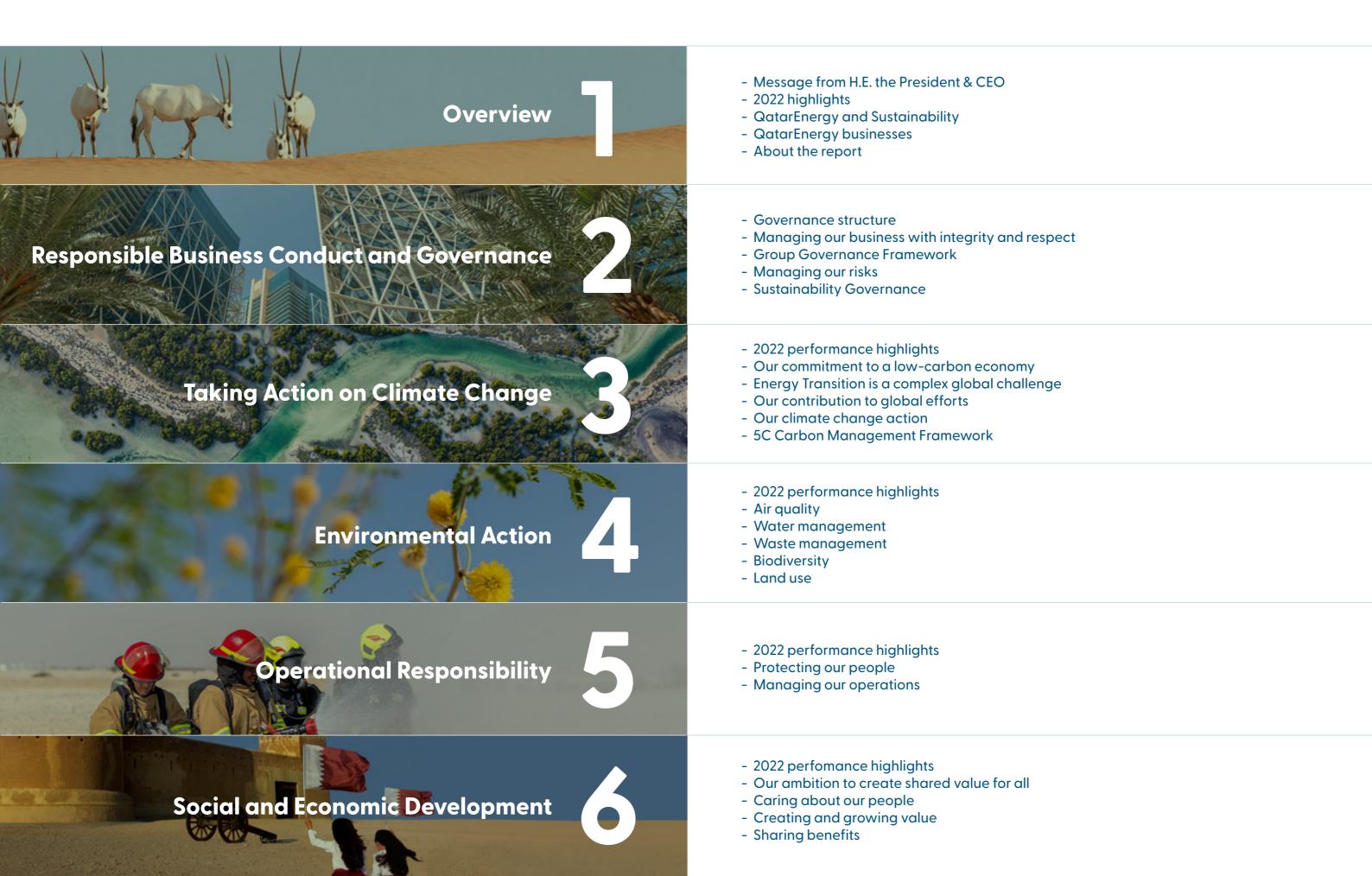


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Sustainability Report 2022

Message from H.E. the President & CEO

I am pleased to present to you QatarEnergy's Sustainability Report for 2022, which highlights our sustainability performance, reaffirms our commitment to holistic sustainable development, and offers a look at our contribution to the global efforts on tackling climate change.

The State of Qatar has long recognized the importance of sustainable and inclusive growth and the urgency of addressing the challenge of climate change. At QatarEnergy, our Sustainability Strategy and actions are underpinned by the State of Qatar's commitment to the Paris Agreement on climate change, as reflected in the Qatar National Vision 2030 (QNV 2030) and the National Climate Change Action Plan (NCCAP).

We are committed to sustainable development of our business, our people, and the broader society by adopting a comprehensive and integrated approach addressing the challenges posed by climate change, taking action to mitigate impact on the environment, ensuring safe and responsible operations, and ensuring overall social and economic development. We believe that by integrating sustainability in our businesses and operations, we can contribute to building a better future for all.

To deliver the goals of the Paris Agreement on climate change, the world needs a just and balanced transition of the energy system ensuring continued, secure, and affordable supply of energy for fair and sustainable growth and living standards for all. We recognize the pressing need to transition to a more sustainable energy future by collaborative efforts from all stakeholders. including energy producers, consumers, governments, and industry leaders.

As a leading supplier of natural gas, we believe we are in a prime position to contribute to the global energy transition. Besides being a clean yet reliable and affordable baseload energy source, natural gas also helps to reduce emissions from industries and other sectors. Establishing a position in low-carbon energy business is

one of QatarEnergy's strategic levers for contributing to the global effort, and we aim to establish a position in emerging opportunities in blue ammonia, building the State of Qatar into a major Carbon Capture and Sequestration (CCS) hub, optimize our position in solar energy, and maximizing carbon mitigation efforts.

Minimizing emissions is a strategic commitment underpinning QatarEnergy's Sustainability Strategy. We have set ambitious targets to reduce our carbon intensity across our Liquified Natural Gas (LNG) facilities by 35% and across our upstream facilities by 25% by 2035, related to the base year of 2013. These targets support our goal of becoming a more sustainable business and contributing to global efforts to mitigate climate change.

In 2022, 100% of QatarEnergy and its Qatar-based affiliates were covered by our Greenhouse Gas Monitoring, Reporting, and Verification Program. We have already reduced energy consumption in our refinery operations by 19% compared to 2021. Moreover, we have consistently reduced flaring in Ras Laffan Industrial City, achieving a 12% reduction in flaring intensity in 2022 compared to 2021, bringing the cumulative reduction to over 70% since 2012. We are also committed to establishing 875 MW of solar capacity at QatarEnergy industrial cities. In 2022, cumulative CO₂ equivalent captured and sequestered since 2019 through CCS reached nearly 5 million tons. For the 2022 reporting year, QatarEnergy achieved the Oil & Gas Methane Partnership (OGMP 2.0) Gold Standard for the second year in a row.

On the environmental front, we have achieved a notable reduction in NOx emissions and a substantial increase in hazardous waste recycling. In line with our commitment to biodiversity conservation, we have made remarkable strides in turtle conservation and coral reef preservation.

Operational responsibility stands as a vital part of our Sustainability Strategy. We place utmost priority on responsible operations, launching various initiatives to safeguard

personal safety, upholding process safety, and driving efficiency, reliability, and operational excellence. In 2022, we have fully met the safety performance targets with zero employee fatalities for seven consecutive years. We improved health, safety, and environmental training, educating over 44,000 individuals through training sessions, and implemented programs to achieve greater efficiency and effectiveness.

As an energy transition partner, we recognize our position to accelerate social and economic progress, causing a ripple effect through our people, our partners, and into broader society. In this context, I am pleased to note the substantial number of new talents joining us, and our low voluntary attrition rate, confirming our standing as an employer of choice. We also value the active participation of the younger generation in this journey, demonstrated through our internship program, which provides Qatari nationals with firsthand experience in the energy sector. This integrated and inclusive approach to talent development and knowledge sharing has proven its value and effectiveness.

Throughout the past year, we placed great emphasis on partnerships, local supply chains, and job creation, contributing to a resilient and competitive energy sector while prioritizing the procurement of goods and services locally. Our direct local procurement spend in 2022 was more than 12 billion Qatari Riyals. In addition, our Tawteen Program, in coordination with industry partners, resulted in local supply chain investment of around 10 billion Qatari Riyals, the creation of thousands of jobs, and an increase in the number of major international investors.

Equally, our commitment to sustainable development is also extended to benefit our local communities and society, where we have invested more than 22 million Qatari Riyals to help maximize value for Qatar's society and create a positive

presence and legacy. This is part of our Social Responsibility Strategy that we are developing and will be implemented over the next few years.

Our approach to sustainability combines long-term commitments and everyday actions, reinforced by our values and aspirations. We believe in the power of collaboration as we journey toward a sustainable future. We carry this mission with a great sense of gratitude to the vision, leadership, and unlimited support of His Highness Sheikh Tamim bin Hamad Al-Thani, the Amir of the State of Qatar.

I invite you to read this report to learn more about our sustainability efforts and I look forward to your active support in this important journey.



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

QatarEnergy has clear ambitions.

We want to drive prosperity across the planet through sustainable energy solutions. Energy is the foundation of the modern world, powering progress, innovation, and opportunity for all people. It is a vital element and reminds us of the critical role we all play in securing a sustainable and equitable future. As we evolve, we are proud to drive our sustainability agenda forward, and to continue reporting on our economic, environmental, and social performance. This report aims to illustrate our ability to create sustainable value in the long-term. Through our reporting, we document our journey to promote transparency across all levels of our organization, while continuing to learn through ongoing evaluation and monitoring of our approach.

its international partners in the USD 28.75 billion North Field East (NFE) project, which will raise Qatar's liquified natural gas (LNG) production capacity from the current 77 million tons per annum (MTPA) to 110 MTPA.

QatarEnergy announced

QatarEnergy achieved more than 78 MTPA of LNG, with world class safety and reliability, as well as superior environmental performance.

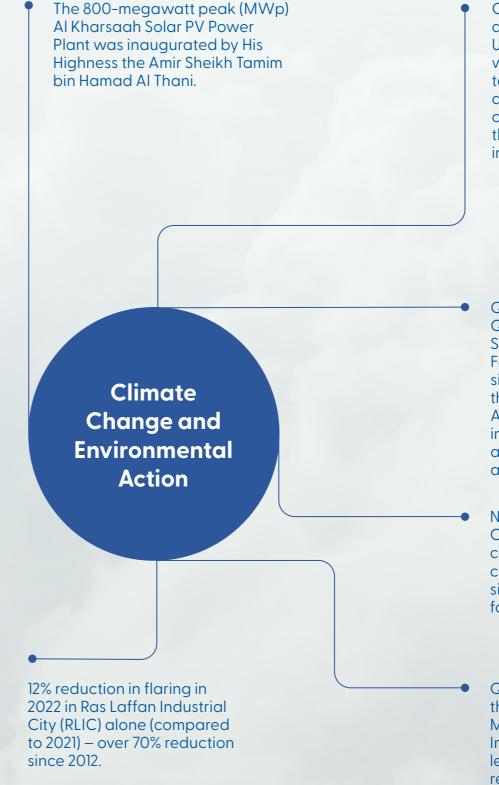
Corporate Developments, Collaborations. and Partnerships

QatarEnergy partnered with FIFA as an official partner of the FIFA World Cup Qatar 2022™.

The sixth Heads of State and Government Summit of the Gas Exporting Countries Forum (GECF) took place in Qatar, and emphasized the central role of natural gas in the global energy transition.

QatarEnergy and Chevron Phillips Chemical took a Final Investment Decision on the Golden Triangle Polymers Plant, a USD 8.5 billion worldscale integrated polymers facility in the Texas Gulf Coast area in the United States of America.

QatarEnergy announced its international partners in the North Field South (NFS) expansion project, which comprises two LNG mega trains that will have a combined capacity of 16 MTPA and will raise Qatar's total LNG production capacity to 126 MTPA.



QatarEnergy signed a Memorandum of Understanding (MoU) with General Electric to collaborate on developing a carbon capture roadmap for the energy sector in the State of Qatar.

QatarEnergy's affiliates, QatarEnergy Renewable Solutions and Qatar Fertiliser Company (QAFCO) signed agreements for the construction of the Ammonia-7 Project, the industry's first world-scale and largest blue ammonia project.

Nearly 5 million tons of CO₂ equivalent (CO₂-eq) captured through carbon capture and storage (CCS) since inception of the facility in 2019.

QatarEnergy joined the Aiming for Zero **Methane Emissions** Initiative, an industryled initiative that aims to reach near zero methane emissions from operated oil & gas assets by 2030.

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By taking bold steps to reduce our

Through proactive measures aimed at social and economic development, we can unlock a brighter future that is inclusive and offers opportunities for all members of society. We also believe that our responsibility to provide sustainable and cleaner energy contributes to social sustainability and prosperity, to the benefit of all.

QatarEnergy and Sustainability

At QatarEnergy, we recognize the importance of sustainability. Our industry has been essential in powering human progress and economic development and we are committed to the sustainable development of our business, our people and the broader society by adopting a comprehensive and holistic approach addressing the challenges posed by climate change, taking action to protect our environment, and ensuring overall social and economic development.

Our Sustainability Strategy rests on three pillars:



Operational Responsibility

We strive to operate in a way that respects and safeguards the natural environment, while also ensuring the health and safety of our employees and the communities in which we operate. We believe that operational responsibility is a key aspect of sustainability and we are dedicated to upholding this responsibility in all our activities.



Sustainability Strategy

As a responsible energy corporation, we have a key role in fueling the global economy, and as the global economy transitions to a low-carbon future, we are committed to fueling that transition. Our sustainability approach is guided by a simple, yet bold, aspiration to contribute to a world where everyone can thrive. For us, this means responsibly operating our business – both from environmental and social perspectives, to create long-term value. We actively manage and addres a range of sustainability issues as we continue to grow our business. Fundamental to this work is our ongoing commitment to responsible business practices that promote accountability, transparency, and ethical leadership.

