracking** project.
- Developed a **dashboard** to **track confirmed cases** in **QatarEnergy and sector.**

Implementation of case management protocol
We developed clear protocol outlining how to identify, transport, seek medical care and communicate all new confirmed and suspected COVID cases. The issuance of the protocol was further supported by the setup of monitoring activities to ensure proper compliance.

Improvement of hygiene and cleanliness standard and PPE distribution to limit viral spread
We increased cleaning frequency, trained cleaning personnel on disinfection techniques, installed temperature guns to screen staff entrances to QatarEnergy facilities, and procured & distributed PPEs. To date, 2.2 million masks and 2.6 million pair of gloves have been successfully distributed.

Launched the QatarEnergy vaccination program
We established a "control tower" that designed and started the execution of QatarEnergy's vaccination program.

NABEEL MOHAMMED A R AL-BUENAIN
Executive VP HSE & Business Services

"COVID-19 this year has brought an unprecedented challenge to our people and business. In line with our utmost priority to protect the health and safety of our people, we have taken swift and decisive actions coupled with strong monitoring to ensure health & safety protocols are being complied.

The current health crisis has also changed the way we manage work and personal life. We acknowledge the difficulty and strain that this might have in the lives of our people and have adopted a number of flexible arrangements such as 'remote working arrangement' along with various supporting initiatives to ease the transition. No effort has been spared in ensuring that our employees receive the much needed support in these challenging times".

ENSURING BUSINESS CONTINUITY

As part of our priority to ensure business continuity, crisis management task forces were deployed to minimize disruption across our human resource, assets & functions, and supply chain.

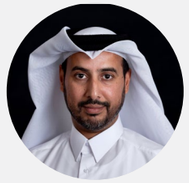
On the aspect of **human resource**, we conducted coordinated repatriation of critical staff, launched remote work arrangement and implemented initiatives to support work from home, and defined prioritization approach for our employee vaccination program. "Village Care" initiatives were also deployed to limit spread and contain any cases in worker villages. To date, more than 8000 staff has been safely repatriated.

In safeguarding operational continuity of our **assets & functions**, we proactively stress-tested and updated our Business Continuity Plans (BCPs) to take into consideration the potential impacts of the pandemic at various risk levels, across different assets and functions.

Ensuring the continuity in our **supply chain** was also a key priority in the crisis response. Disruption in supply chain would not only have an impact to State of Qatar's energy sector but may also negatively impact the broader global energy ecosystem. We mitigated supply chain disruption risk through the following:

- **Securing critical resources & supplies:** We deployed dedicated task force to identify, prioritize, and procure the most critical materials to ensure their availability and to minimize impact on operations. Maintaining critical inventory levels of key resources/supplies and identifying back up supply lines allowed persistent operations across QatarEnergy and the wide Qatar Energy Sector throughout the crisis.
- **Stakeholder risk assessment & mitigation:** A detailed review of the interdependencies within the State of Qatar's energy sector was conducted and key mitigations were defined and prepared for, in order to ensure that Energy ecosystem is minimally impacted by the crisis.

By proactively managing our business continuity and mitigating potential disruptions, QatarEnergy was able to continue our role as a reliable and resilient energy provider in meeting global demand for energy. During 2020, QatarEnergy safely and reliably delivered more than 1045 LNG cargos to more than 20 countries, without a single cargo missed.

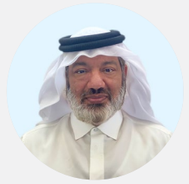


ABDULLA MOHAMED A. AL-MAHMOUD
Supply Chain Manager

"Through close collaboration with both Qatari and International vendors, Qatar Energy sustained the continuity of the supply chain in its entirety throughout the COVID-19 Pandemic. This included the successful execution of planned operational asset shutdowns and turnarounds achieved through 100% material availability".

SUPPORTING THE BROADER COMMUNITY

Beyond our organization, QatarEnergy was also entrusted by the State of Qatar to support in the deployment of the COVID-19 vaccines throughout the Energy Sector community. Throughout 2020 and 2021, we have managed the deployment of ~250,000 COVID-19 vaccines which led to ~90% vaccination rate of QatarEnergy and the broader Energy Sector staff and contractors. The vaccination program played a critical role in minimizing the impact of the pandemic, with reduced number of cases and minimizing disruptions to Energy Sector operations.



MAHMOOD ABDULRAHMAN MAHMOOD AL-JAIDAH
Manager of Healthcare

"As a response to the pandemic, we played a critical role in coordinating the vaccination program across the broader Energy Sector. It was very encouraging for me personally to see the impact that our effort has brought to so many individuals in Qatar during this period of uncertainty".

