

Your Energy Transition Partner

Sustainability
Report 2021



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Introduction



- **Message From H.E. The President & CEO**
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- **Upholding QatarEnergy's Governance**

Message from H.E. The President & CEO

QatarEnergy's Sustainability Report highlights our sustainability performance during 2021 and reflects our strengthened commitment and responsibility as a major energy producer.

With climate change being one of the most pressing challenges of our time, Qatar has placed climate action at the forefront of its priorities. As a member of the Paris Agreement, Qatar has always reaffirmed commitment to the global sustainability goals and ambitions. On its part, and as a key player in the global energy sector and the local economy, QatarEnergy is focused on driving energy transition, on driving the energy transition, by ensuring a robust mix of energy sources that can provide for the baseload of energy needed, particularly for power generation.

Our sustainability strategy, driven by our pioneering vision as your energy transition partner, focuses on meaningful and purposeful action focused on three main pillars: climate change and environmental action, operational responsibility, and social and economic development. Climate change action remains at the forefront of our priorities as we continue to work closely with our partners locally and internationally to make a difference. We have achieved several milestones including 3.8 million tons of CO₂ eq captured through Carbon Capture and Sequestration (CCS) and a 10% reduction in flaring in 2021 in Ras Laffan Industrial City (RLIC) alone (70% reduction since 2012). Through our solar PV projects our

renewable capacity will double by 2024, with more than 850 MW planned for RLIC and Mesaieed Industrial City (MIC) over the next two years. In collaboration with our partners, we are looking to enhance the methods used to identify, quantify, and report our methane emissions.

Our new LNG projects are expected to produce some of the least carbon intensive LNG in the world. By using advanced gas-fired power plants and efficient sulphur recovery units, and incorporating carbon capture and storage technologies, we are able to minimize greenhouse gas emissions during the production and transportation of the LNG. In addition, we have chosen to use solar energy to power the new LNG facilities. We believe that these projects represent a significant step forward in the transition to a low-carbon economy as we aim to reduce our carbon intensity by 35% across our LNG facilities by 2035, and by 25% across our upstream facilities for Scope 1 and 2 emissions.

We have also implemented a wastewater recycling and reduction project, which achieved approximately a 50% reduction in wastewater injection to deep wells. Furthermore, in 2021 we managed to reduce our hazardous waste generation by 63%, and approximately 3,320 tons of various hazardous waste was recycled. Through our efforts to protect and encourage biodiversity, 268 Hawkesbill turtle nests were successfully tagged and recorded in 2021 alone, which is the highest recorded number of nests to date.

Looking at our second sustainability strategy pillar, we are focused on

responsible management of our operations, maintaining occupational and process safety, and driving efficiency, reliability, and operational excellence across our operations.

In 2021, QatarEnergy has met the safety performance targets from its operations by achieving zero employee fatalities for six consecutive years, maintaining top safety performance, and stepping up HSE education by providing more than 200 training sessions to over 2,000 participants. We are also pursuing operational excellence to maximize the synergies between performance management and our commitment towards operational responsibility.

Our efforts in the social and economic development pillar have allowed us to positively contribute to the Qatar National Vision 2030 (QNV2030). We are proud of attracting, investing in, and retaining a highly accomplished and motivated workforce, bringing together both Qatari and international talent to participate and contribute to our vision. We are a significant role-player in building a competitive and resilient energy sector which is key to the growth and diversification of Qatar's economy. Through our social responsibility investment, our local procurement, in-country value program and supplier development initiatives we are sharing benefits with our local communities, business partners and broader society.

QatarEnergy is determined to continue its journey towards a successful and sustainable future. To this end, we are grateful for the vision, leadership, and

unlimited support of His Highness Sheikh Tamim bin Hamad Al-Thani, the Emir of the State of Qatar.

I invite you to read our 2021 sustainability report and to learn more about our progress, our achievements, and our plans.



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

2021 Highlights

Corporate Developments

- QatarEnergy announces its new sustainability strategy.
- Successful completion of QatarEnergy's new corporate headquarters which is designed in accordance with GSAS (Global Sustainability Assessment System) and envisaged to become a true icon of Qatar's architectural landscape.
- Successful completion of a new Main Fire a new Main Fire & Rescue Station and Satellite Fire Station in Mesaieed Industrial City (MIC).

Climate Change & Environmental Action

- QatarEnergy takes the final investment decision for developing the North Field East Project (NFE), the world's largest LNG project, which will raise Qatar's LNG production capacity from 77 to 110 million tons per annum (MTPA) (more than 40% increase).
- Through Carbon Capture and Storage (CCS) QatarEnergy has successfully captured 3.8 million tons of Carbon Dioxide since the inception of various CCS projects.
- QatarEnergy and Shell signed an agreement to pursue joint investments in blue and green hydrogen projects in the United Kingdom.
- QatarEnergy and Korea's Hydrogen Convergence Alliance (H2Korea) signed an agreement for cooperation in the field of hydrogen energy.
- Jointly with Pavilion Energy Trading & Supply Pte. Ltd. and Chevron U.S.A. Inc (Singapore branch), QatarEnergy published a quantification and reporting methodology, the SGE Methodology, to produce a statement of greenhouse gas emissions for delivered LNG cargoes.
- Monitored and conserved Qatar's Hawksbill turtles in eight sites, resulting in 268 nests which is the highest recorded number in the last seven years.

Operational Responsibility

- Successfully introduced "In Vehicle Monitoring System" (IVMS) to all QatarEnergy company vehicles enabling detailed visibility and understanding of driving performance to enhance our ability to positively influence drivers' behavior across our entire fleet.

Collaborations & Partnerships

- QatarEnergy joined the Oil & Gas Methane Partnership (OGMP 2.0).
- QatarEnergy joined the World Bank-led Global Gas Flaring Reduction Partnership (GGFR).
- QatarEnergy teamed up with FIFA as an official partner for the FIFA Arab Cup Qatar 2021™.

Social & Economic Development

- Enabling virtual learning through the delivery of more than 200 thousand training hours, reaching pre-Covid levels of an average of 24 hours of training per employee.
- A five-year workforce plan in place dedicated towards recruitment and development for Qatari nationals.
- As part of our efforts to integrate human rights requirements into our ways of working, we developed and adopted our QatarEnergy Human Rights policy.
- We work closely with our contractors to define, establish, and maintain a working environment where all workers are respected and governance is ensured.
- Majority of our employees strongly agreed that QatarEnergy is committed to doing business ethically and in accordance with our Code of Conduct (CoC).
- We continued to promote the local economy directly through a 5% increase in local procurement spending. To enhance the resilience and competitiveness of the energy sector, we worked with our partners in Qatar to implement a dedicated supplier development program and incentivize In-Country Value (ICV) investments. Key milestones include creation of 46 new investment opportunities, 20 Energy Companies monitoring ICV and 800 suppliers becoming ICV certified.
- Our social investment of more than QAR 20 million made a positive contribution to local communities and Qatar society.

Climate Change and Environment



Scope 1 emissions

35.35 million

tons CO₂eq

Upstream GHG emissions intensity

0.240 million

tons CO₂eq/million HC production

Scope 2 emissions

1.55 million

tons CO₂eq

NOx emissions

13,565 tons

SO₂ emissions

38,742 tons

VOC emissions

2,229 tons

Social



481

new joiners

200,000+

total hours of training, average 24 hours per employee

Majority

of employees strongly agree QatarEnergy is committed to doing business ethically and in accordance with our CoC

74%

local procurement spend

800+

suppliers In-Country Value certified

QAR 20+ million

social responsibility



Economic

Company expenses increased by

18%

compared to 2020

Net profit for the year ('000)

QAR 97.9 million

Total revenue from sales ('000)

QAR 120.3 million

About This Report

Our sustainability report highlights our sustainability performance and details our progress and strategy towards contributing to sustainable development across our business operations and practices. We also highlight our contribution to the national and global agendas towards sustainable development, such as the Qatar National Vision 2030, UN Sustainable Development Goals (UN SDGs) and other global ambitions. The report also details our key achievements and future plans to continue to create shared value for our people, Qatar, and the wider global economy.

Report content and scope

Reporting framework: This report has been prepared in accordance with the Global Reporting Initiative (GRI) Standards: Core option. Our GRI Content Index is found in Appendix A.

Reporting scope: This annual sustainability report is prepared in accordance with the QatarEnergy information classification standard. This report covers both Scope 1 and Scope 2 emissions from assets operated by QatarEnergy and its affiliates. Additionally, there are some non-operated assets that have been included in the Climate Change and Environmental Action Chapter. The reporting period for the 2021 sustainability report is 1st January 2021 to 31st December 2021.

Stakeholders' inclusiveness and materiality: We engaged extensively with our internal and external stakeholders to identify their expectations and prioritization of our material topics to understand what is significant to them and therefore QatarEnergy. The materiality assessment was conducted in line with GRI standard requirements. To compliment this, we also conducted a benchmarking exercise of the identified material topics, against our peers and key global reporting bodies. We gained an in depth understanding of how the material topics are relevant to our sustainable development.

Report Assurance

The information in this report has been prepared internally with external validation and verification to enhance the transparency, ensure accuracy and certify that we have reported in a robust manner. We have sought external assurance of our safety, environmental and greenhouse gas emissions data (of the QatarEnergy group companies), through LRQA— see assurance statement in Appendix F.

About QatarEnergy

QatarEnergy at a Glance

We are the world's largest provider of Liquefied Natural Gas (LNG) due to Qatar's gas reserves. These reserves are used to provide cleaner energy across the world to promote social and economic prosperity. We cover the full spectrum of the oil and gas value chain, which includes exploration, production, processing, refining, sales and delivery. Whilst LNG is our key product, we also produce a wide range of products for our customers, ranging from liquid fuels, fertilizers, metals and petrochemical products.

Due to our geographical location with access to some of the largest markets, we can deploy the world's largest fleet of nearly 70 LNG ships to provide access and extended outreach to all of our global customers. Our international outreach is connected to more than 20 countries around the world. Founded in 1974, we have expanded over the years to establish a current workforce of over 8,000 employees. We have exported 77 MTPA LNG across to the world and have produced 4.8 MBOED of oil and gas. We also have over 45 JV Partnerships domestically and internationally, which contribute towards QatarEnergy being a leading supplier of energy internationally.



Lolwa Khalil Salat

Manager of Public Relations & Communication

"Our new logo and brand identity reflects our understanding of the global changes and our commitment to climate change action, environmental protection and social sustainable development. Our LNG projects will provide additional clean energy to customers around the world and we will continue our heightened commitment to our central role in the global energy transition."

Our Journey

1974

QatarEnergy is established (Formerly Qatar Petroleum).

1996

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

2009

LNG mega-train expansion, adding 38 MTPA of LNG.

2007

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

2014

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

2019

Announced solar projects of 1.6 gigawatts (GW) capacity by 2025 (800 MW Siraj and 875 MW QatarEnergy Industrial Cities solar power plants).

Start-up of CO₂ sequestration first phase.

Announcements of North Field East (NFE) and North Field South (NFS) expansions which will increase Qatar's LNG capacity 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 QatarEnergy Trading LLC as a dedicated trading arm of QatarEnergy.

2021

Formerly known as Qatar Petroleum, we re-branded to become QatarEnergy.

2025

Methane emissions intensity target of 0.2wt%.

2030

Zero routine flaring.

2 to 4 GW solar capacity by 2030.

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

2035

Target of over 5 GW of solar capacity.

35% reduction of carbon intensity in LNG facilities and 25% across Upstream Facilities.

Over 11 MTPA of CCS capacity

Further reductions in Flare and Methane emissions.

Establish Nature Based Solutions Offsets.

Our Geographic Footprint



The State of Qatar is home to many of our (and those of our affiliates') onshore assets. These are spread across the country and can be found in Doha, Dukhan, Mesaieed Industrial City (MIC), and Ras Laffan Industrial City (RLIC). In addition, we also operate offshore through the following assets: Halul Island, offshore production stations, drilling platforms, Al Rayyan Field, and North Field Alpha (NFA). North Field is the most substantial single non-associated gas reservoir worldwide, which spans an area of around 6,000 km² – equivalent to almost half the size of Qatar.

As we strive to broaden our scope of operations, regionally and internationally, our development strategy and hydrocarbon exploration processes extend to the global markets. We are currently expanding through continuous explorations, which include shared agreements with partners and major oil and gas companies worldwide. Our extensive investment portfolio includes assets in North and South America, Europe, Africa, and Asia. Despite being present globally as a proactive non-operating organization, we are however, in the process of evolving our geographic portfolio through partnering with leading international organizations. In this process, we are also developing the international basin and hydrocarbon resource-led explorations.

Our main purpose is to provide reliable, affordable, and sustainable energy to our consumers worldwide, which is accomplished with LNG and hydrocarbons. One of our key strategic and business ambitions is to expand our geographical portfolio. To facilitate this, we will continue to collaborate with top energy suppliers across the globe to ensure that we positively contribute towards the global economy.

Our Value Chain

We diligently work towards building a fully integrated value chain that benefits Qatar by utilizing our available natural hydrocarbon resources. In addition, we are actively investing in the expansion of our renewable installed capacities, with particular attention on Solar PV Plants. These measures will directly diversify our energy mix, contribute towards energy security, and further our efforts towards the clean energy transition.

The nature of the work of QatarEnergy and its affiliates includes undertaking business across the following value chain:



Explorations



Production



Local and international sale of crude oil



Natural gas and natural gas liquids



Liquefied natural gas (LNG)



Refined products



Synthetic fuels



Petrochemicals



Fuel additives



Fertilizers



Steel



Aluminium

Exploration, Drilling & Production

- QatarEnergy through Exploration and Production Sharing Agreements (EPSAs), Development and Production Sharing Agreements (DPSAs) and Joint Operations.
- Gulf Drilling International (GDI)

Power & Utilities

- Ras Laffan Power Company (RLPC)
- Mesaieed Power Company (M Power)
- Ras Girtas Power Company (RGPC)
- Um Al-Houl Power (UHP)

Metals

- Qatar Aluminum (Qatalum)
- Qatar Steel

Support Services

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

Storage & Transportation

- Qatargas (QG)
- Woqod (Qatar Fuel)
- Qatex

Refining & Gas Processing

- Qatargas (QG)
- Oryx GTL
- QatarEnergy

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 (QAFCO)
- Gulf Formaldehyde Company (GFC)
- Qatar Melamine Company (QMC)

Our Corporate Vision and Strategic Objectives

Promoting, driving, and actively contributing towards sustainable development remains at the forefront of our sustainability strategy and will further our position as a key energy transition partner. Our vision is to drive the global energy industry towards a clean energy transition, with us pushing the efforts globally and locally.

It is important to us that the values, goals, and ambitions set out in our sustainability strategy are integrated across our business, our identity and in everything we do. For this purpose, we developed six core values of work culture, including, safety, integrity, excellence, respect, collaboration and responsibility. These values are integrated and reflected throughout our capabilities, mindsets, processes, systems, and behaviours of our people, which will drive sustainable development throughout our business.

Jassim Mohammed Al-Marzouqi

Executive VP, Commercial & Business Development



"QatarEnergy strives to continue to deliver cleaner energy, which the world needs, and play our part in finding alternative and better solutions in the ongoing energy transition. Our strategy is to further strengthen our LNG capabilities to drive the global energy transition, and build a resilient portfolio using international partnerships and investments. Our updated strategy also looks towards new energy carriers in carbon capture storage, blue hydrogen and blue ammonia vectors."

To become one of the best Energy companies in the world, with roots in Qatar and a strong international presence.

Strengthen technical capabilities and operating model in Qatar.

1

Maximize upstream value for the State of the Qatar.

2

Create a large-scale, value adding, growing international upstream portfolio.

3

Reinforce LNG & global gas position.

4

Maximize added value of the Qatar's downstream businesses.

5

Promote energy efficiency & optimum energy mix in Qatar.

6

Commercial & M&A Capabilities

Business Process & Corporate Governance

Asset Portfolio Management

Human Capital

● Vision ● Theme ● Enablers

Our Board of Directors



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. Sheikh Mohammed bin Hamad bin Qassim Al-Abdullah Al-Thani

Minister of Commerce and Industry (Member)



H.E. Ali bin Ahmed Al-Kuwari

Minister of Finance (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 Board of Directors play a vital role in overseeing the overall success of the organization. This includes overseeing our financial strength, sustaining our development, and providing a high standard of living for the people of Qatar.

The Board of Directors serves as an ultimate decision-making body of the organization and conducts their duties with the assistance of Board and Management Committees.

Our Board strives to meet the appropriate interests of our relevant stakeholders by taking into consideration the environmental, social, and economic challenges of our business activities.

Upholding QatarEnergy's Governance

Effective Corporate Governance remains the basis of our business, which is conducted in line with the highest standards of professionalism and transparency. At QatarEnergy, we believe that good governance translates to a strong company that delivers for its stakeholders. Our governance is designed to effectively support our sustainable development and growth of QatarEnergy while successfully meeting the expectations of our stakeholders.

Governance Transformation

As we continue our journey to become the best National Energy Company in the world, effective corporate oversight continues to be the foundation of our success. This includes a commitment to governance and business practices that comply with our policies and applicable national and international laws, regulations and conventions. We have established clear lines of responsibility for these commitments through our new governance and compliance frameworks for our leaders, employees, business partners and other key stakeholders. We believe that this focus on our commitments, while staying true to our values and standards for business conduct, will help us create long-term value for the organization and the communities in which we operate.

Initiatives launched under the Governance Transformation Office (GTO) were successfully completed in 2021. We started this journey in 2018 when we conducted a governance, regulatory and compliance gap analysis,

which led to setting up the GTO to support improved governance and compliance across the organization. Over the last three years, these projects have been implemented and supported by organization-wide communications and change management programs.

In 2021, we enhanced our organizational governance oversight to the QatarEnergy group of companies, including our joint ventures. We aim to implement a framework that will provide guidance to company directors on how to apply QatarEnergy's new corporate policies into a group company context and provide targeted support to enhance governance and compliance. We have also undertaken a gap analysis to identify areas of improvement in our governance policies. Going forward, we aim to align with our stakeholders and plan collective action to bridge these gaps between current practices and future vision, including accountabilities and timelines.

Director Engagement Program

QatarEnergy Directors are a key enabler of robust governance practices. The organization recognizes the importance of building the capabilities of its directors who represent us on our ventures. In 2021, we developed a Directors Engagement Program with the objective of building and managing communication across our director network. This was done to reinforce and strengthen our governance practices by way of sharing best practices, and on going skills development and enhancements.

In 2021, we conducted eight sessions over three months to revisit foundational topics of relevance to our network of joint venture directors. The topics included foundational elements of joint venture governance and related roles and responsibilities. We also conducted dedicated sessions for specific legal issues such as anti-trust and competition, anti-bribery and corruption. These sessions were supported by reviewing various case studies and real life examples. Each of these sessions had a 'Voice of an Executive' where a member of the QatarEnergy executive leadership team provided insights and addressed queries from the participants. We also conducted an 'after-action review' and focus group sessions to identify future learning needs and develop our engagement plan for 2022.

Over the next year, we intend to activate regular webinars and quarterly newsletter on selected governance topics. These topics are chosen based on feedback gathered in the after action review and will provide a blend of emerging issues in governance, along with QatarEnergy's insights into how to address these issues.

We are also developing a learning management solution for onboarding new directors and intend to launch a knowledge repository where the directors can access a governance toolkit and other relevant resources.



Our Code of Conduct

Shaping Who We Are

Our Code of Conduct, Shaping Who We Are, outlines our shared commitments on how we do business, how we work together and how we work with others. It sets the expectations for our behavior, including the actions of our majority-owned subsidiaries and our extensive network of 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 enhancing our reputation and operational success.

In 2021, we conducted a benchmarking exercise with the support of external consultants to improve our existing business conduct policies. This exercise led to the introduction of 19 new policies ranging from workplace respect to climate change, the environment, sustainability, human rights, and many other important and relevant subject matters. These policies were extended to our employees and external stakeholders.

We have gone to great lengths to ensure that these policies are easily accessible to all our stakeholders. We continue to advocate that they should be incorporated in all of our decision-making activities. Together, these policies provide a critical foundation towards our commitments and expectations for ethical business conduct and in everything we do. We invite you to review them on our public website (www.qatarenergy.qa)

As part of our Ethics and Compliance Program, we have initiated a “Speaking Up Line” where concerns around our conduct can be reported to us. We provide space for employees and external third parties to raise any concerns or report any suspected breaches of the law or business conduct.

Our “Speaking Up Line” also allows our people to report actual or alleged violations of our Code of Conduct and its related policies. It is also designed to treat all reported concerns raised in good faith in a confidential and professional manner and we are committed to investigating them in accordance with professional investigation standards. This includes protecting those who come forward to report any actual or suspected acts of wrongdoing.



Respecting Others

QatarEnergy's success depends on all of us. We value diversity and each person's contribution, and our people are our most important resource for accomplishing our vision and objectives. Accordingly, everyone at QatarEnergy is committed to creating an environment that promotes diversity, fair treatment, and respect for others.

How we work:

Respect the benefits that diversity brings

Recognize individuals for their contribution

Speak up if discrimination occurs

Abdulaziz Mohammed Al-Mannai

Executive VP, Human Capital

"Respectful tolerance of people's differences is critical to allow us to work and succeed together."



Leading by Example

Being a leader means taking the right decisions for the good of the organization. This starts with supporting a culture with high standards of business conduct and ethical behaviour, and speaking up when we see something wrong. Our Code of Conduct and Speaking Up policy can guide us to always make the right decisions.

How we work:

All leaders endorse the Code of Conduct and Speaking Up policy.

Show leadership by encouraging speaking up

We support and protect those who speak up

Ahmad Saif Al-Sulaiti

Executive VP, Operations

"You become a leader by standing up for what is right and just. Every one of us can make a positive difference by speaking up for ethical behaviour and good business conduct."



Business Conduct Committee

In shouldering the responsibility of being a reliable and resilient energy provider, managing business continuity is of utmost importance to QatarEnergy. QatarEnergy's Ethics and Compliance Program has been developed to guide business conduct and individual accountability. This program falls under the oversight of our Business Conduct Committee (BCC), a team of six members of QatarEnergy's senior leadership chaired by our EVP, the Executive Vice President of Human Capital. The BCC carries out an executive oversight of the organization, and its value chain partners, to ensure they operate in a principled manner and in accordance with the applicable laws, regulations and standards of conduct, as outlined in QatarEnergy's Code of Conduct and its related foundational policies. The committee ensures timely actions and decisions to prevent, detect and respond to the organization's compliance and business conduct (reputational) risks. Furthermore, the audit committee oversees the mitigation of compliance or audit findings.

Our Ethics and Compliance Program

We have implemented various mechanisms to ensure compliance among employees. Training is provided to employees on topics like anti-bribery and corruption, conflicts of interest, competition law and trade controls. Employees are also expected to review and acknowledge compliance with the Code of Conduct on an annual basis. In 2021, more than 8000 employees completed our annual e-Code of Conduct and acknowledged their compliance with it.

In support of our Ethics and Compliance Program, we continue to enhance awareness around business conduct through the release of our Ethics Moments. These Ethics Moments are sent to all of our employees on a monthly basis and focus on a range of business conduct topics. We also rely on our team of 60 Integrity Ambassadors to help embed these monthly topics within the organization. The Integrity Ambassadors participate in monthly shared learning sessions which focus on the related topic of the month. We do this to ensure an in-depth understanding of the relevant subject matter and work with the Integrity Ambassadors to further spread their knowledge amongst our employee base. These meetings were held on a virtual basis through-out the 2021 calendar year.

Step Up to Speak Up

By creating a safe space for our people to speak up, where they can feel supported to point out when something isn't right, our teams and collaborators will thrive. This helps improve our culture, operations and results. Our Code of Conduct and Speaking Up policy explain that we all have a duty to speak up when it is needed. We invite both our employees and external stakeholders to speak up in regards to behavior that they believe does not align with our Code of Conduct and foundation policies.

How we work:

Expected and acceptable practices are clearly outlined in our Code.

Speak up if unsafe practices or unacceptable behaviour are witnessed.

Transparency and Disclosure

During 2021, we developed and adopted our External Communication and Disclosure Policy which embraces our commitments and expectations when communicating with external entities. We have outlined several commitments to ensure that transparency and honesty is reflected in all of our communications. Additionally, we have invited our external stakeholders to uphold our commitments outlined in the policy by bringing to our attention any suspected violations or concerns regarding our business practices.

During 2021, we continued our work with the Natural Resource Governance Institute (NRGI) and Extractive Industry Transparency Initiative 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.

We also agreed to share our transparency journey by working with the NRGI to publish our story. This publication was issued in the second quarter of 2021.



Managing Our Risks

In order to minimise and manage our risks we utilize an Enterprise Risk Management (ERM) framework to mitigate business risks. By effectively implementing our ERM, it allows us to have a holistic view of our risk exposure and it provides the capacity and overview to enhance our decision-making process.

Aligned with the ISO 31000 standards, our ERM framework bases itself on eight fundamental elements allowing us to mitigate risks that might have an impact across our value chain. These risks could vary from, strategic to financial, operational or even compliance risks. QatarEnergy follows a standard process for identifying, assessing, and reporting risks to efficiently manage them and guarantee a successful and effective risk management mitigation process.

We are committed to constantly improving our ERM framework to support our growth and align with our corporate strategy. We continually strive to advance the risk culture of the organization without neglecting the importance of maximizing our benefits from opportunities.



Risk appetite and strategy

Amount of risk QatarEnergy is willing to take in “pursuit of value”



Risk identification and measurement



Risk Mitigation



Risk Reporting



Link to decision making process



Organization and Governance



Systems



Risk culture and competencies Collaboration and integrated thinking as “One QatarEnergy”

Human Rights

QatarEnergy is committed to balancing its operational performance with its social and environmental responsibilities as Qatar's largest employer and economic contributor. Our success in supporting Qatar's National Vision 2030 (QNV2030) is dependent on applying principled standards of business conduct which create trust-based relationships with our people, business partners and the communities in which we operate.

Human Rights Governance

Ensuring good governance is critical to any significant human rights commitment. At QatarEnergy, the Business Conduct Committee (BCC) is responsible for driving the highest standards of business ethics and behavior across the organization, including those pertaining to compliance with globally recognized human rights standards. We are working to develop a framework that includes human right's governance, risk, impact assessment, due diligence and follow-up, aligned to global best practices on human rights. Our Human Rights Policy was approved by our CEO in 2021 and we are working on developing a framework that includes human rights governance, risk, impact assessment and follow-up, one that is aligned with international best practices. We are also working on several related initiatives that we hope to finalize in 2022 including a standard on worker welfare for the energy industry and a document that outlines our expectations for business conduct within our supply chain.

Human Rights Due Diligence and Remediation

QatarEnergy treats employees and partners fairly, with dignity and respect. In 2021, as part of an ongoing business conduct communications program, and working together with our Integrity Ambassadors, we promoted conversations around the topics of working and embracing opportunities together, treating colleagues with respect and objectivity, and living, working and caring for each other, especially during challenging times. We further expressed our commitment to end discrimination on the grounds of race, age, disability, gender or political or religious beliefs.

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.



Sustainability at QatarEnergy

— Sustainability Framework and Strategy

— Alignment with the United Nations
Sustainable Development Goals
(UN SDGs)

— Sustainability Steering Committee

— Material Topics

Sustainability Framework and Strategy

QatarEnergy's sustainability strategy reflects our role as an energy transition partner and focuses on managing our impacts across our value chain. The sustainability strategy has been designed to drive a holistic roadmap that will achieve our corporate, national and international development objectives with key ESG opportunities at the heart. The strategy strengthens our commitment to align with the Qatar National Vision 2030, the United Nation's Sustainable Development Goals (UN SDGs) and other national and global sustainability ambitions.

Our strategy aims to integrate sustainability into the fabric of our business by focusing on the most material sustainability issues that are relevant to us. The strategy also provides a framework for aligning our processes, procedures and plans with our key sustainability goals. Through the successful implementation of our sustainability framework and strategy, we aim to create long-term value for our people, partners, local communities and environment.

The three pillars of our strategy – Climate Change and Environmental Action,

Operational Responsibility, and Social and Economic Development – set the foundation of our initiatives, targets and ambitions for a sustainable future. The three sustainability pillars were born from a combination of our rich contributions over the past decade and promote our forward-looking ambition as a leading supplier of cleaner energy. Under each pillar, we have defined key sustainability objectives to drive our initiatives and deliver on our targets and goals.

Key Pillars of QatarEnergy’s Sustainability Strategy

Climate Change & Environmental Actions



Growing our natural gas portfolio



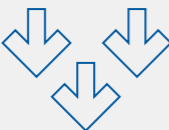
Developing low-carbon energy



Providing assurance to manage and mitigate risks



Reducing emissions from our facilities



Deployment of Carbon Capture and Storage (CCS) & Nature-Based Solutions (NBS)



Operating our assets safely



Promoting circular economy



Restoring habitats and enhancing biodiversity



Operational excellence



Safeguarding the environment

Operational Responsibility

Social & Economic Development



Caring for our people
Employees and Contractors, together



Creating and growing value together with our Business Partners



Sharing benefits across Communities and Broader Society

Alignment with The United Nations Sustainable Development Goals (UN SDGs)

As a key driver for sustainable development in Qatar, we aim to support the national agenda and commitments towards the Paris Agreement and the UN SDGs. The SDGs serve as a global blueprint for peace and prosperity for people and the planet. The 17 goals provide a global target to end poverty, tackle inequalities, confront climate change and economic growth.

We are committed to aligning our sustainability contributions and operations with the SDGs. While we contribute directly and indirectly to all SDGs, we aim to focus on specific goals that are most relevant to our operations and business.

Most Significant SDGs to QatarEnergy

Climate Change & Environmental Actions



7 Affordable and Clean Energy



13 Climate Action



Social & Economic Development



8 Decent Work and Economic Growth



Further SDGs significant to QatarEnergy's operations

Climate Change & Environmental Actions



14 Life Below Water



15 Life on Land



Operational Responsibility



3 Good Health and Well-being



Social & Economic Development



4 Quality Education



12 Responsible Consumption and Production



Sustainability Steering Committee

QatarEnergy has set in motion the launch of a Sustainability Steering Committee in 2022 to ensure the delivery of the sustainability strategy and initiatives in the energy sector, and provide strategic guidance on Environmental, Social, and Governance (ESG) mechanisms. The committee, together with climate change mitigation and social and economic development sub-committees will work towards leveraging QatarEnergy's work on sustainability and will serve as a platform to align the energy sector entities in managing target setting, reporting and monitoring processes. The committee will also ensure overall accountability towards meeting sustainable development goals and climate targets for the sector and the state.