Our sustainability strategy, which guides our efforts towards achieving our sustainability goals, emphasizes the importance of balancing economic, social, and environmental considerations to promote sustainable development while delivering value for all stakeholders. We believe that by integrating sustainability in our business strategy, we can contribute to building a better future for all.

Overarching our strategic pillars is our commitment to **Responsible Business Conduct and Governance**, meaning we are dedicated to doing things the right way, always. This commitment translates to being uncompromising in our ethical code and upholding strong corporate governance policies and practices that help us earn and keep the trust of our stakeholders.

Commitment to Sustainability

Responsible business conduct and governance

Climate Change and Environmental Action



Growing our LNG portfolio



Deploying CCS & local nature-based solutions



Reducing emissions from our facilities



Protecting, restoring, and enhancing habitat & biodiversity



Developing low-carbon energy



Promoting circular economy

Operational Responsibility



Preventing risks related to people's health and safety



Operating our assets safely



Achieving operational excellence

Social and Economic Development



Caring for our people



Creating and growing value, together with our business partners & supply chain



Sharing benefits, across communities & society

Culture of sustainability

Innovation, creativity, and a learning mindset

Collaboration, co-creation, and stakeholder engagement

Our sustainability pillars are based on our extensive experience and reflect our forward-looking aspiration as a leading supplier of reliable and low-carbon energy. We have defined key sustainability objectives for each pillar to drive our initiatives and achieve our targets and goals.

We have also identified three key enablers that pave the way for us to turn our strategy into tangible actions. First and foremost, we believe that creating a culture of sustainability is essential to prioritize sustainability in QatarEnergy's activities. We integrate sustainability into our ways of working and decision making to ensure that

Our approach to sustainability combines long-term commitments and everyday actions, reinforced We apply our history of excellence and responsibility to ideas and efforts that support people and communities, while also protecting the natural environment

Aisha Hassan Al-Kaabi

Finding the balance

Economic growth can be achieved without compromising the natural world.



Contribution to UN Sustainable Development Goals (UN SDGs)

We recognize the need to align our sustainability approach with both national and international sustainability guidelines and initiatives. We are proud to be a part of Qatar's journey towards achieving the Qatar National Vision 2030 (QNV 2030). This ambitious plan outlines Qatar's long-term goals for sustainable economic, social, and environmental development, with a focus on promoting a diversified and knowledge-based economy and improving the quality of life for everyone living in the State of Qatar. We are committed to supporting this vision through our operations, by investing in sustainable technologies, promoting environmental conservation, and fostering economic growth and innovation. Through our partnerships with local communities and organizations, we are actively working to empower Qatari citizens, promote social inclusion and enhance the country's overall resilience and sustainability. By aligning our business strategy with the QNV 2030, we are not only contributing to the long-term prosperity of the State of Qatar but also helping to create a better future for generations to come.

We also believe that our long-term business success must be founded on sustainable business practices that serve global needs as defined by the UN SDGs. We have identified three UN SDGs on access to clean energy, economic growth and climate action as our primary focus areas.

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UN SDGs identified as primary for QatarEnergy



Our focus is on increasing access to affordable, reliable, and sustainable energy, while reducing our carbon footprint and promoting energy efficiency.



Our focus is on creating oppurtunities for economic growth by providing access to affordable and reliable energy. We also prioritize employee safety, health and well-being.



Our focus is on advancing emissions reduction initiatives in our operations, investing in renewable energy sources and using cutting-edge clean technology.

Further UN SDGs contributions

Along with the three primary UN SDGs, we have also identified that we contribute to various other UN SDGs through our strategic sustainability pillars.



Our commitment to UN SDG 3 is reflected in our operational responsibility to ensure the health, safety, and well-being of our employees, contractors, and the communities in which we operate.



Our investments in education and economic development contribute to UN SDG 4, as we work to promote social and economic development and improve the livelihoods of local communities.



We contribute to UN SDG 12 through our environmental actions, including our efforts to reduce our carbon footprint, minimize waste and pollution, and improve resource efficiency.





We promote sustainable marine and terrestrial ecosystems through our environmental programs, including our biodiversity and conservation programs, and our efforts to reduce deforestation and protect natural habitats.

Steel

Aluminum

QatarEnergy businesses

Our vision is to be one of the best energy companies in the world. To achieve this vision, we focuse on operational excellence, innovation, and growth. We aim to consistently deliver high-quality products and services to our customers while maintaining a strong commitment to safety, sustainability, and proactive communication.

Value creation

evolving to keep pace with the skills and capabilities needed to embrace a more sustainable future.

Following is a visual demonstration of our value creation model, showcasing how we transform inputs to our business into outputs that ultimately create value for global economies and societies.

What we do Input Output **Natural resources** Natural gas and natural gas liquids Qatar's natural gas reserves provide cleaner energy across the world to Liquified natural gas promote prosperity. We are one of Processing the world's largest providers of LNG, **Refined products** deploying the world's largest fleet of production nearly 70 LNG ships. **Synthetic fuels Knowledge and expertise Petrochemicals** We innovate to think beyond the business-as-usual and strive to keep ahead of the changing market needs. **Fuel additives Fertilizers** People With 8,000+ employees we are

Sustainability is at the heart of our activities and we believe that diversity is a strength to achieving our goals. By harnessing the collective power of QatarEnergy and its affiliates, we drive innovation and advance sustainable energy solutions. We are committed to using our expertise and resources to build a more sustainable world for all and believe our diversified group of companies is the key to making that vision a reality.



Exploration, drilling & production

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





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)
- Qatar Chemical Company II (Q-Chem II)
- Qatar Fertilizer Company (QAFCO)
- Gulf Formaldehyde Company (GFC)
- Qatar Melamine Company (QMC)



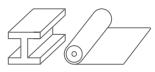
Refining & gas processing

- QatarEnergy
- Qatargas (QG)
- Orvx GTL



Support services

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



Metals

- Qatar Aluminum (Qatalum)
- Qatar Steel



Power & utilities

- Ras Laffan Power Company (RLPC)
- Mesaieed Power Company Limited (MPCL)
- Ras Girtas Power Company (RGPC)
- Umm Al-Houl Power (UHP)



Storage & transportation

- Qatar Fuel Company (WOQOD)
- Qatex Limited

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Geographic footprint

Our global outreach is connected to more than 20 countries across the world, and we have 45 joint venture (JV) partnerships domestically and internationally. We have investments in various regions across the world – in North and South America, Europe, Africa, and Asia. While we have a global presence as a proactive non-operating organization, we are currently working on expanding our geographic portfolio through partnerships with prominent international organizations. This effort involves advancing international basin and hydrocarbon resource explorations.

We are proud to provide reliable, affordable and sustainable energy solutions to consumers worldwide, powered by the unmatched potential of LNG and hydrocarbons. But our ambition doesn't stop there. We constantly seek new ways to expand our reach and deepen our impact, working hand in hand with top energy suppliers across the globe to bring sustainable energy solutions to every corner of the world. By combining our expertise, passion, and commitment to sustainability, we are driving real change and making a positive contribution to the global economy. Together, we are building a more sustainable future, one step at a time.

QatarEnergy's global partner and asset network





















Scope and boundaries

This is QatarEnergy's thirteenth consecutive annual sustainability report. Unless otherwise stated, the report covers the period between 1 January 2022 to 31 December 2022, and presents our operational and non-financial performance, alongside our sustainability policies and initiatives. The disclosed data pertains to the consolidated results of the QatarEnergy Group¹. Data pertaining to climate change action encompasses QatarEnergy's operated and non-operated assets where equity interest is held. All other data covers QatarEnergy's operated assets only, unless otherwise stated.

¹QatarEnergy Group refers to QatarEnergy and its consolidated subsidiaries, and where the context requires, its joint operations, JVs and associates.

Reporting guidelines

We adhere to the principles of the Global Reporting Initiative (GRI) Standards and have used the framework as a point of reference for our reporting. The report is prepared in accordance with the QatarEnergy Information Classification Standard and is classified as public.

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Throughout 2022, we sustained our membership in the Extractive Industry Transparency Initiative (EITI) and engaged in multiple sessions where improved reporting and disclosure practices were shared. We remain actively involved with the EITI, striving to improve public disclosure of our operations.

Ultimately, our commitment to transparency is not simply about open and honest reporting. It is also about building a stronger and more resilient business that can thrive in a rapidly changing world. By being open and accountable, we can build trust with our stakeholders and create a culture of innovation and excellence that will help us achieve our sustainability goals for years to come.

Stakeholder engagement and materiality

Regulators and governments across the globe are increasingly emphasising not only on external issues impacting enterprise value, but also on how enterprises impact people and the planet. We believe that analyzing our current impacts will better equip us for future developments and allow us to improve in proactively managing foreseeable risks and challenges, identify value drivers and set appropriate targets. We also believe that with impact analysis comes awareness, not only of implications for the business, but also for the environment, local communities, and broader society.

30 Understanding stakeholder priorities

It is fundamental to our reporting to target issues that are material to our stakeholders and could impact our ability to be a sustainable business.

Materiality assessment continues to be an important tool to ensure we understand stakeholder perspectives and address the most relevant issues through our focus areas. Our impacts are far-reaching, so we have identified and prioritized issues that are most material for our business and to the stakeholders across our value chain.

As detailed in our Sustainability Report 2021, we undertook an extensive materiality assessment and issued a prioritization exercise through engaging a wide range of external and internal stakeholders. We conducted different Q&A sessions and workshops, collected and documented input to ensure that we address the most relevant and critical issues raised by our stakeholders.

For the current reporting period, we revisited and validated the list of stakeholders and their critical concerns, which we have addressed in the present report.

QatarEnergy's main stakeholder groups







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Understanding our contributions

By understanding our priorities, we are better equipped to allocate our resources and focus our efforts where they are needed most. That's why in this report, we build upon our 2022 materiality assessment by refreshing and consolidating the list of material issues relevant to QatarEnergy across the entire value chain. We then reprioritized and targeted critical and very important issues. These material issues influence our strategy, and inform the evolution of our reporting, as well as our short, medium, and long-term targets.

Materiality assessment process at QatarEnergy



Identification

We identified QatarEnergy's current and potential impacts.



Assessment

We assessed the significance of the identified impacts through quantitative and qualitative analysis.

Prioritization

We established a list of most significant impacts, regrouped as material topics in order of priority.



The following visual outlines key areas of importance to QatarEnergy and our stakeholders. We categorized our material issues across three sustainability pillars and responsible business conduct, and structured our report accordingly.

QatarEnergy's material topics

Responsible **Business Conduct** and Governance

- Anti-corruption
- Transparency and reporting
- Human rights assessment

Climate Change and Environmental Action

- Emissions
- Environmental compliance
- Energy
- Investing in renewable solutions
- Waste
- Water and effluents
- Biodiversity

Operational Responsibility

- Occupational health and safety
- Assets Integrity and reliability
- Data privacy and protection
- Customer health and safety
- Security practices
- Technology and innovation
- Market presence

Social and Economic Development

- Economic performance
- Local communities
- Training and education
- Diversity and equal opportunity
- Labour management relationship
- External stakeholder engagement
- Socio-economic compliance

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Data collection, quality, verification, and assurance

The reporting process and collection of the relevant data is managed by the Sustainability Strategy Team, subject to review and verification by functional owners.

Sustainability data collection is integrated into QatarEnergy's broader reporting system, including internal controls. We have implemented several control measures to secure the quality of our data consolidation and reporting, such as clear segregation of responsibilities, multi-level authorization, and approval systems, as well as rigorous data verification and assurance processes to ensure the accuracy and completeness of our GHG emissions data and sustainability reporting.

We engage independent third-party verifiers to review and assess our GHG emissions data to ensure compliance with relevant reporting standards, such as the Greenhouse Gas Protocol, EU Monitoring and Reporting Regulation (EU MRR), and provide a robust data reporting.

Additionally, we engage external assurance providers to review our sustainability report to ensure the completeness and accuracy of our reporting, including our sustainability performance.