APPENDICES

- APPENDIX A GRI STANDARDS CONTENT INDEX
- APPENDIX B STAKEHOLDER ENGAGEMENT
- APPENDIX C ALIGNMENT WITH QNV2030 TARGETS
- APPENDIX D PERFORMANCE DATA
- APPENDIX E ACRONYMS
- APPENDIX F ASSURANCE STATEMENTS
- APPENDIX G EQUITY SHARES

APPENDIX A GRI STANDARDS CONTENT INDEX

GRI Standard	Disclosure	Page location	Omissions
GRI 102: General Disclosures	**Organizational profile**		
	102-1 Name of the organization	Cover page	
	102-2 Activities, brands, products, and services	QatarEnergy at a glance	
	102-4 Location of operations	Our geographic footprint	
	102-5 Ownership and legal form	QatarEnergy at a glance	
	102-6 Markets served	Our geographic footprint	
	102-9 Supply chain	Our geographic footprint	
	102-11 Precautionary Principle or approach	Managing our risks	
	102-12 External initiatives	QatarEnergy's Environmental Action	
	102-13 Membership of associations	Transparency and disclosure	
	Strategy		
	102-14 Statement from senior decision-maker	Message from H.E. The President & CEO	
	Ethics and integrity		
	102-16 Values, principles, standards and norms of behavior	Our code of conduct	
	Governance		
	102-18 Governance structure	Our board of directors	
	102-20 Executive-level responsibility for economic, environmental, and social topics	Good governance and ethical standards of conduct, Our board of directors	
	102-22 Composition of the highest governance body and its committees	Our board of directors	
	102-23 Chair of the highest governance body	Our board of directors	
	102-26 Role of the highest governance body in setting purpose, values, and strategy	Our board of directors	
	Stakeholder engagement		
	102-40 List of stakeholder groups	Stakeholder Engagement	
	102-42 Identifying and selecting stakeholders	Stakeholder Engagement	
	102-43 Approach to stakeholder engagement	Stakeholder Engagement	
	102-44 Key topics and concerns raised	Stakeholder Engagement	
	Reporting practice		
	102-45 Entities included in the consolidated financial statements	Report Scope	
	102-47 List of material topics	Assessing our material topics	
	102-48 Restatements of information	QatarEnergy's Climate Change Action, QatarEnergy's Environmental Action	
	102-49 Changes in reporting	Report Scope	
	102-50 Reporting period	Report Scope	
	102-52 Reporting cycle	Report Scope	
	102-55 GRI context index	Appendix A	
Material Topics			
GRI 200 Economic Standard Series			
Economic Performance			
GRI 201: Economic Performance	201-1 Direct Economic value generated and distributed	Appendix D Performance Data	
Indirect Economic Impacts			
GRI 203: Indirect Economic Impacts	203-1 Infrastructure investments and services supported	Appendix G Equity Shares	
Procurement Practices			
GRI 103: Management Approach	103-1 Explanation of the material topic and its Boundary	Knowing Our Supply Chain	
GRI 204: Procurement Practices	204-1 Proportion of spending on local suppliers	Contributing to Social and Economic Development	
Anti-corruption			
GRI 103: Management Approach	103-1 Explanation of the material topic and its Boundary	Good Governance and Ethical Standards of Conduct	
GRI 103: Management Approach	103-2 The management approach and its components	Good Governance and Ethical Standards of Conduct	
GRI 103: Management Approach	103-3 Evaluation of the management approach	Good Governance and Ethical Standards of Conduct	

GRI 300: Environmental Standard Series		
Energy		
GRI 103: Management Approach	103-1 Explanation of the material topic and its Boundary	Elevating Energy Efficiency
GRI 103: Management Approach	103-2 The management approach and its components	Elevating Energy Efficiency
GRI 103: Management Approach	103-3 Evaluation of the management approach	Elevating Energy Efficiency
GRI 302: Energy	302-4 Reduction of energy consumption	Elevating Energy Efficiency
Water and Effluents		
GRI 103: Management Approach	103-1 Explanation of the material topic and its Boundary	Water Management
GRI 103: Management Approach	103-2 The management approach and its components	Water Management
GRI 303: Water and Effluents	303-1 Interactions with water as a shared resource	Water Management
GRI 303: Water and Effluents	303-2 Management of water discharge-related impacts	Water Management
GRI 303: Water and Effluents	303-4 Water discharge	Appendix D Performance Data
Biodiversity		
GRI 103: Management Approach	103-1 Explanation of the material topic and its Boundary	Biodiversity
GRI 103: Management Approach	103-2 The management approach and its components	Biodiversity
GRI 304: Biodiversity	304-3 Habitats protected and restored	Biodiversity
Emissions		
GRI 103: Management Approach	103-1 Explanation of the material topic and its Boundary	QatarEnergy's Climate Change Action
GRI 103: Management Approach	103-2 The management approach and its components	QatarEnergy's Climate Change Action
GRI 103: Management Approach	103-3 Evaluation of the management approach	QatarEnergy's Climate Change Action
GRI 305: Emissions	305-1 Direct (Scope 1) GHG emissions	Appendix D Performance Data
GRI 305: Emissions	305-2 Energy indirect (Scope 2) GHG emissions	Appendix D Performance Data
GRI 305: Emissions	305-4 GHG emissions intensity	Our Climate Change Ambition
GRI 305: Emissions	305-5 Reduction of GHG emissions	Our Climate Change Ambition
GRI 305: Emissions	305-7 Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	Air Quality