Material Topics

Stakeholder Engagement

We have adopted a stakeholder centric approach for engaging with our internal and external stakeholders which have a direct or indirect stake in QatarEnergy, or who can affect or be affected by our activities. We place significance in engaging with our stakeholders, to address their concerns, needs, expectations and aspirations.

As outlined in our Stakeholder Engagement Policy, we commit to proactively engaging with our various stakeholders and participating in open and transparent dialogue to create shared value. We regularly engage with our stakeholders through different means of engagement, feedback channels and activities as outlined below.

Stakeholder group	Means of engagement	Key needs and expectations	Our key efforts
Our People	<ul style="list-style-type: none">• Continuous performance appraisals, recognition and awards programs• Feedback systems• Internal newsletters (QatarEnergy Pulse)• Email, QatarEnergy website and intranet• Corporate events• Training and development opportunities• Regular face to face meetings with line manager and departmental meetings• Town halls• Quarterly senior management meetings• Materiality assessment workshop	<ul style="list-style-type: none">• 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	Refer to Social and Economic Development section, page 172
Contractors and Suppliers	<ul style="list-style-type: none">• QatarEnergy website – Supply Management• Bidding and tendering process• Collaborative monitoring of project delivery• Surveys• Audits and site visits• Incident reports and investigations	<ul style="list-style-type: none">• 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	Refer to Social and Economic Development section, page 172

Stakeholder group	Means of engagement	Key needs and expectations	Our key efforts
Government / Regulators	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• 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 talent with a focus on Nationals• 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	<p>Refer to Operational Responsibility section, page 132</p> <p>Refer to Climate Change and Environmental Action section, page 64</p> <p>Refer to Social and Economic Development section, page 172</p>

Stakeholder group	Means of engagement	Key needs and expectations	Our key efforts
Investors	<ul style="list-style-type: none">• Annual reports• Press releases and newsletters• Website• Presentations and liaison with Credit Rating Agencies (Fitch, Moody's, Standard & Poors)• Presentation to the International Monetary Fund (IMF)• QatarEnergy 2021 Bond Prospectus• Exploration and Production Sharing Agreements (EPSAs)• Development and Production Sharing Agreements (DPSAs)• HSE performance (Environment and safety incidents record)	<ul style="list-style-type: none">• 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 clean environmental and safety records• Efficient transaction processing and transfer of funds to the State of Qatar	<p>Refer to all sections of our sustainability report</p>
	<ul style="list-style-type: none">• Surveys conducted at different intervals• Marketing and sales discussions• Contracts and agreements• Customer satisfaction surveys• Feedback through ongoing sales engagement	<ul style="list-style-type: none">• Reliable and efficient operations• High-quality products at acceptable prices• Excellent customer service• Business continuity	<p>Refer to all sections of our sustainability report</p>

Stakeholder group	Means of engagement	Key needs and expectations	Our key efforts
Subsidiaries, Joint Ventures and wider Energy and Industry Sector	<ul style="list-style-type: none">• Exploration and Production Sharing Agreements (EPSAs)• Development and production Sharing Agreements (DPSAs)• 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	<ul style="list-style-type: none">• 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	Refer to all sections of our sustainability report

Stakeholder group	Means of engagement	Key needs and expectations	Our key efforts
Communities (non-profit organizations, educational institutions, community members)	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• 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	Refer to Social and Economic Development section, page 172

We engaged with our key stakeholders to discuss and identify our environmental, social and economic material topics that should be prioritized and investigated. Our stakeholder centric approach is aligned and in accordance with GRI standards and established leading practices for stakeholder engagement. We strongly believe that our open dialogue with our stakeholders has supported us to address, understand and respond to their needs and expectations effectively through our sustainability report.

Materiality Matrix

The materiality assessment has allowed us to identify the most significant ESG and economic aspects and impacts resulting from our operations. The assessment identified several material topics that need to be managed, disclosed and prioritized. The outcomes of the assessment have been used as a foundation of the contents of this report.

Previously, we defined the material topics most relevant to our business by considering our strategic direction and benchmarking against our peers. We also sought to align with key global reporting bodies and international reporting frameworks. This exercise has pushed QatarEnergy to evolve our strengths, address the areas of opportunity and plan for any potential risks, by focusing on what matters to us most as a business. In 2021, we further enhanced our materiality assessment methodology by engaging with our internal and external stakeholders through workshops to identify, assess and prioritize our material topics.

To start the materiality assessment, we identified 31 material topics, aligned to the GRI standards. Thereafter, we collected feedback through surveys from internal stakeholders, and conducted workshops with NGOs, governmental entities and foundations to seek their input on the presented material topics and significant impacts. We requested feedback on areas of improvement throughout our operations and value chain from all stakeholders, which further enriched our understanding and increased value to our materiality assessment.

We categorized our material topics into three levels of priority, 'critical', 'very important' and 'important'. The results of the materiality assessment were generated from stakeholder input, and divided into the three categories of significance. This reflects how our stakeholders regard and prioritize the assessed material topics. We then proceeded to collate the various views and mapped the results of the assessment according to their magnitude on economic, environmental and governance aspects of our business.

The materiality matrix presented identifies the most relevant and significant issues for QatarEnergy and our stakeholders, demonstrating which issues are critical, very important and important.

JV Partners

Climate & Environmental Agencies

IGOs

NGOs

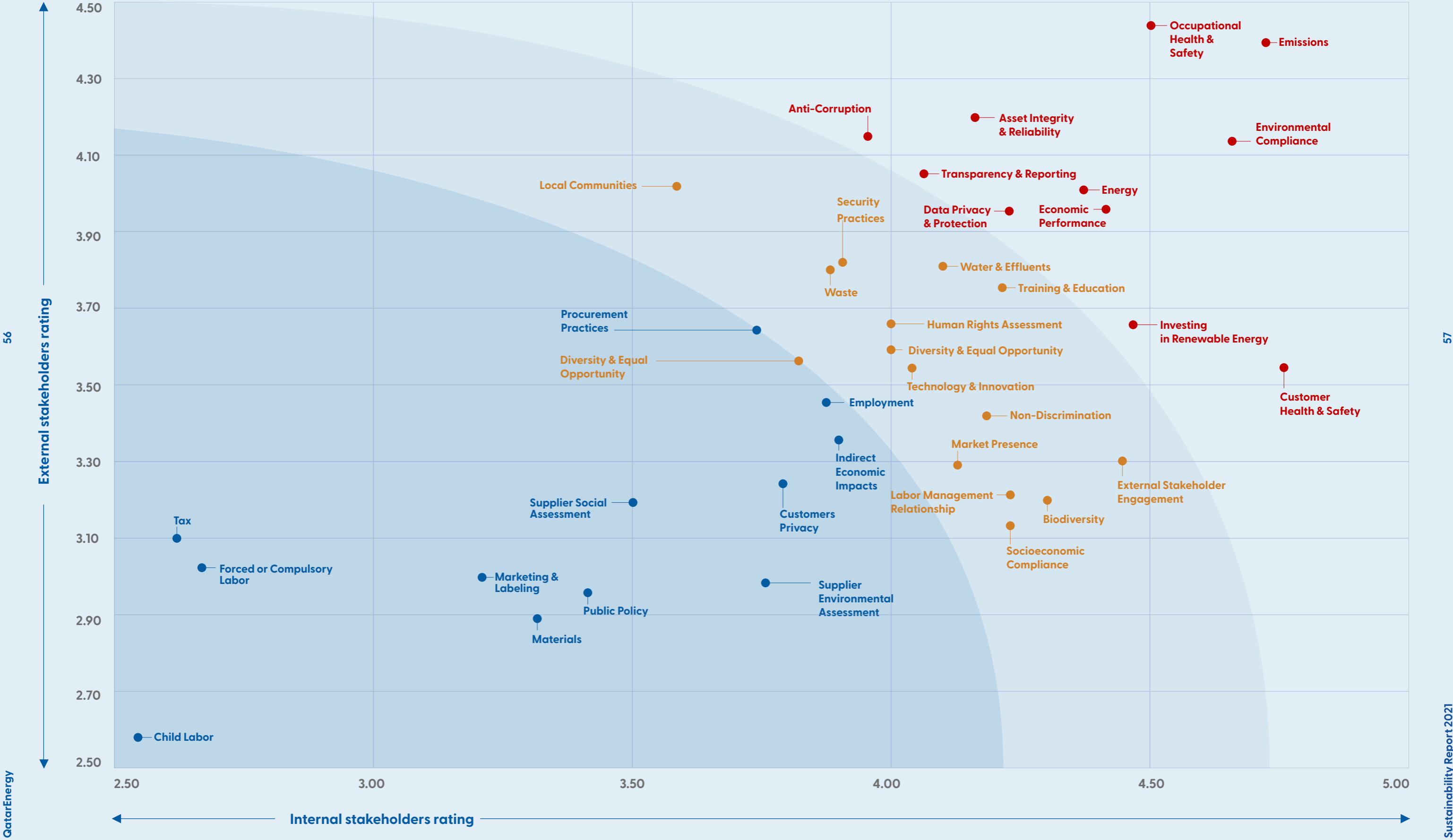
Governmental Agencies

QatarEnergy Materiality Matrix

Critical - material topics that merit critical inclusion that positions QatarEnergy in the sustainability domain.

Very important - material topics that provide stakeholders with an understanding of QatarEnergy's management practices and data disclosed, as per stakeholders significant requirements.

Important - management has the flexibility to report on those material topics based on their strategic direction.



Ensuring holistic management of our environmental impact in the development of QatarEnergy Headquarters at West Bay, Doha

Demonstrating true environmental stewardship, QatarEnergy has integrated climate conscious measures throughout its business operations by building its headquarters as a sustainable facility receiving a 3-Star green building certification under the Global Sustainability Assessment System (GSAS).

Located at the heart of Doha, the facility is highly connected to existing infrastructure with access to utilities including water, electricity and fiber optics. Surrounded by pedestrian walkways and a metro station in proximity, occupants of the facility enjoy convenient access to public transport, thereby reducing the emissions linked with transportation. To safeguard the health and wellbeing of occupants, spaces inside the facility avoid the use of harmful chemicals in paints, finishes and furniture. For improved indoor environment, the buildings are designed to receive ample sunlight throughout the day. Resonating the region's cultural identity, facades within the development feature Mashrabiya pattern.

QatarEnergy headquarters has joined the list of sustainable developments worldwide. Embracing green building practices for its facilities contribute to QatarEnergy's

sustainability strategy that establishes the organization's environmental targets, in line with Qatar National Vision 2030 and the Paris Agreement.



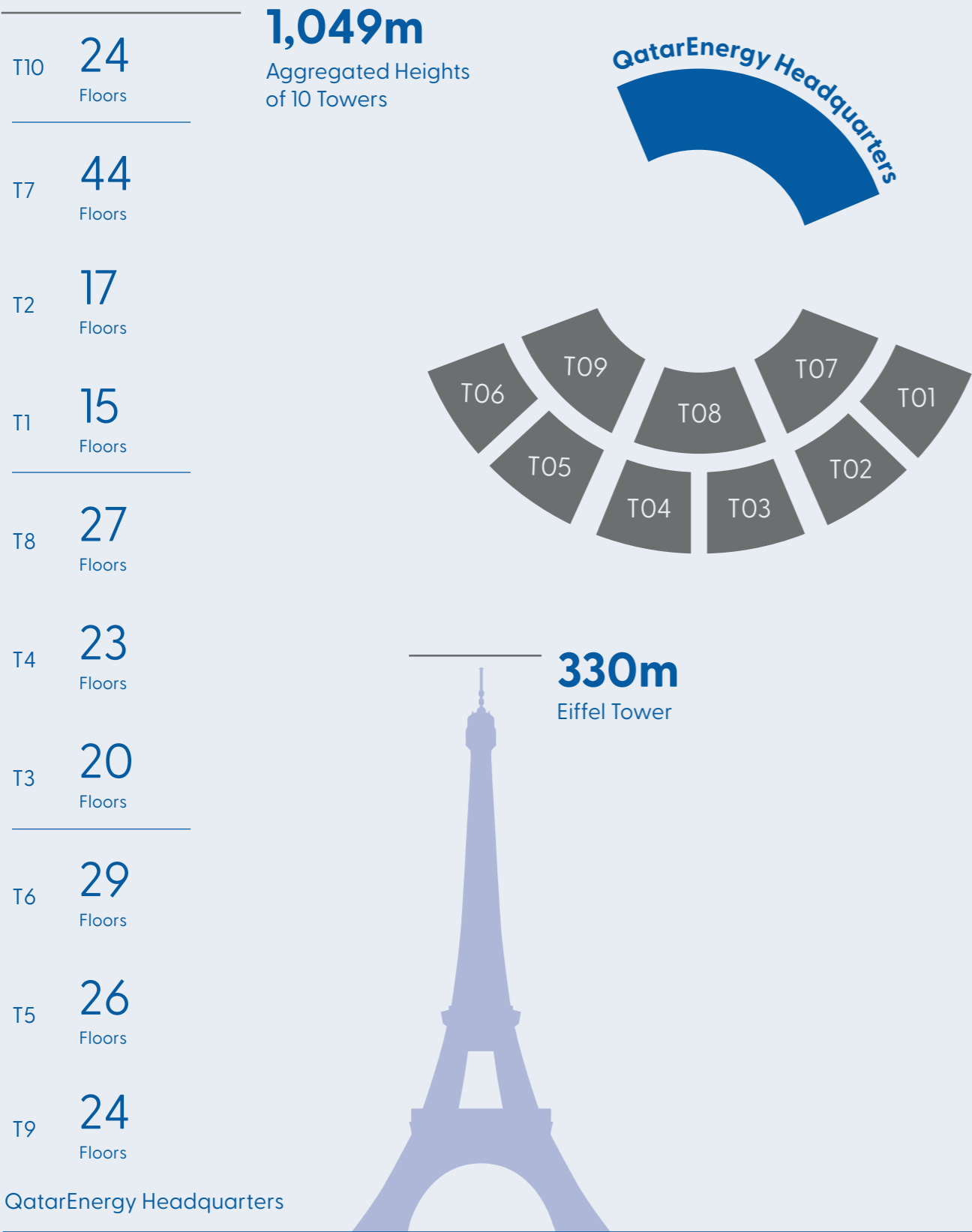
With sustainability incorporated right from the planning and design stage, the masterplan of QatarEnergy headquarters was developed as per green buildings standards.

In line with QatarEnergy's commitment to support regional businesses and to reduce its overall carbon footprint, QatarEnergy headquarters utilized locally available construction materials such as steel rebars, concrete and finishes for the exterior and the parking area. In the same vein, local consultants, contractors and suppliers were intentionally sourced and hired to work on the development.

The facility incorporates a wide range of sustainability measures aimed at preserving the environment and protecting biodiversity. Adopting a holistic approach to water conservation, the development benefits from the use of sensor faucets and low-flow fixtures, increased water reuse through treated sewage effluent systems and landscaping with native and adaptive plants that require minimal amount of water.

The development boasts its own district cooling plant serving all the facilities. To mitigate its energy footprint, the facility features high-efficiency walls and roofs. For enhanced insulation, glazing across all buildings has been done using double tinted glass with spacing inside. To ensure energy is efficient, fans provide fresh and exhaust air to the building, while LED lighting fixtures are optimized with sensor technology. Similarly, MEP (mechanical, electrical and plumbing) systems within the buildings are continuously monitored to ensure enhanced energy efficiency. Furthermore, the facility houses a smart system to control curtains in public spaces and lower the solar load. Benefiting from passive design techniques, the project also employs smart architectural solutions to minimize solar exposure of the glazed surfaces.

QatarEnergy Headquarters



<div><div>M²</div><div>Built Up Area</div><div>700,000m²</div><div>Larger than Hamad International Airport</div></div>	
<div><div></div><div>Regional Materials Sourced</div><div>40%</div></div>	<div><div></div><div>Sustainability Rating</div><div>3 Stars</div></div>
<div><div></div><div>Recycled Materials Content</div><div>25%</div></div>	<div><div></div><div>Construction Man Hours</div><div>140 Millions</div></div>
<div><div></div><div>Energy & Water Saving</div><div>20%</div><div>Equivalent to Operating a Fifty-Storey Tower</div></div>	<div><div></div><div>Demountable Partitions</div><div>70 Km</div><div>Equivalent to the distance from Doha to Ras Laffan</div></div>
<div><div></div><div>Tallest Building Height</div><div>200m</div><div>46 Levels</div></div>	<div><div></div><div>Car Parking</div><div>4,700</div><div>Parking Slots</div></div>
<div><div></div><div>Aggregated Levels</div><div>254 Levels</div><div>3X Taller than Eiffel Tower</div></div>	

Fully Automated Building Management System

- Water
- Air Conditioning
- Building Envelope
- Life Safety
- Electricity
- Lighting

3,800 Staff Occupancy

2 Restaurants250 persons capacity

3 Gymnasiums2750 m2

QatarEnergy Health Center14000 m2

Northfield Hall400 Persons Capacity

Ras Abu Abboud Hall725 Persons Capacity

Metro Station Link

16 Commercial Outlets

Climate Change and Environmental Action

- 2021 Performance Highlights
- Introduction
- QatarEnergy's Climate Change Action
- QatarEnergy's Environmental Action

Climate Change Action

2021 Performance Highlights

66
**78
MTPA**

LNG Production

100%

QatarEnergy and its Affiliates operating in Qatar are now fully covered by our GHG Emissions Accounting, Reporting and Verification program

**54
MMSCFD**

Energy Savings since 2013

**875
MW**

Committed solar capacity at QatarEnergy Industrial Cities

70%

Reduction in LNG Flare Intensity since 2012

Level 3

OGMP 2.0 Gold Standard for methane emissions for the 2021 reporting year

3.8 MTPA

Carbon Captured through CCS since inception (2019)

At QatarEnergy we have always been keen on managing our impact responsibly, improving our environmental performance and reducing our carbon footprint. We have also placed significance on supporting and contributing to societies' overall sustainable development and emissions mitigation. Being at the heart of Qatar's energy sector, we support the national efforts and align closely with the pillars of Qatar's National Vision 2030.

Introduction

The past few decades have witnessed unprecedented economic and industrial growth and considerable improvement in people's living condition around the globe. This, however, had an adverse impact upon the climate, biodiversity and natural resources. Climate change is now a reality and is increasingly affecting people and communities worldwide.

The sustained high energy demand is driving year-on-year increase in global energy related CO₂ emissions. In 2021 CO₂ emissions rose by 6% to a historic level of 36.3 Gt CO₂.

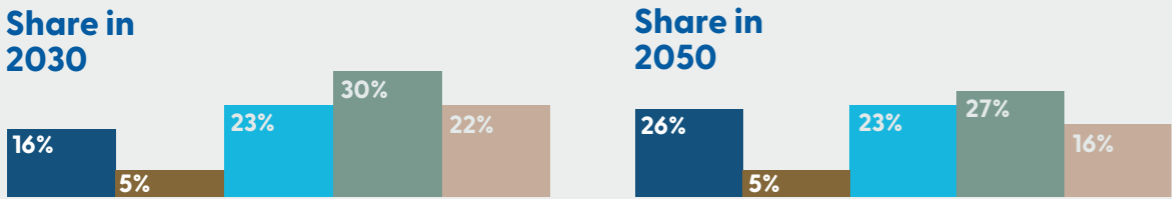
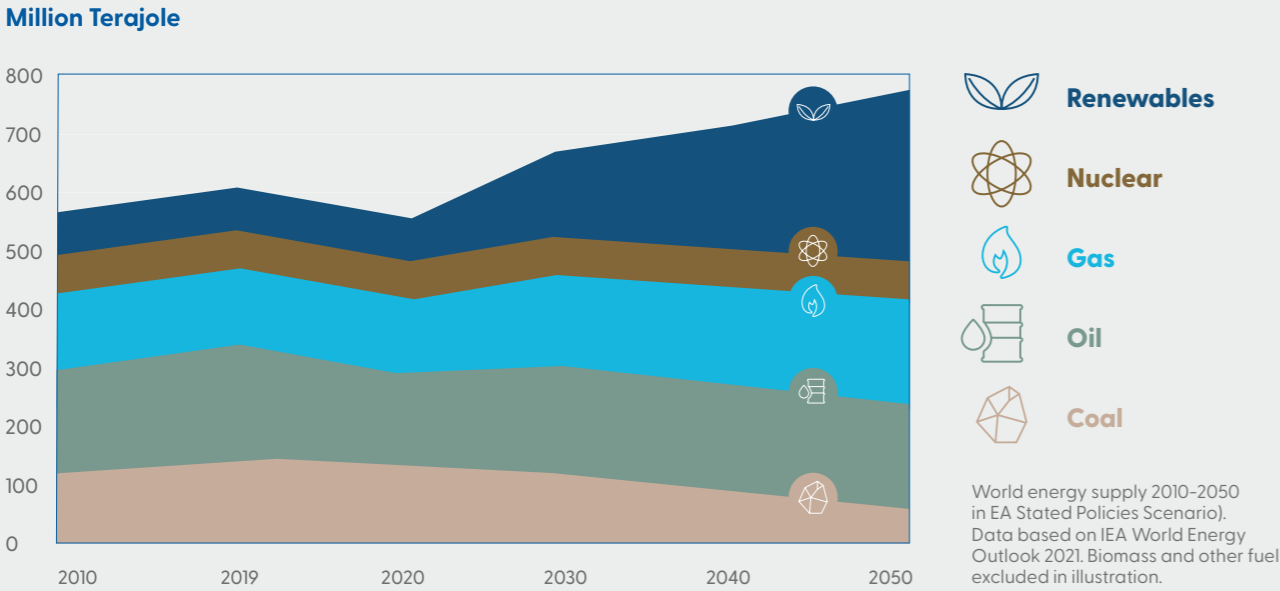
According to the United Nations Framework Convention on Climate Change (UNFCCC), coal accounted for over 40% of the overall growth in global CO₂ emissions in 2021, reaching an all-time high of 15.3 billion tonnes.

The current data points out that we are not yet on track to meet the temperature goals of the Paris Agreement. According to IPCC, under the Business-as-Usual scenario (Scenario A), a rate of increase of global mean temperature during the next century of about 0.3 °C per decade is expected. Consequently, the aim for 1.5°C temperature goal will soon become unachievable unless substantial, faster and comprehensive emissions cuts are taking place imminently.

On a positive note, political action and focus on the climate crisis is progressively picking up momentum. While significant actions are still required, and despite the global increase in energy related CO₂ emissions, we are in a better place than we were ten years ago in terms of commitments and actions. The proven technologies and initiatives available today have the potential to reduce emissions by more than half of today's emissions, which will allow us to achieve the 1.5°C IPCC target. However, closing the gap will require the full deployment of these emission reduction options, and more. These include solar and wind energy, energy efficiency, carbon capture and storage, flare and methane emissions reduction, as well as leveraging new energy carriers such as hydrogen and ammonia. While recognizing the urgency on reducing the GHG emissions, the global energy demand can very well rise by a third. Providing more energy, while dramatically reducing emissions is a key challenge in hand, requiring dramatic shifts in our society and our industry. This dual challenge makes it very difficult to supply sufficient energy to fuel the world economic growth while phasing out fossil energy, purely on environmental grounds. Therefore, and despite rapid growth of renewables and wider deployment of new energy carriers, fossil energy market share is likely to remain sizeable. This is more so true for natural gas.

The global energy demand is expected to continue growing as the population approaches 10 billion people 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 by the energy demand outlook below from the International Energy Agency (IEA).

Global Energy Demand Trend, by Fuel



As the global markets for low carbon energy sources continue to grow, the global demand for coal and liquid fuels will naturally stabilize and eventually decline, whereby natural gas and other clean fuels will be favoured. We are well positioned to meet the rise in demand for natural gas, with our current and future energy portfolio through natural gas production.

Natural gas enables people around the globe to access low carbon energy supporting their living. As the world moves towards a 1.5 C scenario, natural gas will play greater role in this transition and beyond.

As electricity production increasingly shifts to renewable energy sources, gas is the perfect partner to renewables, providing quick and reliable back-up power whatever the weather. Gas is also expected to play a significant role in scaling up hydrogen and blue ammonia use globally, and will therefore continue to be a large part of the energy mix. Whilst electrification is on the rise across other industries, there are some industries that will not be easily electrified including chemicals, steel, and other heavy industries. Thus, gas will continue to serve these hard-to-abate industries. It means that natural gas production alongside Carbon Capture and Storage (CCS), and other emissions reduction technologies, will be critical in producing blue hydrogen at scale. Natural gas is well positioned to drive the energy transition, as it has great handling flexibility, a capacity to respond to fluctuating demand, and is a cleaner alternative when compared with conventional fossil fuels.

A National Priority and Shared Responsibility

The State of Qatar developed a comprehensive National Climate Change Action Plan (NCCAP) which was launched in 2021. QatarEnergy was at the heart of formulating this strategy and fully supports its implementation. We recognize the commitments and partnerships that Qatar has outlined in the NCCAP, which include a firm commitment to the Paris Agreement, The UN SDGs, and numerous initiatives across all sectors to reduce emissions by 2030. Indeed, Qatar’s Nationally Determined Contribution (NDC) to UNFCCC (United Nations Framework Convention on Climate Change) include a list of measures to mitigate against and adapt to climate change, including diversification in the economy. The NDC targets a reduction of 25% in the State of Qatar’s emissions by 2030 compared to a Business-as-usual case scenario.

From a wide spectrum of mitigation measures including energy efficiency, deployment of clean energy and renewables, the NDC also includes climate adaptation actions with mitigation co-benefits in water management, infrastructure and transport, waste management and raising public awareness.

To complement this, Qatar became an active member of the Net Zero Forum Producers (NFP), a new international forum dedicated to developing long-term strategies to reach global net-zero emissions. Canada, Norway, Qatar, Saudi Arabia, and the United States, collectively representing more than 40 percent of global oil and gas production, came closely to form a cooperative forum that will develop pragmatic emissions reduction strategies, including methane abatement, advancing the circular carbon economy approach, development and deployment of clean energy, carbon capture and storage technologies, and other measures in line with each country’s national circumstances.

QatarEnergy's Climate Change Action

Background

QatarEnergy is responsible for about 41% 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 operators, including our JV partners. It is therefore essential that major stakeholders across all sectors take on their share of responsibility and collaborate to reduce emissions on a national level. As an overview, Qatar's 2021 total GHG emissions were approximately 97.6 MTCO₂eq with our contribution being 39.7 MTCO₂eq.

The 2021 total GHG emissions from the energy sector in Qatar and QatarEnergy's equity emissions

MTCO₂eq

QatarEnergy Equity

28.3

2.5

5.1

2.0

1.7

39.6

- Upstream
- Downstream
- Petrochemicals
- Power
- Metals

State of Qatar

43.2

12.5

11.6

24.6

5.7

97.6

59%

Total GHG Emissions

JV Partners

41%

Total GHG Emissions

QatarEnergy Equity

At QatarEnergy, we are strongly committed to creating awareness of the need for our operations, communities, and countries to transition to a low carbon economy. We believe in the urgency of delivering our climate action responsibly by managing our environmental impacts. We have played a proactive role in driving continuous improvement of our climate change and environmental performance through the effective implementation of our sustainability strategy. The global energy demand is expected to increase over the coming decades. As the world's leader in the production of LNG, we have a key role to play in meeting the global energy demand through driving and supporting the clean energy transition, whilst also providing a source of affordable, reliable and clean energy for our customers thereby enhancing energy security.

In order to drive and build the foundation of a clean energy transition and contribute towards society's carbon reduction targets and overall sustainable development, we have established a set of strategic objectives, plans and initiatives. This commitment to climate action is embedded into the building blocks of our sustainability strategy framework and identity. Our Climate Change Mitigation Strategy is divided into four pillars, "The 4C's": Consolidate, Curb, Create and Compensate, will be how we structure our efforts to mitigate and manage our impacts.

**Ahmad Saeed Al-Amoodi**

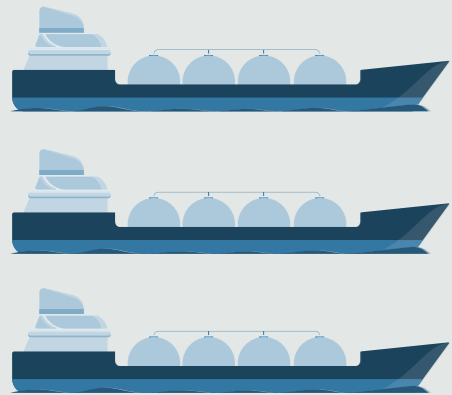
Executive VP Surface Development & Sustainability.

"The energy sector remains a central piece of industrial and economic development. We, at QatarEnergy, acknowledge our responsibility and contribution towards the energy transition and sustainable development."

QatarEnergy 4C Climate Ecosystem

Consolidate

Displacing high emitting fuels with low carbon energy



Curb

Reduce emissions from Operations



Energy Efficiency



Methane emission reduction



Flare emission reduction

Facilities



Create

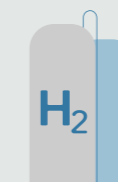
Low carbon energy



Solar



Ammonia

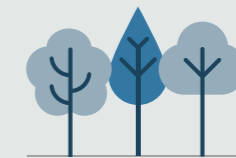


Hydrogen

Renewable energy
Clean energy carriers

Compensate

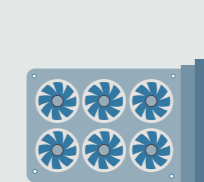
Residual and hard to abate emissions



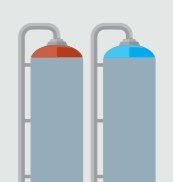
Trees



Coastal Mangroves



Direct Air Capture



Carbon Capture and Storage

Trees/Mangroves,
natural landscape

Geological Formation

Consolidate

We are Consolidating our leading position as a global energy transition partner by increasing our LNG production capacity to 126 MTPA by 2027. In doing so, we are contributing to the global economies fuel transition from liquid fuels and coal to cleaner gas. This switch will encourage other industries to follow suite and equally replace higher emitting energy sources. Therefore, our aim is to consolidate energy sources and support our partners globally to realize emissions reductions from fuel-switching.

Curb

We are Curbing emissions across our supply chain and our operations, including our equity holding. We are dedicated to tackle and curb Scope 1 and 2 GHG emissions including fugitive methane emissions.

This is achieved through a series of measures that are critical in the reduction of our climate impact and emissions generation. Some of the measures include robust accounting and reporting, reducing and directly addressing generated emissions from different sources, investigating synergies and the integration of systems, and leveraging our influence – in propelling climate change mitigation efforts at our assets.

Create

We are Creating low-carbon energy by increasing our renewable and clean energy capacity across our industrial cities and beyond. This will also contribute towards the diversification of our energy mix, thereby increasing our energy and climate resilience. We are also exploring investment opportunities towards new energy vectors such as hydrogen and ammonia.