Executive oversight over reporting

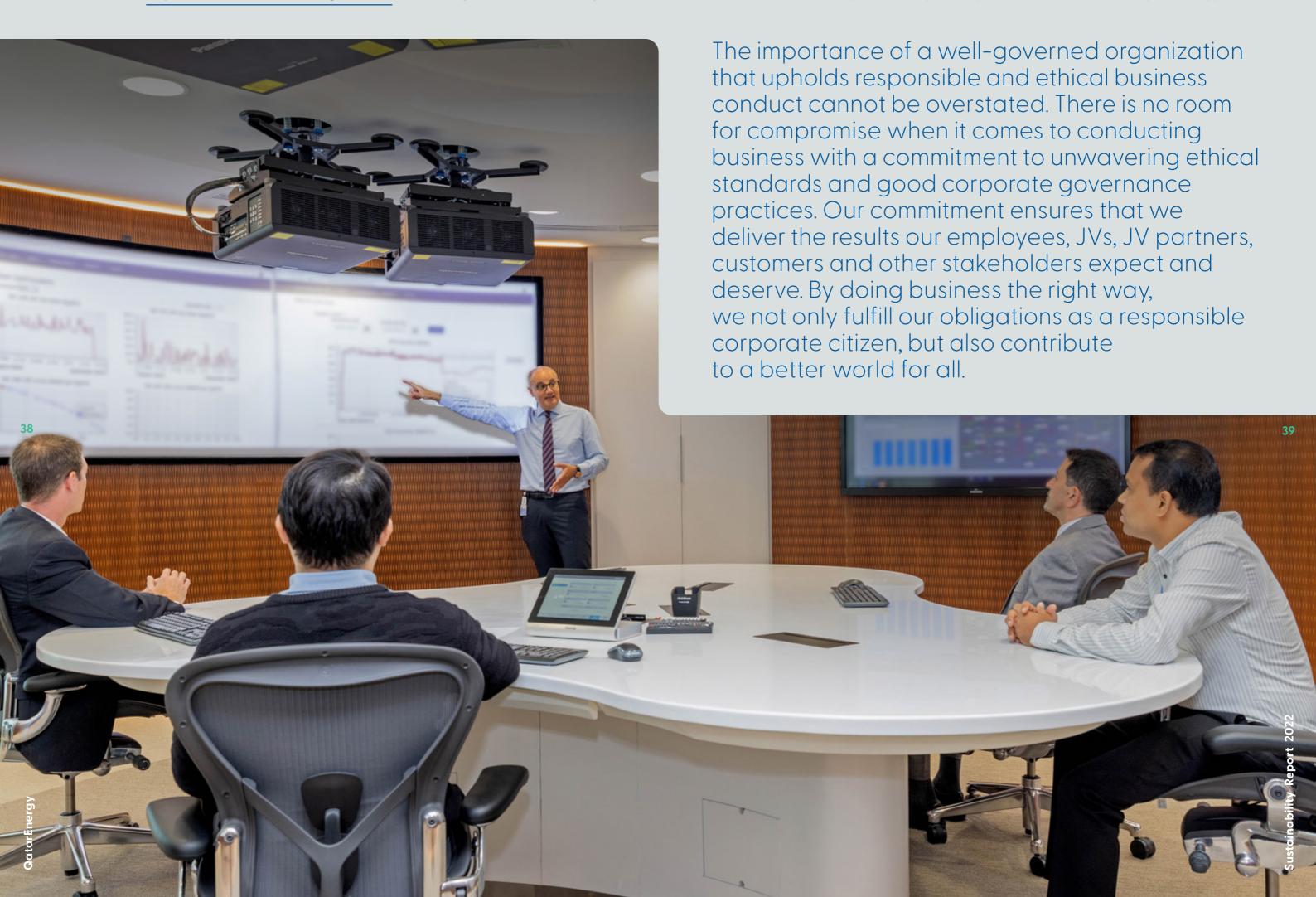
The senior management team of QatarEnergy plays a critical role in overseeing and driving the sustainability reporting process. The Sustainability Strategy Team of QatarEnergy worked closely with the data custodians and directors to ensure that the report meets relevant standards and guidelines. Before releasing the report, H.E. the President & CEO and the Executive Leadership Team (ELT) reviewed and approved it to ensure alignment with our values and priorities.



RESPONSIBLE BUSINESS CONDUCT AND GOVERNANCE

- Governance structure
 - Board of Directors and Executive Leadership Team
- Managing our business with integrity and respect
 - Our values
 - Ethics and compliance program
- Group Governance Framework
- Managing our risks
- Sustainability Governance

Overview



Governance structure

As an energy organization, we need to adapt to change, which means we need to entrench solid governance practices while maintaining the flexibility to respond proactively to the fast-changing regulatory environment and market trends. For us at QatarEnergy, governance entails more than legislative compliance. We believe that strong governance and a focus on ethical and compliant business practices contribute to living our values through enhanced accountability, strong risk and performance management, transparency, and effective leadership oversight. We also recognize the cooperative relationship between QatarEnergy and its stakeholders, adopting a stakeholder inclusive approach that balances the interests of all.

The governance structure of QatarEnergy is focused on implementing leading governance practices, ones that are aligned with our values and the principles found in our Code of Conduct and foundational policies. These guide us to operate in a trusted, legally compliant and responsible manner.



Report

Sustainability

Board of Directors and Executive Leadership Team

Our highest governance body is QatarEnergy's Board of Directors. This body is accountable to the Supreme Council for Economic Affairs and Investment which represents the State of Qatar. In 2022, the Supreme Council for Economic Affairs and Investment held four meetings, chaired by His Highness Sheikh Tamim bin Hamad Al Thani, the Amir of the State of Qatar.

Conducting business the right way and building public trust in QatarEnergy takes good leadership. QatarEnergy's Board of Directors is made up of seven dynamic and experienced leaders from across Qatar's different industries. Our Board members are appointed by the Supreme Council for Economic Affairs and Investment. They provide direction to ensure the relevance and sustainability of our business model by monitoring the economic trends, the availability and quality of capital inputs, and our stakeholders' needs. The Board of Directors has ultimately two key responsibilities. These include leadership and organizational oversight, both of which are critical for guiding QatarEnergy towards achieving its strategic goals.

Board leadership involves providing guidance, direction and oversight to QatarEnergy's Executive Leadership Team, which comprises leaders of different functions and businesses across QatarEnergy. This includes setting the strategic direction, monitoring performance, and ensuring that the resources are being used effectively and efficiently.

Organizational oversight refers to the responsibility the Board has to identify, evaluate, and manage risks that could potentially impact QatarEnergy's ability to create value and achieve its longterm goals and objectives. Effective risk management involves working closely with QatarEnergy's ELT to understand the risks that QatarEnergy faces and developing appropriate strategies to address and minimize those risks. Board leadership also ensures QatarEnergy operates in a legally compliant and responsible manner.

By providing strong leadership and effective organizational and risk oversight, the Board helps ensure that QatarEnergy is well-managed, financially and sustainably viable and ultimately positioned for long-term success.

The Board's work is mainly performed within the framework of formal meetings and through meetings of its Board Audit Committee. Regular contact is maintained between the Chairman of the Board and the CEO, during which ongoing issues are discussed, ensuring that Board decisions are executed.

Further information regarding QatarEnergy's governance structure and the members of the Board of Directors can be found on our public website.



H.H. Sheikh Abdullah bin Hamad Al Thani

The Deputy Amir Chairman of the Board

His Highness Deputy Amir was appointed as Chairman of the Board of Directors of QatarEnergy on the 4th of November 2018. His Highness holds a number of positions including the General Supervisor of the Private Amiri Diwan, Chairman of the Board of Trustees of Qatar University, Vice Chairman of the Supreme Council for Economic Affairs and Investment, and Chairman of the Board of Directors of Sheikh Jassim bin Mohammed bin Thani Social Welfare Foundation. His Highness also supervises the Social and Sport Contribution Fund (Da'am).

His Highness attended Georgetown School of Foreign Service in Qatar, graduating in 2010 with a Bachelor of Science in Foreign Service.



H.E. Saad Sherida Al-Kaabi

Minister of State for Energy Affairs QatarEnergy President & CEO Deputy Chairman

H.E. was appointed as President and CEO of QatarEnergy in 2014. H.E. holds a Bachelor's Dearee in Petroleum and Natural Gas Engineering from Pennsylvania State University and has over 30 years of experience in QatarEnergy.



Mr. Nasser Khalil Al-Jaidah

Board Member

During his 40 years of service at QatarEnergy, Mr. Al-Jaidah was involved directly in the major transformation of the oil & gas industry in both upstream and downstream projects in Qatar. He was the CEO of Qatar Petroleum International until 2015.



H.E. Ali bin Ahmed Al-Kuwari

Minister of Finance **Board Member**

H.E. served as the Group Chief Executive Officer of Qatar National Bank from 2013 to 2018. H.E. has more than 30 years of experience in the banking and financial sector in Qatar.



H.E. Sheikh Mohammed bin **Hamad bin Qassim** Al-Abdullah Al-Thani

Minister of Commerce and Industry **Board Member**

H.E. was appointed Minister of Commerce and Industry in 2021. H.E. currently holds several senior positions in the State of Qatar.



Sheikh Khalid bin Khalifa bin Jassim Al-Thani

CEO of Qatargas **Board Member**

Sheikh Khalid bin Khalifa Al-Thani held different positions in QatarEnergy including Business **Development Manager** of MIC and Director of RLIC before taking over as the **Chief Executive Officer** of Qatargas in 2010.



Mr. Said Mubarak Al Muhannadi

Board Member

Mr. Said Al Muhannadi worked for QatarEnergy for 38 years during which he held several senior positions and represented the organization in various boards and management committees. In November 2018, he was appointed as Board Member of QatarEnergy.

Collaboration

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Managing our business with integrity and respect

Our values

Responsibility

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

Collaboration



We communicate across all areas and levels, sharing information and considering diverse viewpoints to achieve our common goals. We empower others, build ownership, create accountability, and enhance cooperation.

Respect



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

We believe that doing business responsibly is not only the right thing to do, but it also makes good business sense. We want our customers and key stakeholders to feel confident that they are dealing with an organization that shares their values and operates with transparency, fairness, and integrity. As an organization, our values align with this vision. They support our culture and underpin our actions and how we treat all our stakeholders.

Responsibility



Integrity

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

Safety



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

Excellence

We continually improve our processes to achieve greater efficiency, productivity, and higher performance. We generate and are open to new ideas.



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- Anti-Bribery and Corruption Policy
- Anti-Fraud Policy
- Anti-Money Laundering Policy

Working with others

• Stakeholder Engagement Policy

How we do business

• Climate Change Policy

Environment Policy

• Sustainability Policy

- Asset Protection Policy
- Competition Policy
- Confidential Information Policy
- Conflicts of Interest Policy
- External Communication and Disclosure Policy
- Regulatory Compliance Policy
- Trade Compliance Policy

Translating our values into actions

Our commitment to maintaining high standards is upheld by our Code of Conduct and foundational policies. These serve as a guide for our business practices. To keep up with industry and regulatory changes and meet the evolving expectations of our stakeholders, we regularly review and update our commitments as outlined in these documents. In addition, we offer continual training and support to our employees to ensure they comprehend and understand our commitments for responsible business conduct.

A key component of our organizational governance is our foundational documents, including our Code of Conduct, Shaping Who We Are, and our 19 foundational policies. These documents describe our commitments and expectations pertaining to our investments, risk tolerance, and related operating practices. They communicate our commitments to climate change, environmental conservation, human rights, occupational health and safety, and our zero-tolerance stance regarding fraud and corruption.

Our foundational policies were published in late 2021 and are aligned with the sections of our Code of Conduct, namely Working Together, Representing Our People; How We Do Business, Representing Our Practices; Working With Others, Representing Our Partners; and Living the Code, Representing the Importance of Speaking Up.

Compliance with all these policies is mandatory for our employees, while we actively encourage our business partners to create and adopt similar policies of their own. Together, we can create a culture of sustainability, transparency and ethical business practices that will benefit us all.

Our values, Code of Conduct and 19 foundational policies are the backbone of our shared commitments towards how we do business, collaborate and interact with others. These documents establish expectations for our conduct, encompassing the actions of our majority-owned subsidiaries, JVs, and other key business partners. They form the foundation of QatarEnergy and are pivotal in positioning us as a preferred partner, both within the State of Qatar and globally. Our uncompromising commitment to ethical leadership drives us to operate in a safe, environmentally conscious, and ethical manner that aligns with the guiding principles outlined in all our foundational documents.

Working With Others How We Do Business **Living the Code** Speaking Up Policy

Working together

- Human Rights Policy
- Occupational Health and Safety Policy
- Privacy of Personal Information Policy
- Respectful Workplace Policy

Focusing on our commitments

In our quest to uphold and respect human rights, we adhere to the principles of equality, accountability, and participation, and we strive to work collaboratively with all stakeholders to promote and protect human rights for all. We recognize that human rights violations are serious, and we are committed to using all available tools and strategies to prevent, address and remedy such violations.

In 2022, expanding on our commitment to human rights, we drafted our first Anti-Human Trafficking (AHT) Plan, which includes the creation of an Anti-Human Trafficking Standard. The purpose of this Standard is to outline the minimum requirements, from a human rights perspective, for engaging our personnel and business partners, and to ensure that we meet our commitments as outlined in our Human Rights Policy. This standard will apply to all QatarEnergy personnel and business partners, including contractors, sub-contractors, suppliers, vendors, agents, and other providers of goods, services, or materials. The AHT Standard covers various aspects, such as the tendering and awarding of contracts, recruitment of personnel, deployment of personnel, payment of personnel,

end of contract and personnel repatriation, responsibility of QatarEnergy's business partners, auditing for compliance, reporting misconduct, and disciplinary action.

During the reporting period, we made significant strides in raising awareness about the issue of human trafficking. One of our key efforts involved conducting a series of four separate one-hour sessions, which were attended by a total of 450 people. These sessions were specifically designed to educate individuals in key positions about the prevalence and impact of human trafficking and to help people recognize the signs of trafficking in their sphere of influence. Through these sessions, we aimed to empower individuals to act and make a difference in the fight against human trafficking. Our plan for 2023 is to continue building awareness on this important topic.



Ethics and compliance program

Our ethics and compliance program is a comprehensive set of policies, procedures, and practices designed to ensure that QatarEnergy operates with the highest standards of integrity and in compliance with applicable laws and regulations. We have a system for reporting and investigating potential violations of these standards, as well as measures to protect individuals who raise concerns, ensuring their confidentiality is maintained and that they are not retaliated against. Through our ethics and compliance program, we strive to build trust with our employees and external stakeholders, thereby promoting and maintaining a culture of transparency, accountability, and ethical leadership.

Leading by example

Effective leaders set the tone for their teams, establish goals and expectations, and provide guidance and support when needed. Perhaps one of the most important roles of a leader is to set an example for the entire organization.

When leaders lead by example, they demonstrate the behaviors and values they want to see in their teams. This not only establishes a clear standard for behavior, but also creates a culture of accountability, and contributes to a more cohesive and productive workplace.

With this in mind, in 2022 we launched an innovative initiative called Conversation Cafés, which provides a platform for informal yet informed discussions between members of our leadership teams on the principles outlined in our foundational policies. The objectives of these Cafés is to engage our managers in the ethical leadership journey QatarEnergy has embarked upon. By highlighting the significant changes that our organization is undergoing, and focusing on our strategy and policy commitments, we aim to inspire our leaders to be part of the journey.

The interactive format of the Café has resulted in a candid and open dialogue involving a significant portion of our leadership team. This has allowed for the exchange of ideas and perspectives between managers and their employees, creating a culture of inclusivity and transparency. The response from employees to the two Cafés held in 2022 was overwhelmingly positive and we plan to continue this initiative throughout 2023.