Waste		
GRI 103: Management Approach	103-1 Explanation of the material topic and its Boundary	Waste Management
GRI 103: Management Approach	103-2 The management approach and its components	Waste Management
GRI 306: Waste	306-1 Waste generation and significant waste-related impacts	Waste Management
GRI 306: Waste	306-2 Management of significant waste-related impacts	Waste Management
GRI 306: Waste	306-3 Waste generated	Appendix D Performance Data
GRI 306: Waste	306-4 Waste diverted from disposal	Appendix D Performance Data
GRI 400: Social Standards Series		
Employment		
GRI 103: Management Approach	103-1 Explanation of the material topic and its Boundary	Talent Attraction
GRI 103: Management Approach	103-2 The management approach and its components	Talent Attraction
GRI 401: Employment	401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees	Workers' Welfare
Occupational Health and Safety		
GRI 103: Management Approach	103-1 Explanation of the material topic and its Boundary	Operational Responsibility
GRI 103: Management Approach	103-2 The management approach and its components	Operational Responsibility
GRI 103: Management Approach	103-3 Evaluation of the management approach	Practicing Personal Safety
GRI 403: Occupational Health and Safety	403-1 Occupational health and safety management system	Operational Responsibility
GRI 403: Occupational Health and Safety	403-2 Hazard identification, risk assessment, and incident investigation	Practicing Personal Safety
GRI 403: Occupational Health and Safety	403-5 Worker training on occupational health and safety	Practicing Personal Safety
GRI 403: Occupational Health and Safety	403-6 Promotion of worker health	Workers' Welfare
GRI 403: Occupational Health and Safety	403-9 Work-related injuries	Appendix D Performance Data
GRI 403: Occupational Health and Safety	403-10 Work-related ill health	Appendix D Performance Data

Training and Education		
GRI 103: Management Approach	103-1 Explanation of the material topic and its Boundary	Talent Development
GRI 103: Management Approach	103-2 The management approach and its components	Talent Development
GRI 103: Management Approach	103-3 Evaluation of the management approach	Talent Development
GRI 404: Training and Education	404-1 Average hours of training per year per employee	Appendix D Performance Data
GRI 404: Training and Education	404-2 Programs for upgrading employee skills and transition assistance programs	Talent Development
Diversity and equal opportunities		
GRI 103: Management Approach	103-1 Explanation of the material topic and its Boundary	Talent Attraction
Local Communities		
GRI 103: Management Approach	103-1 Explanation of the material topic and its Boundary	Contributing to Social and Economic Development
Supplier social assessment		
GRI 103: Management Approach	103-1 Explanation of the material topic and its Boundary	Knowing Our Supply Chain

APPENDIX B STAKEHOLDER ENGAGEMENT

Stakeholders	Ways of Engagement	Stakeholders Expectations and Priorities
Employees	■ Performance appraisals, recognition and awards programs ■ Feedback systems ■ Internal newsletters (QatarEnergy Pulse) ■ Email, QatarEnergy 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 ■ Supportive management ■ Responsible and ethical business practices

Contractors and Suppliers	■ QatarEnergy 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 Sharing Agreements ■ Joint Ventures 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 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 C ALIGNMENT WITH QNV2030 TARGETS

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 and carbon offsets such as carbon capture technologies. ■ Partnering with Chevron and Pavilion Energy to improve the GHG accounting, reporting and verification ■ Progressing with the continuous implementation of the 4C framework with its 4 components: Consolidate, Curb, Create, Compensate
	Air Quality	■ Setting up monitoring stations for air quality in industrial cities and Dukhan ■ Investments to lower emissions of oxides of nitrogen (NOx), oxides of sulfur (SOx) and volatile organic compounds (VOC) released during oil and gas production and processing
	Cleaner water	■ 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 ■ Developing a new wastewater collection network and treatment facility in Halul island ■ Developing a brine discharge study for near zero liquid discharge at MIC ■ Upgrading the capabilities of our Dukhan Sewage Treatment Plant.
	Waste management	■ Rolled out a comprehensive hazardous waste management center in MIC and industrial non-hazardous waste management facility, in addition to a domestic waste transfer station.
	Conservation of biodiversity	■ Monitoring and conserving Qatar's hawksbill turtles in seven sites of the state namely – Ras Laffan Industrial City, Ras Rikken, Umm Taes, Al Gharrya, Fuwairit, Al Marrouna, Halul Island, and Sheraouh Island.
	An increasingly environmentally aware population	■ Creating environmental awareness through promoting topics such as Waste Recycling and preservation of Hawksbill Turtles ■ Creating environmental awareness through sponsored community projects with schools such as environmental workshops
	Promoting sustainable environmental practices	■ Organizing hands-on campaigns such as tree plantings, marine debris removal, and mangroves planting that engage both employees and citizens in environmental stewardship.
	Improved governance and outcomes	■ Deploying a core team to review, assess, and monitor QatarEnergy's key sustainability matters. ■ 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. ■ Communicating and embedding QatarEnergy's business conduct principles as outlined in its Code of Conduct through a series of employee awareness campaigns & initiatives on environ.

INTRODUCTION | SUSTAINABILITY AT QATARENERGY | CLIMATE CHANGE & ENVIRONMENTAL ACTION | OPERATIONAL RESPONSIBILITY | SOCIAL & ECONOMIC DEVELOPMENT | RESPONDING TO COVID-19 | APPENDICES

HUMAN DEVELOPMENT

Development of all its people to enable them to sustain a prosperous society.