Compensate

We are Compensating for residual emissions that are notoriously difficult to tackle and abate. We will continue deploying Carbon Capture and Storage (CCS) to counteract the environmental impact. The role of technology is significant in our climate change mitigation efforts. That is why we are constantly exploring leading technologies in the industry to support our objectives. Looking forward, it is essential that new solutions are considered, such as Post Combustion Capture technology and the exploration of natural carbon sinks.

Climate Change Targets

2025

Achieve a 0.2% weighted methane intensity

2030

Achieve zero routine flaring

Increase CCS capacity to 7-9 MTPA CO₂

Expand solar capacity to 2-4 GW

Achieve net carbon intensity reduction of 15% from upstream and 25% from the LNG facilities by 2030, including direct and indirect emissions

2035

Increase CCS capacity to over 11 MTPA by 2035

Expand solar capacity to over 5 GW by 2035

Achieve net carbon intensity reduction of 25% from upstream and 35% from the LNG facilities by 2035, including direct and indirect emissions

2019 Sustainability Strategy

2030

2020 Sustainability Strategy

2035

2013

Reduction in Carbon Intensity

-25% LNG Facilities
Scope 1 & 2

-15% Upstream
Scope 1 & 2

CH₄

Methane reduction
Methane Intensity 0.2 wt% by 2025



Flare Reduction
Zero Routine Flaring

CO₂

CSS
7-9 MTPA CO₂



Solar
2-4 GW



Energy Efficiency
150 MMSFD Gas saving

Reduction in Carbon Intensity

-35% LNG Facilities
Scope 1 & 2

-25% Upstream
Scope 1 & 2

CO₂

CCS
Over 11 MTPA



Solar
Over 5 GW



Natural Based Solutions



Further Reductions

Figure 2 Climate Change Mitigation Targets

We aim to reduce emissions across our entire value chain. We will tackle our Scope 1 and 2 emissions through active and passive measures, including energy efficiency improvements. Furthermore, we are progressing on our goals towards zero routine flaring and methane emission reductions to a target of 0.2% intensity, as we are considering all emission sources across our operations. We are expanding our installed solar capacity, which increases our energy security in addition to curbing our associated GHG emissions. Besides helping our partners to navigate the energy transition, we continue to explore new energy vectors such as ammonia and hydrogen. We are committing to expand our CCS capacity to more than 11 MTPA by 2035 and are exploring nature-based solutions.

Consolidate

Highlights 2021:

- In 2021, we exported 78 MTPA of LNG to our customers worldwide.
- Two new Compressed Natural Gas (CNG) stations with associated pipelines, located in RLIC and MIC, are now commissioned and fully operational.

At QatarEnergy we pride ourselves in being a vital contributor to Qatar's development and the global economy. We acknowledge and appreciate that this comes with the responsibility to ensure that we offer and provide affordable, clean and reliable sources of energy to our customers. With our leading global position, we will drive the fuel-transition from high emitting fuels to cleaner gas. Thus, we have committed to increase our LNG upstream production by 64% by 2030 compared to our current production. This will allow us to consolidate our position as a global energy transition partner by reaching 126 MTPA LNG production capacity by 2027. This is essential in meeting the global energy demand in a responsible manner, that is compatible with the Paris goal of limiting warming to 1.5 degrees Celsius.

Our position, leadership, efficient management of operations, and solid investments have been instrumental in channeling our efforts towards achieving an increase in our production over the past few years. For instance, in 2021 we exported about 78 MTPA of LNG to our customers worldwide. 2021 saw us making progress towards expanding our current LNG production capacity leading up to 2027. This will be achieved with the completion of the Golden Pass LNG export project, anticipated to start production in 2024. It is forecasted that Golden Pass will increase our LNG production capacity to 93 MTPA, which will prove to be a record-breaking performance for QatarEnergy. The North Field expansion plans include the North Field East (NFE) and North Field South (NFS) projects and are planned as our second milestone aimed at increasing our LNG production capacity to approximately 142 MTPA. The Golden Pass LNG facilities design includes various best practices to reduce combustion emissions, GHG, and flaring. In addition, heat recovery has been employed on Gas Turbines to significantly reduce fuel consumption and CO₂ emissions. Beyond fuel switching from high emitting energy sources to LNG, Compressed Natural Gas (CNG) also provides an opportunity for additional switching to cleaner fuels within the transportation sector, as a sustainable alternative to conventional fuels. As of 2021, two new Compressed Natural Gas (CNG) stations with associated pipelines, located in RLIC and MIC, are now commissioned and fully operational.

Outlook:

- Coal-to-gas fuel switching remains one of the most cost-effective levers to decarbonize the power sector.
- Studies are being carried out to develop CCS opportunities for post start-up implementation in Golden Pass.

Case Study- The Statement of Greenhouse Gas Emissions (SGE) Methodology

QatarEnergy's SGE Methodology, in partnership with Chevron and Pavilion Energy



QatarEnergy's SGE Methodology has been developed jointly in partnership with Chevron and Pavilion Energy. With reference to currently available product life cycle accounting standards, principally the GHG Protocol Product Life Cycle Accounting and Reporting Standard, ISO14067:2018 standard, and PAS 2050:2011 specification for the assessment of life cycle GHG emissions of goods and services. It provides a consistent approach for GHG emission calculation and reporting for delivered LNG cargoes, based on industry standards. This is in line with QatarEnergy's efforts to lead the Monitoring, Reporting and Verification (MRV) standards for the LNG industry. This is the first such published methodology that will be applied to Sales and Purchase Agreements (SPAs) by Pavilion Energy with QatarEnergy and Chevron. Intended for wider adoption, the methodology covers operational emissions associated with all life cycle stages across the LNG value chain, from wellheads to discharge terminals.



Taoufiq Gueddar

Climate Change Lead

"This joint effort to develop a greenhouse gas quantification and reporting methodology is part of a series of projects and initiatives that reflect QatarEnergy's commitment to reduce GHG emissions and to decarbonize the LNG value chain. We are proud to join hands with our partners Pavilion Energy and Chevron in this landmark project".



Curb

Highlights:

- Level 3 OGMP 2.0 Gold Standard for methane emissions for the 2021 reporting year.
- 54 MMSCFD Energy Savings since 2013.
- 70% Reduction in LNG Flare Intensity since 2012.
- 100% QatarEnergy and its Affiliates operating in Qatar are now fully covered by our GHG Emissions Accounting, Reporting and Verification program.

QatarEnergy recognizes the importance of its climate change action and associated GHG performance considering its position at the center stage of Qatar's energy sector.

We are fully committed to curbing our Scope 1 and 2 GHG emissions including fugitive methane emissions across our assets.

GHG Emissions Management

We have committed to a 35% reduction in the carbon intensity across our LNG operations and to a 25% reduction in the upstream facilities by 2035 in alignment with Qatar's national target.

We monitor, report, and verify our associated GHG emissions across all of our operations. We routinely employ our mature data collection processes and internal GHG management protocols to assess and identify emission generation hotspots across our onshore and offshore facilities. Furthermore, to ensure that we can be globally benchmarked and accountable, our GHG accounting and reporting methodologies are based on the Intergovernmental Panel on Climate Change (IPCC), the EU Monitoring and Reporting Regulation (EU MRR), and SGE methodology, among others. In our commitment for continuous improvements on our GHG performance, we routinely assess and refine our methodologies, protocols and management approaches for GHG accounting and reporting. Prior to 2021, the scope of our annual third party GHG emissions verification included RLIC, MIC and our operated facilities. In 2021, our non-operated offshore assets were added to the accounting and verification program. Thus, allowing us to reach 100% coverage of the oil and gas sector in Qatar.

Operators Under the GHG Accounting & Reporting Scheme

2010	2019	2020	2021
RLIC Facilities        	QatarEnergy Onshore Operated Assets  Mesaieed Operations  Dukhan Operations  Refinery	MIC Facilities & QatarEnergy Offshore           Offshore	Non-Operated Offshore   

Elevating Energy Efficiency

Similar to GHG emissions accounting and reporting, enhancing energy efficiency is another significant element of our climate change action plan. We recognize and place significance on our responsibility to make improvements in the energy efficiency of our systems and operational portfolio to conserve our natural resources and reduce our carbon footprint.

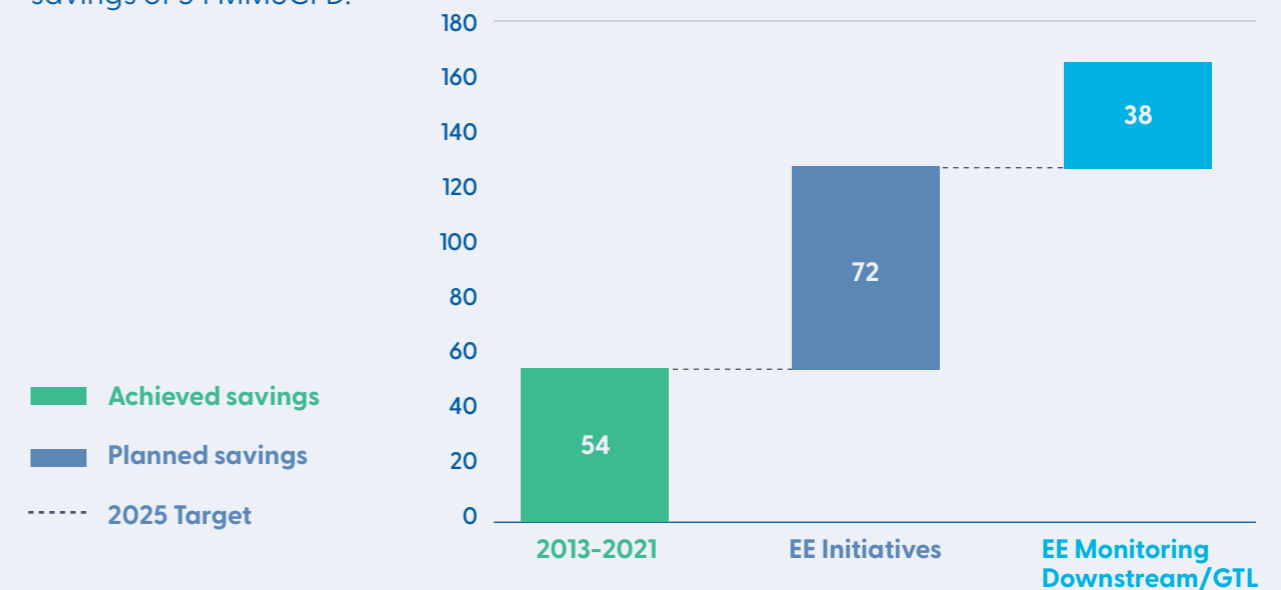
In 2021, we launched a concept study to identify several opportunities to enhance energy efficiency across our operations. The study highlighted areas of improvement, whereby a number of initiatives were developed, including gas turbine hardware upgrades, rebounding of compressors, filter house upgrades and recycling excess fuel gas to inlet facilities. The net fuel/feed gas saving potential from these studies is expected to reach more than 70 MMSCFD.

Furthermore, we have successfully developed an in-house energy efficiency monitoring tool to track energy usage relative to design specifications and identify areas of improvement. We expect this tool to yield future savings of around 40 MMSCFD across our downstream activities. In 2021, direct energy consumption from QatarEnergy operated assets was over 79 million gigajoules, about 8% higher than in 2020. The increase in our direct energy consumption was primarily related to the integration of a subsidiary, SEEF's petrochemical plants, into QatarEnergy's refinery in Mesaieed Industrial City (MIC).



As of 2021, we have successfully achieved energy consumption savings of 54 MMSCFD.

Energy Savings 2013-2025



Plan

Responsibility of Top Management
 Energy Policy
 Management Representative
 Energy Review
 Objectives and Action Plans

Do

Implementation and Realization
 Communication
 Training
 Awareness
 Operational Control

Check

Monitoring
 Analysis
 Corrective Action
 Preventive Action
 Internal Audit

Act

Management Review
 New Strategic goals
 Optimization

Reducing Flare Emissions

In 2021, we continued to drive flare reduction initiatives to deliver our ambition to achieve zero routine flaring by 2030. Our approach to minimizing flaring is focused on investments in innovative technologies, reduction of purge gas from flares, and implementation of best-in-class maintenance procedures.

We have continued to implement our flare minimization plans which identified activities or projects to monitor and improve our flaring activities.

Following the plans, we have continued to monitor our flared gas volumes through flare vent gas flowmeters for an accurate reporting of the data. In addition, we have also conducted timely repairs and carried out regular maintenance activities of the flaring systems to evaluate any potential optimization opportunities in our operations. Within the detailed maintenance plans, we also perform routine calibrations of the installed meters, according to the manufacturers' specifications, to ensure accuracy of our reporting. We continued the execution of our Flare Reduction Project (FRP) at RLIC for the purpose of minimizing flaring during planned or unplanned shutdown events, across our LNG operations. Since 2020, this initiative has led to more than 1500 MMSCF of flared gas being rerouted back to operational trains.

In 2021, our flaring intensity in RLIC decreased by approximately 10%, compared to the previous year. Some of our offshore flare reduction successes include reducing flaring at Al-Shaheen oil field by around 20% during

2021 compared to previous years. This was achieved through the reinstatement and repair of the flare system functionality, maintenance of passive valves and process optimization. Similarly, we installed infra-red cameras that supported sale gas facilities in detecting and monitoring flames that are invisible to the naked eye. The installation of these cameras enabled us to reduce flame visibility by 50%, reduce quantities of purge gas used, and subsequently reduce our flaring volumes. This year we have maintained a steady progress in our flaring reduction journey by considering additional flare gas recovery opportunities and conducting preliminary feasibility studies and assessments across our operations. This will enable us to create a suitable platform for deployment of new flare reduction technologies as they become available.

Moving forward, in addition to achieving our target of zero routine flaring by 2030, we will strive to reduce our non-routine flaring as well until we reach the minimum possible level of flaring.

Overall, we have committed investments of over USD \$170 million from 2018 to 2021 to achieve the above targets.

In 2021, about 70% reduction in flaring in our LNG facilities was achieved compared to 2012 levels, when we started the flare reduction program.

Flare reduction for LNG Facilities

(Flared gas volume (QRG basis)/ Sweet gas production volume)



* Qatar Reference Gas has a calorific value of 1000 BTU/SCF

In 2021, we became members of the Global Gas Flaring Reduction (GGFR) partnership which strengthens our commitment to end routine gas flaring at our sites.



Reducing Methane Emissions

Tackling and eliminating methane leaks from our facilities represents one of the best short-term opportunities identified to effectively contribute towards climate change mitigation. As we move towards near-zero methane emissions across our operations, we are committed to report our data in an accurate and transparent manner, through the adoption of improved monitoring and measuring technologies and improved methane leak detection.

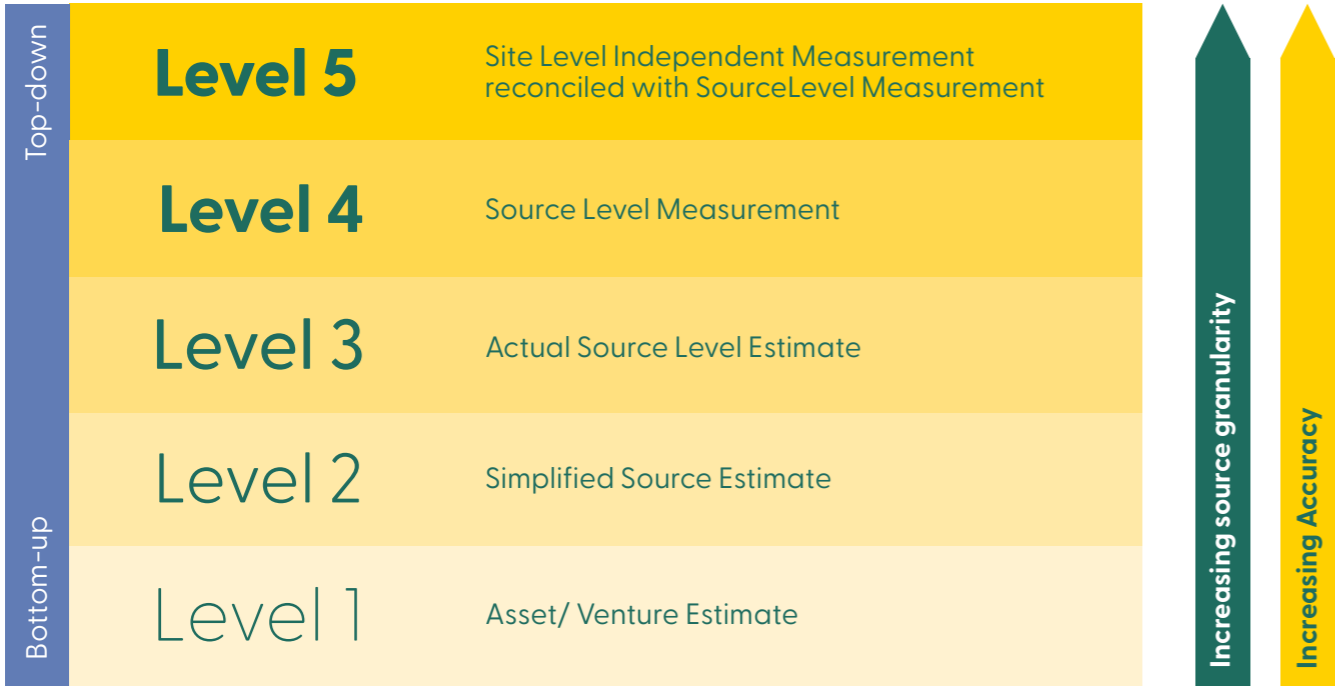
We have expanded the scope of our methane-focused smart Leak Detection and Repair (LDAR) program, which began in 2019, to include all QatarEnergy Group companies. The program utilizes advanced Optical Gas Imaging (OGI) camera technology and Toxic Vapor Analyzers (TVAs) to survey and detect leaks in a quick and efficient manner. Additionally, guidance documentation was developed and implemented to identify and repair leaking equipment, reduce VOC emissions and calculate and report accurate fugitive methane emissions.

Mesaieed Operations took the initiative to identify the sources of fugitive methane emissions and estimated emitted quantities using their well-established LDAR program in Mesaieed Operations.

In January 2021, QatarEnergy joined the second phase of the Oil and Gas Methane Partnership (OGMP 2.0), which aims to effectively monitor and report methane emissions.



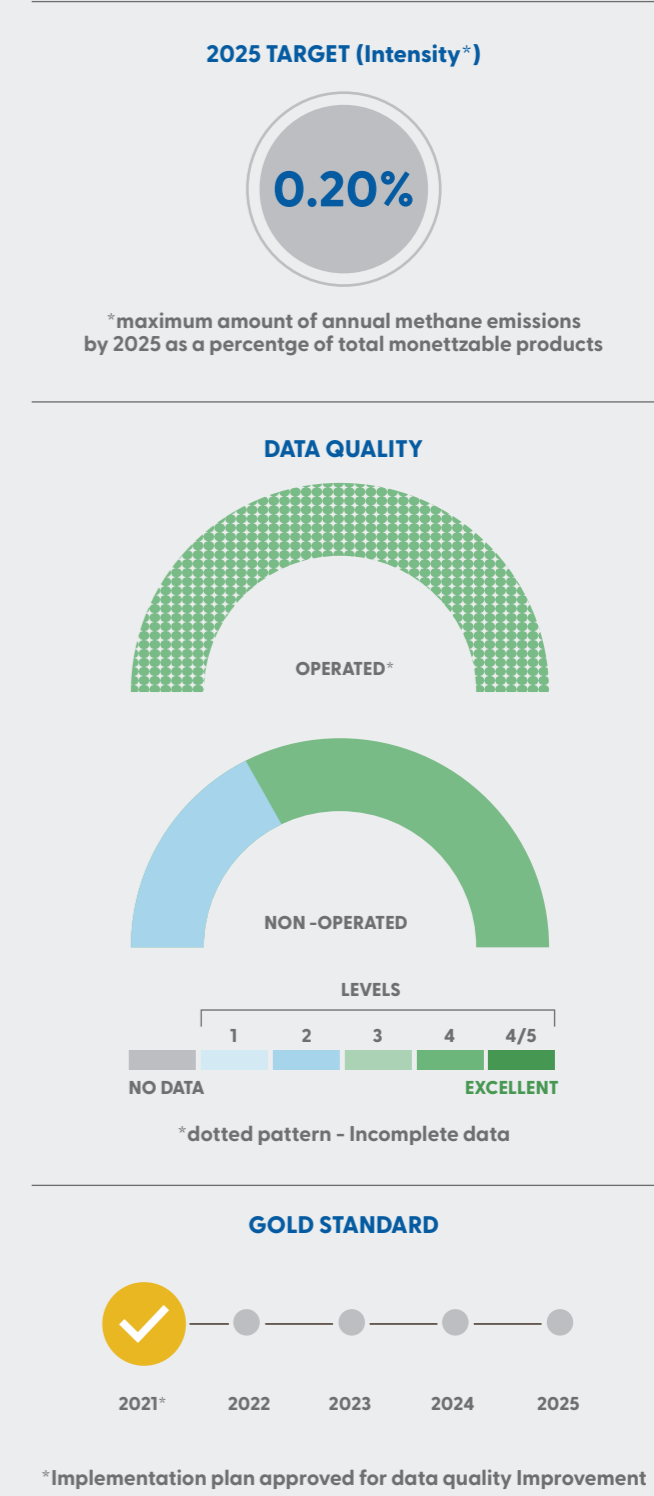
QatarEnergy OGMP 2.0 Gold Standard Status



OGMP 2.0 Reporting Levels

Gold Standard		
Trials for remote methane monitoring & reconciliation with field measurements to close gap to level-5	Measuring methane emissions from other significant sources (e.g. Stationary combustion) to close gap to level-4.	Fugitives already measured via the LDAR program.

QatarEnergy has published its methane emissions data in the first annual OGMP 2.0 report, An Eye on Methane: International Methane Emissions Observatory 2021 Report. QatarEnergy achieved the Gold Standard for the 2021 reporting year.



Case Study: Methane Reduction Management at the Pearl GTL Facility

Remote Monitoring Trial Summary

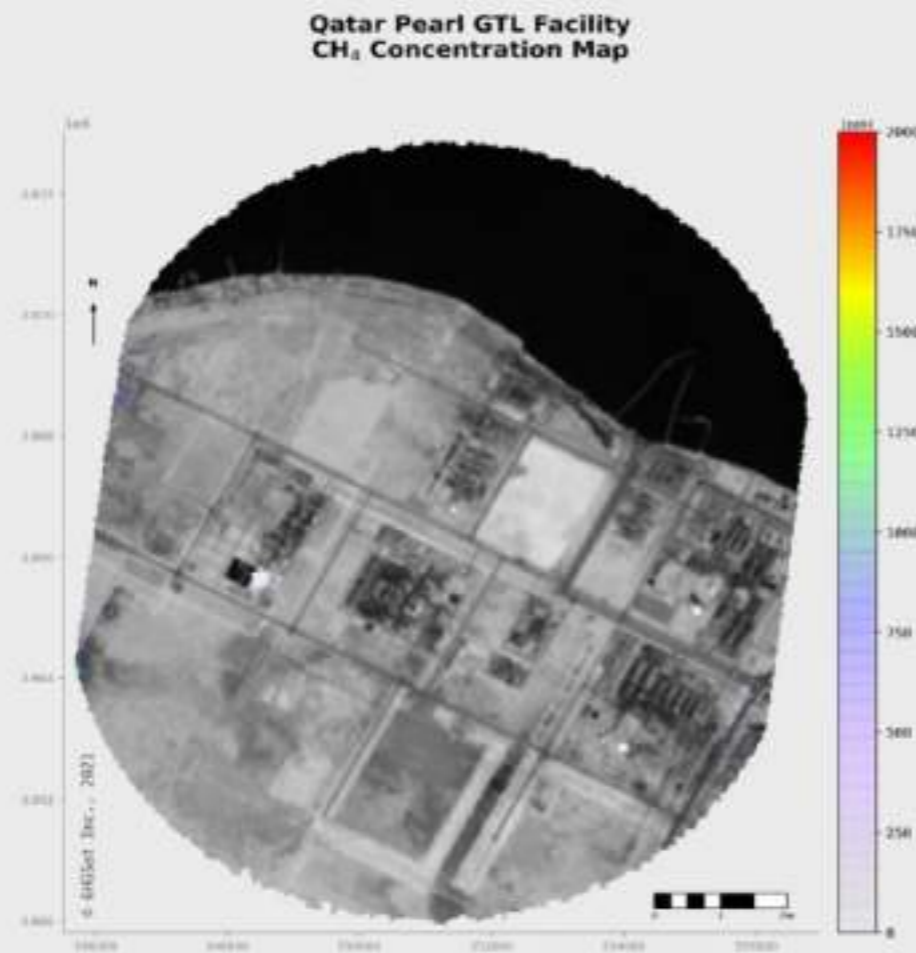
Two remote satellite-based methane detection trials with different vendors were performed at Pearl GTL during 2021. The detection threshold is around 100kg/h with windspeeds below 3m/s rising to 250kg/h at higher windspeeds. Based on tests done at Pearl and other sites, a preferred vendor has been selected. The technology used

provided assurance that the site did not have any point emission larger than 100 - 250kg/h.

As a way forward, monthly surveys will be performed from 2023 onwards which will be reconciled with Level 3 measurements.

Pearl GTL Facility CH₄ Concentration Map

No Emissions Found



In January 2021, QatarEnergy joined the second phase of the Oil and Gas Methane Partnership (OGMP 2.0), which aims to effectively monitor and report methane emissions.

Mesaieed Operations took the initiative to identify the sources of fugitive methane emissions and estimated emitted quantities using their well-established LDAR program.

Synergies and Integration

Downstream Product Synergies in Mesaieed Industrial City

QatarEnergy executed a study to explore Downstream Synergies in MIC leveraging its unique Industrial Cluster of mature industries. The goal was to identify specific opportunities to integrate assets, focusing on raw materials, by products, waste streams and/or utilities that are used or produced in one asset, and can be successfully utilized in a newly installed or existing other asset. The impact of such initiatives would be through increased efficiency, lower environmental impact, lower operational cost, or higher revenues, and often a combination of several of these.

One of the identified opportunities revolves around hydrogen, which is a by-product of any petrochemical cracker operation, including those in MIC. Under normal unintegrated operations, hydrogen is typically used in the fuel gas system to preheat the process and generate steam. However, hydrogen can be put to much better use by converting it into clean energy

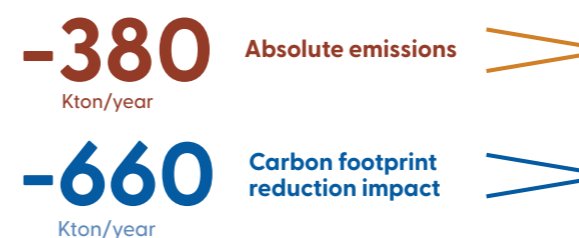
carriers such as ammonia or methanol, both produced in Mesaieed. Both carriers require “on purpose” hydrogen production by steam methane reforming, utilizing natural gas as feedstock and energy source. By redirecting hydrogen from the crackers to the Ammonia and/or the Methanol facilities, the efficiency of these processes (expressed as MMBTU/t) and production volumes are drastically increased, and the unit environmental impact (CO₂ emission per ton) is reduced.

Another opportunity is the use of “Pytar”, which is a low value by-product from cracker operations. Instead of incineration, this product can be used in Ras Laffan fuel bunkering operations, thereby lowering the cost of bunkering ships and reducing the environmental impact of incineration.

This study involves high intensity collaboration with all MIC assets. Out of a total of 50 promising initiatives, 30 were selected to be implemented in two waves over the next few years.



Combined Carbon Reduction for Wave I



Outlook:

- Zero routine flaring by 2030
- Level 4/5 OGMP 2.0 Gold Standard and meeting 0.2% methane intensity by 2025

Create

Highlights:

- 875MW Committed solar capacity at QatarEnergy Industrial Cities
- 800MW committed for Al Kharsaah Solar project

The third fundamental component of the 4 C Framework focuses on further diversifying our energy mix and creating opportunities for low carbon energy sources. 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.

With the anticipated commissioning of our flagship Al Kharsaah Solar Project in 2022, it is expected that our total installed solar PV capacity would reach 800 MW. This builds the foundation of achieving our target of over 5 GW of installed capacity by 2035.

As the pace of the energy transition accelerates, we will continue to explore and investigate various forms of new and clean energy vectors, such as blue hydrogen and blue ammonia, to be utilized throughout our facilities and beyond.

QatarEnergy Solar Projects

QatarEnergy continues to expand Al Kharsaah solar project. The total capacity will be implemented over two phases, by 2022 reaching a total capacity of 800MW. QatarEnergy is also deploying solar PV at the Industrial Cities to reduce carbon emissions from electricity generation with a further 875 MW planned at these two locations. Which will also contribute to reduce indirect emissions by supplying power to both new LNG and petrochemical facilities.