Noor Abdulaziz Al-Mulla

Lead Dentist

Inspiring leadership mobilizes people

Imagine a sustainable future that will include inspirational and transformational leaders with a growth mindset, who will understand the diverse perspectives of future thinking, nurture creativity and innovation, and anticipate and adopt change.

This leadership will continuously embrace cultural integration, prioritize well-being and environmental health, and through fostering human engagement, nurture inclusive communities that respect and value diversity, and ultimately strengthen the interconnectivity between people, planet, and

This is the type of leadership that mobilizes people.



June 2022 Our foundational policies and why they matter

The Café was on the importance of policies and focused on the introduction of our 19 new foundational policies and the value of embedding them throughout the organization.

September 2022 Our sustainable future

This Café focused on the topic of sustainability, and in particular, QatarEnergy's Sustainability Strategy and how our decisions should be made with this strategy in mind.

We believe that going forward, Conversation Cafés will be a valuable tool in promoting ethical leadership within QatarEnergy. By facilitating open communication and dialogue, we can ensure that our actions align with our values, strategy, and policy commitments. This initiative also provides a unique opportunity for our leaders to be directly involved in shaping the future of our organization. We look forward to continuing these conversations and building on the success of this initiative.

Shaping employees hearts and minds

In 2022, we dedicated considerable effort to effectively communicating our policy commitments and expectations to our workforce of over 8,000 people. Our approach, known as our Policy Embedding Plan, involved a focused effort on highlighting the significance of the foundational policies and what this means for everyone.

Throughout the reporting period, our primary focus was on advancing our sustainability agenda, with a strong emphasis on raising awareness around climate change mitigation and our environmental practices. The Policy Embedding Plan included sharing a range of materials and visual aids, such as policy briefing notes, Point Bulletins, Ethics Moments, and videos. Considerable effort went into the development of these materials with a focus on enhancing employee awareness around the importance of the topics. The videos featured several of our leaders, as well as students from QatarEnergy Mesaieed and Dukhan schools. Titled Leaders, Leading the Way and Kids on Compliance, the videos touched viewers hearts and minds, and inspired our employees to understand the importance of their role at QatarEnergy and their value to the success of the organization.













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Upholding ethics through strong governance

Integrity ambassadors

Our integrity ambassadors are instrumental in disseminating QatarEnergy's values, Code of Conduct, and foundational policies, including our focus on ethical leadership amongst our employees. The integrity ambassadors play a crucial role in promoting a culture of integrity within QatarEnergy.

In 2022, we continued to foster our partnership with the integrity ambassador network, which consisted of approximately 70 employees of QatarEnergy. Virtual meetings were held with the ambassador network on a regular and recurring basis throughout the calendar year. During these meetings, all ambassadors were invited to join a one and a half hour virtual session to discuss the current topic being focused during the month. We also revived our in-person Annual Integrity Ambassador Forum

which was held in June 2022.

This was the first time the Forum was held after a three-year, Covid-related hiatus. The forum was attended by approximately 40 of our ambassadors, plus several members of our ELT. Relevant subject matter experts (SMEs) also participated in the event. The gathering of these individuals and the focus of the topics up for discussion, collectively led to the success of this special, full-day event.

Code-of-Conduct

At QatarEnergy, we take a strong stance against any form of corruption, bribery, or unethical behavior. In line with our steadfast commitment to business integrity, we make it a point to continuously engage with our employees about our business practices and code-related expectations.

In 2022, we asked our employees to once again review the principles outlined in our Code of Conduct. This annual review, known as our e-Code of Conduct, is mandatory for all employees to complete. It has been offered annually for the past four years but underwent a major refurbishment during 2022. The module now includes reference and related knowledge checks (learning questions) associated with several of our foundational policies. More than 8,300 employees completed the module and confirmed their compliance with our Code of Conduct during the month of November 2022.

As part of the process, we also asked our employees to answer a series of self-reflection questions. Based on the results of one of these questions, 93% of our employees indicated that they remain confident that QatarEnergy is committed to doing business ethically and in accordance with our Code of Conduct. Additionally, 96% of our employees indicated that they did not feel any pressure to compromise our values or principles to fulfill their job responsibilities.

The self-reflection questions did revealed that some employees were hesitant to voice their concerns regarding observed or perceived issues of misconduct.

They indicated that they believed that no action would be taken, or they might face retaliation or blame for speaking up about a matter of misconduct. As a result, we have recognized the need to raise awareness of our Speaking Up Policy and emphasize that all cases are treated seriously and investigated thoroughly. Our 2023 Policy Embedding Plan will prioritize this issue, focusing on promoting a deeper understanding of our Speaking Up Policy and related procedures.

In our Code of Conduct, and through our Speaking Up Policy, we encourage anyone to report a concern, a possible violation of our policies, or to seek advice on how to implement our policies and practices for responsible business conduct. We provide employees with means to speak up anonymously and without fear of retaliation through our 24/7 Speaking Up Line or a dedicated email address at hotline@qatarenergy.qa. Our Speaking Up Policy outlines how people are protected from retaliation when they raise or report, in good faith, a suspected act of misconduct or a violation of the law.

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Group Governance Framework

In 2021, we conducted a baseline assessment of QatarEnergy's current approach to governance of the QatarEnergy group of companies, and subsequently identified key levers for improvement. In 2022, we engaged our stakeholders to obtain feedback on how to enhance our organizational governance oversight for the QatarEnergy group of companies, including JVs.

During these consultations, we defined and agreed on design principles to adopt an organizationwide approach and collaborated with group companies to understand the challenges of implementing the new approach. The project was presented to the ELT, which approved the next phase to commence in 2023. A Steering Committee was established to oversee progress and guide the project team.

The project objective is to implement a framework that will provide guidance to company directors on how to apply QatarEnergy's new corporate policies in a group company context and provide targeted support to enhance governance and compliance. It seeks to identify practical ways to enhance collaboration with group companies, reduce risks and improve compliance, ultimately creating a more efficient and effective group of companies.



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Director Engagement Program

In 2021, we initiated the Director Engagement Program, that aims to enhance the skills and performance levels of QatarEnergy JV directors. The program engages with both current JV Board members and potential future appointees. Our efforts to nurture and advance the skills of these directors continued in 2022, wherein we conducted three director webinars and circulated three Director Connect newsletters. The response to these endeavors has been overwhelmingly positive, and we plan to make them a regular part of our Director Engagement Program in 2023 and beyond.

The 2022 webingrs and newsletters focused on the following objectives:

Board committees

Providing information on the different types of Board committees and helping the directors understand the committees' roles

JV director briefings

Building an understanding on the role of the directors for the alignment with QatarEnergy's position on key governance issues.

Cyber security

Helping directors assess the quality of the discussions around cybersecurity and the respective company's readiness for a cyberattack.

Our webinars for directors were a dynamic blend of internal and external perspectives. We had the privilege of hosting guest speakers from outside our organization, who offered valuable insights on various governance topics. Additionally, representatives from QatarEnergy's leadership team shared their perspectives on related subjects and helped to deepen the directors' understanding of QatarEnergy's operations. Our Director Connect newsletters complemented the webinars by providing more in-depth information on the topics discussed, along with recommended additional resources and reading materials. These newsletters also featured a section that regularly shone a spotlight on one of QatarEnergy's JVs, highlighting their accomplishments and contributions.

In our ongoing efforts to improve director onboarding, we are developing a learning management solution, which is anticipated to be launched in 2023.

Additionally, we have established a knowledge repository, providing directors with access to a governance toolkit and other essential resources.

Continuing our partnership with the International Institute for Management Development (IMD) Business School, we remain committed to training our current directors. In 2022, we conducted the third edition of our Director Development Program, which offered two unique programs. These programs enhanced the skillsets of our Board members and included the following:

Foundation of Directorship (FOD) Program

In 2022, 30 directors participated in this module with a total number of 1242 training hours. These participants have been appointed to boards since 2019.

Director Excellence (DE) Program

In 2022, 89 directors who are alumni of past DE and FOD programs (held in 2019) attended this refresher course for a total number of 840 training hours.

Managing our risks

As a global energy corporation, QatarEnergy recognizes the need to manage a variety of risks through a comprehensive risk management framework that integrates risk management into daily business activities and strategic planning. Our risk management framework adheres to the ISO 31000 standards and consists of eight essential elements aimed at mitigating risks that could impact our value chain. These risks can be strategic, financial, operational or compliance related. QatarEnergy has a standardized approach to identify, assess, and report risks, ensuring that they are efficiently managed, leading to a successful and effective risk mitigation process.

Risk appetite and strategy

Risk identification and measurement

Overview

Risk mitigation

Risk reporting

Link to decision making process

Organization and governance

Systems

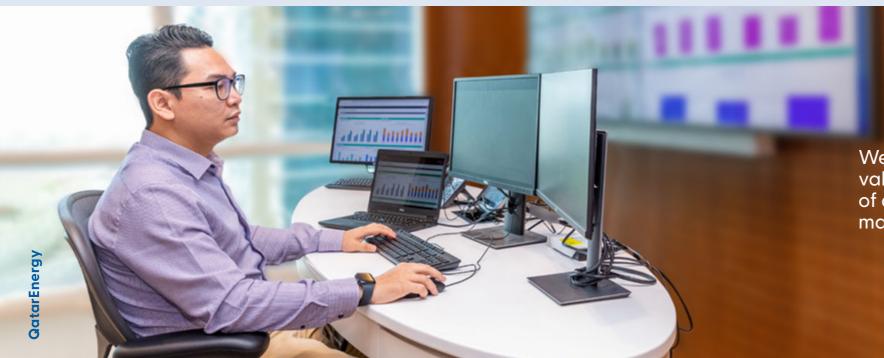
Risk culture and competencies

The QatarEnergy Enterprise Risk Management Framework includes a comprehensive assessment of risks related to the Sustainability Strategy pillars of Operational Responsibility and Social and Economic Development, including personal and process safety risks and risks relating to compliance.

Risks related to the Sustainability Strategy pillar on Climate Change and Environmental Action are under constant review. In addition to risks relating to the environmental impact of our activities, we actively evaluate risks arising as a consequence of the ongoing energy transition. These risks are identified and assessed with reference to their potential impacts on QatarEnergy:

- **Operational risks**, including the impacts of additional costs required to comply with emerging regulations and policies relating carbon emissions.
- Commercial and financial risks related to changes in the demand and price for our key products and loss of access to certain markets.
- Compliance and reputation risks that may result in litigation, loss of reputation, and stakeholder pressures.
- Environmental risks relating to physical changes in the climate of areas in which we operate.
- **People risks** relating to our ability to attract and retain resources and capabilities required to manage the evolving business.

The risk landscape for energy providers continues to shift rapidly and radically. Despite the challenges, QatarEnergy's approach to risk management has demonstrated agility in managing the quickly evolving risks. Risks are becoming increasingly interconnected, and emerging risks cut across and impact multiple risk categories. Aiming to remain at the forefront of best practice, the core objective that underpins our approach to manage risk is to ensure responsible growth and adaptability.



We remain committed to creating sustainable value through a thorough understanding of the needs of all our stakeholders, understanding and managing material risks to which QatarEnergy is exposed.

Sustainability Governance

At QatarEnergy, we understand the importance of Sustainability Governance and the role it plays in shaping our future. We believe that by implementing effective sustainability practices, we can make a positive impact on the world around us while ensuring the long-term success of our business.

Oversight of the progress on sustainability issues that are important to QatarEnergy and our stakeholders occurs at the highest levels of our organization. This encourages stronger consideration of sustainability matters when making decisions and improves cross-functional collaboration.

Our governance model for sustainability is designed to integrate the management of distinct priorities and overlapping areas, while also addressing contributions to both internal and external initiatives. By considering the potential opportunities and risks associated with climate change, our structure helps guide our business strategies and risk tolerance.

In 2022, a Sustainability Steering Committee was established. It is a partner network committee, that creates a platform to strengthen inter-company collaboration on environmental, social and governance (ESG) planning, effective performance reporting, sharing of good practices, and provision of strategic guidance for the energy sector in the State of Qatar.

The Sustainability Strategy Team of QatarEnergy comprises experts from across the business who lead and advise on key environmental, social, and operational initiatives.

Sustainability Steering Committee

Working group on climate change and environment

Working group on social and operational responsibility

Shared milestones and deliverables across initiatives to leverage capabilities

Oversight of QatarEnergy's sustainability ambitions, including our approach to energy transition, is embedded at the ELT level, where the respective targets and objectives are confirmed and approved. These targets are cascaded accordingly through the governance and departmental structures of QatarEnergy to ensure we remain on track to meet our sustainability ambitions.



- 2022 performance highlights
- Our commitment to a low-carbon economy
- Energy Transition is a complex global challenge
- Our contribution to global efforts
- Our climate change action
 - Mitigation measures
 - Adaptation measures
- 5C Carbon Management Framework
 - Consolidate
 - Curb
 - Create
 - Compensate
 - Circulate



Climate change is one of the most significant global challenges facing our planet – a challenge that requires collaborative and coordinated action, as well as investment at local, regional, and global levels. At QatarEnergy, we are committed to playing our part. Our Sustainability Strategy and actions are guided and informed by the State of Qatar's commitment to the Paris Agreement, as reflected in QNV 2030 and the National Climate Change Action Plan (NCCAP).

As one of the largest producers and suppliers of natural gas, we recognize the important role that we can play in the global effort for rapidly reducing GHG emissions and supporting the transition to a low-carbon energy system. In addition to our focus on the supply of low-carbon intensity gas, we are also investing in the development of new low-carbon businesses and solutions that can help reduce carbon emissions across value chains.



Our commitment to a low-carbon economy

As a leading energy corporation, we are committed to promoting sustainability through our operations and supporting the global transition to a low-carbon economy. We recognize that the adoption of cleaner energy carriers is essential for achieving a more sustainable and equitable future, while also ensuring economic stability.

> We remain committed to continuously improving our operations and technologies to reduce our carbon footprint and contribute to the transition towards a low-carbon economy. This includes investing in renewable energy projects, implementing energy efficiency measures in our operations, and exploring CCS technologies.