An Educated Population	Education and training	■ Arranging virtual classrooms to provide technical and administrative training for employees during pandemic. ■ Offering non-technical education programs to help employees improve their performance and develop skills through engaging local and international trainers.
	Improving knowledge transfer mechanisms	■ Supporting youth and new professionals through diverse talent attraction programs followed by knowledge sharing initiatives such as internships.
	Nurturing a healthy population	■ Maintaining a Health, Safety, Sustainability and Environmental Policy and providing ongoing safety training, workshops, and communication. ■ Establishing a Crisis Management Governance to respond to the pandemic through prevention, detection, and management. ■ Supporting sector compliance with health requirements. ■ Providing health education for employees, which they can then share with their families.
A Healthy Population: Physically and Mentally	Managing occupational health and safety information to monitor and assess the health status of all employees	■ 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 to prevent and contain major incidents such as fires, explosions, toxic clouds, and surges in COVID-19 cases.
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. ■ 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 Tas'ees, which aims 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. ■ Protecting our workers through a Workers' Welfare Standard to ensure everyone is treated with respect and dignity. ■ Awareness Forum to enhance awareness around workers' welfare. ■ Establishing a pandemic response plan to ensure the people, their families, and the whole community. ■ Designing steps to ensure our employees and their families get access to healthcare and wellness programs.
A Sound Social Structure	Enhancing public safety and security	■ Providing employees and contractors with ongoing Health, Safety and Environment training. ■ Adopting the 7 Star HSE Audit System to improve occupational health and safety in the workplace. ■ Maintaining reporting of Process Safety Incidents to ensure that the recurrence of such incidents can be decreased.

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	■ Continuing the integration of the Operation Excellence Program to exploit synergies between upstream and downstream operations. ■ Ensuring the successful implementation of the Curb initiatives from our 4C framework to ensure efficiency growth.
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). ■ Completing the successful integration of Qatar Chemical and Petrochemical Marketing and Distribution Company (Muntajat) into QatarEnergy.

APPENDIX D PERFORMANCE DATA

	2016	2017	2018	2019	2020
Progression Towards Lower Carbon Emissions					
Emissions[1]					
Total Greenhouse gas emissions (GHGs) - Equity Basis					
Scope 1 - Direct total GHGs (million tons CO_2eq)	33.46	33.28	34.70	33.69	34.79
Scope 2 - Energy indirect total GHGs (million tons CO_2eq)	1.19	1.22	1.34	1.69	1.80
Total Greenhouse gas emissions (GHGs) - Operated Basis[2]					
Scope 1 - Direct total GHGs (million tons CO_2eq)	5.16	4.56	4.48	4.99	5.19
Scope 2 - Energy indirect total GHGs (million tons CO_2eq)	0.34	0.35	0.43	0.76	0.62
Total Greenhouse gas emissions (GHGs) from LNG - Equity Basis					
Scope 1 - LNG (million tons CO_2eq)	22.23	22.61	22.05	21.30	21.35
Scope 1 - LNG, exported energy (million tons CO_2eq)	0.07	0.07	0.09	0.08	0.08
Scope 1 - LNG, sequestration (million tons CO_2eq)	0.47	0.48	0.48	0.56	0.63
Scope 2 - LNG (million tons CO_2eq)	0.42	0.41	0.42	0.43	0.34
Total Greenhouse gas emissions (GHGs) Breakdown by Sector - Equity Basis					
Scope 1 - Upstream (incl. LNG) (million tons CO_2eq)	27.23	27.06	28.58	27.47	27.73
Scope 1 - Downstream (refining, GTL & terminals) (million tons CO_2eq)	1.98	2.25	2.08	2.24	1.89
Scope 1 - Petrochemicals (million tons CO_2eq)	4.25	3.97	4.03	3.98	5.16
Scope 2 - Upstream (incl. LNG) (million tons CO_2 eq)	0.59	0.58	0.70	1.02	1.01
Scope 2 - Downstream (refining, GTL & terminals) (million tons CO_2eq)	0.27	0.32	0.31	0.35	0.33
Scope 2 - Petrochemicals (million tons CO_2eq)	0.33	0.32	0.33	0.32	0.46
Greenhouse gas emissions (GHGs) Intensity					
Upstream (incl. LNG) (million tons CO_2eq /million tons hydrocarbon production)	0.247	0.244	0.240	0.233	0.228
LNG (million tons CO_2eq /million tons hydrocarbon production)	0.315	0.310	0.307	0.299	0.296
Downstream (refining, GTL & terminals) (million tons CO_2eq / million tons hydrocarbon production)	0.235	0.191	0.171	0.190	0.186
Petrochemicals (million tons CO_2eq /million tons production)	0.629	0.586	0.614	0.612	0.702

1. Global warming potentials are based on 5th Assessment Report of IPPC with 100-year time horizon.
Total emissions excluding power and metals.
2. Prior to 2019, QatarEnergy used the SANGEATM 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 USEPA MRR (Subparts C, P, W and Y). In 2019, QatarEnergy onshore assets followed the EU ETS Monitoring and Reporting Regulation (MRR) to quantify and report GHG emissions. From 2020 onwards, all QatarEnergy assets are following the EU ETS MRR.