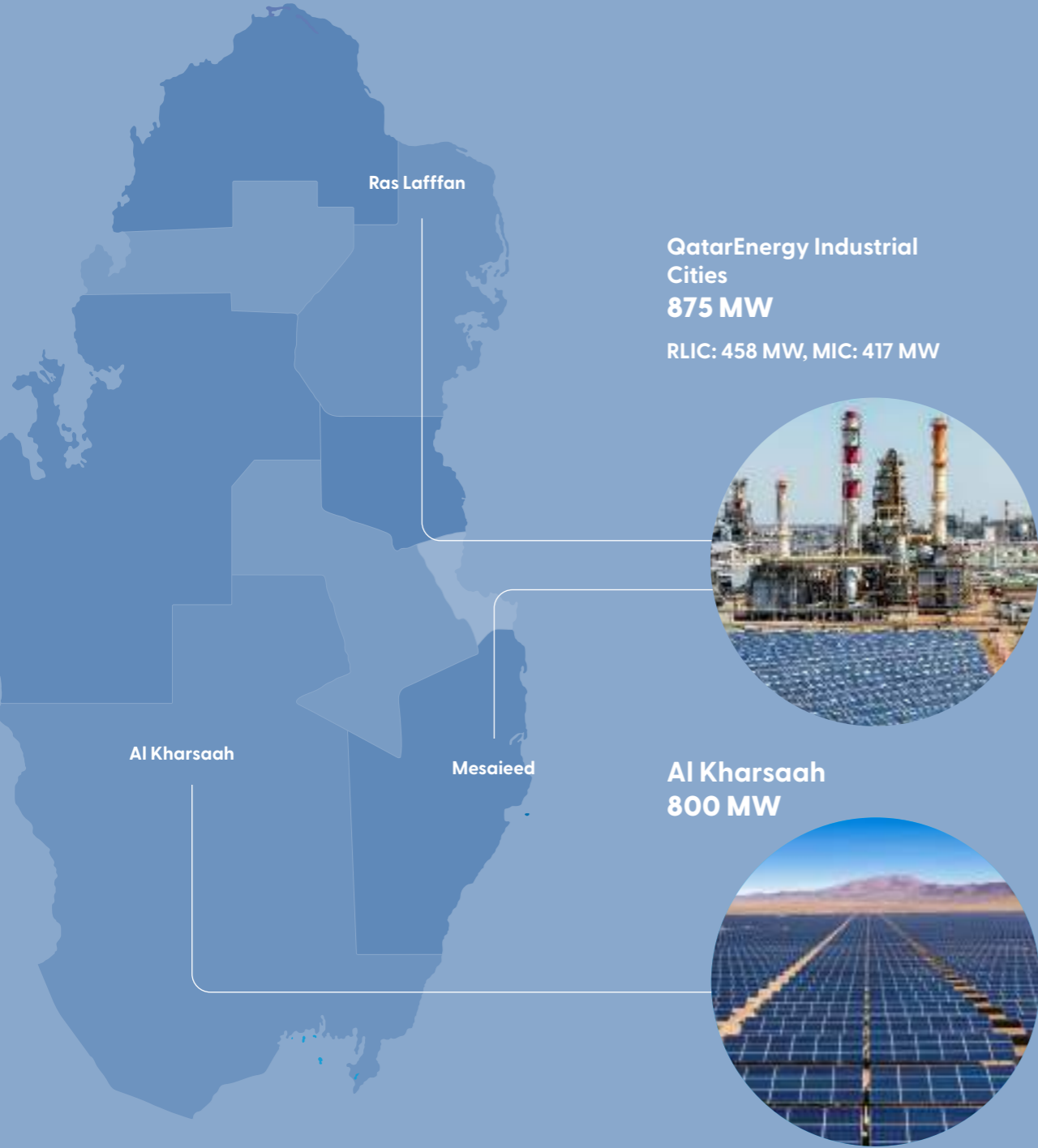
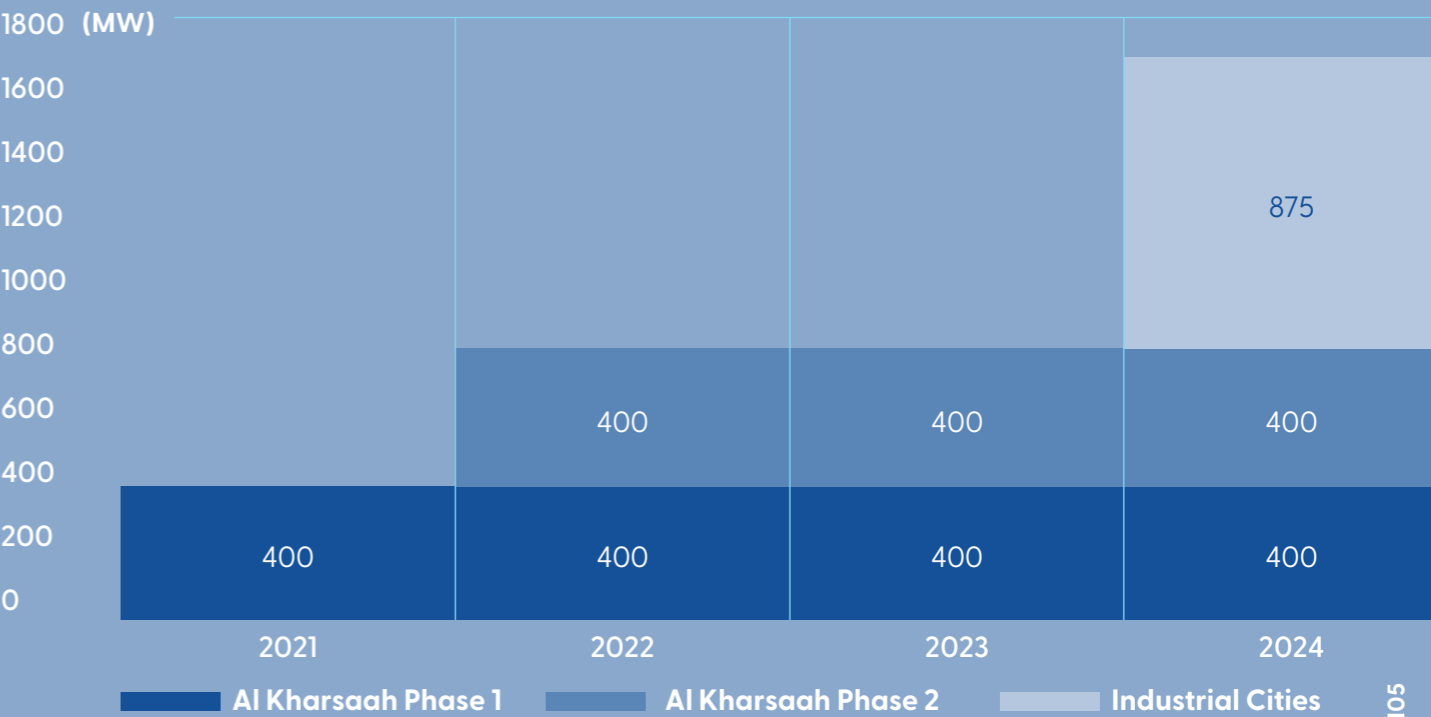


Figure 6 QatarEnergy Solar PV Capacity

Over **5,000 MW** of solar PV capacity by 2035



Clean Energy Carriers

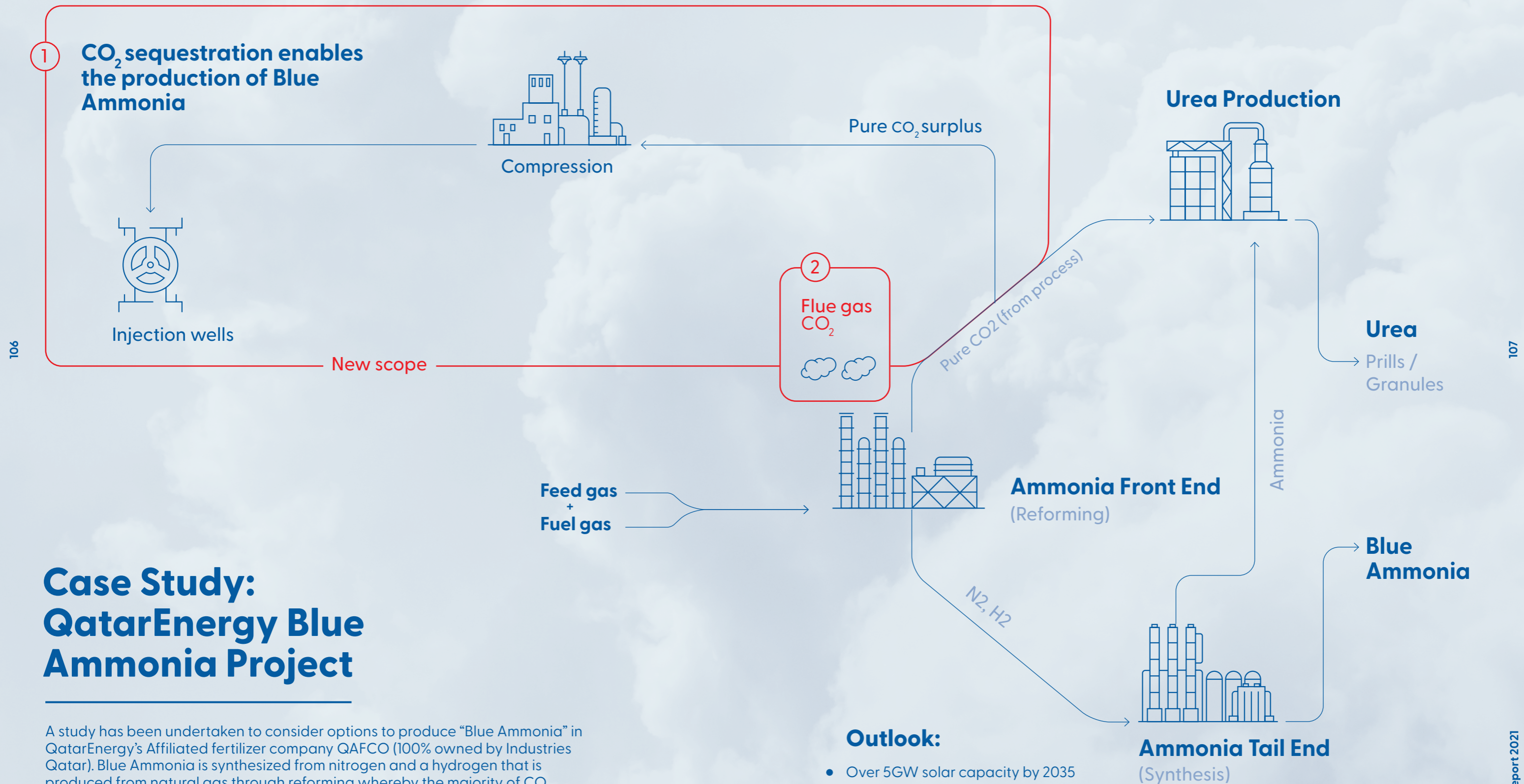
In 2021 we conducted internal studies (investigations sounds negative) into the viability of hydrogen and ammonia as potential energy vectors. Thereafter, it was recognized the role that both energy vectors can play in our operational processes and activities, such as, fueling our transportation fleet. Here at QatarEnergy, we have significant in-house expertise in large scale hydrogen production, which will be leveraged in utilizing these



The Signing Ceremony between QatarEnergy and H2Korea

energy sources at a major scale. Furthermore, we signed an agreement with Kore's Hydrogen Convergence Alliance (H2Korea) for cooperation in the field of Hydrogen. We also pursued a joint venture with Shell in the investment of blue hydrogen projects in the United Kingdom, We plan on continuing to target integrated and scalable opportunities in key sectors such as industrial cluster development and the transportation sector. This opportunity will allow us to leverage our partners' expertise and potentially seek similar opportunities that complement our current investments and scale up hydrogen projects.

As the pace of the energy transition accelerates, we will continue to explore and investigate various forms of new and clean energy vectors, such as blue hydrogen and blue ammonia, to be utilized throughout our facilities and beyond.



Case Study: QatarEnergy Blue Ammonia Project

A study has been undertaken to consider options to produce “Blue Ammonia” in QatarEnergy’s Affiliated fertilizer company QAFCO (100% owned by Industries Qatar). Blue Ammonia is synthesized from nitrogen and a hydrogen that is produced from natural gas through reforming whereby the majority of CO₂ produced is captured and stored. The resulting product is a ‘low Carbon’ alternative to the fuel market offering CO₂ emissions reduction compared to conventional fuels. QatarEnergy aims to play a significant role in these markets.

Outlook:

- Over 5GW solar capacity by 2035
- Considering Hydrogen and Ammonia opportunities with global partners

Compensate

Highlights:

- 3.8 million tons of CO₂ eq captured through CCS since inception (2019)

The final key element of our 4 C Framework is to compensate for our residual emissions that are difficult to tackle and abate. Our compensation plan places significance on prominent technologies, including carbon capture and sequestration. We believe that we are well positioned to drive the development of new technologies that support us to harness our abatement mechanisms and achieve our future targets. In 2021, we continued to explore and employ the carbon capture, utilization, and sequestration technology at our facilities.

We delivered on our earlier commitment (9 MTPA of CCS by 2030) by initiating several carbon capture projects that will contribute towards achieving our enhanced target of sequestering over 11 MTPA, by 2035. Currently, our carbon capture facilities have a capacity of 2.2 MTPA. In addition, we have successfully captured and injected more than 3.7 million tons of CO₂ eq since the inauguration of our facilities at Ras Laffan, which is the largest carbon capture and storage facility in the MENA Region by capacity. Incidentally over 1.2 MTPA was captured during 2021 alone.

QatarEnergy aims to lead the CCS initiatives in the MENA region through deployment of state-of-the art technologies and best practices.

CCS for Existing LNG Facilities

CCS capture project in the LNG facilities aims at capturing an additional amount of around 4 MTPA at our sites in LNG North and South facilities. The project concept phase is now completed, and we expect to commission the project in 2028, achieving an increase of our total CO₂ capture capacity to around 6 MTPA.

Enhanced Oil Recovery (EOR)

QatarEnergy plans to utilize captured CO₂ from existing LNG facilities for Enhanced Oil Recovery (EOR) application in its Dukhan oilfields, as a pilot project. The project is ongoing with expected completion in 2026. EOR facilities within the LNG assets includes dehydration system, booster compression, metering package and necessary utilities. The pilot phase is expected to last for 5 years. The results will be analyzed and the final decision to implement the project on a wider scale (full sector development) will be taken, with expected start-up by 2035.

Outlook:

- Over 11 MTPA CCS capacity by 2035
- Exploring post combustion capture opportunities
- Evaluation of Nature Based Solutions

Future CO2 capture potential (MTPA)

Total by 2035

+11

Ongoing studies on existing trains

>4

NFS Project

1.1

NFE Project

2.1

Current CO2 capture facility

Existing Facilities 2021

1.2

Environmental Action ▶

2021 Performance Highlights

5%

reduction in
SO₂ emissions
compared to 2020.

50%

reduction in wastewater
injection to deep injection
wells.

30%

reduction in the volumes
of water discharged to
sea compared to 2020.

63%

reduction in hazardous
waste disposal.

3,320

tons of various hazardous
waste was recycled.

268

Hawksbill turtle nests
were successfully tagged
in 2021 alone - the highest
recorded number of nests
to date.



QatarEnergy’s Environmental Action

Our Environmental Policy sets out our responsibility as a steward of Qatar’s national resources across environmental protection and Pollution Prevention (PP) through the following pillars:

Yousef Ahmad Al-Hussaini
Manager, Environment & HSE Risk Management

“At QatarEnergy, we see value in all aspects of the environment. Encompassing climate change, air quality, water management, waste management, biodiversity and land use. We are committed to taking direct action to embed environmental considerations and measures into our operations, and in our industrial cities. We will also continue to conduct environmental protection studies and translate the findings into the way we operate.”



Our responsibility towards environmental action is embedded in our core values, and is evident in the way we operate. Our commitment is further strengthened by our documented policies and procedures that provide guidance to all our employees and stakeholders. These outline the principles that form the foundation of all our decisions. They determine our actions and guide our material topics in line with our sustainability strategy. Building on from the achievements and plans that were detailed under our climate change action, this chapter focuses on our commitment towards environmental action.

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Air Quality

Improve our local air quality by reducing emissions and continuing to act on issues of climate change.

Our environmental monitoring extends beyond our direct operations across our value chain, to include our contractors and their operations. We have embarked on a journey to enhance QatarEnergy’s environmental management practices and data transparency.

To achieve this objective, we have recently consolidated our environmental indicators as part of QatarEnergy’s sustainability reporting. The consolidated data will form part of the main QatarEnergy’s Environmental Data Management System (EDMS), which will enable us to better monitor, benchmark and improve our performance. Today, there are 27 environmental indicators that are being reported. QatarEnergy has identified areas for improvement which will be translated into reportable environmental indicators in the coming years. These improvements in reporting of environmental indicators have been leveraged against benchmarks from leading regional and international energy sector peers, particularly in the areas of air quality, water management, land use, waste management, and biodiversity.

Water Management

Develop solutions to conserve fresh water resources and restore ecological balance in marine environments to protect these essential resources.

Waste Management

Reduce waste generation, including reuse and recycling initiatives, and improve waste management throughout the life cycle of our processes to aid the transition towards circular economy.

Biodiversity

Protection, mitigation and investment approaches to minimize our impact on biodiversity.

Land Use

Enhance the long-term potential of all land resources.

Air Quality

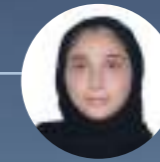
Managing emissions and air pollutants is essential to cultivating good air quality for our people and local communities. The nation of Qatar is aiming to reduce pollutant levels in accordance with the national ambient air quality standards. Our commitment to adhering to the national air quality standards is aligned with our sustainability framework, policies, and strategy.

We recognize that our operational activities result in GHG emissions and other air emissions, including Nitrogen Oxides (NOx), Sulphur Oxides (SOx), Volatile Organic Compounds (VOCs), and other hazardous air pollutants. We understand the impacts of these pollutants on our environment and have implemented a robust monitoring system to manage our air emissions. To achieve this, timely and pro-active maintenance is essential to ensure safe operations and acceptable levels of emissions. We will also continue to explore advanced solutions to reduce our emissions. In 2021, we successfully completed a technical performance site audit of all seven Continuous Ambient Air Quality Monitoring (AAQM) stations. The audit results confirmed that all the stations complied with US Environmental Protection Agency (US EPA) requirements.

We are planning the implementation of several initiatives at our operating sites to reduce key air pollutants. These initiatives including the execution of a pilot project to retrofit high-pressure steam boilers, with low-NOx boilers are expected to conclude by the end of 2023 and include the execution of a pilot project to retrofit high-pressure steam boilers with low-NOx burners.

Fatima Ali Al-Abdulla

Sustainability Analyst



"As a Sustainability Analyst, one of the regular, most fascinating features of my role is the interaction with various parts of the organization. Over the past few years, I have seen strong momentum building up in this activity as sustainability is increasingly imbedded in every aspect of the business. I am thrilled to know I am part of transformative journey, and contributing to the sustainability report that has been instrumental in raising awareness around our sustainability action both internally and externally."

This is attributed to an increase of our Acid Gas Flare in 2021 mainly because of the shutdown of the NGL-3 Sulphur Recovery Unit (SRU) for routine maintenance and unplanned outages.

SO₂ emitted (Tons)



NO_x emitted (Tons)



VOC emitted (Tons)



Water Management

As we operate in an extremely high-water stressed area, we continue to identify and implement solutions that enhance water use efficiency and water conservation. Our commitment is embedded in our environmental policy, as we seek to develop solutions to conserve freshwater resources and restore ecological balance in marine environment.

In 2021, we launched a company-wide initiative to identify opportunities for water conservation and water-use efficiency improvements. This study involves a comprehensive survey to deliver detailed water balance and footprint assessments. The study will enable us to develop water conservation plans and achieve significant water reduction targets in the next few years. The largest waste stream in the oil and gas industry is the wastewater generated from operations and processes, as such we have placed significance on implementing actions to reduce its environmental impact. Consequently, we established a wastewater “recycling and reduction” project, which achieved approximately a 50% reduction

in wastewater injection to deep injection wells. The project sought to manage the water produced in the field and dispose of it into the aquifers, to reduce the amount of water discharged into the sea. Furthermore, we have several wastewater treatment facilities which host advanced treatment technologies, such as Reverse Osmosis (RO) brine-reject disposal systems and newly established sludge drying bed facilities. The effective use of such technologies supports us in complying with national requirements and is aligned with our commitment to enhancing the quality of the marine environment, in the surrounding area. This technology has also has the benefit of

reducing the environmental impact from desalination compared to conventional thermal processes.

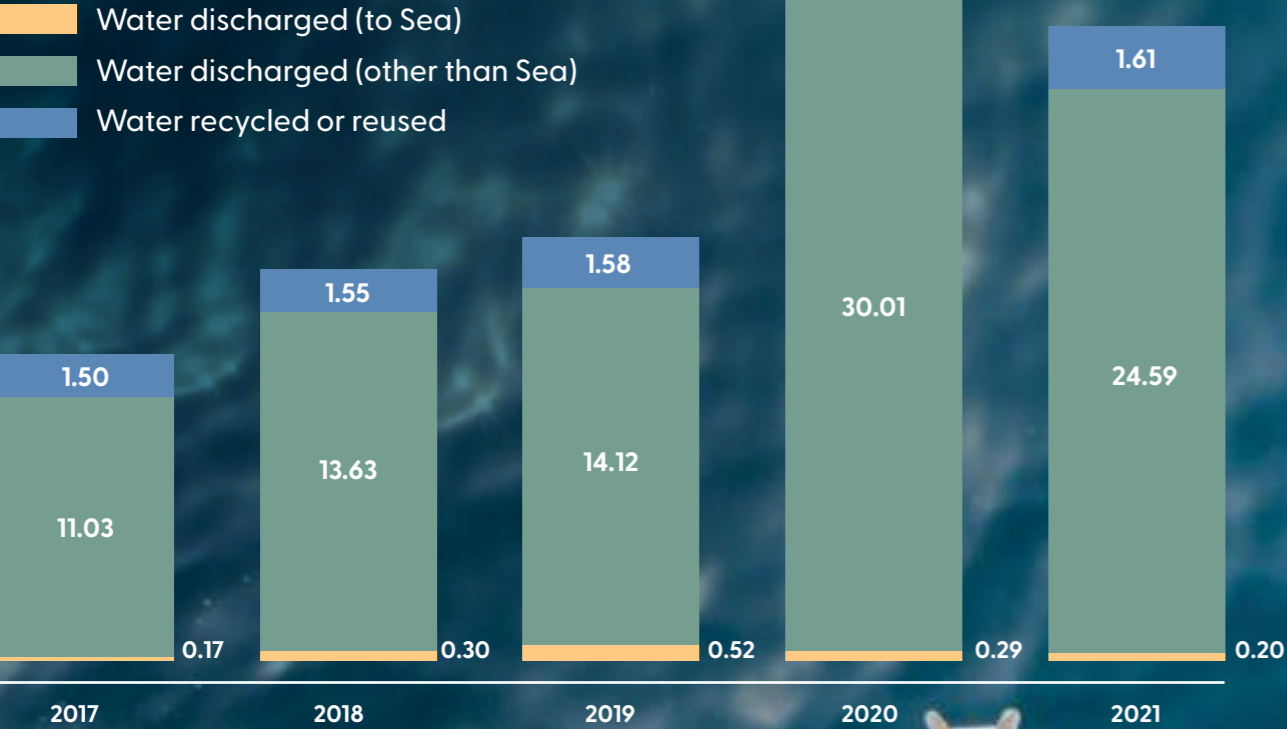
Our continuous efforts to minimize the impacts of our operations on the water resources have resulted in over 30% reduction in the volumes of water discharged to the sea, compared to 2020 figures. Additionally, we have achieved 23% reduction in the amount of water discharged to the aquifer compared to 2020. We continue to reuse the Treated Sewage Effluent (TSE) for irrigation and landscaping across our industrial cities and facilities.



Salman Fahad Al-Mohannadi
Head, Environment (RLIC)

“The challenge at Ras Laffan Industrial City is to maintain rapid industrialization and a high standard of working and living conditions while simultaneously reducing the impacts on the “Environment”. RLIC feels that it is not a matter of choice, but a necessity and an opportunity to steer a sustainable course for the Industrial City of Ras Laffan. “Laffan Environmental Society-LES” was established by RLIC and Asset Operators, to have a collaborative approach to achieve synergy in undertaking environmental projects of common interest such as the RLIC Marine Study 2020–2021. This study offers great insight into shoreline protection by establishing benthic habitat mapping, studying species richness and abundance, and verifying contaminants of concern in seawater and sediment from RLIC industrial projects and operations.”

Water Discharge Performance
(million m3)



Building on our measures and looking forward to the future, we are planning to assess our footprints and water usage efficiencies across our operations, with the aim to develop a ‘Water Conservation Strategy and Policy’, in addition to fit-for-purpose ‘Water Conservation Plans’ for each of our operation assets by 2023.

Case study: Effluent Water Treatment Plant for Mesaieed Operations

QatarEnergy has conducted a study and concept optimization for Mesaieed Operations effluent treatment plant to strengthen our water effluent quality monitoring and control.

The study has proposed an upgrade of existing treatment units and modification of effluent collection and transfer systems, including holding tanks. The implementation of these solutions will bring about numerous benefits due to the reuse of treated water, such as:

- ▶ Reduction in total water consumption.
- ▶ Reduced impact on marine environment.
- ▶ Cost savings through reduced import of water from the utility company due to the reuse of treated effluent water.

Waste Management and Circularity

Waste management was identified in NCCAP 2030 as a significant area of improvement, with a national goal to recycle around 15% of solid waste by 2022. Thus, Qatar is implementing a solid waste management plan on a national level to operationalize recycling mechanisms, rehabilitate contaminated sites and manage hazardous materials and waste. To align with the national agenda and goals, QatarEnergy continues to seek opportunities to aid the transition towards a circular economy, waste reduction measures and recycling across all operations.

Circular economy focuses on waste to-value opportunities, which rebrands generated waste as a valuable resource whereby waste materials are reused, re purposed and recycled wherever possible. Non-hazardous waste amounted to around 92.5% of the total volume of our waste generated in 2021, as a result, we have set clear plans to manage our reuse and recycling effectively. Our established integrated waste management system will remain operational, which ensures the safe management, transportation, recycling and disposal of waste generated. Our total waste generation increased by 22%

in 2021 due to a high generation of water-based mud & cuttings from drilling operations. Our waste recycling activities such as: paper, cardboard and scrap metal recycling have contributed to increasing our waste recycling, compared to the previous year.

On the other hand, hazardous waste amounts to approximately 6.2% of our total waste generated in 2021. Our hazardous waste is made up of materials such as, oily sludge, wastewater, and toxic heavy metals, among others. Due to the nature of the waste, we carry out periodic inspections of our hazardous waste facilities. Additionally, we ensure strict regulatory compliance with the

requirements of local authorities for waste handling, transportation, treatment, storage and disposal. All hazardous waste, from the industrial cities and QatarEnergy Operations, is successfully disposed of in compliance with the local environmental regulations. In 2021, there was a 63% decrease in our hazardous waste disposal due to our efforts to recycle, at a leading cement company, Fluid Catalytic Cracker (FCC) spent catalyst and BELCO Catalyst from refineries instead of disposing them at a hazardous waste treatment center (664 tons of BELCO Catalyst and 340 tons of FCC spent catalyst from refineries were successfully recycled).

As part of our contribution and commitment to SDG 12 (Responsible Consumption and Production), we piloted an office recycling program at QatarEnergy HQ. The aim of the program was to enhance recycling culture and manage office waste related aspects such as the collection, assessment and reporting of waste recycling in an effective manner.

In 2021, Mesaieed Hazardous Waste Treatment Center Recycled 11.6 tons of recovered oil, 143.5 tons of shredded plastics, 53 tons of used lead acid batteries and 370.6 tons of crushed metal drums to authorized recycling facilities. We aim to expand this initiative across our operations as well as identify further recycling and green procurement opportunities which are transferrable to our operations. Similarly, we have plans to collaborate with TAWTEEN, QatarEnergy's Supply Chain Localization Program for the energy sector throughout Qatar, to explore further circular economy opportunities.

Biodiversity

Biodiversity is a key part of Qatar's heritage, culture, and future. It forms the basis for food security and for sustainable agricultural development by providing food, medicine, clothing, housing, energy, and raw materials. The National Biodiversity Strategy and Action Plan (NBSAP) recognizes that the natural habitats help mitigate the effects of climate change by absorbing excess flood water, acting as barriers against coastal degradation and extreme weather events, and naturally capturing.

QatarEnergy is currently conducting a project related to Marine Ecological surveys. These surveys are carried out for each production stations every three years to ensure sustainable development on the surrounding marine environment of QatarEnergy's operational areas. These surveys assess the water quality, sediment quality, and the condition of biota toxicology, benthic infauna, zooplankton, and phytoplankton.

The knowledge created by this project will help in anticipating the impact of the operational activities and highlights the efficacy of the mitigation measures implemented by QatarEnergy's offshore assets to protect the habitats within the production areas. To date, the results of the surveys have shown that all parameters (physico-chemical, microbiological, inorganics, metals, and hydrocarbons) across all sampling stations were within acceptable ranges in accordance with the national standards.

Another important project is the Ecological Survey of the Marine Environment at Halul Island. This project seeks to assess success in the habitat enhancement of the deployed Artificial Reef Balls (ARB) on the southwest side

of Halul Island. In 2006, QatarEnergy deployed a total of 48 Artificial Reef Balls around the Halul Island.

The artificial reef balls were deployed to compensate for the lost habitat (coral reefs) due to the installation of the undersea water infrastructure pipelines. Since then, QatarEnergy has regularly monitored the success in habitat development of the deployed reefs balls. The project also recorded the types of marine life that has developed around the reef balls.

The ARB sites have numerous reef balls in a flat sandy area and is adjacent to the distal shelf of coral reef. The artificial reef was observed to be covered by fouling organisms and bivalves. We continue to regularly monitor the reef balls to track marine life developments. The reef balls have proven to be highly successful in enhancing the fish habitat by providing structures for fish and other marine life to grow and prosper.

As part of our wider commitments to protecting our environment, we are also monitoring Qatar's endangered Hawksbill turtles through our coastline protection initiative across eight of our sites. All of the coastlines in these areas are protected during turtle nesting and hatchling emergence season, from March to September every year. We have developed a tagging program to track the population of turtles, with satellite tracking, and Deoxyribonucleic Acid (DNA) analysis as part of our monitoring initiative. In 2021, a total number of 268 nests were recorded, which is higher than the long-term average by 29 nests and is the highest recorded in the last 7 years (since 2014).



QatarEnergy's affiliate North Oil Company (NOC) and the Ministry of Environment and Climate Change (MoECC) signed a Memorandum of Understanding (MoU) for the conservation of Whale Sharks in Qatar.

This MoU represents a significant step towards the protection and preservation of these magnificent creatures. The signatories of the MoU are committed to working together to promote research, education, and conservation efforts related to Whale Sharks, and to raising awareness about the importance of these animals to the health of our oceans. We look forward to seeing the positive impact it will have on the future of Whale Sharks in Qatar.



Case study: Ras Laffan Industrial City (RLIC) Marine Study

QatarEnergy and major industries in RLIC have all undertaken marine baseline assessment studies as part of an Environmental Impact Assessment (EIA).

Achievements from the studies include:

- Developed a hi-resolution remotely sensed, ground truthed benthic habitat map of the study area with WorldView-2 imagery.
- Deployed novel eDNA technology to confirm presence/absence of previously reported high risk IMS having the potential to be introduced to Gulf waters through ballast water discharge.
- Sampled various points along 25 defined transects in RLIC Upstream, RLIC Shoreline, RLIC Port and downstream of RLIC Port for Flora and fauna (determined species richness and abundance).
- Seawater water analysis (to verify relevant contaminants of concern).
- Sediment analysis (to verify relevant contaminants of concern).

The study confirmed that the 16 potential invasive species identified by the marine study conducted in 2010, were not among the 585 identified species in 2020-2021. Potential invasive species are of high risk to social, economic, environmental or public health. However, in the RLIC Marine 2020-21 study that used new eDNA (environmental DNA) techniques, around 23 new alien invasive species were identified. These have never been reported before in the Arabian Gulf and are likely to have been introduced recently. They can be considered as putative invasive marine species, however, their assessed risk for potential environmental or socioeconomic impact is not greater than moderate levels.