As a supplier of natural gas, we believe we are in a prime position to contribute to the global energy transition. As the demand for energy grows, natural gas will play a critical role in meeting this demand while reducing carbon emissions. Along with being a cleaner yet reliable and affordable energy source, natural gas can provide the critical baseload power supply that can accommodate

can also be used as a feedstock for the production of low-carbon hydrogen and ammonia. It can also help to reduce emissions from industries and other sectors. Natural gas plays a vital role in providing energy security, particularly in regions where there are limited energy resourcesor a lack of infrastructure.

Establishing a position in low-carbon energy business is one of QatarEnergy's strategic levers for contributing to the global efforts towards combatting climate change and it entails several commitments, such as establishing a position in emerging opportunities in blue ammonia and hydrogen businesses, building the State of Qatar into a major CCS hub, optimizing our position in solar energy, and maximizing the value of

Minimizing emissions is a strategic commitment underpinning QatarEnergy's strategy. Sustainability considerations are at the heart of our activities. We have set ambitious targets to reduce our carbon footprint in line with our commitment to tackle climate change. We aim to reduce the carbon intensity of our operations (Scope 1 and 2 emissions) by 35% across our LNG facilities and by 25% across our upstream facilities, by 2035. We believe these targets will help us make significant progress toward our goal of becoming a more sustainable business while supporting global efforts to mitigate climate change.



State of Qatar's commitment to tackling climate change

Qatar has identified climate sustainability as a critical focus of its growth strategy. QNV 2030 emphasizes the importance of environmental protection and combating climate change by improving preparedness, building resilience, and enhancing the society adaptation. The State of Qatar further reaffirmed its commitment to combating climate change through the publication of the NCCAP in 2021, which was developed in coordination with more than 50 entities within the country, including QatarEnergy. This plan includes a range of measures to mitigate and adapt to climate change, including diversifying the economy

and reducing emissions by 25% by 2030 compared to a business as usual scenario (base year 2019).

Additionally, the State of Qatar's endorsement of the Global Methane Pledge, which encourages the participants to contribute to the collective efforts to reduce global methane emissions by at least 30% from 2020 levels by 2030, provides critical momentum to global efforts to urgently reduce methane emissions.

In 2022, through the Methane Guiding Principles (MGP) Initiative, QatarEnergy was a contributing member in

developing the publicly available MGP Oil & Gas Sector Toolkit for the Global Methane Pledge, which supports policymakers as they develop sound policy and regulation to drive down oil & gas methane emissions.

Through consolidated efforts manifested in different institutions and the introduction of new policies, regulations, and green initiatives, the State of Qatar continues to accelerate and support efforts directed at reducing, and adapting to the harmful effects of climate change.





Sustainability Report 2022

Energy Transition is a complex global challenge

As the world aspires to deliver on its commitment to address Climate Change, coordinated and effective actions are needed to ensure a just and balanced

the global energy system instead of focusing

However, it needs to be recognized that problems that demand global solutions. A the emissions from hydrocarbon energy come

processing, and end-use of energy spans across countries and continents. Because most of the emissions are generated when energy is used, countries that are the largest consumers of energy are also the largest

To reduce emissions through the energy

- Secure and affordable supply of new combined with mitigation technology
- Robust emissions management in the

This implies using all the levers that are available now instead of waiting for a single silver-bullet solution. Electrification of enduse is widely recognized as a key lever for rapid reduction in emissions from energy use. However, while growing the electricity generation capacity, it is equally important to ensure that emissions from legacy high-

carbon intensity power generation facilities are reduced as soon as possible. Natural gas used for generating power can halve carbon emissions compared to coal. This can be lowered further by adding CCS to the gas power generation.

Furthermore, the same scenarios also highlight that even in the most ambitious scenarios, the energy system cannot eliminate all emissions on its own. Deep reductions in emissions can only be achieved by mitigating unavoidable emissions by storing them in sinks, that can be natural, e.g. forests, or engineered, e.g. CCS.



Many hard-to-abate sectors will need to continue to rely on hydrocarbon energy and the resulting emissions will need to be increasingly mitigated. Rapid commercial development and deployment of CCS technology needs to be a global priority.

The energy system also needs to deliver an unprecedented improvement in energy productivity. Many of the solutions require the use of lightweight materials and better insulation. The use of natural gas in producing these critical petrochemicals derivatives will be needed to make this possible.

Another challenge is the distributional impacts of the energy transition. Some communities and regions are more dependent on fossil fuels than others, and the transition towards a low-carbon economy may disproportionately affect them. Hence, it is essential to ensure that the transition is just and inclusive, with measures in place to support affected communities.

Finally, there are significant financial challenges associated with the energy

transition. The transition toward a lowcarbon economy requires significant investments in new infrastructure and new technologies. New financing mechanisms are needed to ensure that the transition is adequately financed and that the costs are shared fairly.

While climate change is perhaps one of the most pressing challenges faced by society, energy security and energy poverty are other critical issues that need to be addressed in this transition. The availability and affordability of energy are crucial for economic development and social welfare. Therefore, we need to ensure that the transition toward a lowcarbon economy is done in a way that balances these concerns.

The transition towards a low-carbon economy is essential for addressing global challenges such as climate change, air quality, and energy security. By working together, we can address these challenges and build a more sustainable future for our planet and communities.

Our contribution to global efforts

As a responsible energy business, we recognize the pressing need to transition to a more sustainable energy future. We also believe that this transition is a global challenge that requires collaborative efforts from all stakeholders, including energy producers, consumers, governments, and industry leaders. We acknowledge that transitioning to a low-carbon economy is a gradual process and must be approached with a practical and realistic mindset. Each country and region has its own distinct energy requirements and conditions, necessitating individualized solutions rather than a one-size-fits-all approach.

The world needs to urgently work on all solutions needed for a balanced energy transition. At QatarEnergy, we believe we have a significant contribution to make toward the global effort to transition to a low-emission energy system. Our strategy for contributing to this global effort focuses on these priority areas.

Shantanu Chatterjee

Manager Sustainability Strategy

Taking action on all fronts

Society needs to transition to an energy system that allows everyone affordable and secure access to energy while reducing carbon emissions to mitigate the effects of climate change. This is not an easy task.

To address this challenge, we must rely on robust analysis of energy value chains underpinned by science. Emissions are a global problem. Solutions to that problem should be based on a systems approach and not fragmented by geographical boundaries.

Targets and solutions should consider their end-to-end impact on entire value chains instead of focusing on individual parts. Most of the emissions from energy that we use today comes from their use. We need to rapidly increase the share of those energy carriers in the mix, that produce lower carbon emissions when used. For example, natural gas when used in power generation produces much lower emissions

While new energy carriers and solutions emerge, we must focus on rapid deployment of all solutions that are available today and not wait for the "perfect solution". We will need them all.



Secure and affordable supply of cleaner natural gas for rapid reduction in carbon intensity of the power grid

QatarEnergy is a global leader in the production and distribution of natural gas, a cleaner and more environmentally friendly alternative to traditional fossil fuels like coal and oil. One of the key advantages of natural gas is that it produces significantly fewer GHG emissions compared to other fossil fuels when burned for energy. In fact, natural gas emits about 50% less carbon dioxide (CO₂) than coal and about 25% less than oil. This makes it an attractive option for power generation and other energyintensive industries looking to reduce their carbon footprint. QatarEnergy's focus on providing a secure and affordable supply of cleaner natural gas is an important step towards a low-carbon power supply mix and reducing GHG emissions.

CCS value chain at scale

QatarEnergy is actively developing a CCS value chain at scale, which involves capturing CO₂ from point sources, and then transporting it to a suitable storage site where it can be stored safely and permanently underground or in other longterm storage solutions.

QatarEnergy is committed to developing a CCS value chain at scale, which involves the deployment of carbon capture facilities, the development of transportation infrastructure to move captured CO, to storage sites and the establishment of secure storage sites where CO₂ can be safely, and permanently stored.

New low-carbon energy options

QatarEnergy is actively developing new low-carbon energy options, including blue ammonia. Blue ammonia is made from nitrogen and hydrogen. Hydrogen is produced through the process of steam methane reforming, where natural gas is converted into hydrogen and CO₂. The CO₂ generated from the ammonia production process is then captured and stored using CCS technology, producing blue ammonia. Blue Ammonia can be transported using conventional ships and then be used in power stations to produce low-carbon electricity. The investment in blue ammonia and the expanded CCS facilities are part of the steps QatarEnergy is taking to deliver on its sustainability strategy, which emphasises its commitment, as a major energy producer, to the responsible production of clean and affordable

energy to facilitate the energy transition.

Development of solar generation

QatarEnergy's solar generation projects use advanced photovoltaic (PV) technology to capture as much sunlight as possible and convert it into electricity with high efficiency. One of QatarEnergy's flagship solar generation projects is the Al Kharsaah Solar PV Power Plant. This 800 MWp solar plant will provide clean energy to more than 200,000 homes in the State of Qatar. The Al Kharsaah Solar PV Power Plant is a key part of QatarEnergy's strategy to expand its renewable energy portfolio and reduce its carbon footprint. In addition to large-scale solar generation projects, QatarEnergy is also exploring the use of distributed solar generation in the industrial cities.



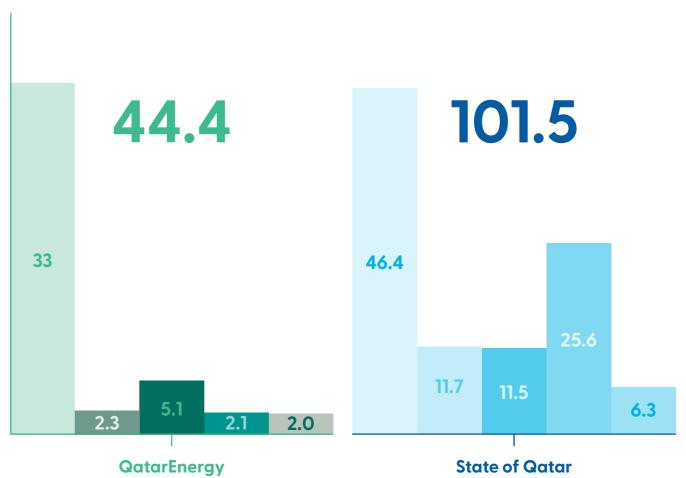
The data presented in the chart illustrates the overall emissions in the State of Qatar, including upstream, downstream, petrochemicals, power, and metals sectors. QatarEnergy is currently accountable for nearly 44% of the energy-related GHG emissions in the State of Qatar.

It is important to note that the energy-related emissions in the State of Qatar come from more than 20 operators, including our JV partners. Therefore, it is imperative that all major stakeholders in all sectors share the responsibility and collaborate to minimize emissions at a national level.



The 2022 total GHG emissions from the energy sector in the State of Qatar and QatarEnergy's equity emissions







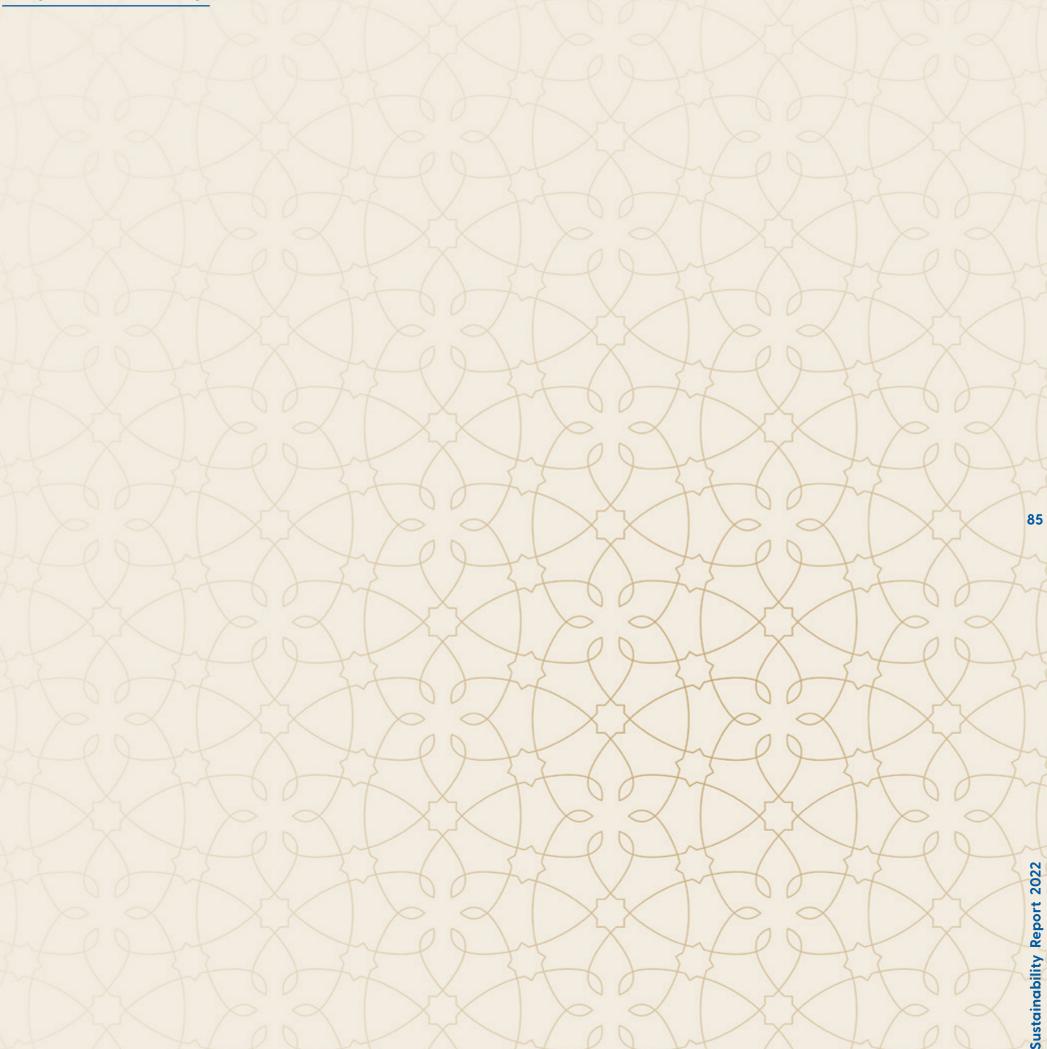




QatarEnergy continues to prioritize

verified by an independent third-party verifier against EU Monitoring and Reporting Regulation (MRR), the Intergovernmental Panel on Climate Change (IPCC) Guidelines, as well as our own internal procedures.