Flaring					
Flaring (upstream, Operated & Non-Operated) (million tons CO_2eq)	2.37	2.60	2.46	2.12	2.10
Flaring (upstream, Operated & Non-Operated) (MMSCF gas flared, QRG basis)*	39,724	40,728	35,409	30,507	35,186
Flaring (LNG) (MMSCF gas flared, QRG basis)*	26,558	24,442	21,091	16,894	21,706
Flaring Intensity (LNG) (MMSCF gas flared, QRG basis* / MMSCF sweet gas production, %)	0.59%	0.54%	0.47%	0.38%	0.49%

*** Normalized figures based on heating value @1000 Btu/Scf known as "Qatar Reference Gas" (QRG).**

Other Emissions					
SO_2 emitted (tons)*	74,451	257,153	227,022	73,697	40,887
NO_X emitted (tons)*	12,026	11,387	11,222	10,970	13,849
VOC emitted (tons)	1,962	1,896	1,901	1,860	2,017
Methane emitted (tons)/Total Monetizable Products (tons), %, for LNG Facilities	0.005%	0.007%	0.008%	0.005%	0.007%

*** Values changed (due to change in methodology for the years 2015-2018) compared to 2018 SR.**

Energy					
Direct energy consumption (GJ) (QatarEnergy Operated Assets)	68,247,488	63,162,260	61,247,627	65,703,102	73,421,919
Upstream (incl. LNG) (gigajoules per ton production)	3.87	3.83	3.80	3.85	3.69
Refining & GTL (gigajoules per ton production)	1.49	2.05	1.26	1.38	1.49
Chemical plants (gigajoules per ton production)	20.68	20.45	20.37	21.35	21.21
Water Management[3]					
Water discharged other than to sea (m^3)	7,298,345	11,030,714	13,630,788	14,122,336	32,011,210
Water discharged to sea (excludes non-contact cooling water) (m^3)	136,007	168,510	295,105	522,935	289,510
Water recycled or reused (m^3)	1,453,878	1,501,936	1,552,201	1,578,736	1,680,982
Waste Management					
Total waste generated during the year (tons)	52,599	57,921	73,749*	81,357	96,427
Non-hazardous waste generated (tons)	46,830	48,701	68,146*	74,360	79,347
Hazardous waste generated (tons)	5,769	9,220	5,603*	6,998	17,080
Total waste recycled (tons)	1,290	1,379	3,017	2,646	1,789
Non-hazardous waste recycled (tons)	592	668	1,043	1,062	907
Hazardous waste recycled (tons)	698	711	1,974	1,584	882
Percentage of non-hazardous waste generated	89.0%	84.1%	92.4%	91.4%	82.30%
Percentage of hazardous waste generated	11.0%	15.9%	7.6%*	8.6%	17.70%
Percentage of non-hazardous waste recycled	1.3%	1.4%	1.5%*	1.4%	1.10%
Percentage of hazardous waste recycled	12.1%	7.7%	35.2%*	22.6%	5.2%

***numbers restated**

Safeguarding Our Workforce and Operating Safely					
Safety of Our Workforce					
Employee headcount	8,682	8,468	8,142	8,536	8,359
Total employee work hours	18,051,393	17,599,470	16,364,732	16,092,008	16,991,535
Total contractor work hours	72,154,510	62,158,310	59,225,391	54,599,800	60,127,799
Employee lost time injuries	2	4	9	4	1
Contractor lost time injuries	20	8	11	14	8
Total lost-time injury rate (LTIR) of employees and contractors (per 1 million working hours)	0.24	0.15	0.26	0.25	0.12
LTIR of employees (per 1 million working hours)	0.11	0.23	0.55	0.25	0.06
LTIR of contractors (per 1 million working hours)	0.28	0.13	0.19	0.26	0.13
Employee total recordable injuries	9	12	16	11	2
Contractor total recordable injuries	49	38	29	30	24
Total recordable injury rate (TRIR) of employees and contractors (per 1 million working hours)	0.64	0.63	0.60	0.58	0.34
TRIR of employees (per 1 million working hours)	0.50	0.68	0.98	0.68	0.12
TRIR of contractors (per 1 million working hours)	0.68	0.61	0.49	0.55	0.40
Total fatalities	1	0	0	2	0
Employee fatalities	0	0	0	0	0
Contractor fatalities	1	0	0	2	0
Work related illnesses (per 1 million hours worked)	0.07	0.19	0.22	0.28	0.17
Heat stress events (employees and contractors)	4	14	13	13	6

3. 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.

The Others Emissions section reports QatarEnergy performance alone, while the Flaring section is a combination of operated and non-operated assets.

Growing Our Talents					
Training hours	106,649	117,056	193,073	206,005	45,088
Average hours of training per employee	12.28	13.82	23.71	24.13	5.75
Process Safety and Asset Integrity					
Number of Tier 1 process safety incidents	3	2	1	1	3
Number of Tier 2 process safety incidents	0	10	8	8	6
Number of Tier 3 process safety incidents	400	645	525	632	646

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.