Land Use

We acknowledge that through our operations and value change we impact the land and ecosystems in which we operate. Nurturing and protecting a healthy ecosystem protects the planet and sustains society and livelihoods. Safeguarding our land resources is vital enhancing air and water quality, biodiversity conservation and climate change.

Land use is critical to the success of Qatar's environmental vision. The sustainable and productive use of land is a key enabler for Qatar to achieve its national objectives. There are four broad types of land usage, and each has varying objectives with close linkages to other environmental domains: Agricultural Land, Urban Land, Industrial Land and Natural Land. Through its overarching environmental action, QatarEnergy is actively contributing towards achieving state level land use objectives.

On Agricultural Land, QatarEnergy is contributing to food security through its affiliated fertilizer company (QAFCO) by focusing on crop nutrition solutions in line with Qatar's aim to achieve food security and self-sufficiency reliably and sustainably. Key value-driven partnerships have been established with Qatari organisations, including Qatar University, to develop high tech agricultural solutions and to support agricultural research. This will allow the balancing of the need to drive higher productive yield while ensuring the long-term productive potential of the land in Qatar.

At our Industrial sites, we strive to minimize pollution impact of our industrial activities, which have been covered under the air quality, water and waste management areas of environmental action.

Regarding Natural Land, QatarEnergy is actively conserving and restoring land around its operations which support biodiversity and natural ecosystems, as has been covered under the biodiversity section.

In addition, land use also drives the development of key economic sectors such as food, agriculture and tourism. It also enhances health and well-being through healthier and more nutritious agriculture products from productive agricultural land use and better air quality from efficient urban land usage.

QatarEnergy seeks to advance these initiatives and plans in support of Qatar's Environment and Climate Change Strategy targets and KPIs launched in 2021. QatarEnergy has shown further commitment to work alongside the international community to drive sustainable land use efforts.



Operational Responsibility

- 2021 Performance Highlights
- Protecting Our People
- Managing Our Operations

2021 Performance Highlights

Total Operated Production

0.12

Maintained Lost Time Injury Rate (LTIR) the same as previous year

Zero

employee fatalities for six consecutive years

195

HSE Training sessions for more than 2000 participants

17.5 million

man hours without Lost Time Injury (LTI)

90%

vaccination rate achieved within few months

235,000

vaccination doses administered for energy sector employees

150,000

total doses for contractors in collaboration with Ministry of Public Health (MoPH)

Protecting Our People

Operational responsibility is another key pillar of our sustainability strategy. We regard workplace safety and the health and wellbeing of our people to be a top priority. Thus, we strive towards embracing a positive and safe culture throughout our day-to-day operations to protect our people, contractors and the communities around us.

Our commitment to the transition to a low-carbon economy highlights the need for resilient and efficient operations. We believe in the urgency of prioritizing our people's health and safety, maintaining operational efficiency, and managing our operations responsibly. We continue to emphasize on the integration of operational excellence and health and safety in our frameworks and strategies. Under the operational responsibility pillar of our sustainability strategy, we focus on protecting our people and managing our operations.

We value our people and see our human capital as the foundation which enables us to achieve our vision and corporate strategy. 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 efforts reflect in our People Agenda, which helps us consistently improve performance. The management system in place provides a connection between structures, processes, systems, policies, people and culture. 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.

Our focus on health and safety stems from our corporate values and ambition of achieving world-class performance across our operations. We aim to provide an incident-free, secure, safe, and healthy environment for our employees, stakeholders, partners, contractors, and the local communities where we operate.

HSE Program

QatarEnergy aims to foster a culture of safety and environmental awareness within the organization and ensure the proper implementation of its HSEQ program. Monitoring of the HSE performance of our projects through dedicated systems in place including contractor audits, inspections and reviews is essential to ensure compliance with our corporate standards and requirements. During the year 2021, the COVID-19 outbreak continued to impact our offshore operations and the working conditions for our people. In these adverse times, we effectively integrated the COVID-19 requirements, protocols, and protection measures within our business. We implemented and maintained those requirements to manage our health and safety performance and to support our people as best we can. We continuously monitored the performance of our initiatives and tracked the adverse impact of COVID-19 on the implementation of our key projects.

The provision of Radiation Monitoring Badges:

QatarEnergy is effectively monitoring employees exposure to radiation from NORMs or X-Ray machines by distributing Personal Radiation Monitoring Dosimeters for all the staff working in the field of Ionizing Radiation in Offshore and Onshore fields or working with X-Ray machines in healthcare facilities.

The programme to provide Radiation Monitoring Badges is implemented on quarterly exchange frequency in order to ensure that the Radiation Exposure Levels are within the exempted limit as set by the Ministry of Environment and Climate Change (MoECC) and Corporate Standards.

Our continuous monitoring has enabled us to achieve full compliance with the HSEQ requirements despite the challenges faced due to the COVID-19 pandemic.

Our achievements in 2021 included:

- Achieving zero employee fatalities.
- Improvement of 9% in the Combined (employees=Contractors) TRIR compared to 2019.
- Complying with all applicable HSEQ management system requirements.
- Complying with the Legal HSE Requirements.
- Complying with the Internal and External HSEQ Audit Requirements.
- Obtaining all permits in timely manner.

Occupational Health and Safety

Our complex operations require effective implementation of the HSEQ management system and a sturdy health and safety management approach that promotes continual improvement. Our processes and procedures provide guidance to identify, manage and address operational risks and safety hazards. By upholding the requirements of our management system and implementing our processes and procedures, we instill and promote a health and safety mindset within our organization.

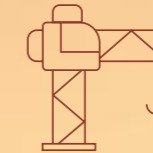
Our commitment to occupational health and safety is demonstrated through our Occupational Health and Safety Policy, and our Code of Conduct. We actively and frequently communicate our commitments and values through these documents with our employees and contractors. We are keen on maintaining our active communication as we believe it aids the creation of a culture of health and safety awareness that permeates the entire organization.

We have developed our Life Saving Rules (LSR), based on the International Oil and Gas Producer (IOGP) best practices, to govern the behavior of our employees and contractors and ensure their safety and protection. We continuously monitor the compliance of our employees to our LSR through regular inspections and site visits.

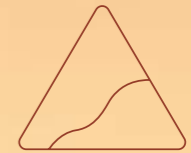
Life Saving Rules



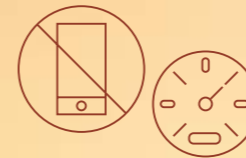
Permit to work



Lifting operation



Working at heights



Transport Safety



Personal Protection Equipment



Smoking



Line of Fire

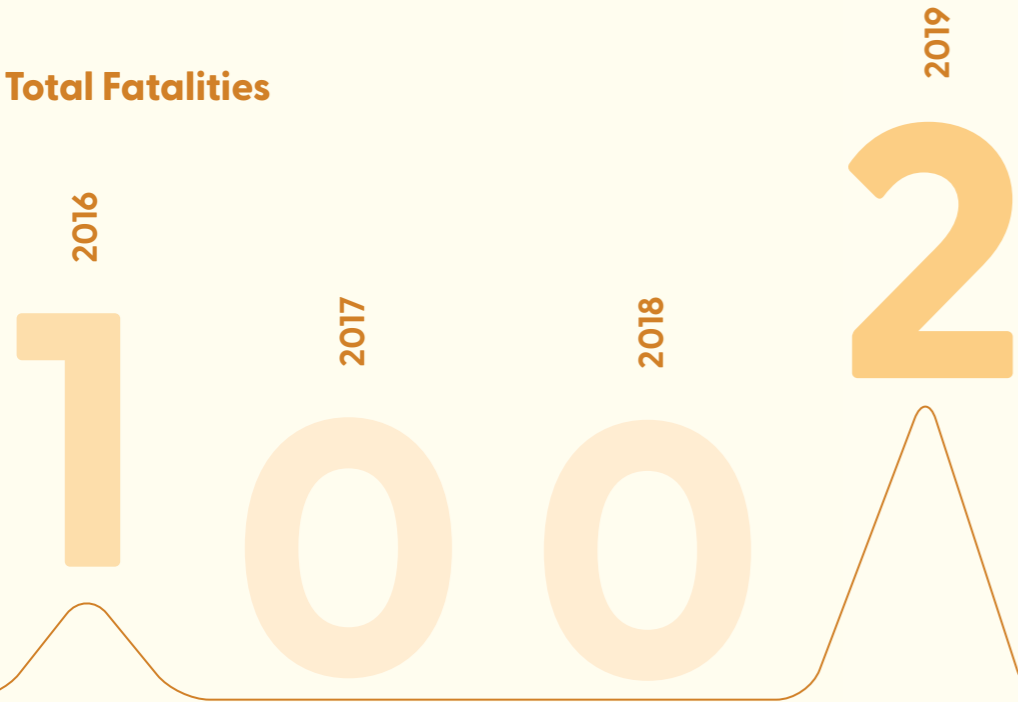
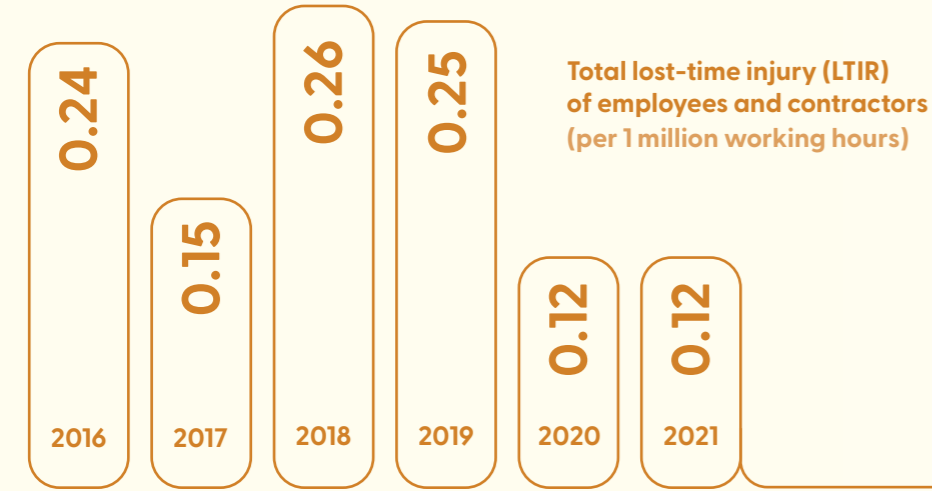


Gas Hazards

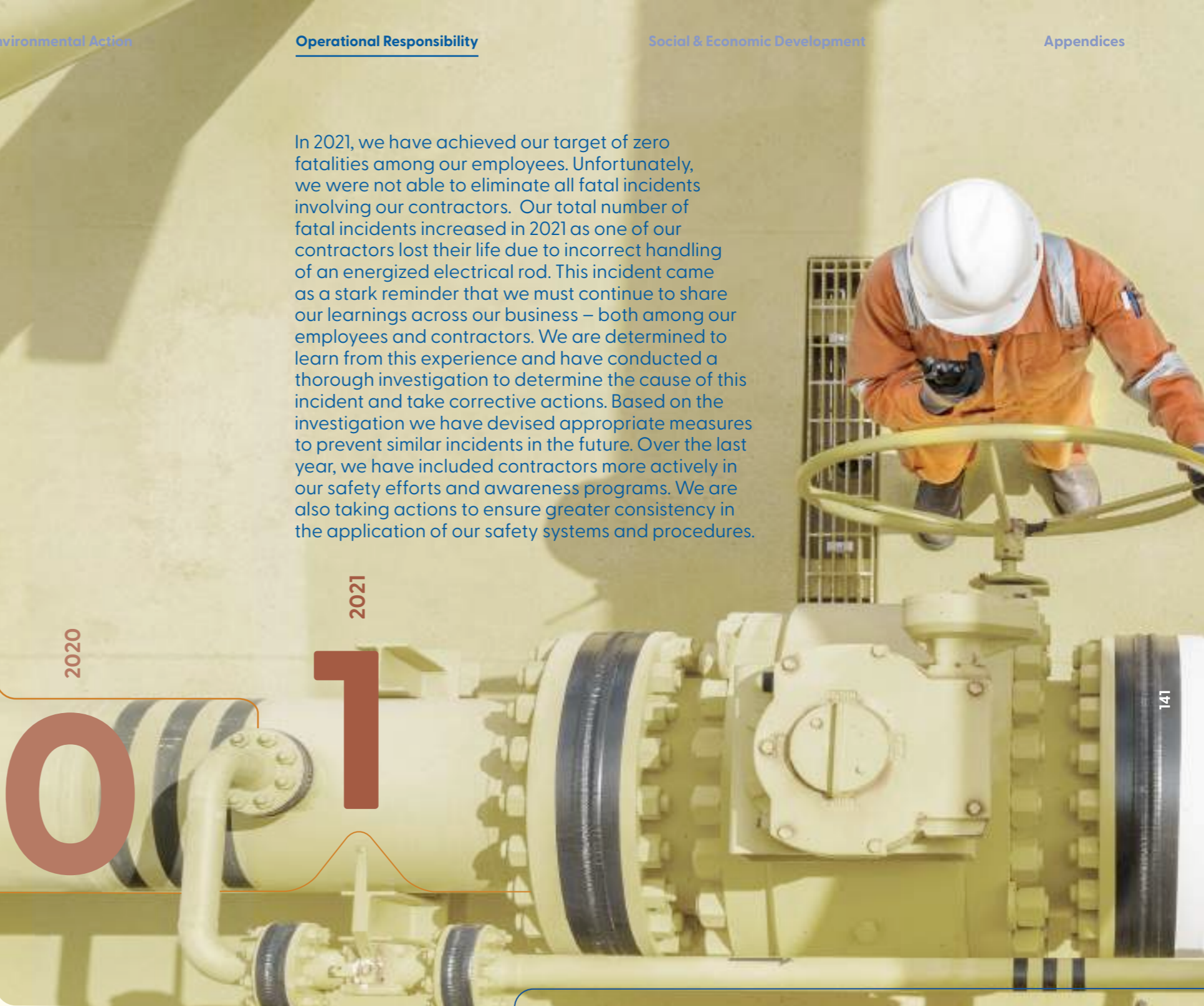
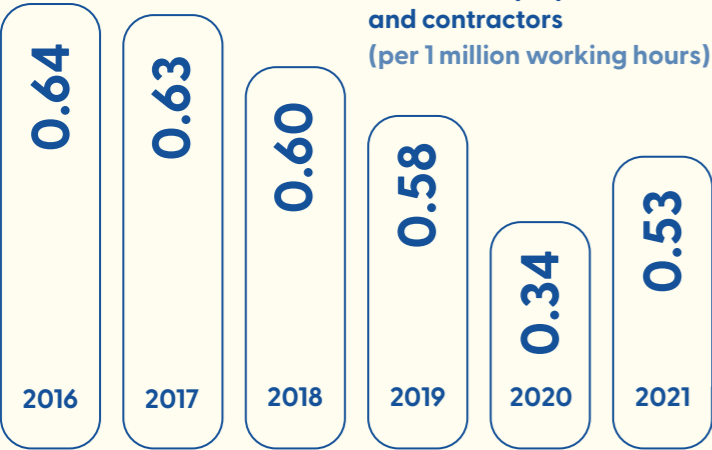


Safety Critical Equipment

The governance of all health and safety related issues is managed through allocation of responsibilities at each organizational tier with further support from our Executive Leadership Team (ELT). The ELT functions as an HSEQ Committee at the corporate level. The ELT team provides guidance on setting HSEQ targets, reviews HSEQ performance and progress against set targets, assesses significant incidents, and issues instructions and directives for continual improvement. Our approach for managing our safety performance aligns with leading HSEQ practices. Including establishing our guidance and procedures, encouraging our people to proactively identify hazards and risks, and empowering them through awareness and trainings.



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



In 2021, we have achieved our target of zero fatalities among our employees. Unfortunately, we were not able to eliminate all fatal incidents involving our contractors. Our total number of fatal incidents increased in 2021 as one of our contractors lost their life due to incorrect handling of an energized electrical rod. This incident came as a stark reminder that we must continue to share our learnings across our business – both among our employees and contractors. We are determined to learn from this experience and have conducted a thorough investigation to determine the cause of this incident and take corrective actions. Based on the investigation we have devised appropriate measures to prevent similar incidents in the future. Over the last year, we have included contractors more actively in our safety efforts and awareness programs. We are also taking actions to ensure greater consistency in the application of our safety systems and procedures.



We regularly monitor our performance against our targets and have an online reporting system that supports our performance management efforts. The system allows for direct reporting of HSE related incidents, which ensures that all incidents are investigated, and appropriate corrective actions are identified, implemented, and tracked. To foster a safe environment, we continuously encourage reporting of unsafe acts and conditions, and

recognize the efforts of reporting by rewarding such acts. In 2021, overall Total Recordable Injury Rate (TRIR) increased by 56% as our operations resumed in line with pre-COVID-19 levels. As with remote working in the previous year, our employees and contracts were exposed to a smaller number of hazardous activities on site. We have maintained the LTIR of our employee at the same level last year.

Case study – Achieved more than 17.5 million man-hours without Loss Time Injury

We achieved 17.5 million man-hours without Lost Time Injury (LTI) from 23rd November 2017 till 31st December 2021 in Ras Laffan Industrial City. This achievement highlights our efforts and demonstrates our commitment to protect our employees in line with our ambition to become one of the best energy companies in the world. This achievement demonstrates the integration of a health and safety mindset among our employees and contractors. We have accomplished this by aligning with our established procedures and protocols around the following areas:



Implementation of effective contractor and QatarEnergy safety management systems.



Planning and implementation of preventive maintenance plans by experienced operations and maintenance staff.



Implementation of COVID 19 protocols to ensure smooth running of operations.



Regular inspections and audits of contractors, including the Contractor Seven Star program, which was successfully implemented at RLIC.



Roll out and implementation of QatarEnergy's Life Saving Rules as a key resource for preventing any incident at workplace.



Regular emergency preparedness exercises to handle emergency situations safely and effectively.



Frequent and more comprehensive HSEQ training programs that were delivered virtually, in a classroom setting, and through blended learning to all QatarEnergy staff, contractors, joint ventures, etc.



Integrated risk profile for QatarEnergy Industrial Cities and the introduction of the bow-tie tool that was used to identify and monitor risks control barriers.



Online remote monitoring of sea water quality at RLIC to ensure compliance with the newly introduced environmental guidelines.

Health and Safety Training

We believe in the dedicated implementation and continuous improvement of our health and safety awareness and training programs. To achieve our commitment to providing an incident-free work environment and reducing health and safety incidents. We strive to continuously update our employees on leading health and safety practices as part of our HSEQ training programs.

We maintain continuous dialogue with our employees and contractors through regular HSEQ training sessions, toolbox talks, and weekly safety moments.

In 2021, we actively communicated relevant safety information, lessons learnt, and leading practices with our employees and contractors to ensure that they are effectively embedded across our operations. These controls help reduce the risks that are inherent in our organization's daily business activities. Our health and safety trainings were regularly provided throughout 2021 to cover a range of general and specific training courses – these range from HSEQ induction to gas testing and scaffolding courses.

HSE Training Courses Provided

- HSEQ induction
- Gas testing
- Managing HSEQ in contracts
- Helicopter Landing Officer
- Firefighting awareness
- Breathing apparatus
- Scaffolding course
- Defensive Driver Training
- Online Management System Awareness course

We provided more than

195

HSEQ training sessions, for

2,116

participants including contractors, and asset operators' representatives

Defensive Driver Training

We continue to seek the best solutions for the provision of Defensive Driver Training across the business. During the period where COVID restricted face-to-face training a temporary e-learning solution was made available to ensure we continued to meet the QatarEnergy Road Safety Standard.

We are currently working with local training providers to provide a permanent e-learning solution for the renewal of Defensive Driver Training within a GCC context.

Contractor Management

We aim to ensure the health and safety of our employees and contractors, and require them to adhere to our supplier code of conduct, HSE policies and applicable procedures. We have dedicated HSE regulations for contractors and sub-contractors in addition to contract specific HSE requirements that govern health and safety related practices and metrics.

Ensuring proper management of health and safety is essential to reduce incidents of health and safety and minimize lost time incidents. We provide our contractors with trainings on health and safety and continuously monitor their performance. We also encourage our contractors to confidentially report any violations to our policies, and code of conduct through our 'Speaking Up' hotline. We are committed to achieving the highest standards in business practice and ethical behavior as part of our practices and dealings with our contractors and vendors. In 2021, we have continued to embed our strong culture of collaboration, integrity, and trust in all our business activities.

Regular Safety Inspections

QatarEnergy has conducted 630 regular safety inspections in RLIC concession areas to support our contractors and asset operators to align with HSE standards and guidelines.

Contractor Seven-Star Program

Our Contractor Seven Star audit program focuses on checking that the key aspects of managing occupational health, safety in the workplace are implemented effectively. It offers a structured path for continual improvement by integrating the principles of effective implementation of HSE systems and standards, in contractor requirements and QatarEnergy's Life Saving Rules. The model is reflective of the recognized PLAN – DO – CHECK – ACT management cycle and was extended to all IM (L) contractors. We continued to support our contractors through conducting self-assessments and internal audits in line with our plans. To recognize good health and safety practices by our contractors and demonstrate the importance we place on health and safety aspects, we organized award ceremonies to celebrate the top performing contractors.

Managing COVID-19

Responding to the pandemic in a proper and timely manner was critical to ensure continuous operations across our facilities. We continued to implement the various measures to limit the spread of infection and protect our employees.

Measures implemented:

- Introduction of working-from-home protocols for employees.
- Provision of personal protection equipment and masks for employees and contractors.
- Disinfection of offices to reduce the possibility of infections.
- Closure of common areas to reduce the number of face-to-face meetings.
- Implementation of minimum physical distancing protocols.

As part of our response to the COVID-19 pandemic, we ensured that vaccinations were provided to ensure the immunization of QatarEnergy employees and the wider sector staff. We rolled out vaccination campaigns that supported in achieving more than 90% full vaccination rates within a few months. We administered over 235,000 vaccination shots for the 1st and 2nd COVID-19 doses for energy sector employees. This includes around 150,000 total doses for contractors scheduled through QatarEnergy, in collaboration with the Ministry of Public Health (MoPH). The progression of the COVID pandemic introduced new variants, which required continuous vaccination programs to ensure that employees and their families are safe and immune against them. QatarEnergy reacted swiftly to ensure that the eligible sector staff and their

families received the necessary 42,000 booster doses have been administered to QatarEnergy and Sector staff till date.

Achieving a high percentage of vaccination coverage and provide booster shots for our employees enabled us to roll out a plan for return to business as usual. The implementation of our rigorous safety plans, including disinfection, strict application of face masks, and physical distancing was ensured. In 2021, we continued to conduct contact tracing, isolation and provided the required treatment for infected personnel. Additionally, we developed an online reporting platform that allows employees to report confirmed and suspected cases and request a COVID-19 test to be administered.

QatarEnergy established a COVID-19 pandemic crisis management team to support energy sector companies and the MoPH in preventing the spread of the virus and reducing the impact on operations. The management team developed a mechanism to closely monitor and follow up on suspected infection cases and track the process of quarantine and testing for confirmed cases.

Additionally, QatarEnergy established the following in response to the COVID-19 pandemic:

- **Quarantine facility with 480 beds dedicated for QatarEnergy employees, if needed.**
- **Village care program for industrial cities.**
- **On-site medical facilities for COVID testing.**
- **Vaccination program design and deployment with over 250,000+ doses administered.**
- **Developed and executed detailed business continuity plans to instill resilience in the organization and to improve efficiency of operations.**

The following activities were undertaken to ensure uninterrupted business continuity:



PMO (Project Management Office)

QatarEnergy appointed a fully dedicated COVID-19 PMO team composed of multidisciplinary leaders, focused on managing the crisis on a daily basis. The team included 6 critical task forces, each covering different emergency response areas with regular reporting to the crisis management team.



People and Assets

The business continuity planning methodology was designed to mitigate against worse case scenarios of loss of resources. The same methodology was escalated to various levels of functions and leveraged existing focal points for each function.

We also defined clear governance structure to ensure continuity plans with the right monitoring processes in place.

This has enabled us to limit infections among operations staff and Back-ups to infected tested staff being secured in a timely manner.



Back to Normality

We created cross-cutting vaccination task force, including relevant stakeholders which developed data collection and reporting mechanism to track vaccine deployment progress and immunity levels.

The vaccine deployment plan had a clearly defined prioritization framework and de-escalation phases with subsequent measures and triggers.



Supply Chain

We introduced a waiver on service contracts renewals to allow for extension of contracts, without new tendering process. We also developed standard response for force majeure events.

We developed protocols for purchase order prioritization in the event of low resource availability and shifted towards a more digitalized method of managing tenders.



Cross Sectorial

- Categorized key relationships within the system (e.g, gas to power, infrastructure, etc)
- Held workshops with leadership to align on priority assets and risk mitigation actions to different scenarios
- Ensured regular updates with energy sector entities



Human Resources

Developed process to support employees during the crisis with dedicated program in place to support employees emotional, psychological and physical wellbeing including the introduction of work-from-home protocols for employees and adjustments of shift rotation schedules and travel guidelines based.



Care for People

- Closure of all facilities to prevent outbreak of COVID, based on State guidance.
- Developed guidelines to control the usage and distribution of PPEs.
- Suspension of non-essential services and re-allocation of medical resources.
- Adequate and timely procurement of testing equipment and kits and mobilization of staff to manage testing program.
- Introduced remote consultations.
- Reorganized office to enable social distancing.



Policies and Procedures

- Adopted reporting tools to instill crisis preparation into leadership and workforce
- Enhanced IT processes including cyber security response
- Enhance QatarEnergy resiliency and recovery after the crisis through command and control system approach and adoption of Tier 3 incidents reporting tools (SITREP)



Communication

- Designed and implemented change management plan in collaboration with internal and external stakeholders
- Appointed point of contacts from different energy sector entities to ensure information sharing is effective

Managing Our Operations

Efficiency and Reliability of Our Operations

Ensuring high performance of our assets is critical in reaching top quartile operations. Both maintenance activities and production losses triggered by downtime due to failures need to be well understood throughout the entire lifecycle of the asset. That is why our focus on Reliability, Availability, and Maintainability aspects allows understanding the entire lifetime performance of assets in terms of availability, production efficiency and profitability to anticipate problems before they occur and mitigate them accordingly.

In addition, QatarEnergy seeks to ensure continuous business success through safe, reliable, and efficient operations and continues to invest in best in-class technologies and adopt best practices to improve our safety, production efficiency, reliability, and maintenance execution and performance. We are constantly engaging with our stakeholders to identify and manage risks to enhance our processes and systems.

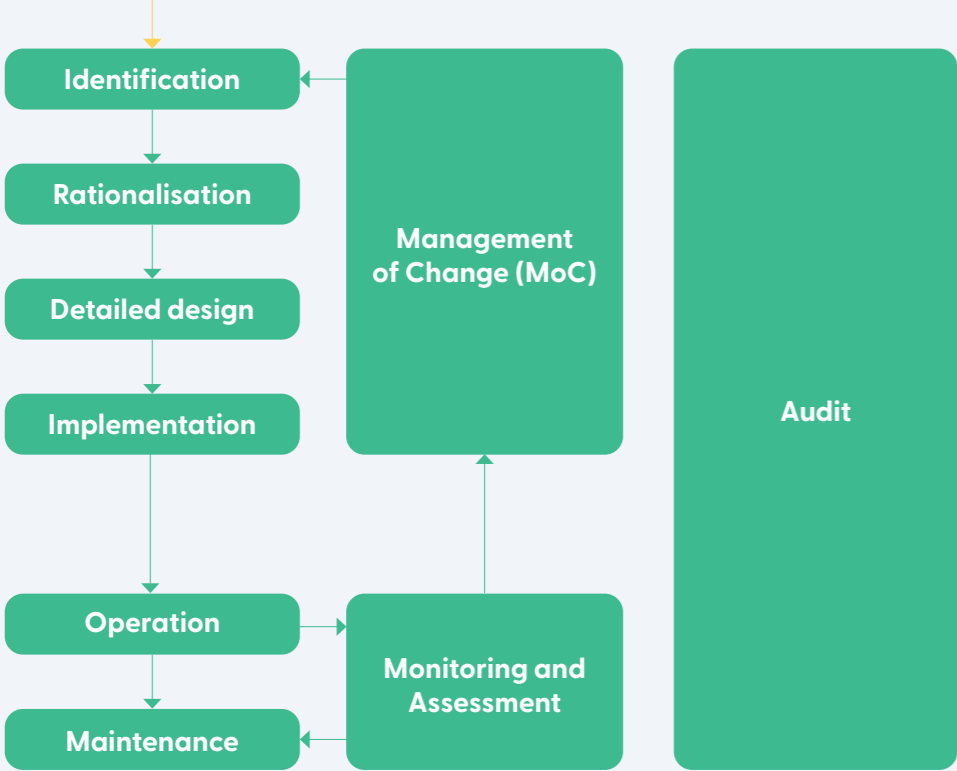
Maintaining process safety at our facilities is reliant on our ability to prevent Loss of Primary Containment (LOPC) events and maintaining high dependability, availability and asset integrity of safety and utility systems that are critical in mitigating the release of hazardous materials or energy. In addition, Safe operations are directly and closely linked to reliable operations, and conditions that lead to safe and reliable operations are generally the same ones that lead to high overall plant availability and efficient operations therefore emphasizing the need for a comprehensive facility life cycle management program encompassing process safety and asset integrity.