Our commitment to combatting climate change is unwavering, and we will continue to work towards a more sustainable future while acknowledging the complex realities of the energy landscape. We aim to reduce our carbon intensity by 35% across our LNG facilities and by 25% across our upstream facilities, for Scope 1 and 2 emissions by 2035.



Climate change mitigation targets

2025

2030

 Achieve a 0.2% weighted methane intensity.

- Achieve zero routine flaring.
- Increase CCS capacity to 7-9 MTPA CO₂.
- Achieve net carbon intensity reduction of 15% from upstream and 25% from the LNG facilities, including direct and indirect emissions.*

QatarEnergy is fully committed to reducing emissions throughout the entire value chain. We recognize the importance of addressing both Scope 1 and 2 emissions, and we have implemented active and passive measures to achieve this goal. One of our main strategies involves improving energy efficiency to minimize our carbon footprint.

We are working diligently to achieve our goal of zero routine flaring and are actively reducing methane emissions by targeting a 0.2% intensity rate across all our operations. Our comprehensive approach to assessing all potential sources of emissions ensures significantly reducing our impact on the environment.

In addition to our own efforts, we are assisting our partners in navigating the energy transition and continue to look for innovative solutions to reduce emissions across our industry. Furthermore, we are committed to expanding our CCS capacity to over 11 MTPA CO₂ by 2035 as part of our efforts to reduce our carbon footprint.

- Increase CCS capacity to over 11 MTPA CO₃.
- Expand solar capacity to over 5 GW by 2035.
- Achieve net carbon intensity reduction of 25% from upstream and 35% from the LNG facilities, including direct and indirect emissions.*



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Sustainability Report 2022

Flare

reduction

-25% LNG facilities scope 1 & 2 -15% Upstream scope 1 & 2

CH₄

Methane

reduction

intensity of 0.2

wt% by 2025

Methane







Reduction in carbon intensity Baseline year 2013

-35% LNG facilities scope 1 & 2 -25% Upstream scope 1 & 2











Mitigation measures

Climate change is one of the most pressing global challenges we face today, and mitigating its impacts requires immediate action. QatarEnergy is committed to playing a leading role in reducing GHG emissions and transitioning to a low-carbon economy through a range of climate change mitigation measures.

Our efforts to reduce emissions start on a macro level, where we work to reduce GHG emissions by supplying energy users with natural gas, the cleanest hydrocarbon source, and one of the most reliable, affordable, and sustainable sources of energy. We are also committed to reducing our own emissions from our operations. We have implemented energy efficiency measures across many of our facilities and processes and we regularly monitor our emissions and have set targets to further reduce our carbon footprint.

We are exploring CCS technologies, which can capture CO₂ emissions from our operations and store them underground, preventing them from entering the atmosphere. These technologies have the potential to significantly reduce our GHG emissions, and we are committed to further exploring the potential benefits.

In addition, we are actively exploring ways to circulate and reuse our emissions. We believe that by finding innovative ways to repurpose our emissions, we can reduce our carbon footprint while also creating value. We are

exploring the potential of using CO₂ as a feedstock for the production of chemicals and other products.

We are also actively engaging with our suppliers, customers, and local communities to promote sustainable practices. This includes collaborating with our partners to develop more sustainable supply chains and supporting local initiatives to reduce carbon emissions and promote sustainable development.



5C Carbon Management Framework

Natural carbon sinks and ecosystems

We recognize the importance of natural carbon sinks and ecosystems as mitigation and adaptation measures and we are committed to using sustainable practices that protect and enhance these calculable resources.

Energy transition

QatarEnergy is investing in sustainable technologies and promoting the use of natural gas as a cleaner and more efficient energy source.

Efficiency gains

We strive to achieve efficiency gains through continuous improvement initiatives, innovation, and the adoption of best practices in all areas of our operations.

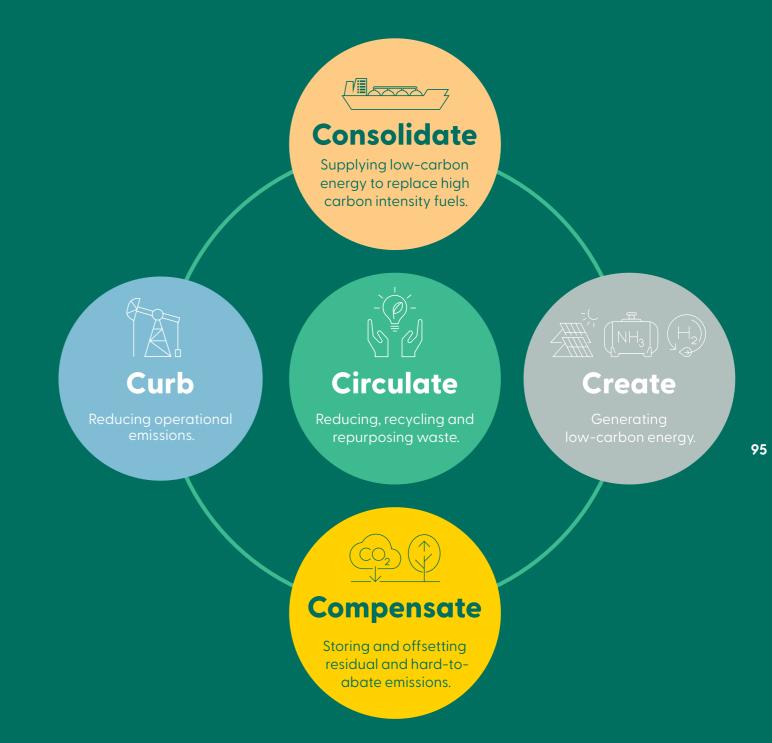
Reducing consumption and waste

We are committed to reducing our consumption and waste and implementing practices of circularity across our operations.

Scaling technology

We are dedicated to scaling technology by investing in cutting-edge solutions, leveraging digitalization, and collaborating with industry partners to drive innovation and achieve sustainable growth.

Our commitment to climate action is an integral part of our Sustainability Strategy Framework and identity. We have developed a Climate Change Mitigation Strategy that is structured around five pillars, which we refer to as "The 5Cs": consolidate, curb, create, compensate and circulate. Through these pillars, we aim to consolidate our efforts to mitigate and manage our impact on the environment.



Our approach is to support energy transition with sustainability projects and implementation plans that are fully developed and ready for execution, rather than simply announcing long-term targets that are not backed up by concrete plans. This approach ensures that we can deliver on our commitments and make a meaningful impact towards a more sustainable future.

Our focus is on energy productivity and the most economically efficient use of various primary energy sources. Hydrocarbons can be processed into zero-carbon energy carriers like electricity, hydrogen, and ammonia by capturing and storing the carbon emissions from these processes, combined with a balanced use of renewable power.

Consolidate

Expansion of our LNG production capacity to 142 MTPA is expected to consolidate our position as leading supplier of a cleaner low-carbon source of energy. This expansion supports the global trend of shifting from high-emission fuels, such as liquid fuels and coal, towards cleaner gas. By setting this example, we hope to inspire other industries to follow suit and transition to lower-emitting energy sources. Ultimately, our aim is to promote energy source diversification and support our partners worldwide in achieving emissions reductions through fuelswitching initiatives.

LNG Production Capacity

+16 MTPA

+49 MTPA



Curb

We curb emissions in our own operations and the operations of our equity holdings. Our focus is on tackling emissions within our direct control (Scope 1 and 2), including fugitive methane emissions. Our approach involves various measures such as accurate tracking and disclosure of emissions, implementing direct emissions reduction measures, seeking opportunities for integration and collaboration across systems, and using our influence to drive wider climate action. Our ultimate goal is to minimize our impact on the environment and lead the way in climate change mitigation.

2022 highlights

- 19% reduction in energy consumption compared to 2021 for refinery operations.
- 1.4% reduction in energy consumption compared to 2021 for our operated assets.
- 12% reduction in flaring compared to 2021 for RLIC.



Emissions management

Our organization is dedicated to monitoring, reporting and verifying GHG emissions from all of our operations. We have well-established data collection processes and internal protocols for managing GHG emissions, which enable us to identify areas where emissions are most significant at our onshore and offshore facilities. To ensure that we are held accountable on a global level, we base our GHG accounting and reporting methodologies on respected standards set by the Intergovernmental Panel on Climate Change, the EU MRR, and the Statement of GHG Emissions (SGE) methodology.

As part of our ongoing commitment to improving our GHG performance, we regularly review and refine our accounting and reporting methodologies, protocols and management approaches. Until 2021, our annual third-party GHG emissions verification only included the facilities within RLIC, Mesaieed Industrial City (MIC), and our operated facilities. However, in 2021, we expanded our accounting and verification program to include our non-operated offshore assets, thereby achieving complete coverage of the energy sector in the State of Qatar.

QatarEnergy places a high priority on monitoring and managing its GHG emissions, and we continuously strive to improve our performance through rigorous data collection, reporting, and verification processes, while aligning ourselves with industry standards and best practices.

Energy efficiency

Improving the energy efficiency of our operational portfolio and systems, with the aim of preserving natural resources and reducing our carbon emissions, is a crucial component of our strategy to address climate change. We prioritize this commitment and strive to make meaningful progress towards achieving it.

In 2022, we made significant improvements in our energy consumption, achieving a 19% reduction compared to 2021 in refinery operations. This is a result of our diligent efforts in improving the efficiency of our boilers, furnaces and compression systems. Additionally, we were able to reduce energy losses by downgrading and purging the flare gas for non-energy purposes. Our commitment to sustainable and efficient energy practices has paid off, and we will continue to explore new ways to reduce our carbon footprint and achieve even greater energy efficiency enhancements in the future.

Energy savings 2013-2030



As of 2022. we have successfully achieved energy consumption savings of 59 MMSCFD.

Emerson Martinez Beltran

Sustainability Analyst

Using our energy wisely

Optimizing our equipment to reduce our carbon footprint and minimize energy costs is for the benefit of the environment, our communities, our customers, and our shareholders.

It has been rewarding to be involved in reducing QatarEnergy's energy use.

Flare gas recovery project

To meet the flaring targets outlined in its Sustainability Strategy, we undertook an engineering study assessing the potential for flare gas recovery at various flares. Conducted by a thirdparty contractor, in close collaboration with QatarEnergy operations, the study assessed the technical options for recovering the purge and pilot volumes at each flare stack and returning

this gas to either the fuel gas system or the gas export lines. The aim was to reduce CO₂ and nitrogen oxides (NOx) emissions while also achieving financial benefits.

QatarEnergy plans to improve flare gas volume and composition monitoring at all other locations to further enhance environmental performance.



We are committed to reducing flaring and have adopted a multi-pronged approach towards achieving this goal. Our strategy entails investing in cutting-edge technologies, minimizing the use of purge gas in flares, and implementing top-of-the-line maintenance procedures. By prioritizing these measures, we aim to significantly decrease our flaring activities and minimize their impact on the environment.

In 2022, we continued reducing flaring activities by executing our comprehensive flare minimization plans, which identify and implement activities and projects aimed at improving our flaring practices. In line with these plans, we have continued to monitor our flared gas volumes meticulously using advanced flare vent gas flowmeters, ensuring precise and accurate reporting of data. We also carried out regular maintenance and timely repairs of our flaring systems to evaluate potential optimization opportunities in our operations.

Our detailed maintenance plans also include routine calibrations of the installed meters, adhering strictly to the manufacturers' specifications, to ensure our reporting accuracy. As part of our Flare Reduction Project (FRP) at RLIC, we are actively working towards minimizing flaring during planned or unplanned shutdown events, across all our LNG operations. Since the project's inception in 2020, we have successfully rerouted over 2,182 million standard cubic feet (MMscf) of flared gas back to operational trains, a significant accomplishment in our efforts to reduce flaring and its environmental impact.



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Reducing methane emissions

Eliminating methane leaks from our facilities is one of the most effective short-term strategies we have to combat climate change. We are fully committed to achieving near-zero methane emissions across all our operations and intend to report our progress with complete transparency and accuracy.

To achieve this goal, we have adopted advanced monitoring and measuring technologies and are continually improving our methane leak detection processes. By prioritizing these measures, we aim to significantly reduce our methane emissions and meaningfully contribute to global efforts to reduce emissions from the energy sector.

We remain committed to managing methane emissions from our oil and gas operations through our participation in the OGMP 2.0 initiative. This multi-stakeholder initiative provides a protocol to help companies systematically manage their methane emissions, and QatarEnergy voluntarily committed to achieving its Gold Standard.

QatarEnergy has published its methane emissions data in the second annual OGMP 2.0 Report, An Eye on Methane: International Methane Emissions Observatory 2022 Report. Based on its implementation plan, QatarEnergy achieved the Gold Standard for the 2022 reporting year, for the second year in a row.

In addition to our participation in the OGMP 2.0 initiative, we also have Leak Detection and Repair (LDAR) programs.

Under the LDAR project, we measure 100% of the relevant components in our operated assets following Method 21 (US Environmental Protection Agency (US EPA)) using toxic vapor analyzers (TVAs). We will be applying a SMART LDAR approach, where 50% of the components will be

monitored using an optical gas imaging camera and the remaining 50% with TVAs. All components and associated measurements will be captured in a LDAR software program, allowing for fugitive emission calculation and reporting.