Creating Prosperity and Our Social Responsibility					
Economic Performance					
Crude oil production (MBBL/day)	234	232	229	246	295
North Field Alpha Lean Gas (MMBTU/day)	598	624	635	606	606
Total refinery throughput (KBBL/day)	118	114	104	111	107
Total revenue (‘000 QAR)	88,003,196	95,217,970	118,507,388	108,331,608	76,442, 485
Total expenses (‘000 QAR)	54,098,208	55,872,271	73,637,723	69,415,662	55,711, 810
Net operating profit (‘000 QAR)	33,904,888	39,345,699	51,457,387	44,979,038	28,852, 669
Share in profits of joint ventures and associates (‘000 QAR)	29,432,091	34,104,224	48,934,617	40,634,833	19,759, 382
Net profit for the year (‘000 QAR)	48,943,404	59,075,567	73,324,837	65,460,501	42,687,628
Local Economic Contribution					
Total procurement spending (‘000 QAR)	8,740,000	11,460,000	8,350,000	11,640,000	9,198,422
Total procurement spending on suppliers based in Qatar (‘000 QAR)	7,420,000	9,500,000	4,820,000	9,200,000	6,385,682
Percentage of local procurement spending (%)	85%	83%	58%	79%	69%
Number of registered suppliers	9,530	10,194	10,055	5,268	5,833
Number of registered suppliers based in Qatar	3,960	4,102	4,262	2,662	2,947
Percentage of Qatari registered suppliers (%)	42%	40%	42%	51%	50%
Support to our Society					
Amount spent for CSR projects (QAR)	28,000,000	34,000,000	38,120,000	29,184,350	20,090,000

APPENDIX E ACRONYMS

AGP	Advanced gas path
ALARP	As low as reasonably possible level
AR6	Sixth Assessment Report of the IPCC
BCC	Business Conduct Committee
BCP	Business Continuity Plan
BH	Bul Hanine
BTU	British Thermal Unit
CCS	Carbon Capture and Storage / Sequestration
CEMS	Continuous Emissions Monitoring Systems
CEO	Chief Executive Officer
CFR	Code of Federal Regulations
CI	Continual Improvement
CNG	Compressed Natural Gas
CO2	Carbon dioxide
CO2eq	Carbon dioxide equivalent
COP	Community Outreach Program
COVID-19	Coronavirus Disease 2019
CSR	Corporate Social Responsibility
CTO	Consent to Operate
DLN	Dry Low NOx
EAP	Employee Assistance Program
EE	Energy Efficiency
EIA	Environmental Impact Assessment
EITI	Extractive Industry Transparency Initiative
EOR	Enhanced Oil Recovery
EPA	Environmental Protection Agency, USA
EPIC	Engineering, Procurement, Installation, Commissioning
EPSA	Exploration and Production Sharing Agreements
ERM	Enterprise Risk Management
EU	European Union
EU MRR	European Union Monitoring and Reporting Regulation
EU ETS	European Union Emissions Trading Scheme
EVP	Executive Vice President
FEED	Front End Engineering Design
GCC	Gulf Cooperation Council
GDP	Gross Domestic Product
GHG	Greenhouse gas
GRI	Global Reporting Initiative
GT	Gas Turbines
GTL	Gas-To-Liquid
GW	Giga Watt
GWPs	Global Warming Potentials
H.E.	His Excellency
H.H.	His Highness
HSEQ	Health, Safety, Environment and Quality
HWTC	Hazardous Waste Treatment Centre
IEA	International Energy Agency
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
ISO	International Organization for Standardization
JBOG	Jetty Boil-off Gas
JV	Joint Venture
KAHRAMAA	Qatar General Electricity and Water Corporation
LDAR	Leak Detection and Repair
LNG	Liquefied Natural Gas
LPG	Liquefied Petroleum Gas
LTIR	Lost-Time Injury Rate
MAHM	Major Accident Hazards Management
MENA	Middle East and North Africa
MGP	Methane Guiding Principles
MIC	Mesaieed Industrial City
MMBTU/D	Million British Thermal Units per Day
MMP	Methodology Monitoring Plan
MMSCFD	Million Standard Cubic Feet per day

Mt	Million tons
MtCO2 eq	Million tons of CO2 equivalent
MTPA	Million metric tons per annum
MW	Mega Watt
NbS	Nature based Solutions
NBSAP	National Biodiversity Strategy and Action Plan
NFA	North Field Alpha
NFE	North Field East
NFS	North Field South
NGL	Natural Gas Liquids
NORM	Naturally Occurring Radioactive Materials
NOx	Nitrogen oxide
NRGI	Natural Resource Governance Institute
NZLD	Net Zero Liquid Discharge
OE	Operational Excellence
OGMP	Oil & Gas Methane Partnership
PIP	Performance improvement packages
PM	Particle Matter
PMO	Project Management Office
PPE	Personal Protective Equipment
PR	Public Relations
PSMS	Process Safety Management System
PSIs	Process Safety Incidents
PV	Photovoltaic
QAR	Qatari Riyal
QAFAC	Qatar Fuel Additives Company
QAFCO	Qatar Fertiliser Company
QG	Qatargas
QNV	Qatar National Vision
QP	Qatar Petroleum
QRG	Qatar Reference Gas
RAM	Risk Assessment Matrix
RATA	Relative Accuracy Test Audit
RLC	Ras Laffan Industrial City
RLPP	Ras Laffan Petrochemical Project
SCF	Standard Cubic Foot
SDGs	Sustainable Development Goals
SGE	Statement of Greenhouse Gas Emissions
SO2	Sulphur dioxide
SOC	Safety Observations Card
SOx	Sulphur oxides
STP	Sewage Treatment Plant
TGTU	Tail Gas Treatment Unit
TIW	Treated Industrial Water
TRIR	Total Recordable Injury Rate
UN	United Nations
VOC	Volatile Organic Compound
WHO	World Health Organization
ZLD	Zero Liquid Discharge