Initiatives Under Operational Excellence Program

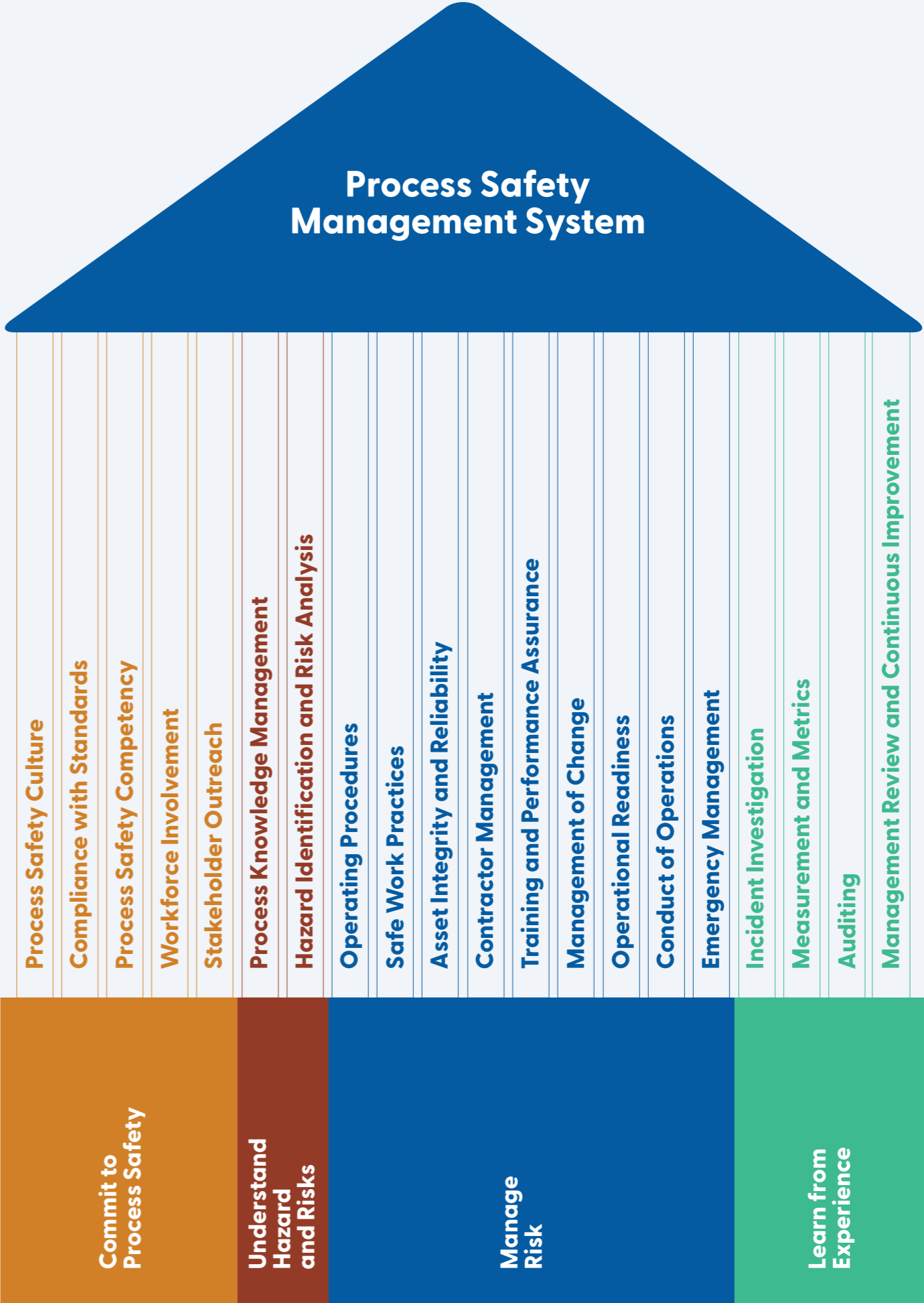
In practical terms, our refinery operations benefit from a Process Safety Management System (PSM), including Alarm Management, which is allowing us to maintain operations within safe and reliable range. The PSM framework includes the following activities:

1. Develop, Adopt, And Maintain the Alarm Philosophy.
2. Collect data and constantly benchmark our systems.
3. Perform bad actors alarm resolution.
4. Perform alarm Documentation and Rationalization (D&R).
5. Implement alarm audit and enforcement technology.
6. Implement real time alarm management
 - a. Alarm shelving
 - b. State-based alarming and alarm flood suppression.
 - c. Operator alert systems.
7. Control and maintain our improved systems.

Alarm Philosophy



In our Refining Operations, we have also established a Process Safety Management Committee which has established dedicated KPIs in alignment with the Engineering Equipment and Materials Users Association (EEaMUA) and the International Surfing Association (ISA).



Automation Upgrade at Dukhan Field

We replaced the existing system with latest automation technologies that facilitate centralized and remote control of these facilities from the operation control rooms.

Upgrade of Ras Laffan Port Control Processes and Systems at Ras Laffan Industrial City (RLIC)

The Ras Laffan Port provides loading facilities and associated functions for LNG export. The port had undergone an expansion which led to certain limitations in the processes and functionality of the port control tower. The existing port control tower was retrofitted with an improved Vessel Traffic Services (VTS) system which covers the port and anchorage areas nearby. The VTS supports in the process of monitoring movements of vessels in the service area, seamless communication with ships based on their status, transmission of signals, etc. The retrofit proved to have been essential to ensure the sustainable operation and enhance the safety and continuity of our port operations.

HSEQ System

To drive operational excellence across our organization, we maintained and implemented a robust HSEQ system. The HSEQ system and has been certified according to the following standards:

ISO 9001:2015
for Quality Management Systems

ISO 45001:2018
for Occupational Health and Safety Management Systems

ISO 14001:2015
for Environmental Management Systems

ISO 22301:2012
for Business Continuity Management Systems

We have developed and maintained Management System Documents (policies, Manuals, Standards Procedures, Work Instruction, and guidelines) for our people on the requirements of the different Management System standards and their implementation through an Integrated Management System (IMS).

We continuously assess our compliance with the HSEQ Management system by conducting external third-party certification audits and we have achieved zero non-conformance in our HSEQ third-party surveillance audit and have maintained the certification across our assets and facilities. Moreover, to ensure the effectiveness of our controls and HSEQ Management systems, we conduct the internal risk-based audits annually, bi-annually, and quarterly through our different departments. The internal risk-based audits are also conducted in QatarEnergy's Internal Audit department and corporate HSEQ department.

Furthermore, QatarEnergy has implemented Business Continuity Management System (BCMS) across the Company. QatarEnergy's BCMS covers all business-critical processes, to enable quick and effective reaction to, and recovery from serious incidents, thereby protecting QatarEnergy's reputation and ensuring continued business operations. It also integrates the key components of the BCMS - Emergency Preparedness & Response (EP&R), Crisis Management (CM), Business Continuity Planning (BCP) and IT Resilience.

Operational Excellence Program

As one of the leading energy sector companies, we are keen on pursuing operational excellence to maximize the synergies between performance management and our commitment towards operational responsibility. Through our established program of initiatives, we aim to address both operational excellence and sustainability goals simultaneously.

We have a clear vision as an organization for efficient and reliable operations and have developed the appropriate roadmap of initiatives to help maximize our inputs and efficiencies, while reducing our costs. Our ongoing operational excellence program promotes efficient collaboration across our value chain. Guided by the best practices of the oil and gas industry, in addition to the experience and knowledge delivered to our employees and contractors in the field, the program has been delivering our intended

outcomes for responsible operation. We aim to continue our strive towards operational excellence by keeping the sentiment of “doing the right thing in the right way, every day” at the focus of our operations.

Following QatarEnergy vision and the Operational directorate objectives to operate: “safe, reliable and efficient” and to be recognized as a world class operator, we have put in place a rigorous process to continuously improve our processes to ensure operational responsibility.

Continual Improvement of Operational Excellence Program

To support the operational excellence program, QatarEnergy Operations Directorate initiated an Operational Excellence (OE) program, to ensure a continuous improvement of our operations, with the aim to improve our operation business every day.

The OE model has been evolved, as we are learning from the 2016 platform which focused on three pillars: People, Process and Technology, with 13 OE improvement initiatives, which were aimed at closing the assessed gaps to reach to “best in class” industrial standards.

In 2021, these improvements were fully integrated our in routine operations and are now evolved into a Continual Improvement (CI) programme, so that we remain aligned with the latest industrial developments.

The CI programme is facilitated by a manager at the five operation assets, leading a team of Subject Matter Experts (SME), coached by OE experts. Several improvement processes in these programmes have an cross-directorate collaboration with representatives from these directorates.

The 13 initiatives have been integrated into four main workstreams – (1) Culture & Capacity, (2) Asset Integrity and Process Safety Management, (3) Reliability and Maintenance Execution and (4) Production Excellence. We have started with a focus on the Reliability and Maintenance Execution Process transformation in August 2021 at one site to learn. In 2022, this improved process will be rolled out at the other four production sites.

Operational Excellence 2021 4 Work Streams

Workstream	13 Initiatives	
Asset Integrity and Process Safety Management AI-PSM	P1	Process Safety & Behavioral Safety Management
	P4	Safe, reliable and efficient operations (ESP)
	P2	Asset Integrity Management
	T3	Electronic PTW
Reliability & Maintenance execution R-ME	P2A	Turnaround Management
	P3	Reliability Improvement
	P5	Maintenance Planning and Execution
	T4	Asset Management System
Production Excellence P-Ex	T5	Production Excellence (IOF)
	P4	Safe, reliable and efficient operations (ESP)
	P6	Value Enhancement
Culture & Capability C-C	T1	Performance Reporting, Management & KPIs
	O2	Competence Development & Assessment
	O4	Front-Line Staff Alignment and Engagement
Operation Excellence Advisors		

Operational excellence site teams at Refinery, Gas plants, Dukhan Offshore, IDD El Sharqi

Asset Integrity – Process Safety Management

Assets operate cost effectively within safe and optimal limits without compromising integrity.



Goal Zero:
No harm to people or the environment.

Reliability & Maintenance Execution

Assets are maintained at optimal life-cycle cost to ensure reliable operations.



Goal Zero:
No unplanned downtime.

Production Excellence

Assets produce at their optimal levels leveraging the power of data, process and systems.



Goal Zero:
No non-routine flaring or production opportunity losses.

Culture & Capability

Develop a high-performance accountable & continuous improvement culture with capable people at its heart.



Goal Zero:
No waste in our work processes.

Process Safety Management

We have established and implemented corporate-wide frameworks to improve our process safety management and remain ready to respond to emergencies and crises when required. We have developed our frameworks in line with best practices and the guidance provided by our corporate HSEQ Management system. To ensure that any risks related to our people, processes and technologies are identified, assessed, and managed, as applicable. We are committed to operate responsibly and safely to achieve our goal of zero tier-1 process safety incidents and maintain the same level up to 2027.

As part of our efforts to continuously manage process safety risks across our operations, we have established a Corporate-wide Process Safety Community to actively engage in implementing the systems to assess and mitigate potential process safety risks. The Process Safety Community consists of key members from each of the Directorates which collaborates to develop appropriate risk-based process safety systems and tools to improve process safety management practices and performance. In 2021, we continued to engage with the Directorates to follow our established procedures and systems and worked towards enhancing our performance through monitoring and analysing key Process Safety KPIs.

Our robust suite of Risk Management and Formal Safety Assessment Standards and Procedures, allow us to assess all process related hazards and risks. These include Hazard Identification (HAZID) and Hazard & Operability Study (HAZOP) which allow for early inherently safer design of new facilities and modifications to existing ones.

In 2021, we also implemented several initiatives to enhance the management of process safety incidents and their impacts on our operations. By establishing our incident reporting standards, revamping our SAP HSE module and launching awareness sessions and trainings to promote a culture of commitment to process safety, these initiatives have supported our efforts to reduce the Tier 1 and Tier 2 process safety incidents recorded in 2021 by 67%.



Number of Tier 1 process safety event



Number of Tier 2 process safety event



Case Study – Hazard and Operability Study and Safety Integrity Level Assessment

Dukhan Production Facilities is considered a complex facility due to its large geographical area that includes more than 50 facilities, with varying design and nature of construction. Because of that, there is a need for specific processes related to hazard identification, inspections for equipment failure, safeguarding assessments, etc. for each facility.

To systematically identify all current risks and evaluate the adequacy of the existing safeguards, we have conducted Hazard and Operability (HAZOP) studies and Safety Integrity Level (SIL) assessments in 2021.

A systematic approach was adopted wherein the facilities were grouped into 75 clusters and a massive data collection exercise was undertaken. Numerous actions were generated as a result of these studies, which have had a fundamental bearing on the way we operate our assets. Snapshots of some of the benefits include:

Evaluation of the Current Process Safety Management: Acknowledging the gaps and developing recommendations for further improvement.

Identification, documentation, and mitigation of any deviations from design standards, operating procedures, and our leading practices.

Assessment of Major Accident Hazards (MAHs) and qualitative demonstration of an acceptable level of “As Low As Reasonably Possible” (ALARP) was carried out.

All actions generated from the HAZOP study were actioned and tracked using our electronic HSE tracking system. All recommendations from associated SIL studies were captured as part of the preventive maintenance plan of Safety Instrumented Functions (SIFs), as applicable.



Case Study – Completion of Seven Hazard Analysis Studies at QatarEnergy Refinery Operations

To ensure that our refinery operations' risks are properly identified, the refinery leadership appointed an external third-party to conduct seven process hazard analysis studies. The studies were concluded in 2021 and their scope covered all the following aspects of key safety barriers areas:

- **Baseline HAZOP study**
- **SIL Assessment, Specification Requirement and SIL Verification**
- **Quantitative Risk Assessment (QRA)**
- **Pressure Safety Valve (PSV) adequacy study**
- **Emergency Shutdown Valve (ESDV) adequacy study**
- **Fire and Gas Mapping study**
- **Fixed Fire Protection Study.**

Based on the studies, the risks identified were aligned and ranked according to QatarEnergy's HSE Risk Assessment Model (RAM), and appropriate recommendations were developed to mitigate the risks. The Risk Working Committee, in collaboration with the different departments, developed an implementation roadmap that ensures all risks are managed and mitigated.

Emergency Preparedness and Response

We aim to remain ready to respond to emergencies and have developed Corporate Standard for Emergency Preparedness and Response (EP&R). Emergency response plans are aligned with the Corporate Standard, which is in line with national requirements and international best practices. These include educating our employees and contractors on the potential risks and emergency situations such as fires, explosions, release of hazardous materials and onshore and offshore spills.

In 2021, Emergency Preparedness for full scale occupancy of QatarEnergy Headquarters was a challenge considering its large population. Therefore, Emergency Plans were developed and emergency response teams established, with dedicated personnel specialized in emergency evacuation, and conducting regular drills. Furthermore, we introduced a new QatarEnergy Standard for Emergency Preparedness and Response in Projects through GATE Approval Cycle.

The overall status of EP&R readiness was audited by Bureaus Veritas Qatar (BVQ) during ISO 22301 Business Continuity Management System, and evaluated as suitable for QatarEnergy given its size and profile. Four Tier III Exercises in addition to Tier II and Tier I were conducted periodically also confirms adequate arrangements and capabilities to successfully respond to emergencies.

Our emergency procedures are regularly assessed through our internal and external audit procedures. These ensure that they are well understood by our people and contractors, appropriate for our scope and effective in managing our performance. In 2021, we regularly conducted emergency drills to test the efficiency of our response plans and identify areas of further improvement. Additionally, we conducted 43 process safety exercises in our RLIC facilities on Tier 1, Tier 2, and Tier 3 process safety events and operational emergency exercises. The exercises were successfully implemented demonstrating adequate levels of preparedness in response to emergency situations by our people, processes, and systems.



Construction of Fire and Rescue Stations at Mesaieed Industrial City

Our operations at the Heavy Industrial Area at Mesaieed Industrial City (MIC) accommodate many large-scale petrochemical/ hydrocarbon plants, heavy metallurgical industries, and a fully serviced port with ship repair facilities. A previous study was conducted to assess the need for additional support from fire and emergency services at the facility. Based on the findings of the study, we initiated the construction of a main fire and rescue station and satellite fire station in 2021.

These new fire stations will provide the essential fire and rescue services needed to ensure safe operations at the industrial complex.

Internal Accreditation for Fire and Rescue Division

Our fire and rescue division was accredited by the US based Commission on Fire Accreditation International (CFAI) of the Centre for Public Safety Excellence (CPSE) in April 2021. The CFAI accreditation, which is valid for 5 years, covers 11 categories that span the fire and emergency service operations:

- 1 Governance and Administration
- 2 Assessment and Planning
- 3 Goals and Objectives
- 4 Financial Resources
- 5 Community Risk Reduction Programs
- 6 Physical Resources
- 7 Human Resources
- 8 Training and Competency
- 9 Essential Resources
- 10 External Systems Relationship
- 11 Health and Safety

Social & Economic Development

— Caring About Our People

Employees and Contractors Together

— Creating and Growing Value

Together With Our Business Partners

— Sharing Benefits

Across Communities and Broader Society

2021 Performance Highlights

24

average hours of training
provided per employee

800

suppliers achieved
in-country value
certification

74%

goods and services
sourced in Qatar

Welcomed

481

new joiners into
QatarEnergy

20

companies monitoring
in-country value

20+ million
QAR

Corporate Social Responsibility and Social
contributions through partnerships

17

Programs

Introduction

Through the successful implementation of our sustainability framework and strategy, we aim to create long-term value for our people, partners, communities, and society at large while valuing the environment. This strategically aligns with the Qatar National Vision 2030 of “economic and social justice for all, in which nature and man are in harmony”.

How we do business is as important as the results we achieve. We recognize that we can make a positive impact to the State of Qatar, its economy, social development, and environment. We are committed to acting in an ethical, safe, and socially responsible manner. We have developed policies, practices and procedures that ensure that the way we do business is in alignment with our values and standards for business conduct, but we also know ultimately the pervasive enabler of sustainability is in the ‘hearts and minds’ of everyone. At QatarEnergy our social and economic development ambition is for all to participate and benefit.



Our Social and Economic Development Ambition Is For All to Participate and Benefit



Caring About Our People

Employees and Contractors Together



Creating and Growing Value

Together With Our Business Partners



Sharing Benefits

Across Communities and Broader Society

With ‘hearts and minds’ as an enabling red thread

Caring About Our People

Employees and Contractors Together

For all to participate and benefit, we need to value each other. People are our most important asset and form the foundation which allows all to thrive. Our success depends on people all working together – our employees and our contractors.

“Qatar must continue to invest in its people so that all can participate fully”

Qatar National Vision 2030

At QatarEnergy we are committed to establish, nurture, and retain a talented and diverse workforce, recognizing that we can accomplish more by bringing together people from different backgrounds and with different talents and ideas to work together in an inclusive and respectful environment – creating a safe, caring and encouraging space where everyone's contribution counts and everyone's voice is heard.

Our efforts with employees and contractors to work together effectively and respectfully, contributes to the social development and the economic development pillars of the Qatar National Vision 2030, as well as SDGs 3, 4 and 8:

SDG3: Good health and well-being.

SDG4: Quality education.

SDG8: Decent work and economic growth.

Growing Talent

Attracting and retaining staff with the right combination of competencies and behaviors, will result in a workforce able to contribute effectively to our business objectives in alignment with our values. We believe investing in talent development through fit for purpose development pathways, directly contributes to the creation of a diverse, capable, committed, and motivated workforce. We value diversity across all levels and view it as a source of strength, that empowers our people through the flow of experience and knowledge.

Talent Attraction and Retention

Our talent attraction and retention strategies begin with targeted investment in young Qatari talent and the recruitment of exceptional national and non-national staff, followed by continued investment in both groups for a long-term career with us.

Talent Attraction

At QatarEnergy we are dedicated to attracting and hiring the highest caliber of employees while also promoting a culture of inclusion and diversity. We contribute to the Qatar National Vision 2030 through our commitment to increase the effective participation of Qatari's in the workplace and by drawing on the global experience of our international hirers.

We invest in the identification and sponsorship of high-potential Qatari's to join us for a fulfilling long-term career. We

are focused on attaining the right individuals through a robust recruitment process, which allows us to select a candidate based on their merit, ability, and suitability to deliver on the job requirements.

We do believe that a diverse and inclusive workforce can inspire positive impact, drive innovation and act as a catalyst for business delivery as well as social and economic development. Our talented employees include a wide range of nationalities, across the different age groups, and representing both genders.

Highlights

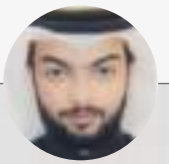
- We supported national university and vocational students through training and sponsorships.
- We have welcomed 481 new joiners in 2021. This is quite an achievement considering the impact Covid-19 had on recruitment and expatriation.
- At QatarEnergy there is a healthy balance between the professional- and industrial workforce, and distribution across job group (seniority) levels.

Talent Retention

It is important for business continuity and an engaged workforce to retain our talent. We have a multi-pronged approach to retain talent, including recognition, professional development, and career progression. These continuous efforts positively impact employee engagement and productivity, allowing us to retain our employees.

Highlights

- 485 individuals received a special recognition award in 2021.
- The voluntary attrition of our overall workforce is well below 3%.



Ibrahim Al-Abdulla
Petroleum Engineer

"As part of QatarEnergy's scholarship program, I had access to a dedicated senior student also on the QatarEnergy program – this really helped me. My coach spent time with me exploring and guiding me on different subjects and instructors, and also rethinking the effectiveness of my studying methods – this improved my grade and subsequent recognition rewards.

The networks I formed at the time, not only helped me during my studies, but are still benefiting me, now that I have joined QatarEnergy, as I have gained a social support system and workplace network. As a Petroleum Engineer, I am totally committed to play my role in the oil and gas industry. QatarEnergy encourages sponsored students to invest in the energy sector, promoting transferable skills that can be applied throughout any career. QatarEnergy really invests in their graduates. I have been given opportunities to go offshore and spend time at various sites. Even my managers were impressed with my diverse learning experience. The associate program allowed me to go to different places which very few others in the industry have had the opportunity to go.

Looking back over my progression from graduate to associate, makes me appreciate the benefits and chances I have been given and have here at QatarEnergy."

Talent Development

At QatarEnergy, we recognize development in talent as a critical success factor to not only meet our business needs in a safe and responsible manner, but also grow a workforce motivated to participate in our Sustainability journey. This requires intentional cultivation of our employees' skills and knowledge, while also investing in the identification and sponsorship of high-potential Qataris to join us. We empower our employees to be successful in their current role and future career with us.

Where appropriate, we encourage our contractors and business partners to proactively invest in the development of their people too.

We have a strong commitment as an organization to develop and support the next generation of talent and future leaders. As we welcome new joiners across the ranks and see others move into retirement, we seek to utilize the years of skills and knowledge to set the path forward. Our efforts in building our employees' capabilities extend beyond enhancing their technical skills restricted within their current roles. We believe in arming our people with the required set of technical and soft skills to best apply their skills and expertise, take on new challenges and grow into leadership positions, further down their career paths. We actively promote leaders that drive our strategic priorities, champion change and inspire the next generation of leaders and professionals to surpass their goals and ambitions. To build and sustain strong leadership capability, we invest in leadership development programs and plan for succession.

We have aligned our policies and procedures to leading practices, providing guidance and tools for our staff on the applicable processes. This includes leveraging fit-for-purpose development pathways in a wide variety of areas relevant to their development and utilising state-of-the-art training and development platforms across a variety of delivery methods (ranging between traditional in-person sessions and virtual classrooms; and between instructor-led and self-paced sessions).

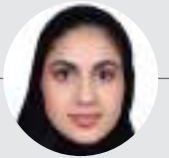
Making use of a two-level training evaluation system we were able to monitor the effectiveness of the trainings and continuously improve on our learning and development systems.

Highlights

- We introduced a succession planning program in 2021 for our critical senior positions, to ensure we have the right leadership talent to continue and drive our business forward consistently.
- We developed an initiative that allows us to cluster inter-related job roles into job families with a common set of technical and general aptitudes, and launched the first two job families (commercial and project management). We were therefore able to map the required professional competencies that relate to the skills, knowledge or experience staff required for any given job role within these two job families. This approach resulted in the development and implementation of a mix of learning solutions based on the job roles and individual development plans, enabling employees to close any competency gaps and improve their performance. This supports our career progression planning and enables our management to engage with the workforce in an open discussion to align on their contribution to QatarEnergy's wider goals.
- We modified our training courses by enabling virtual learning through online sessions and introduction of e-modules to ensure continuity of capacity building and development despite the COVID-19 pandemic. This allowed us to deliver more than 200 thousand hours of training, with the average hours of training per employee increasing from 6 to 24 hours, successfully accomplishing pre-COVID levels.
- To enhance our employees' accessibility to our policies and processes, we upgraded and improved our People Portal platform during 2021. The user-friendly platform provides employees with easy access to all services and information related to talent management, learning and development, as well as a repository of our human resource policies and procedures. This platform serves as a central source where every employee can manage their annual leave allowances, access learning and benefits, and document performance appraisals.

Outlook

- Our professional development framework for the first two job families has proven to be a success, and we will roll-out more job families in the coming year. This will facilitate the progress of training needs analysis and will promote the development of our employees in a systematic manner.
- We have initiated plans for a dedicated leadership development program that includes a coaching program beneficial to senior leadership as well as junior members across the organization. The aim is to develop additional leadership competencies, provide continuing education classes, and facilitate tuition reimbursement.



Shaikha Al-Mulla
Council (Corporate Affairs)

"As a student I was offered the chance for an internship at QatarEnergy. When I saw the Code of Conduct I knew this is a positive environment to work in. Everyone was so encouraging. It was an easy decision to join the QatarEnergy team after completing my studies.

I tell others I work at QatarEnergy because it is a healthy, professional environment, where I am appreciated and recognized. There is a chance for everyone here. My advice to other graduates will be to take the opportunities QatarEnergy provides - we are students in this life.

Here you can shine as much as you want."



Qatarization

We aim to capitalize on the benefits resulting from diversification, while also upholding our commitments to our local talent and communities. Qatarization is an integral part of QatarEnergy's strategic workforce planning as well as a key element of our talent strategy.

In support of the State of Qatar's initiative to promote Qatari talent, we have devised a five-year workforce plan that ensures that the right talent is available at the right time. This plan enables us to assess our business needs for Qatari Nationals over a period of time and to design suitable recruitment and development plans to meet that demand. It places emphasis on the need to develop Qataris for key positions at QatarEnergy by applying competency-based training and development.

This year, we continued to regularly monitor, review, and update our internal development plans, aimed at promoting the growth and development of our Qatari talent. We also provided annual updates to an overseeing, sector-wide steering committee, and subcommittees dealing with recruitment, training, and development, in line with this initiative.

Key Features of Our Qatarization Approach Are:

- Attracting, recruiting, developing, and preparing Qataris to assume positions in QatarEnergy and the wider energy sector.
- We support and manage the recruitment of high school graduates for educational sponsorships at universities and vocational training programs.
- We 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.
- We facilitate the placement, career progression and professional development of Qatari Nationals in line with our Qatarization plans.
- We deliver development programs on effective leadership, and design individual development plans for our future leaders as part of the corporation's leadership development framework.

Our Qatarization program looks beyond our direct employees, as we aim to develop Qatari Nationals in the entire energy sector. We have several initiatives that promote Qatarization across the sector, ranging from internships to scholarships.

- **Scholarship Opportunities:** We continued to offer sponsored scholarships for academic and vocational programs for eligible Qatari students and employees to pursue educational degrees, certificates, and training programs in the fields of petroleum, and other engineering disciplines and specialized programs.
- **Ta'sees project:** We continued to implement and improve the Ta'sees project, which targets national graduates who join as associates. Ta'sees is a 'push' training program that focuses on driving improvements of the employee's abilities and effectiveness. This program was developed to improve the knowledge of new employees on the wider energy industry, increase their awareness of our operations, and enhance individual skills and effectiveness.

In addition, we have also sought partnerships with the educational sector as well as with the Ministry of Education and Higher Education to integrate sustainability principles as part of students' education and training curriculums. This is in an effort to create a National workforce that considers sustainability as an integral part of how we live and work.



Care and Wellbeing

At QatarEnergy we are committed to the wellbeing of our people. It is fundamental to our core values, and shapes our approach to those working for us and with us. The business proposition for enhancing care and wellbeing is clear. Conducive working and living conditions, and respectful interactions, where everyone has a voice, ensure that those working for us and with us, are content and motivated. Wellbeing has proven to enhance the affiliation of employees with QatarEnergy increasing their commitment to collaboration, and thereby leading to stronger organizational and safety performance.

Our belief around the importance of respecting and promoting our people's wellbeing are shaped by leading global practices. We have integrated specific requirements as part of our policies, procedures, and management systems. We also commit to only work with contractors and business partners that share our standards of business conduct and values. We encourage our contractors and business partners to proactively invest in the care and wellbeing of their people too.

As the National Energy Company of Qatar and the largest employer in the country, we are committed to respect, protect, and promote human rights. Human rights form a fundamental building block of our corporate culture and have been embedded into our way of conducting business. Our aim is to continue our progress on human rights, in Qatar and everywhere we operate around the world.

Highlights

- We are proud of launching our Human Rights Policy and are committed to integrate human rights into our ways of working and ensuring consistency across our operations.
- Our stance on human rights, which is reflected throughout our policy document, provides guiding principles on our management approach. Thus, to implement efficient governance and to ensure proper implementation across our value chain, we established our Business Conduct Committee. The aim is to address governance, risks, impact assessment, due-diligence, and follow-up, as well as other elements of a world-class human rights program.

Working and Living Conditions

We recognize the importance of working and living conditions to those working for us and with us. QatarEnergy provides our staff with services and benefits that improve their overall wellbeing, ranging from health care services to special programs. We work closely with our contractors and business partners to provide and maintain working and living conditions contributing to the care and wellbeing of all those working together.

Highlights

- **Health services:** We provide employees and their dependents with extensive healthcare coverage for services in all our operating locations, including general practice, laboratory, radiology, pharmacy, and dental clinics.
- **Wellness programs:** We provide annual medical checkups, weight loss and smoking cessation programs to our employees. We have also offered them sessions on improving mental health resilience, managing stress, etc.
- **Awareness campaigns:** We conduct regular awareness campaigns to inform and ingrain behavioral change in our employees on key issues like smoking, early cancer detection, etc.
- **COVID-19 vaccination campaign:** In collaboration with the Ministry of Public Health (MoPH), we provided vaccines to all our employees and their families. We have also collaborated with the MoPH to support their efforts by providing vaccines to the wider energy sector employees.
- **QatarEnergy privilege program:** We offer a benefits program that provides special discounts for products and services from more than 90 companies covering 30 business sectors, including restaurants, airlines, department stores, events, among others.
- **Employee assistance program:** This is an anonymous hotline for employees which provides independent 24-7 access to a range of professional support services, including telephonic and face-to-face counseling, legal and financial guidance, and wellness coaching, to assist with issues that can potentially impact job performance, health, mental- and emotional wellbeing.

Respectful Interactions

Respectful interaction is a fundamental component of the way we do business. Our Respectful Workplace Policy demonstrates our efforts towards creating a workplace culture of fairness and mutual respect. It ensures that all those working together are valued and respected, and high performance is recognized. The Policy lays out our requirements of employees and all persons doing business with QatarEnergy, emphasizing the role everyone needs to play to ensure a respectful workplace. We work closely with our contractors to define, establish, and maintain a working environment where all workers are respected, and governance is ensured.

Highlights

- Working with our contractors, a growing number of worker wellbeing forums were established, creating more opportunities for employees to receive information and share their views.

Outlook

- We are looking forward to developing and constructing the new North Field Expansion camp according to the high quality underpinned by our policies and standards.
- As we are expanding our operations, we endeavor to work increasingly closer with our contractors to identify areas for improvement on worker care and wellbeing.
- Looking ahead we plan to expand our awareness and training program on the importance of human trafficking and worker welfare, both within our own operations and those of our business partners.