Any leaks identified during the first round of monitoring that exceed 10,000 parts per million are referred to the relevant maintenance teams. First repairs are attempted and monitoring resumed. In most cases, the first repairs is successful, resulting in significant fugitive emission reduction. If a first repair is unsuccessful, the component is registered on the "Delay of Repair" list, and preparations are made to repair or replace the component during the next shutdown window.

Overall, the LDAR project has both environmental and safety benefits, as it helps to reduce methane emissions, and improve air quality, while also enhancing safety measures for personnel working on the equipment.



2025 TARGET (intensity*)



* maximum amount of annual methane emissions by 2025 as a percentage of total monetizable products





^{**} dotted pattern = incomplete data

GOLD STANDARD



implementation plan approved for data quality improvement

QatarEnergy has published its methane emissions data in the second annual OGMP 2.0 report. QatarEnergy achieved the Gold Standard for the 2022 reporting year.

Acting on our commitment to reducing methane emissions

In 2022, QatarEnergy joined the Aiming for Zero Methane Emissions Initiative, an industry-led effort that seeks to achieve near zero methane emissions from oil and gas operations by 2030. The initiative is all-inclusive, treating methane emissions with the same seriousness that the industry treats safety. It advocates for the adoption of robust regulations to address methane emissions and urges governments to include methane emissions reduction targets as part of their climate strategies.

QatarEnergy is the first organization to join the initiative launched by the 12 members of the Oil and Gas Climate Initiative, which include global players such as Aramco. BP. Chevron. CNPC. Eni, Equinor, ExxonMobil, Occidental, Petrobras, Repsol, Shell and TotalEnergies. By joining this initiative, QatarEnergy has taken a significant step towards reducing methane emissions from its operations and contributing to global efforts to combat climate change.

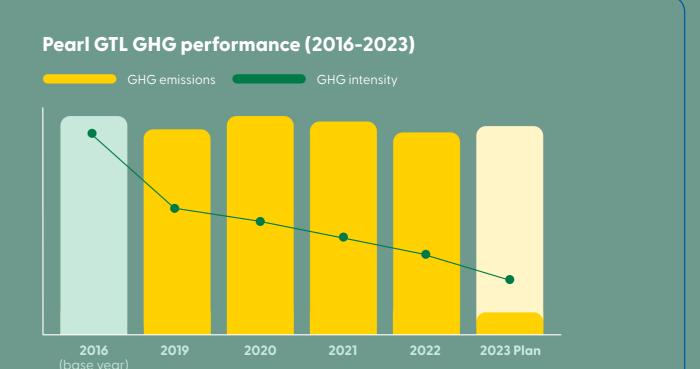
Pearl GTL satellite monitoring

In 2021, Pearl GTL conducted two satellite-based methane detection trials using different vendors. The trials showed that the detection threshold was around 100 kg/h at wind speeds below 3 m/s, rising to 250 kg/h at higher wind speeds. Based on the results of these tests and those conducted at other sites, a preferred vendor was selected to monitor these emissions. This monitoring technology provided assurance that the site did not have any point emissions larger than 100-250 kg/h.

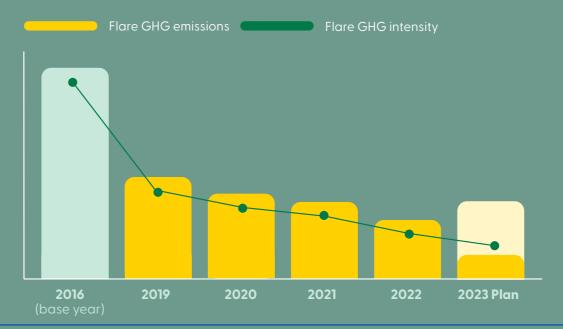
In 2022, Pearl GTL made significant progress in reducing GHG emissions. The plant achieved the lowest monthly and yearly GHG intensity and flaring emissions since its inception. Additionally, the plant was able to achieve 161 kt

CO₂-eq abatement, which was 4.6 times more than the target of 35 kt CO₃-eq. This remarkable achievement was made possible by using advanced technologies and best practices that helped optimize operations and reduce emissions.

The success of these initiatives highlights our commitment to sustainability and reducing our environmental footprint. It also underscores the importance of continuous improvement and innovation in achieving ambitious sustainability targets. By leveraging new technologies and working collaboratively across departments and with external partners, Pearl GTL was able to achieve significant emissions reductions while maintaining operational efficiency and profitability.



Pearl GTL flare GHG performance (2016-2023)



Create

We create low-carbon energy by bolstering our renewable and clean energy capabilities in both our industrial cities and other areas. This strategy promotes diversification of our energy portfolio, leading to greater resilience in both energy and climate realms. We actively investigate investment prospects in cutting-edge energy technologies, as well as emerging energy vectors including hydrogen and ammonia.

Solar projects

In recent years, Qatar's solar energy industry has come under the spotlight and QatarEnergy has played a major role in advancing the country's renewable energy efforts. Al Kharsaah Plant will have a significant impact on Qatar's energy landscape.

2022 highlights

- 875 MW committed solar capacity at QatarEnergy industrial cities
- Opening of Al Kharsaah Solar PV Power Plant – 800 MWp





Overview

A landmark solar power plant

The 800 MWp Al Kharsaah Solar PV Power Plant is a significant development in the field of solar energy. The aim was to become one of the world's largest solar power plants, equipped with high-efficiency, half-cut bifacial solar modules, which are mounted on trackers to maximize power gains by taking full advantage of the region's exceptional sunshine.

Taking action on climate change

The use of 3,240 installed string inverters further increase the annual yield by allowing for better tracking of the maximum power point at the string level.

In addition, the plant features a semi-automated cleaning system for the solar modules that cleans the dust and sand off every single module every four days. During its first year of operation, Al Kharsaah Solar PV Power Plant is expected to generate almost 2,000,000 MWh, which is equivalent to the energy consumption of approximately 55,000 Qatari households. This represents a significant milestone in the country's energy history, as the plant is set to produce 10% of its peak electricity demand at full capacity and reduce CO₂ emissions by 26 Mt over its lifespan.



Clean energy carriers

At QatarEnergy, we understand the potential of ammonia and hydrogen as energy vectors for our operational processes and activities, including fueling our transportation fleet. We recognize the crucial role that both these energy carriers can play, and we have extensive in-house expertise in large-scale hydrogen production. We are fully committed to utilizing ammonia and hydrogen at a major scale, leveraging our expertise to ensure their effective and efficient use in our operations.







Largest blue ammonia facility in the world

QatarEnergy's affiliates, QatarEnergy Renewable Solutions and QAFCO, have signed an agreement to construct the Ammonia-7 Project, which will be the industry's first world-scale and largest blue ammonia project, with an integrated CCS facility having a capacity

of 1.5 MTPA. This project will have a capacity of 1.2 MTPA of blue ammonia, making it the largest facility of its kind in the world. The plant is expected to begin operations in the first quarter of 2026 and will be located in MIC, where it will be operated by QAFCO as part of its integrated facilities. This project represents an important step forward in QatarEnergy's efforts towards reducing GHG emissions.





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Compensate

We compensate for residual emissions, which are known for being challenging to address and mitigate, by deploying CCS technologies to counteract their environmental impact. Our approach to climate change mitigation heavily relies on technology, and we continuously explore cutting-edge technologies in the industry to support our goals. Moving forward, it is crucial to consider novel solutions, including post-combustion capture technology and the exploration of natural carbon sinks in the State of Qatar.

Carbon capture and storage

We have upheld our previous commitment to CCS by initiating multiple projects aimed at achieving a target of sequestering over 11 MTPA by 2035. Our current carbon capture facilities have a total capacity of 2.2 MTPA, and we have successfully captured and injected more than 4.9 million tons of CO₂-eq since the inauguration of our facilities in Ras Laffan. Our facility in Ras Laffan is the largest CCS facility in the Middle East and North Africa region in terms of capacity. In 2022, we captured about 1.2 million tons of CO₂-eq.

2022 highlights

• Nearly 5 million tons of CO₃-eq captured through CCS since inception of the facility.





The CO₂ Capture Project

The CO₂ Capture Project is a crucial initiative that aims to capture CO₂ from the Qatargas-North and Qatargas-South (Trains 1,2,3) LNG facilities to reduce their GHG intensity. The project includes installing piping systems, compression, metering, and a pipeline to injection facilities. The dedicated injection wells will be provided within RLIC.

The project front-end engineering design tendering activities were finalized in 2022 and the contract is set to be awarded in 2023, with the project expected to be completed by 2028. The project's total CO₂ capture potential is around 4 MTPA,

increasing the total CO₂ capture capacity to about 6 MTPA from the existing Qatargas LNG and Sales Gas Trains.

The CO₃ Capture Project will have a significant impact on reducing the GHG intensity of the LNG produced by the existing facilities, contributing to achieving QatarEnergy's sustainability targets.



Ali Saleh Al-Menhali

Assistant Manager Asset Planning

Safeguarding QatarEnergy's assets

The high levels of active participation in our awareness sessions on the CO₂ Storage Resources Management System, and the subsequent discussions on how we can increase our CCS capacity, is a clear sign that it is a topic of fast-growing interest for all.



Khalid Mustafawi

Project Manager

Creating new possibilities through carbon innovation

As Project Manager for the CO, Water Alternating Gas (WAG) Pilot Project, it has been an honor to lead this strategic initiative that directly supports QatarEnergy's business and sustainability objectives. Enhanced injection and oil recovery techniques have helped us reduce the environmental impact of our LNG facilities. By utilizing captured CO₂ for enhanced oil recovery, we can ensure Qatar's oldest onshore field continues to support Qatar's economy into the future.

Sustainability Report 2022

2.2

Existing

facilities 2022

NFE project

NFS project

Ongoing

studies on

existing trains

Projects in

pipeline

Total

Circulate

Circularity in the context of carbon emissions refers to the concept of minimizing waste and maximizing the use of resources throughout the entire lifecycle of a product or process, including its emissions. It involves implementing practices that reduce or eliminate carbon emissions, as well as finding ways to capture and reuse those emissions to create value elsewhere. In other words, instead of treating emissions as waste to be disposed of, circularity seeks to treat them as a valuable resource to be repurposed and used in other industries or applications. This can lead to significant reductions in GHG emissions, while also creating economic and environmental benefits.

At QatarEnergy, we strive to promote the recycling and repurposing of materials within our operations to minimize waste and reduce emissions. As an example, we can reuse waste heat generated during industrial processes for other purposes. We can also capture CO₂ emissions and repurpose them for use in other industries, such as in the production of chemicals, fuels, or building materials.

We also collaborate with stakeholders, including suppliers to implement circular economy practices throughout the value chain. This could involve designing products and services that are more durable, repairable, and recyclable, as well as promoting the use of renewable energy sources and sustainable materials.

By engaging with our suppliers we can identify opportunities to reduce emissions and minimize waste across the entire lifecycle of our products and services.

Ultimately, by integrating circular economy principles into our Emissions Management and Reduction Framework, we can create a more sustainable and resilient business model that benefits both the environment and the economy. This approach can help us meet our emissions reduction targets, while also creating new business opportunities and enhancing our position as a responsible and forward-thinking organization.