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APPENDIX F ASSURANCE STATEMENTS

ASSURANCE STATEMENT RELATED TO GHG EMISSIONS INVENTORY FOR CALENDAR YEAR 2020 PREPARED FOR QATAR PETROLEUM[3]

Assurance Statement

The GHG Assertion for the calendar year 2020 prepared by: Qatar Petroleum has been verified by Lloyd's Register Qatar LLC in accordance with: ISO 14064-3:2006[2] as conforming to the requirements of ISO 14064-1:2006[5]

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 CO_2e Total	Million Tonnes CO_2e QP Equity Basis
Direct GHG emissions (Scope 1)	98.99	38.23
Energy indirect GHG emissions (Scope 2, Location-based)	5.63	2.04
Total	104.62	40.27

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

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

Date: 26 Aug 2021

LR reference number: QAT00000050

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

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 2020, (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.

3. Assurance was conducted prior to change in entity name, hence use of "Qatar Petroleum" or "QP" and not "QatarEnergy".
4. ISO 14064:2006 Greenhouse gases — Part 3: Specification with guidance for the validation and verification of greenhouse gas assertions.
5. ISO 14064:2006 Greenhouse gases — Part 1: Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals.

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 Qatargas and Companies reporting their GHG as per the EU MRR methodology as well as other relevant methodologies applied by joint venture operating entities.
- Reviewed verification opinions of RLC facilities, MIC facilities and QP operated assets expressed by SGS for Scope 1 and Scope 2 emissions carried out to a reasonable level of assurance against EU MRR 2012 to confirm summarised information within the Sustainability Report 2020 aligns with it.
- Sampled GHG inventories based on strategic and risk analysis of the following entities: QP Operated Assets, Qatargas, QAPCO, QATALUM, RGPC, QEWC, South Hook, Al Khalij Oil, Q Chem, North Oil Company TPC and PCS.
- 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 Qatargas, verified Scope 1 and Scope 2 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 uniformly and in consistent manner.
- Accounting and reporting method for Scope 2 should be documented. Some generic instructions are available in the emission report itself, but clarity is required. EU MRR Article 11 requires Monitoring Plan for Scope 2.
- Communicate QP accounting methodology to the oilfields and international JVs for uniformity.
- The GWPs used to calculate emissions from CH4 and N2O were not consistent across all assets.

The differences caused by these qualifications are not material.

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

Date: 26 Aug 2021

LR reference number: QAT00000058

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)
Al Khalij Oil Field
Qatar Petroleum Development Co. Ltd. (Japan) (QPD)

Assets INTERNATIONAL
South Hook LNG (Terminal), UK
Petrochemical Corporation Of Singapore Pvt Ltd (PCS)
The Polyolefin Company (Singapore) Pte Ltd (TPC)
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 2020 calendar year

Scope of GHG emissions All Assets	Million Tonnes CO2e Total	Million Tonnes CO2e QP Equity Basis
Direct GHG emissions (Scope 1)	98.99	38.23
Energy indirect GHG emissions (Scope 2, Location-based)	5.63	2.04
Total	104.62	40.27
Note 1: Scope 2, Location-based and Scope 2, Market-based are defined in the GHG Protocol Scope 2 Guidance, 2015.		

Further Breakdown of above overall Figures as below:

Scope of GHG emissions QG-LNG	Million Tonnes CO2e Total	Million Tonnes CO2e QP Equity Basis
Direct GHG emissions (Scope 1)	31.62	21.35
Energy indirect GHG emissions (Scope 2, Location-based)	0.50	0.34
Total	32.12	21.69
Note 1: Scope 2, Location-based is defined in the GHG Protocol Scope 2 Guidance, 2015.		

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)	97.30	38.74
GHG emissions - International Assets (Scope 1 + Scope 2, Location-based)	7.32	1.53
Total	104.62	40.27

Scope of GHG emissions By Sector	Million Tonnes CO2e Total	Million Tonnes CO2e QP Equity Basis
Upstream Sector Direct GHG emissions (Scope 1)	45.31	27.73
Downstream Sector Direct GHG emissions (Scope 1)	11.68	1.89
Petrochemicals Sector Direct GHG emissions (Scope 1)	12.39	5.16
Total	69.39	34.79
Upstream Sector Energy indirect GHG emissions (Scope 2, Location-based)	2.45	1.01
Downstream Sector Energy indirect GHG emissions (Scope 2, Location-based)	0.42	0.33
Petrochemicals Sector Energy indirect GHG emissions (Scope 2, Location-based)	1.44	0.46
Total	4.31	1.80

2020 Qatargas GHG sequestration2 (Scope 1)	Million Tonnes CO2e Total	Million Tonnes CO2e QP Equity Basis
Total	1.34	0.69
LNG Assets only	0.92	0.63

Note 2: GHG sequestration is applicable in QG South, through removal of CO2 present in the feed (inherent CO2) during processing in the onshore LNG production facilities.