Having A Voice

At QatarEnergy we are committed to establishing a structure, and cultivate a culture where everyone has a voice. Our Speaking Up Policy highlights our commitment to build and maintain a working culture where speaking up is not only accepted but encouraged.

We believe it is the responsibility of all of us, as we work together for the greater good of QatarEnergy and the State of Qatar.

Our Respectful Workplace Policy and Code of Conduct continually encourage all of our employees and contractors to report any violation to our policies. We have processes in place to report cases in a confidential manner, ensuring that all reported cases are evaluated and suitable actions are identified.

Maintaining good relationships with our employees is essential to improve their job satisfaction and our retention rates. We have put organization-wide mechanisms in place to allow our employees to raise their feedback and concerns in a structured manner (including Speaking Up line and more than 60 committed Integrity Ambassadors across QatarEnergy). We monitor several performance indicators to ensure that we are addressing any of the concerns that have been raised in a timely manner and in line with our established processes. Our speaking up mechanisms aim to serve our employees and encourage them to stay motivated and invested in the work they do for our business. We have continued to engage our employees through trainings and capacity building, and open dialogue. We work closely with our contractors to create an environment where all workers have a voice.

Highlights

- As part of our annual Code of Conduct Certification, 84% of our employees agreed that QatarEnergy is committed to doing business ethically and in accordance with our Code of Conduct.
- Speaking up is widely imbedded across QatarEnergy, including in the onboarding of new joiners, integrity ambassador briefing points and monthly Ethics Moments shared with all employees.

Outlook

- In 2022, we are planning on staging a series of Conversation Cafes that will feature our senior leadership team and other subject matter experts. These sessions will focus on various topics, allowing for transparent and candid discussions, in line with our various policies, including the concepts around speaking up when we do not believe we are acting in accordance with our organizational principles.



Prabodh Vasant Bande
Marine Pilot, MESAIEED Port

“Looking back over my past 24 years working at QatarEnergy, I have come to discover and experience that the organization has a heart.

Myself and my family have personally benefitted from the quality of accommodation, healthcare and education provided by QatarEnergy. Since I started working with QatarEnergy, I saw an increase in engagement with the communities, and an investment in our families. Some examples of the activities QatarEnergy have encouraged include dedicated clubs for staff members, and a blood donation campaign.

The worldwide healthcare coverage ensured both me and my family were protected and supported whenever and wherever there was a case of emergency. When my daughter became sick while we were on holiday, QatarEnergy’s toll free hotline removed the stress of an already stressful situation. Also my team fully supported me so I could focus on my loved ones. During the global pandemic in 2020, QatarEnergy ensured that we all were supported and safe, safeguarding our salaries and additional benefits – even if we were operating from our home countries due to emergencies.

My two kids had the opportunity to go to very good schools, where they grew and developed as individuals, enabling them both to go to university.

In QatarEnergy I saw a growing number of online courses, making personal development for staff more widely accessible. The internal diffusion of knowledge and experience from the more experienced members of staff has personally benefitted me during my career and continues to do so as I am moving into retirement and taking a teaching assignment in my home country – I am thankful and excited to pass on my experience from my years at QatarEnergy to the next generation of engineers.”

Creating and Growing Value

Together With Our Business Partners

We recognize the important role partners play to enable us to progress with our sustainability journey. It is therefore fundamental to enter into business partnerships only with those that share our high standards and align with our commitments to human rights, health and safety, business ethics and the environment.

We believe shared value can be generated along the value chain of our activities and within our supply chain.

Doing business the sustainable way, creates high value for our suppliers, stakeholders, and society at large, especially in the core areas of our operations. We rely on our supply chain to sustain our resilience, ensure timely delivery of our products to customers and to actively participate in the journey towards sustainability.

Our business partnerships contribute to the economic development pillar of the Qatar National Vision 2030, as well as SDGs 7, 8, 12 and 13:

SDG7: Affordable and clean energy.

SDG8: Decent work and economic growth.

SDG12: Responsible consumption and production.

SDG13: Climate action.

Doing Business the Sustainable Way

We are actively involved across the entire spectrum of the oil and gas value chain; from exploration through to production, processing, transportation, and marketing our products to local and global markets. At QatarEnergy we understand the importance of forming long-lasting relationships and strategic partnerships with our operating and non-operating partners, suppliers, service providers and customers. Sustainability is a shared challenge, but also an opportunity to grow and create value that contributes, to not only QatarEnergy's sustainability ambitions, but also those of our business partners – ultimately contributing to sustainability across the board.

Our Sustainability Policy emphasizes our commitment to support local value chains, and to build and maintain mutually beneficial relationships, while also fostering a culture of energy and carbon savings and the integration of climate change in our strategic and operational decision-making. Our Environment Policy holds us responsible for conducting environmental due diligence in our supply chain and encouraging contractors and suppliers to commit to the prevention of pollution and protection of the environment. Our corporate contracting and procurement manual provides guidance for our procurement process and outlines the expectations from our suppliers. The manual contains procedures and guidelines applicable to the end-to-end value chain of the procurement process from initiation to close-out, including material management and disposal. Through these mechanisms we aim for us all to do business the sustainable way.

Resilient and Competitive Energy Sector

We fully embrace the Qatar National Vision 2030, Qatar's gas resources can be leveraged to make sustainable development a reality for all its people.

We are committed to contributing to the development of human resources and diverse economic capacities throughout Qatar, while providing a major source of clean energy for Qatar and for the world. Our economic contribution also generates jobs, supports business vitality, and increases consumer spending.

Our procurement spend contributes directly to the strategic supply chain initiatives within the sector, and generates economies of scale.

We recognise that building a resilient and competitive energy sector in Qatar is not something we can do alone. In collaboration with other energy sector companies in Qatar, we developed the Tawteen program. This program aims to generate clusters of investment opportunities, support the development of local suppliers, and promote in-country-value contributions to establish a sustainable and competitive in-country supplier base able to meet the requirements of Qatar's energy sector.

Our local procurement, cluster development, supplier development and in-country value program contribute directly to Qatar's National Vision of leveraging the hydrocarbon resources. to make sustainable development a reality for all its people - and act as powerful enablers for our business partners to participate and benefit, thereby creating and growing value for all.

Local Procurement

We operate a resilient world class supply chain that possesses the ability to overcome complex global challenges. A primary success driver is sustained and valued engagement across our portfolio of global and local contractors and suppliers. Our business relationships are formed on the foundation of QatarEnergy’s values and a basis of mutual respect. Moreover, emphasis is placed on the highest standards of business ethics and compliance with our Code of Conduct.

Consistent with the Qatar National Vision 2030, we give priority to the acquisition of goods and services locally as demonstrated through increasing annual procurement spend. Dedicated contractor and supplier performance management resources provide a process of constant dialogue with the aim of developing and achieving optimum relationships.

Highlights

- QAR 9.7 billion total procurement spend representing an increase of 5% on the previous year.
- 74% procurement spend awarded to suppliers and contractors based in Qatar.
- 50% of the total portfolio of contractors and suppliers are Qatari registered.
- 10 Engineering, Procurement, Construction and Installation Contracts with a total value of QAR 0.64 billion were awarded locally.



Abdulla Mohamed Al-Mahmoud
Manager, Supply Chain

“The future of the Supply Chain in QatarEnergy relies on close partnership with our Contractors and Suppliers built upon innovation, sustainability and shared value.”

Procurement Spend Breakdown

Indicator	Unit	2020	2021
Total procurement spending	Billions QAR	9.2	9.7
Total procurement spending on suppliers based in Qatar	Billions QAR	6.4	7.5
Goods and services sourced locally	Percentage	69%	74%
Number of registered suppliers	Number	5,833	6,331
Number of registered suppliers based in Qatar	Number	2,947	3,130
Percentage of Qatari registered suppliers	Percentage	50%	50%

Cluster Development

The objective of the cluster development team is to strengthen and develop the supply chain base by developing investment opportunities, thus localizing products and services in various fields for the energy sector. This is achieved by creating and awarding investment opportunities in the areas of subsurface operations, maintenance, repair and overhaul (MRO), digital technologies, chemicals and metals, engineering services as well as light equipment, business services and other services across the energy sector supply chain. The opportunities cover a wide range of services such as drilling inspection services, recycling, and maintenance.

Highlights

- 46 investment opportunities were awarded, with 21 of the 46 being related to manufacturing, 14 to service shops and 11 to proof of concept within the digital category.

Launched in 2019

69

Investment Opportunities

Breakdown

12 Digital Cluster		14 Lighting Equipment
01 Engineering Cluster		07 Maintenance
15 Subsurface Cluster		20 Chemicals & Metals

Award status as of December 2021

46

Investment Opportunities

21 Manufacturing Opportunities		11 Digital Proof of Concept Opportunities
14 Service Shops Opportunities		

Outlook

- Looking forward, we will continue to create more investment opportunities that contribute towards sustainable development, and encourage adoption of this approach across other sectors. Our aim is to promote and raise awareness beyond just the energy sector and we will endorse whoever adopts the Tawteen Program regardless of which industry they operate in.
- Looking forward we will establish 'anchor suppliers' to form the core of a supplier eco-system, which will enhance sustainable supplier development.

Supplier Development

QatarEnergy, in collaboration with other energy sector companies in Qatar, has developed Tawteen, a supplier development program. This program aims to promote sustainable and competitive in-country suppliers to meet the requirements of Qatar's energy sector. It also supports the development of local suppliers as part of the Qatar National Vision 2030 to diversify Qatar's economy.

14 Tawteen Partners



To enable all to participate and benefit across our supply chain, it is important to invest in continual capability development to empower existing and future energy sector employees and contractors to remain updated and aligned to the latest leading practices for this sector.

The Tawteen Program is a joint industry partnership that provides business support, capability- and talent development and strategic support to suppliers and entities to ensure cooperation, integration, effectiveness and capabilities within the supply chain.

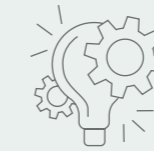
Supplier Development Mechanisms



Business Support

1

- Support with land allocation, government and financial entities
- Engage with Energy companies, Original Equipment Manufacturer (OEM) and Engineering, Procurement and Construction (EPC) contractors to onboard suppliers
- Disseminate demand and forecast data of the Energy sector to suppliers
- Raise suppliers' awareness and support them to enroll into In-Country Value (ICV) program



Capability Development

2

- Support suppliers to get listed as Preferred Vendors (PVL) or Preferred Manufacturers (PML)
- Provide supplier readiness assistance
- Qualify suppliers as per Energy Sector requirements
- Support performance management and (KPI) key performance indicator development
- Engage in audits and reviews and continuous improvement opportunities



Talent Development

3

- Undertake skill-set gap analysis and competency reviews
- Support suppliers with personnel development plans
- Develop supplier competencies

Highlights

- Every supplier participating in the development program has been allocated a dedicated member of the QatarEnergy Supply Chain Localisation team to guide and support them.

Outlook

- We aim to broaden our external awareness and training sessions to further enhance suppliers' ability to contribute to a resilient and competitive energy sector in Qatar.
- We will embed best practices into supplier development programs which will 'lever towards economic, social and environmental sustainability' such as the measures that have been outlined in this report. Our long-term ambition is to leverage success and contribute to the development of suppliers above and beyond the contracts that have been awarded by us through the Tawteen Program.

In-Country Value

The In-Country Value (ICV) program has been developed to complement the Qatar National Vision 2030 by driving the localization agenda in Qatar's energy sector. Qatar's first digital In-Country Value portal was launched through the Tawteen program in 2020. Through the portal, we have established a robust baseline to measure suppliers and benchmark their performance over time. We continue to transform the procurement process of the energy sector by prioritizing suppliers and incentivizing them to contribute to the local economy. The program aims to measure the progression over time and ensure processes and systems are in place to maximize ICV.

Supplier ICV contributions are measured using a formula based on the retained in-country contribution from local purchases, development of local human and business capabilities, and establishing capital investments.

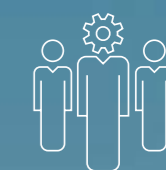
Supplier participation in the ICV initiative is voluntary. The intent is to entice and reward bidders investing in ICV, by providing them a commercial advantage when bidding for a tender offered by QatarEnergy or any of the Tawteen partnering companies.

In-Country Value Strategic Objectives

Maximize the sustainable in-country value creation from the sourcing of goods and services



Upskill and develop local talent suppliers



Promote in-country private investment



Highlights

- Since the launch in 2020, more than 800 suppliers were In-Country Value (ICV) certified.
- 12 ICV certifiers have been appointed and three audit waves conducted.
- An ICV digital portal was launched, increasing efficiency and reach.
- 20 companies started monitoring ICV.

Outlook

- We will aim to expand the number of suppliers registering In-Country Value (ICV) contribution, with the long-term objective to raise the average ICV ratings. We will work to increase the pool of energy companies endorsing and implementing the ICV initiative and introduce the national ICV initiative. This will spread awareness and contribute significantly to the State of Qatar's sustainable growth.
- We aim to establish, govern, coordinate, and lead the ICV Program implementation across the energy and governmental sectors in Qatar to enable local suppliers and manufacturers to benefit. We are leading a process of transforming Terms and Conditions to ensure contractors are SME friendly and reflect ease of doing business in the Energy Sector.



Salim Taoutaou
Manager, Cluster Development,
Supply Chain Localization

"I believe it is our prerogative to look after our suppliers especially Startups, Micro and Medium size companies. Our investment in developing them, helps them to become more competitive and bring more value to the market. Their contributions enable us to meet our objectives. Supplier development is an example of shared value - a win-win."

20 Companies Implementing In-Country Value Program



Sharing Benefits

Across Communities and Broader Society

We embrace our responsibility to contribute to the Qatar National Vision 2030, to invest in it’s people so that all can participate fully, and are actively looking to contribute positively towards the communities in which we operate, as well as add value to society at large. We seek to build a better tomorrow for future generations by sustaining a positive relationship with the communities we impact, and creating a positive presence and legacy across broader society.

We are committed to operating in a socially responsible manner and build partnerships to support sustainable development and growth. The initiatives we undertake reflect community priorities and are in partnership with other stakeholders, creating shared value for all. We believe trust-based relationships with our local communities and broader society are fundamental to see all participate and benefit.

When we work with others, we are guided by several key principles, including shared value, collaboration, and a commitment to open dialogue. A sense of shared responsibility and respect for others is at the core of our stakeholder engagement activities whether that be with local communities, educational institutions, governmental stakeholders, or broader society.

We specifically, and oil and gas companies generally, can significantly contribute to the national, regional, and local economies. The overall contribution can be measured on several fronts, such as the creation of employment opportunities, support for local procurement, social development, and taxes paid for local governments.




Our social responsibility projects, programs and sponsorships contribute to the economic, the human and the environmental development pillars of the Qatar National Vision 2030, as well as SDGs 4, 7, 8 and 13.

- SDG4: Quality education.**
- SDG7: Affordable and clean energy.**
- SDG8: Decent work and economic growth.**
- SDG13: Climate action.**

Corporate Social Responsibility

We see our Social Responsibility investments as an opportunity to establish and maintain a positive contribution towards both social and economic development. We engage in a transparent, consistent, and accurate manner with our near-by communities, through programs and initiatives that are developed in collaboration with them.

Corporate Social Responsibility Priority Areas

-  Education and awareness
-  Skills and enterprise development
-  Community wellbeing and partnership
-  Environment
-  Qatari identity and culture

We believe in consulting community members to identify local needs and concerns; collaborating with partners ranging between governmental entities, private and energy sector players, non-profitable organisations, and schools. We aim to encourage our employees to volunteer and support our community activities.

Highlights

As part of our corporate social responsibility program, QatarEnergy invested more than QAR 18 million in leading, delivering or contributing to a combination of projects, programs, and sponsorships during 2021:

- **Agreement with Teach for Qatar:** Teach for Qatar is a local Non-Governmental Organization (NGO) working as part of the solution to help solve some of the challenges Qatar's students face. The program puts exceptionally talented leaders from school systems through a two-year teaching and leadership development course known as the "Leadership Journey".
- **Sponsorship of Qatar Paralympic Committee:** QatarEnergy sponsored the Qatar team of athletes with various disabilities to compete at the Paralympic Games and other international Paralympic sports competitions.
- **Partnership with FIFA Arab Cup™:** QatarEnergy partnered with FIFA Arab Cup™, which reflects QatarEnergy's continued support of sports and its iconic activities. This is in line with our efforts to promote a healthy lifestyle, preserve the country's sports heritage, and nurture future sports heroes. It also supports the role that Qatar plays in the world of regional and international sports, and in particularly football.
- **Support to Abdullah Bin Hamad Al- Attiyah International Foundation for Energy and Sustainable Development:** QatarEnergy supported Abdullah Bin Hamad Al-Attiyah International Foundation for Energy and Sustainable Development as a platinum member. The foundation showcases QatarEnergy as a global social responsibility leader by recognizing our contribution as a member in all the foundation's publications.
- **Sponsorships:**
 - Qatar National Day Committee
 - 7th General Conference of Arab Union of Electricity
 - Al Dawri & Al Kass Sports Channel

Outlook

- Looking forward, we will develop and initiate a strategic approach to social responsibility that promotes partnering and creating shared value for sustainable societies. We will proactively increase the awareness of energy transition and sustainability amongst our communities and societies to drive the infusion of knowledge, skills, and practices. We also have a long-term ambition to inspire others to support the community and broader society by investing in them. We will develop these plans over the coming months.
- Start construction works of a new primary and secondary school in Dukhan in 2022.



Saja Ibrahim Saleh Al-Naimi
2 years on Teach for Qatar Program,
HSE Incident Investigating and Learning Analyst

"Participating in the Teach for Qatar Program is a great opportunity and career development mechanism for QatarEnergy staff, and directly contributes to social development. Working as an engineer for 10 years in a big company, I wanted to make my individual impact more visible also outside my workspace. When the Teach for Qatar opportunity arose, I applied to be a mathematics teacher. The Leadership Development program prepared me by providing comprehensive training on teaching strategies and understanding youth mindset and personalities. I was excited to use my professional experience and skills in the teaching environment and play a role in showing the world out-there who we are at QatarEnergy.

It is important to show the younger generation, specifically young girls that there is also a place for them in the oil and

gas industry. I shared with them a video of one of our female colleagues at an international climate change conference. Young ones in Qatar need to open-up their thinking and see possibilities to be more than just one thing. My interaction with the teaching staff from other countries also benefited them, as they learned more about the national culture.

Returning to my role at QatarEnergy knowing that my students look up to me, my colleagues saw the difference in me. I am more passionate and have a driving force now: I want to make a positive impact. I am a better professional because of Teach for Qatar experience.

The teach for Qatar Program has shown me and others that I'm not just an engineer at QatarEnergy, I am also a teacher, a mentor and friend to young girls."

Social Contributions Through Partnerships

Ras Laffan Industrial City Community Outreach Program (RLIC-COP) is an industry-led initiative that was established in 2010 with the vision to create a respectful and trustworthy partnership between the energy industry and community in the northern region of Qatar.

The seven founding members are operating in Ras Laffan, and include Al-Khalij Gas, Dolphin Energy, ORYX GTL, Pearl GTL, QatarEnergy and Qatar Gas North and -South. The RLIC-COP focuses on ensuring a two-way engagement process with the community and local stakeholders, enabling co-creation, innovation and collective decision-making benefiting all. It also strengthened trust and co-operation between the industrial companies located in the northern region of Qatar.

The RLIC-COP implements a wide range of projects that contribute to; respectful interactions with the local community in Al Khor and northern areas of Qatar, direct benefits through social development programs, and benefit of the local community as a whole by working in partnership with public institutions in supporting several cultural, educational, health, environmental, security and safety initiatives.

Highlights

As member of the Ras Laffan Industrial City Community Outreach Program (RLIC-COP) our partnering contribution for 2021 exceeded QAR 1.8 million, resulting in the collective involvement in the following 11 projects and programs:

Al Shamal girls primary school education park - phase 1

Al-Bairaq Qatar University program to engage and stimulate student curiosity about science

Magic Carpet interactive educational experience

Maqad Al Duha program to transfer female retirees and senior citizen skills to society

Al-Khor & Al Thakhira majlis improvements

New Community Needs Survey for the Qatar northern area

Darb Al Salama safe journey program to change young driver behavior - virtual

Al Daayn municipality training room

Al Nokhba reading program distributing English books

Al-Khor Club bus sponsorship

Park refurbishments

Outlook

- Exploring opportunities for a marine waste minimization program in partnership with the Ministry of Environment, Ashghal (Public Works Authority of Qatar) and Qatar Museums by installing a trash boom at Zubarah.
- Looking forward to support initiatives contributing to sustainable development for the northern area of Qatar.

برنامج راس لفان للتواصل الإجتماعي
Ras Laffan Industrial City Community Outreach Program



Sharing Benefits

Across Communities and Broader Society



A wide-angle photograph of a person walking across a lush green field. In the background, a dense city skyline with various skyscrapers is visible under a hazy sky. The person is a small figure in the middle ground, walking from left to right. The overall tone is serene and aspirational, linking nature with urban development.

**Our Social and
Economic Development
Ambition Is For
All to Participate
and Benefit.**

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 Statement**
- **Appendix G:
Equity Shares**

Appendix A: GRI Standards Content Index

GRI Standard	Disclosure	Location/ QatarEnergy Response	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	
	102-3 Location of headquarters	Introduction	
	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	
	102-7 Scale of the organization	Introduction	
		Appendix D: Performance data	
		Social and Economic Development: Caring about our people	
	102-8 Information on employees and other workers	Appendix B: Stakeholder Engagement	
		Appendix C: Alignment with QNV2030 Targets	
		Appendix D: Performance Data	
	102-9 Supply chain	Our geographic footprint	
		Social and Economic Development: Creating and growing value	
		Appendix B: Stakeholder Engagement	
		Appendix C: Alignment with QNV2030 Targets	
		Appendix D: Performance Data	
	102-10 Significant changes to the organization and its supply chain	Material topics	
	102-11 Precautionary Principle or approach	Managing our risks	
	102-12 External initiatives	QatarEnergy's Environmental Action	
		Social and Economic Development: Sharing benefits	
		Appendix B: Stakeholder Engagement	
		Appendix C: Alignment with QNV2030 Targets	
		Appendix D: Performance Data	
	102-13 Membership of associations	Transparency and disclosure	

GRI Standard	Disclosure	Location/ QatarEnergy Response	Omissions
Strategy			
	102-14 Statement from senior decision-maker	Message from H.E. The President & CEO	
	102-15 Key Impacts, risks, and opportunities	Sustainability Governance	
		Appendix D: Performance data	
		Risk Management	
		Social and Economic Development section	
		Appendix B: Stakeholder Engagement	
		Appendix C: Alignment with QNV2030 Targets	
		Appendix D: Performance Data	
Ethics and Integrity			
	102-16 Values, principles, standards and norms of behaviour	Our code of conduct	
		Social and Economic Development: Caring about our people	
		Appendix B: Stakeholder Engagement	
	102-17 Mechanisms for advice and concerns about ethics	Our code of conduct and company policy guidance	
		Social and Economic Development: Caring about our people	
		Appendix B: Stakeholder Engagement	
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	
	102-21 Consulting stakeholders on economic, environmental, and social topics	Stakeholder Engagement	
		About this report	
		Social and Economic Development: Sharing benefits	
		Appendix B: Stakeholder Engagement	
		Appendix C: Alignment with QNV2030 Targets	
	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	
	102-25 Conflicts of interest	Our code of conduct	
	102-26 Role of the highest governance body in setting purpose, values, and strategy	Our board of directors	
	102-29 Identifying and managing economic, environmental, and social impacts	Risk Management	
		Stakeholder Engagement	
		Appendix B: Stakeholder Engagement	

GRI Standard	Disclosure	Location/ QatarEnergy Response	Omissions
	102-30 Effectiveness of risk management processes	The ELT oversees QatarEnergy's Enterprise Risk Management Program	
	102-32 Highest governance body's role in sustainability reporting	Our Executive Leadership Team, including the President & CEO, review and approve our annual Sustainability Report before publication	
Stakeholder Engagement			
	102-40 List of stakeholder groups	Stakeholder Engagement Appendix B: Stakeholder Engagement	
	102-42 Identifying and selecting stakeholders	Stakeholder Engagement Appendix B: Stakeholder Engagement	
	102-43 Approach to stakeholder engagement	Stakeholder Engagement	
		Social and Economic Development: Sharing benefits Appendix B: Stakeholder Engagement	
	102-44 Key topics and concerns raised	Stakeholder Engagement	
		Social and Economic Development: Sharing benefits	
		Appendix B: Stakeholder Engagement	
		Appendix C: Alignment with QNV2030 Targets	
Reporting Practice			
	102-45 Entities included in the consolidated financial statements	Report Scope	
	102-46 Defining report content and topic Boundaries	About this report	
		Appendix D: Performance data	
	102-47 List of material topics	Material topics	
	102-48 Restatements of information	QatarEnergy's Climate Change Action, QatarEnergy's Environmental Action	
	102-49 Changes in reporting	Changes from previous reporting periods in scope, boundary or measurement methods can be found in our performance data tables	
	102-50 Reporting period	Jan. 1st to December 31st, 2021 (unless otherwise stated)	
	102-51 Date of most recent report	November 2021	
	102-52 Reporting cycle	Annual	
	102-53 Contact point for questions regarding the report		
	102-54 Claims of reporting in accordance with the GRI Standards	About this report	
	102-55 GRI context index	Appendix A	
	102-56 External assurance	An independent third-party has provided assurance on QatarEnergy's KPIs for our 2021 Sustainability Report. The assurance report can be found in Appendix F	

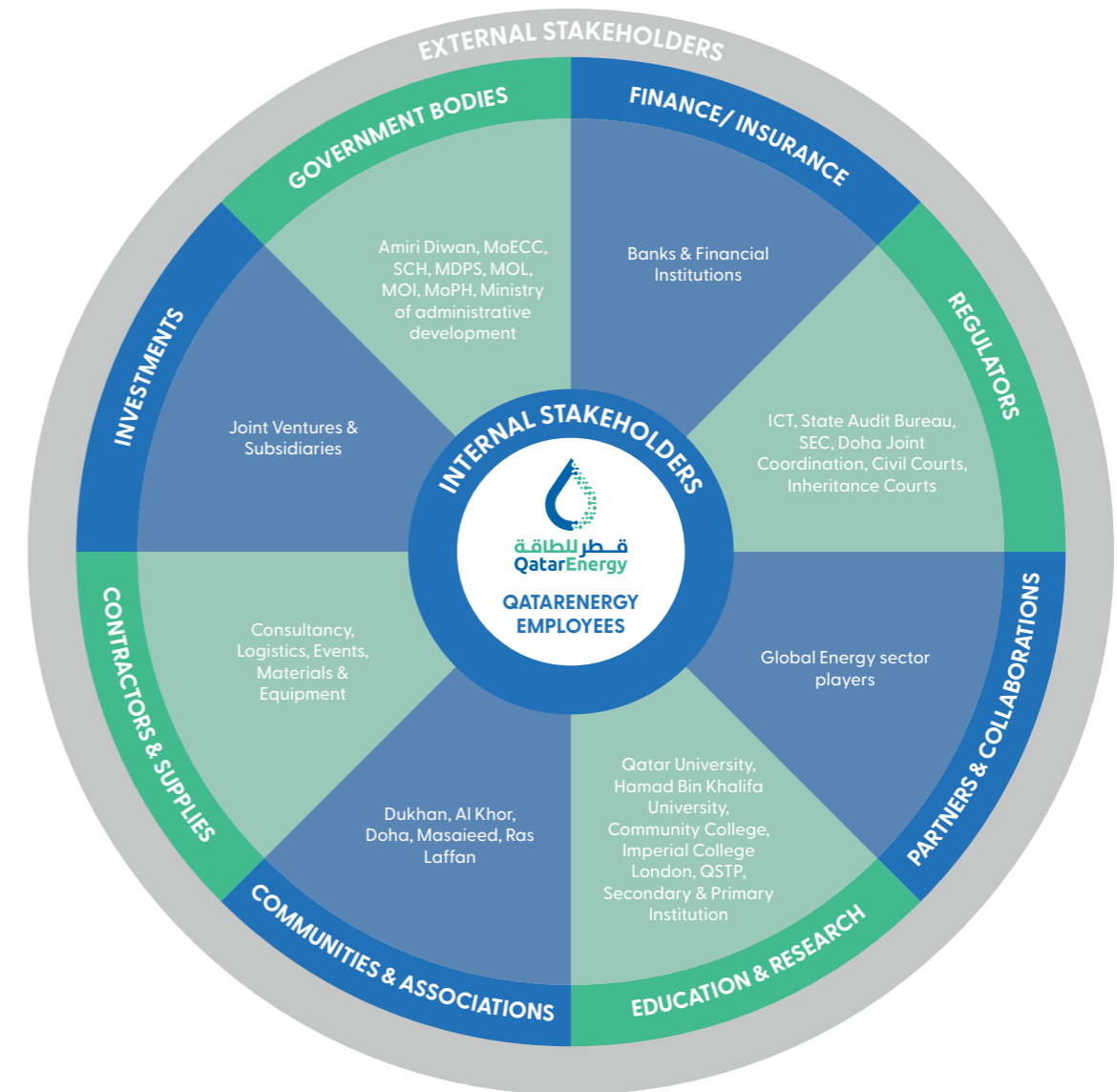
GRI Standard	Disclosure	Location/ QatarEnergy Response	Omissions
GRI 103: Management Approach	103-1 Explanation of the material topic and its boundary	Appendix D: Performance Data Sustainability at QatarEnergy Knowing Our Supply Chain	
Material Topics			
GRI 200 Economic Standard Series			
Economic Performance			
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 H: Equity Shares	
Procurement Practices			
GRI 103: Management Approach	103-1 Explanation of the material topic and its Boundary	Knowing Our Supply Chain	
		Stakeholder Engagement	
		Social and Economic Development: Creating and growing value	
		Appendix B: Stakeholder Engagement	
GRI 204: Procurement Practices	204-1 Proportion of spending on local suppliers	Social and Economic Development: Creating and growing value	
		Appendix C: Alignment with QNV2030 Targets	
		Appendix D: Performance Data	
Anti-corruption			
GRI 103: Management Approach	103-1 Explanation of the material topic and its Boundary	Good Governance and Ethical Standards of Conduct	
	103-2 The management approach and its components	Good Governance and Ethical Standards of Conduct	
	103-3 Evaluation of the management approach	Good Governance and Ethical Standards of Conduct	
GRI 205: Anti-corruption	205-1 Operations assessed for risks related to corruption	Our code of conduct	
	205-2 Communication and training about anti-corruption policies and procedures		
GRI 300: Environmental Standard Series			
Energy			
GRI 103: Management Approach	103-1 Explanation of the material topic and its Boundary	Elevating Energy Efficiency	
	103-2 The management approach and its components	Elevating Energy Efficiency	
	103-3 Evaluation of the management approach	Elevating Energy Efficiency	