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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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ASSURANCE STATEMENT RELATED TO CY 2020 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 2020 for the calendar year 2020, (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 2020 and as summarized in Annex- UHX-1 & Annex-UHX2 are not materially correct.

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

Date: 26 Aug 2021

LR reference number: QAT00000050

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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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Annex-UHX-1- Environmental Parameters

Indicator	Unit	Total for CY2020
Water discharged (to Sea)	m3	289,510
Water discharged (other than Sea)	m3	32,011,210
Water recycled or reused	m3	1,680,982
SO2 emitted	Tonnes	40,887
NOx emitted	Tonnes	13,849
VOC	Tonnes	2,017
Total waste generated during the year	Tonnes	96,427
Non-hazardous waste generated	Tonnes	79,347
Hazardous waste generated	Tonnes	17,080
Total waste recycled	Tonnes	1,789
Non-hazardous waste recycled	Tonnes	907
Hazardous waste recycled	Tonnes	882
Percentage of non-hazardous waste generated	Percentage	82.30%
Percentage of hazardous waste generated	Percentage	17.70%
Percentage of non-hazardous waste recycled	Percentage	1.10%
Percentage of hazardous waste recycled	Percentage	5.20%
Direct energy use	GJ	73,421,919
Direct GHG emissions (scope 1)	MillionTonnes Co2e	5.19
Indirect GHG emissions (scope 2)	MillionTonnes Co2e	0.62
Flaring	mmscf	11,535

Annex-UHX-2- Safety Parameters

Parameter	Quantity
QatarEnergy Employees	
Fatalities (FAT)	0
Total Recordable injuries (TRI)	2
Lost Time Injuries (LTIs)	1
Workhours	16,991,535
Fatality rate (FAT per Mmhrs)	0.00
LTI rate (LTIF)	0.06
TR injury rate (TRIR)	0.12
Contractors	
Fatalities (FAT)	0
Total Recordable injuries (TRI)	24
Lost Time Injuries (LTIs)	8
Workhours	60,127,799
LTI rate (LTIF)	0.13
TR injury rate (TRIR)	0.40
QatarEnergy Employees + Contractors	
Fatalities (FAT)	0
Total Recordable injuries (TRI)	26
Lost Time Injuries (LTIs)	9
Workhours	77,119,334
LTI rate (LTIF)	0.12
TR injury rate (TRIR)	0.34

APPENDIX G EQUITY SHARES

QatarEnergy Equity Shares

	Operator Ventures	QatarEnergy's Effective Share As Of 31 Dec 2020
1	QG – LNG Companies	Refer to table below
2	AKG	AKG-1: 0% AKG-2: 20%
3	Barzan	93%
4	Laffan Refinery	51%
5	Laffan Refinery 2	84%
6	Dolphin Energy	0%
7	QAFCO	Refer to table below
8	QAFAC	25.5%
9	QAPCO	Refer to table below
10	Q-Chem	Refer to table below
11	The Petrochemicals Corp of Singapore Pte Ltd Tetra Chemicals (Singapore) PTE Limited	24.5% 14.7%
12	Pearl GTL[5]	0%
13	Oryx GTL	51%
14	QatarEnergy Refinery	100%
15	Qatar Steel	51%
16	Qatalum	25.5%
17	UHPC	5%
18	QPOWER	0%
19	RGPC	15%
20	MPCL	20%
21	RLPC	10%
22	QEWC	0% Treated as Investment in FVOCI
23	NGL Complex	100%
24	QatarEnergy O&GP (Dukhan)	100%
25	QatarEnergy Offshore	100%
26	NOC	70%

5. Qatar Energy does not hold equity in Pearl GRL; however, it is in a DPSA agreement with the company.

27	South Hook LNG Terminal	67.5%
28	North Adriatic LNG Terminal	22.0245%
29	BC-10 (Brazil)	23%
30	TEPC (Congo)	15%

QatarEnergy Shares in QG LNG Ventures, QAFCO, QAPCO, and Q-Chem in 2020

	Ventures	QatarEnergy's Effective Share As Of 31 Dec 2020
1	QG1 Upstream	65%
2	QG1 Downstream	65%
3	QG2	67.50%
4	QG3	68.50%
5	QG4	70%
6	QG3&4	69.25%[6]
7	RLI	63%
8	RLII	67.05%
9	RL3	70%
10	QAFCO	51%
11	QMC	51%
12	QAPCO	40.80%
13	QATOFIN	25.97%
14	QVC	62.04%
15	Q-Chem	34.08%
16	Q-Chem II	34.08%
17	RLOC	31.02%

6. 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%.