GRI Standard	Disclosure	Location/ QatarEnergy Response	Omissions
GRI 302: Energy	302-1 Energy consumption within the organization	Appendix D: Performance Data	
	302-3 Energy intensity	Appendix D: Performance Data	
	302-4 Reduction of energy consumption	Appendix D: Performance Data	
Water and Effluents			
GRI 303: Water and Effluents	303-3 Water withdrawal	Appendix D: Performance Data	
		Climate Change and Environmental Action Chapter	
	303-4 Water discharge	Appendix D: Performance Data	
		Data Climate Change and Environmental Action Chapter	
	303-5 Water consumption	Appendix D: Performance Data	
		Climate Change and Environmental Action Chapter	
Biodiversity			
GRI 103: Management Approach	103-1 Explanation of the material topic and its Boundary	Biodiversity – Climate Change and Environmental Action Chapter	
	103-2 The management approach and its components	Biodiversity – Climate Change and Environmental Action Chapter	
GRI 304: Biodiversity	304-3 Habitats protected and restored	Biodiversity – Climate Change and Environmental Action Chapter	
Emissions			
GRI 103: Management Approach	103-1 Explanation of the material topic and its Boundary	QatarEnergy's Climate Change Action	
	103-2 The management approach and its components	QatarEnergy's Climate Change Action	
	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	
	305-2 Energy indirect (Scope 2) GHG emissions	Appendix D: Performance Data	
	305-4 GHG emissions intensity	Climate Change and Environmental Action Chapter	
		Appendix D: Performance Data	
	305-5 Reduction of GHG emissions	Climate Change and Environmental Action Chapter	
		Appendix D: Performance Data	
	305-7 Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	Climate Change and Environmental Action Chapter	
	Appendix D: Performance Data		

GRI Standard	Disclosure	Location/ QatarEnergy Response	Omissions
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	
	306-2 Management of significant waste-related impacts	Waste Management	
	306-3 Waste generated	Appendix D: Performance Data	
	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	Social and Economic Development: Caring about our people	
		Appendix B: Stakeholder Engagement	
		Appendix C: Alignment with QNV2030 Targets	
	103-2 The management approach and its components	Appendix D: Performance Data	
		Social and Economic Development: Caring about our people	
		Appendix B: Stakeholder Engagement	
GRI 403: Occupational Health and Safety	103-3 Evaluation of the management approach	Appendix C: Alignment with QNV2030 Targets	
		Appendix D: Performance Data	
	403-1 Occupational health and safety management system	Operational Responsibility	
	403-2 Hazard identification, risk assessment, and incident investigation	Practicing Personal 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	
	403-9 Work-related injuries	Appendix D: Performance Data	
	403-10 Work-related ill health	Appendix D: Performance Data	

GRI Standard	Disclosure	Location/ QatarEnergy Response	Omissions	
Training and Education				
GRI 103: Management Approach	103-1 Explanation of the material topic and its Boundary	Social and Economic Development: Growing talent & Sharing benefits		
		Appendix B: Stakeholder Engagement		
		Appendix C: Alignment with QNV2030 Targets		
	103-2 The management approach and its components	Appendix D: Performance Data		
		Social and Economic Development: Growing talent & Sharing benefits		
		Appendix B: Stakeholder Engagement		
	103-3 Evaluation of the management approach	Appendix C: Alignment with QNV2030 Targets		
		Appendix D: Performance Data		
		Social and Economic Development: Growing talent & Sharing benefits		
GRI 404: Training and Education	404-1 Average hours of training per year per employee	Appendix B: Stakeholder Engagement		
		Appendix C: Alignment with QNV2030 Targets		
		Appendix D: Performance Data		
	404-2 Programs for upgrading employee skills and transition assistance programs	Social and Economic Development: Growing talent & Sharing benefits		
		Appendix B: Stakeholder Engagement		
		Appendix C: Alignment with QNV2030 Targets		
		Appendix D: Performance Data		
		Social and Economic Development: Growing talent		
		Appendix D: Performance Data		
Diversity and Equal Opportunities				
GRI 103: Management Approach	103-1 Explanation of the material topic and its Boundary	Social and Economic Development: Caring about our people		
GRI 405: Diversity and equal opportunities	405-1 Diversity of governance bodies and employees	Social and Economic Development: Caring about our people		
Local Communities				
GRI 103: Management Approach	103-1 Explanation of the material topic and its Boundary	Stakeholder Engagement		
		Social and Economic Development: Sharing benefits		
		Appendix B: Stakeholder Engagement		
		Appendix C: Alignment with QNV2030 Targets		
		Appendix D: Performance Data		

Appendix B: Stakeholder Engagement



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	<ul style="list-style-type: none">Managing and measuring our environmental footprint, from energy consumption to responsible use of water, materials and natural habitatsInvesting in various energy savings and energy efficiency programs.Establishing alternate renewable energy resources such as solar power plants.
	Reducing emissions	<ul style="list-style-type: none">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 verificationProgressing with the continuous implementation of the 4C framework with its 4 components: Consolidate, Curb, Create, Compensate
	Air quality	<ul style="list-style-type: none">Setting up monitoring stations for air quality in industrial cities and DukhanInvestments 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	<ul style="list-style-type: none">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 facilitiesDeveloping a new wastewater collection network and treatment facility in Halul islandDeveloping a brine discharge study for near zero liquid discharge at MICUpgrading the capabilities of our Dukhan Sewage Treatment Plant.
	Waste management	<ul style="list-style-type: none">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	<ul style="list-style-type: none">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 and Sheraouh Island
	An increasingly environmentally aware population	<ul style="list-style-type: none">Creating environmental awareness through promoting topics such as Waste Recycling and preservation of Hawksbill TurtlesCreating environmental awareness through sponsored community projects with schools such as environmental workshops
	Promoting sustainable environmental practices	<ul style="list-style-type: none">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	<ul style="list-style-type: none">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 QE's business conduct principles as outlined in its Code of Conduct through a series of employee awareness campaigns & initiatives on environ.

Human Development

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

An Educated Population	Education and training	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• Supporting youth and new professionals through diverse talent attraction programs followed by knowledge sharing initiatives such as internships.
A Healthy Population: Physically and Mentally	Nurturing a healthy population	<ul style="list-style-type: none">• 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.
		<ul style="list-style-type: none">• 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.
	Managing occupational health and safety information to monitor and assess the health status of all employees	
A Capable and Motivated Workforce	Increased and diversified participation of Qataris in the workforce	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• 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 protection our people, their families, and the whole community.• Designing steps to ensure our employees and their families get access to healthcare and wellness programs.
		<ul style="list-style-type: none">• Providing employees and contractors with ongoing Health, Safety and Environment training.
A Sound Social Structure	Enhancing public safety and security	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• 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.
		<ul style="list-style-type: none">• Improving efficiency to increase resources available for the sustainable development of the State of Qatar.
Responsible Exploitation of Oil and Gas	Efficient use of natural resources, which includes energy, oil and gas	<ul style="list-style-type: none">• Improving efficiency to increase resources available for the sustainable development of the State of Qatar.
	Reducing oil and gas costs to maximize efficiency	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• 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

	2017	2018	2019	2020	2021
Progression Towards Lower Carbon Emissions					
Emissions ^{1,2}					
Total Greenhouse gas emissions (GHGs) - Equity Basis					
Scope 1 - Direct total GHGs (million tons CO2eq)	33.28	34.70	33.69	34.79	35.35
Scope 2 - Energy indirect total GHGs (million tons CO2eq)	1.22	1.34	1.69	1.80	1.55
Total Greenhouse gas emissions (GHGs) - Operated Basis ³					
Scope 1 - Direct total GHGs (million tons CO2eq)	4.56	4.48	4.99	5.19	5.78
Scope 2 - Energy indirect total GHGs (million tons CO2eq)	0.35	0.43	0.76	0.62	0.62
Total Greenhouse gas emissions (GHGs) from LNG - Equity Basis					
Scope 1 - LNG (million tons CO2eq)	22.61	22.05	21.30	21.35	21.16
Scope 1 - LNG, exported energy (million tons CO2eq)	0.07	0.09	0.08	0.08	0.11
Scope 1 - LNG, sequestration (million tons CO2eq)	0.48	0.48	0.56	0.63	0.60
Scope 2 - LNG Facilities (million tons CO2eq)	0.41	0.42	0.43	0.34	0.36
Total Greenhouse gas emissions (GHGs) Breakdown by Sector - Equity Basis					
Scope 1 - Upstream (incl. LNG facilities) (million tons CO2eq)	27.06	28.58	27.47	27.73	27.82
Scope 1 - Downstream (refining, GTL & terminals) (million tons CO2eq)	2.25	2.08	2.24	1.89	2.33
Scope 1 - Petrochemicals (million tons CO2eq)	3.97	4.03	3.98	5.16	5.20
Scope 2 - Upstream (incl. LNG facilities) (million tons CO2 equivalent)	0.58	0.70	1.02	1.01	0.83
Scope 2 - Downstream (refining, GTL & terminals) (million tons CO2eq)	0.32	0.31	0.35	0.33	0.30
Scope 2 - Petrochemicals (million tons CO2eq)	0.32	0.33	0.32	0.46	0.42
Greenhouse gas emissions (GHGs) Intensity - Equity Basis					
Upstream (incl. LNG facilities) (million tons CO2eq /million tons hydrocarbon production)	0.244	0.240	0.233	0.228	0.240
LNG (million tons CO2eq /million tons hydrocarbon production)	0.310	0.307	0.299	0.296	0.301
Downstream (refining, GTL & terminals) (million tons CO2eq /million tons hydrocarbon production)	0.191	0.171	0.190	0.186	0.213
Petrochemicals (million tons CO2eq /million tons hydrocarbon production)	0.586	0.614	0.612	0.702	0.882

	2017	2018	2019	2020	2021
Flaring ⁴					
Flaring (upstream, Operated & Non-Operated) (million tonsCO2eq)	2.6	2.46	2.12	2.1	2.08
Flaring (upstream, Operated & Non-Operated) (MMSCF gas flared, QRG basis)*	40,728	35,409	30,507	35,186	33,055
Flaring (LNG) (MMSCF gas flared, QRG basis)*	24,442	21,091	16,894	21,706	17,564
Flaring Intensity (LNG) (MMSCF gas flared, QRG basis* / MMSCF sweet gas production, %)	0.54%	0.47%	0.38%	0.49%	0.39%
* Normalized figures based on heating value @1000 Btu/Scf known as “Qatar Reference Gas” (QRG).					

Other Emissions ⁴					
SO2 emitted (tons)*	257,153	227,022	73,697	40,887	38,742
NOX emitted (tons)*	11,387	11,222	10,970	13,849	13,565
VOC emitted (tons)	1,896	1,901	1,860	2,017	2,229
Methane emitted (tons)/Total Monetizable Products (tons), %,for LNG Facilities	0.007%	0.008%	0.005%	0.007%	0.005%
* Values changed (due to change in methodology for the years 2015-2018) compared to 2018 SR.					

Energy ⁴					
Direct energy consumption (GJ) (QatarEnergy Operated Assets)	63,162,260	61,247,627	65,703,102	73,421,919	79,157,502**
Upstream (incl. LNG) (gigajoules per ton production)*	3.73	3.76	3.87	3.88	4.08
Refining & GTL (gigajoules per ton production)	2.05	1.26	1.38	1.49	1.36
Chemical plants (gigajoules per ton production)	20.45	20.37	21.35	21.21	20.98
* Restated to include our non-operated offshore assets.					
**2021 Data includes energy used by chemical plant under QatarEnergy Refinery					

Water Management ⁵					
Water discharged other than to sea (m3)	11,030,714	13,630,788	14,122,336	32,011,210	24,598,968
Water discharged to sea (excludes non-contact cooling water) (m3)	168,510	295,105	522,935	289,510	201,205
Water recycled or reused (m3)	1,501,936	1,552,201	1,578,736	1,680,982	1,611,687

	2017	2018	2019	2020	2021
Waste Management ⁵					
Total waste generated during the year (tons)	57,921	73,749*	81,357	96,427	125,662
Non-hazardous waste generated (tons)	48,701	68,146*	74,360	79,347	117,829
Hazardous waste generated (tons)	9,220	5,603*	6,998	17,080	7,833
Total waste recycled (tons)	1,379	3,017	2,646	1,789	2,488
Non-hazardous waste recycled (tons)	668	1,043	1,062	907	949.9
Hazardous waste recycled (tons)	711	1,974	1,584	882	1,538.3
Percentage of non-hazardous waste generated	84.1%	92.4%	91.4%	82.30%	93.76%
Percentage of hazardous waste generated	15.9%	7.6%*	8.6%	17.70%	6.23%
Percentage of non-hazardous waste recycled	1.4%	1.5%*	1.4%	1.10%	0.80%
Percentage of hazardous waste recycled	7.7%	35.2%*	22.6%	5.2%	19.63%
*Numbers restated					

Safeguarding Our Workforce and Operating Safely					
Safety of Our Workforce					
Employee headcount	8,468	8,142	8,536	8,359	8,404
Total employee work hours	17,599,470	16,364,732	16,092,008	16,991,535	16,009,100
Total contractor work hours	62,158,310	59,225,391	54,599,800	60,127,799	57,325,311
Employee lost time injuries	4	9	4	1	2
Contractor lost time injuries	8	11	14	8	7
Total lost-time injury rate (LTIR) of employees and contractors (per 1 million working hours)	0.15	0.26	0.25	0.12	0.12
LTIR of employees (per 1 million working hours)	0.23	0.55	0.25	0.06	0.12
LTIR of contractors (per 1 million working hours)	0.13	0.19	0.26	0.13	0.12
Employee total recordable injuries	12	16	11	2	3
Contractor total recordable injuries	38	29	30	24	36
Total recordable injury rate (TRIR) of employees and contractors (per 1 million working hours)	0.63	0.60	0.58	0.34	0.53
TRIR of employees (per 1 million working hours)	0.68	0.98	0.68	0.12	0.19

	2017	2018	2019	2020	2021
TRIR of contractors (per 1 million working hours)	0.61	0.49	0.55	0.40	0.63
Total fatalities	0	0	2	0	1
Employee fatalities	0	0	0	0	0
Contractor fatalities	0	0	2	0	1

Growing Our Talents

Training hours	117,056	193,073	206,005	45,088	201,444
Average hours of training per employee	13.82	23.71	24.13	5.75	23.97

Process Safety and Asset Integrity

Number of Tier 1 process safety incidents	2	1	1	3	1
Number of Tier 2 process safety incidents	10	8	8	6	2
Number of Tier 3 process safety incidents	645	525	632	646	766
Methane emitted (tons)/Total Monetizable Products (tons), %,for LNG Facilities	0.007%	0.008%	0.005%	0.007%	0.005%
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 (KBBL/day)	232	229	246	295	289
North Field Alpha Lean Gas (MMSCF/day)	701	694	681	717	632
Total refinery throughput (KBBL/day)	114	104	110	107	107
Total revenue (‘000 QAR)	95,217,970	118,507,388	108,331,608	76,442, 485	120,283,088
Total expenses (‘000 QAR)	55,872,271	73,637,723	69,415,662	55,711, 810	65,701,733
Net operating profit (‘000 QAR)	39,345,699	51,457,387	44,979,038	28,852, 669	61,648,957
Share in profits of joint ventures and associates (‘000 QAR)	34,104,224	48,934,617	40,634,833	19,759, 382	53,031,856
Net profit for the year (‘000 QAR)	59,075,567	73,324,837	65,460,501	41,212,033	97,891,280

	2017	2018	2019	2020	2021
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Local Economic Contribution

Total procurement spending (000 QAR)	11,460,000	8,350,000	11,640,000	9,198,422	9,600,000
Total procurement spending on suppliers based in Qatar (‘000 QAR)	9,500,000	4,820,000	9,200,000	6,385,682	7,400,000
Percentage of local procurement spending (%)	83%	58%	79%	69%	75%
Number of registered suppliers	10,194	10,055	5,268	5,833	6,331
Number of registered suppliers based in Qatar	4,102	4,262	2,662	2,947	3,130
Percentage of Qatari registered suppliers (%)	40%	42%	51%	50%	50%

Support to our Society

Amount spent for CSR projects (QAR)	34,000,000	38,120,000	29,184,350	20,090,000	20,000,000
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1. Global warming potentials are based on 5th Assessment Report of IPPC with 100-year time horizon.
2. The GHG emissions includes our international assets’ data.
3. 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.
4. Where we have equity, 100% basis. The Others Emissions section reports QatarEnergy performance alone, except the LNG methane intensity, while the Flaring and Energy sections are a combination of operated and non-operated assets.
5. 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.

Sr. No.	Operator Ventures	QatarEnergy's Effective Share As at 31 Dec 2021
1	Qatargas (QG)	
A	QG - LNG Companies	Refer to Table B below
B	AKG	AKG-1: 0% AKG-2:20%
C	Bazan	93%
D	Laffan Refinery	51%
E	Laffan Refinery 2	84%
2	Dolphin Energy	0% (Note 1)
3	QAFCO	Refer to Table B
4	QAFAC	25.5%
5	QAPCO	Refer to Table B below
6	Q-Chem	Refer to Table B below
7	Petrochemical Corporation of Singapore (Private) Ltd.	24.5%
8	The Polyolefin Company (Singapore) Pte Ltd.	14.7%
9	Pearl GTL	0% (Note 1)
10	Oryx GTL	51%
11	QatarEnergy Refinery	100% owned by QatarEnergy
12	Qatar Steel	51%
13	Qatalum	25.5%
14	UHPC	5%
15	QPOWER	0%
16	RGPC	15%
17	MPCL	20%
18	RLPC	10%
19	QEWG	0%
20	NGL Complex	100% owned by QatarEnergy
21	Dukhan Operations	100% owned by QatarEnergy
22	QatarEnergy Offshore	100% owned by QatarEnergy
23	NOC	70%
24	Al Khaliq Field (Block 6)	60%

25	Qatar Petroleum Development Co. Ltd. (Japan) (QPD)	0%
26	South Hook LNG Terminal	67.5%
27	North Adriatic LNG Terminal	22.02%
28	BC-10 (Brazil)	23%
29	TEPC (Congo)	15%

Table B: QatarEnergy Shares in QG LNG Ventures, QAPCO, Q-Chem, and QAFCO in 2021

Ventures	QatarEnergy's Effective Share As at 31 Dec 2021
QG1 Upstream	65%
QG1 Downstream	65%
QG2	67.50%
QG3	68.50%
QG4	70%
QG3&4	69.25% (Note 2)
RLI	63%
RLII	67.05%
RL3	70%
QAPCO	40.80%
QATOFIN	25.97%
QVC	62.03%
Q-Chem	34.06%
Q-Chem II	34.06%
RLOC	31.02%
QAFCO	51%
QMC	51%
GFC	35.7%

Note 1: The Group's interest in these joint operations is based on contractual terms of production sharing arrangement which varies from time to time.

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

Appendix E: Acronyms

AR6	Sixth Assessment Report
ALARP	As low as reasonably possible level
BBL/D	Barrels Per Day
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
CNG	Compressed Natural Gas
CO2eq	Carbon dioxide equivalent
COVID-19	Coronavirus Disease 2019
CSR	Corporate Social Responsibility
CTO	Consent to Operate
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
EU ETS	European Union Emissions Trading System
EPSA	Exploration and Production Sharing Agreements
ERM	Enterprise Risk Management
EVP	Executive Vice President
FEED	Front End Engineering Design
GCC	Gulf Cooperation Council
GDP	Gross Domestic Product
GHG	Greenhouse gas
GRI	Global Reporting Initiative
GTL	Gas-To-Liquid

GW	Giga Watt
GWPs	Global Warming Potentials
H.E.	His Excellency
HSEQ	Health, Safety, Environment and Quality
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
MENA	Middle East and North Africa
MIC	Mesaieed Industrial City
MMBTU/D	Million British Thermal Units per Day
MMSCFD	Million Standard Cubic Feet per day
MTPA	Million Metric Tons Per Annum
MoPH	Ministry of Public Health
Mt	Million tons
MtCO2 eq	Mllion tons of CO2 equivalent
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
OE	Operational Excellence
PM	Particle Matter
PR	Public Relations
PSMS	Process Safety Management System
PV	Photovoltaic
QAR	Qatari Riyal
QNV	Qatar National Vision
QRG	Qatar Reference Gas
RAM	Risk Assessment Matrix
RLIC	Ras Laffan Industrial City
RLIC - COP	Community Outreach Program
RLPP	Ras Laffan Petrochemical Project
SCF	Standard Cubic Feet
SDGs	Sustainable Development Goals
SEEF	SEEF Limited
SO2	Sulfur dioxide
SOC	Safety Observations Conversation
TRIR	Total Recordable Injury Rate
UN	United Nations
VOC	Volatile Organic Compound
WHO	World Health Organization

Appendix G: Assurance Statement



LRQA Independent Assurance Statement

Relating to QatarEnergy's Assertion in the Sustainability Report for the CY 2021.

This Assurance Statement has been prepared for QatarEnergy in accordance with our contract.

Terms of Engagement

LRQA was commissioned by QatarEnergy to provide independent assurance of its assertion for greenhouse gas (GHG) emissions inventory and EHS parameters. ("the Report") for the CY 2021 against the assurance criteria below to a limited level of assurance and materiality of 5% using LRQA's verification procedure. LRQA's verification procedure is based on current best practise and is in accordance with ISAE 3000 and ISAE 3410.

Our assurance engagement covered QatarEnergy's operations and activities in the State of Qatar and its affiliates in other countries as mentioned in Annex-1) and specifically the following requirements:

- Verifying conformance with:
 - QatarEnergy's reporting methodologies for the selected datasets;
 - 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 emissions¹.
- Reviewing whether the Report has taken account of:
 - International Petroleum Institute Environmental Conservation Association (IPIECA), Petroleum Industry Guidelines for Reporting Greenhouse Gas Emissions.
- Evaluating the accuracy and reliability of data and information for only the selected indicators listed below:
 - Direct (Scope 1), Energy Indirect (Scope 2) GHG emissions;
 - And other Environment and Health & Safety parameters as listed in Annex-3.

Our assurance engagement excluded the data and information of QatarEnergy's scope-3 GHG emissions.

LRQA's responsibility is only to QatarEnergy's. LRQA disclaims any liability or responsibility to others as explained in the end footnote. QatarEnergy's responsibility is for collecting, aggregating, analysing and presenting all the data and information within the Report and for maintaining effective internal controls over the systems from which the Report is derived. Ultimately, the Report has been approved by, and remains the responsibility of QatarEnergy.

LRQA's Opinion

Based on LRQA's approach nothing has come to our attention that would cause us to believe that QatarEnergy has not, in all material respects:

- Met the requirements of the criteria listed above; and
- Disclosed accurate and reliable performance data and information as summarized in Table 1 below.

The opinion expressed is formed on the basis of a limited level of assurance² and at the materiality of 5%.



1. <http://www.ghgprotocol.org/>
2. The extent of evidence-gathering for a limited assurance engagement is less than for a reasonable assurance engagement. Limited assurance engagements focus on aggregated data rather than physically checking source data at sites. Consequently, the level of assurance obtained in a limited assurance engagement is lower than the assurance that would have been obtained had a reasonable assurance engagement been performed.

Table 1. Summary of QatarEnergy Key Data for CY2021:

Scope of GHG emissions All Assets	Million Tonnes CO2e	Million Tonnes CO2e (on QatarEnergy equity basis)
Direct GHG emissions (Scope 1)	98.42	38.90
Energy indirect GHG emissions (Scope 2, Location-based)	3.96	1.76
Total	102.38	40.66
Note 1: Scope 2, Location-based and Scope 2, Market-based are defined in the GHG Protocol Scope 2 Guidance, 2015.		

Note: For further details & break down refer to Annex-2.

LRQA’s Approach

LRQA’s assurance engagements are carried out in accordance with our verification procedure. The following tasks were undertaken as part of the evidence gathering process for this assurance engagement:

- conducting remote verifications and reviewing processes related to the control of GHG emissions data and records;
- interviewing relevant employees of the organization responsible for managing GHG emissions data and records; and
- assessing QatarEnergy’s data management systems to confirm they are designed to prevent significant errors, omissions or misstatements in the report as per QatarEnergy GHG Accounting and Reporting procedures, GHG Accounting and Reporting Plan.
- reviewing GHG Emissions for entities of QatarEnergy and its affiliates as mentioned in Annex-(1) based on review & verification of individual Entity GHG inventory summaries against GHG Emission Statements by independent third-party verifier and with provided declaration of equities of such entities as applicable.
- reviewing and verifying the entity’s GHG Emissions Inventory which are not accompanied by verification statement by an independent third-party verifier (i.e. for TEP Congo), and to provide an Assurance Statement.
- Reviewing the QatarEnergy Environmental and Health & Safety performance indicators and cross checking through monthly & quarterly performance reports & data checks by run reports from online systems & software applications in implementation.
- verifying historical GHG emissions data and records for Environment and Health & Safety parameters at an aggregated level for the calendar year 2021.



Observations

Further observations and findings, made during the assurance engagement, are:

- Communicate QatarEnergy requirements & expectations from international JVs in relation to GHG emissions to facilitate effective reporting and monitoring.
- Improve data & information cross checks of submitted GHG inventory sheets, assurance statements for individual entity within scope.

LRQA’s Standards, Competence and Independence

LRQA implements and maintains a comprehensive management system that meets accreditation requirements for ISO 14065 Greenhouse gases – Requirements for greenhouse gas validation and verification bodies for use in accreditation that are at least as demanding as the requirements of the International Standard on Quality Control 1 and comply with the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants.

LRQA ensures the selection of appropriately qualified individuals based on their qualifications, training and experience. The outcome of all verification and certification assessments is then internally reviewed by senior management to ensure that the approach applied is rigorous and transparent.

LRQA is Company certification body for ISO 9001, ISO 14001, ISO 45001 for some of the entities of QatarEnergy Entities/ affiliates (E.g. QAFCO). We also provide this entity with a range of training services related to management systems. The verification and certification assessments, together with the training, are the only work undertaken by LRQA for this entity and as such does not compromise our independence or impartiality.

Signed Dated:
Usman Haider
LRQA Lead Verifier
On behalf of LRQA

27th Oct, 2022

LRQA reference: QAT00000067

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Annex 1

Assets in QATAR
Qatargas (QG)
Dolphin Energy Limited (DEL)
Qatar Fertiliser Company (QAFCO)
Qatar Fuel Additives Company (QAFAC)
Qatar Petrochemical Company (QAPCO)
Qatar Chemical Company (Q-Chem) (MIC & RLC, Qatar)
Pearl GTL
Oryx GTL
QatarEnergy Refining Operations (QatarEnergy 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)
QatarEnergy Mesaieed Operations (NGL Complex)
QatarEnergy O&GP (Dukhan Operations)
QatarEnergy Offshore Operations (QatarEnergy Offshore, Qatar)
North Oil Company (NOC)
Qatar Petroleum Development Co Ltd. (Japan) (QPD)
Al-Khalij Oil.
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)



Annex 2 - Breakdown of above overall Figures as below:

Scope of GHG emissions QG-LNG	Million Tonnes CO2e Total	Million Tonnes CO2e QatarEnergy Equity Basis
Direct GHG emissions (Scope 1)	31.31	21.16
Energy indirect GHG emissions ¹ (Scope 2, Location-based)	0.52	0.36
Total	31.84	21.51

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 QatarEnergy Equity Basis
GHG emissions - State of Qatar Assets (Scope 1 + Scope 2, Location-based)	97.62	39.63
GHG emissions - International Assets (Scope 1 + Scope 2, Location-based)	4.76	1.03
Total	102.38	40.66

Scope of GHG emissions By Sector	Million Tonnes CO2e Total	Million Tonnes CO2e QatarEnergy Equity Basis
Upstream Sector Direct GHG emissions (Scope 1)	44.29	27.82
Downstream Sector Direct GHG emissions (Scope 1)	12.37	2.33
Petrochemicals Sector Direct GHG emissions (Scope 1)	12.48	5.20
Total (Scope 1)	69.14	35.35
Upstream Sector Energy indirect GHG emissions (Scope 2, Location-based)	1.26	0.83
Downstream Sector Energy indirect GHG emissions (Scope 2, Location-based)	0.38	0.30
Petrochemicals Sector Energy indirect GHG emissions (Scope 2, Location-based)	1.24	0.42
Total (Scope 2)	2.88	1.55



Annex 2 - Breakdown of above overall Figures as below:

Indicator	Unit	2021
Water discharged (to Sea)	m ³	201,205
Water discharged (other than Sea)	m ³	24,598,968
Water recycled or reused	m ³	1,611,687
SO2 emitted	Tonnes	38,742
NOx emitted	Tonnes	13,565
VOC	Tonnes	2,229
Total waste recycled	Tonnes	2,488
Total waste generated during the year	Tonnes	125,662
Non-hazardous waste generated	Tonnes	117,829
Hazardous waste generated	Tonnes	7,833
Non-hazardous waste recycled	Tonnes	950
Hazardous waste recycled	Tonnes	1,538
Percentage of non-hazardous waste generated	Percentage	93.76%
Percentage of hazardous waste generated	Percentage	6.23%
Percentage of non-hazardous waste recycled	Percentage	0.80%
Percentage of hazardous waste recycled	Percentage	19.63%
Direct energy use	GJ	79,157,502
Direct GHG emissions (scope 1)	MillionTonnesCO2e	5.78
Indirect GHG emissions (scope 2)	MillionTonnesCO2e	0.62
Flaring	MMSCF	13,252



Annex 3-B - Safety Parameters

Indicator	Unit	2021
Work hours - employees	Hour	16,009,100
Work hours - contractors	Hour	57,325,311
Employee fatalities	Number	0
Contractor fatalities	Number	1
Employee lost time injury rate	Per1	0.12
Contractor lost time injury rate	Per1	0.12
Employee total recordable injuries	Per1	3
Contractor total recordable injuries	Per1	36
Number of Tier 1 process safety events	Number	1
Number of Tier 2 process safety events	Number	2
Number of Tier 3 process safety events	Number	766
Employee lost time injuries	Number	2
Contractor lost time injuries	Number	7
Lost time injury rate (employees and contractors) (per 1 million working hours)	Per1	0.12
Total recordable injury rate (employees) (per 1 million working hours)	Per1	0.19
Total recordable injury rate (contractors) (per 1 million working	Per1	0.63
Total recordable injury rate (employees and contractors) (per 1 million working hours)	Per1	0.53



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QatarEnergy