Jeroen Brons

Assistant Manager, Fertilizer Facilities

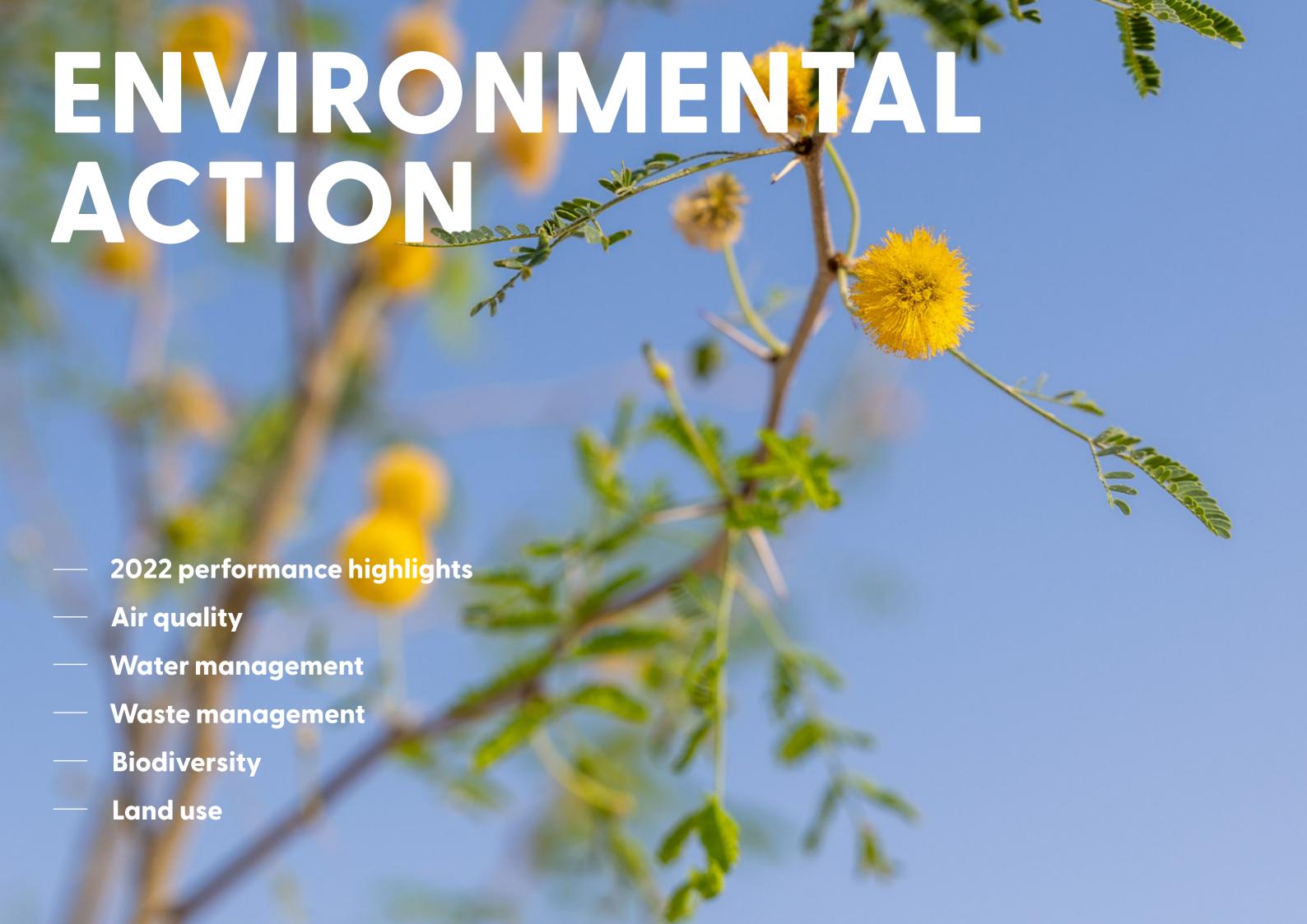
From waste to value

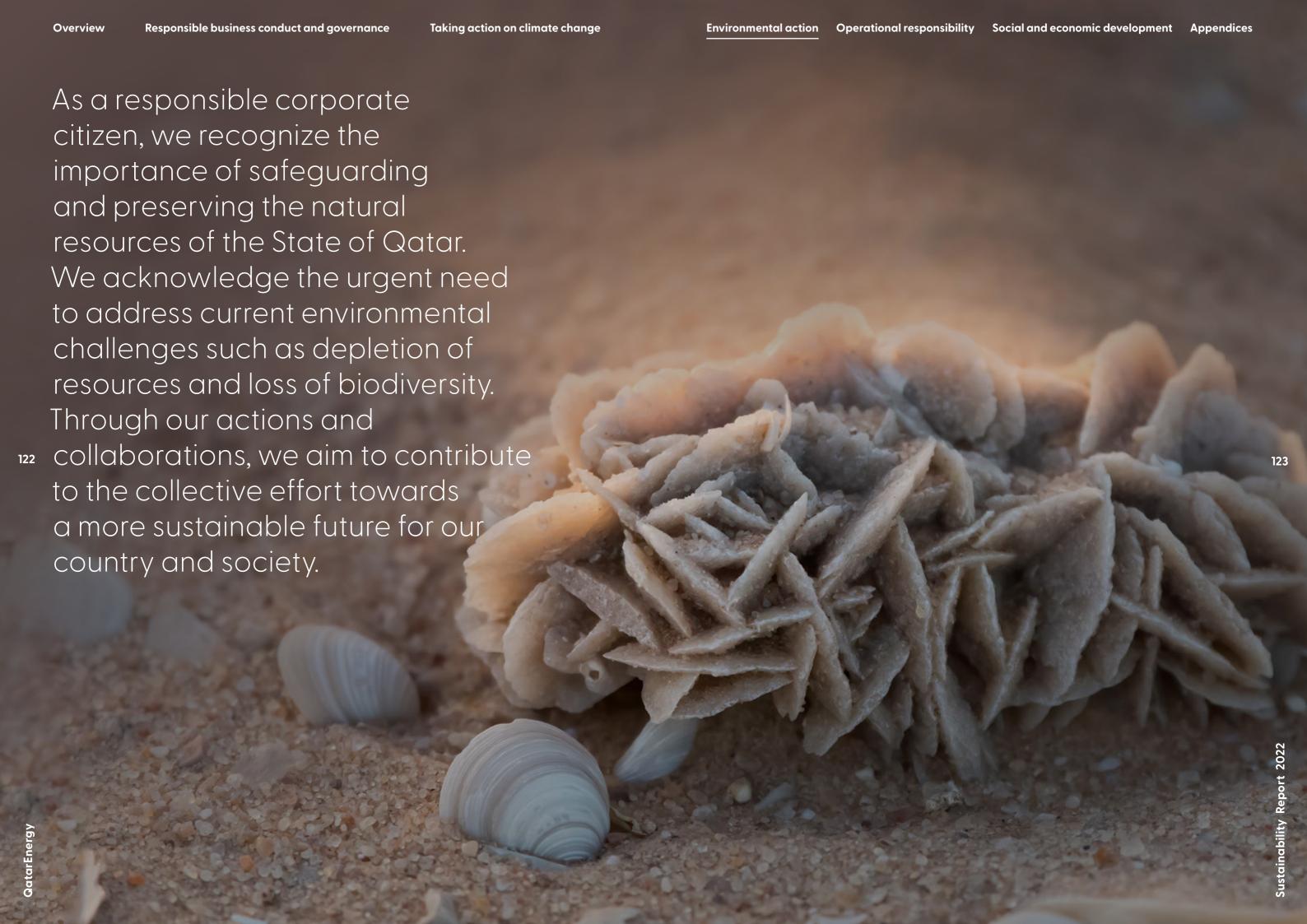
There is a huge potential in utilizing waste streams and by-products from one Asset, as raw materials in another Asset. By-products that are historically conveniently used as fuel, or waste streams that are disposed of or flared can be put to good use in neighboring Assets.

To reap the benefits of Synergy opportunities requires a strong collaborative mindset across Assets and across Business functions, next to process creativity and a relentless commitment across the organization. It is exciting to help unleash the potential of these Synergies, that benefit the State of Qatar, the environment and ultimately the Planet.

A great example is the planned re-purposing of Hydrogen, a by-product in the production of ethylene (the main plastics 'building block'), commonly used internally as fuel. Projects are under development to convert this Hydrogen to Ammonia, which then finds its way to low-carbon fuel markets.

Such "Process Synergies" lead to more optimum use of natural resources and other raw materials, as well as reduced emissions and waste, and ultimately to sustained financial benefits as well.





Air quality

Maintaining a healthy atmosphere and reducing air pollution is crucial for promoting the well-being of society and local communities. At QatarEnergy, we understand the significance of managing emissions and air pollutants in ensuring good air quality. Our steadfast dedication to adhering to national air quality standards is in line with our sustainability framework, policies, and strategy.

We are aware of the effects of Nitrogen Oxides (NOx), Sulphur Oxides (SOx), Volatile organic compounds (VOCs), and other air pollutants on the environment and have implemented a robust monitoring system to monitor our air emissions. To ensure safe operations and acceptable levels of emissions, we prioritize timely and proactive maintenance. Additionally, we constantly explore advanced solutions to reduce our emissions.



In 2021, we conducted a technical performance site audit of all seven continuous ambient air quality (AAQM) stations. We also completed the audit of five MIC and two Dukhan stations. We are proud to announce that the audit results confirmed compliance with the requirements of the US EPA for all of our stations.

In 2022, we witnessed a 14% decline in NOx emissions, compared to the emissions level in 2021, due to various factors. Firstly, the scheduled shutdown and turnaround event at Dukhan operations contributed to curbing NOx emissions. Secondly, the implementation of more efficient operational practices, including close monitoring of excess oxygen levels, helped reduce NOx emissions at refinery operations. We readjusted our emission calculations by updating the design flow rates with actual flow rates obtained from emission testing conducted in 2018.

Moving forward, QatarEnergy will conduct a study to explore different technological options including ultra-low NOx burners to further reduce NOx emissions across our operations. As we operate aging equipment, complying with national emission standards remains a challenge. Therefore, we will collaborate with our original equipment manufacturers to explore retrofit and upgrade options that will enable us to act upon our commitment to respect and safeguard the natural environment.

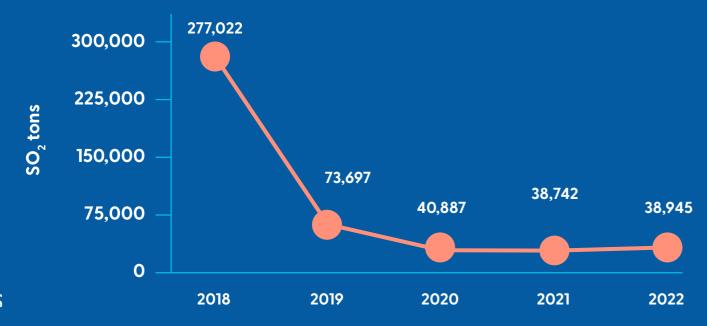
In 2022, our VOC emissions increased due to our efforts to implement a structured program for monitoring and reducing fugitive emissions in our operated assets. To tackle this issue, QatarEnergy has appointed a third-party contractor to carry out a Leak Detection and Repair (LDAR) program across all operations, except for refinery operations, which already have their own in-house LDAR capabilities. As part of the current LDAR program, we anticipated VOC emissions to peak in 2022 and gradually decline in the future, mainly due to the leaks that have been identified during the initial monitoring phase. At offshore operations, we have already managed to reduce the total number of leaking components by over 80%, which will help in reducing VOC emissions in the years to come. In addition, we plan to implement a corporate procedure for inspecting and maintaining internal and external floating roof storage tanks, in line with the American Petroleum Institute Standard 653, to further reduce fugitive VOC emissions from storage tanks. Overall, these measures will support our efforts to decrease VOC emissions and promote environmental sustainability.

Since 2018, sulfur dioxide (SO₂) emissions have been decreasing due to the improved performance of the Sulphur Recovery Unit (SRU) at NGL-3 (Mesaieed Operations), despite a negligible increase in 2022.

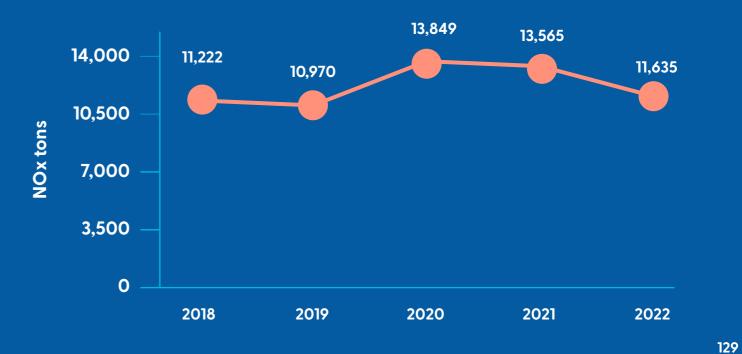
There have been less frequent operational upsets and outages and as such our acid gas flaring volumes have decreased significantly from 2018 levels.

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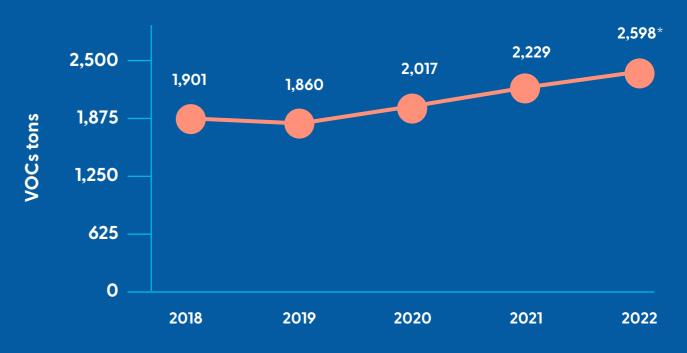
Sulfur dioxide emitted



Nitrogen oxides emitted



Volatile organic compounds



* The number of VOC components measured were increased

Monitoring, speciating, and managing ambient particulate matter

Over the past 20 years, RLIC has experienced significant growth in its industrial establishments and associated support facilities as an onshore base for offshore natural gas exploration. Rapid construction activities increased vehicular movements, and elevated energy consumption in industrial operations and construction projects have contributed to the high levels of particulate matter (PM) emissions in the city. Natural sources such as windblown dust and marine aerosols and transboundary regional particulate pollutants have also been found to contribute to high PM levels in the region.

PM affects human health, visibility, water body quality, material, crops damage, and global climate, and therefore, monitoring and managing ambient PM levels is crucial. In response to this, we conducted studies to identify the ambient air PM levels linked to both natural and industrial sources in RLIC accurately.

To better understand the sources of the complex mixture of PM present in the ambient air of RLIC, a scientific research initiative was necessary. The goal was to develop proactive tools to better quantify and qualify the impact of different sources on the ambient PM concentrations. To achieve this goal, QatarEnergy-RLIC conducted the RLIC PM Speciation (profiling) Study.

The PM speciation study employed a comprehensive scope of work to collect 43 industrial process stack source samples and 218 ambient air samples, capturing PM10 and PM2.5 fractions. A total of 7 million data points from 10 years of PM data from 5 continuous real-time reading Ambient Air Quality Stations were used for PM trend analysis.

The RLIC PM Speciation Study findings provide significant insight into the PM fractions, both in their mass concentration and chemical speciation, enabling a clear understanding of the impacts and implementation of control measures.



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Water management

We recognize the challenges of operating in a region with high water stress, and, as a responsible organization, we are dedicated to identifying and implementing solutions that enhance water use efficiency and conservation. Our commitment to protecting freshwater resources and restoring ecological balance in marine environments is embedded in our environmental policies. We believe in developing sustainable solutions that minimize our impact on water resources while maintaining operational excellence. By prioritizing water conservation and efficiency measures, we are taking proactive steps towards creating a more sustainable future for our communities. We will continue to explore innovative approaches to conserve freshwater resources and maintain ecological balance,

while striving to achieve our operational goals.

In 2022, we were able to significantly increase the volume of water released to sea. This was due to our first-time reporting of additional large discharge effluents, which were identified during the ongoing water conservation project. These included approximately 0.97 million m³/year of brine discharged to sea at Halul, and approximately 0.9 million m³/year of process water discharged to sea from Mesaieed's operations and refinery.

In addition, the total water discharged to other waters than the sea increased by 15% in 2022 compared to 2021. This was due to a 34% increase in the total produced volume of produced water generated at Dukhan. As a result, larger volumes of produced water were disposed in the Umm-er-Radhuma (UeR) aguifer compared to the previous year.

Additionally, there were increased volumes of produced water disposed of in UeR from Production Station 1 (PS1).

However, the total water recycled and reused increased by 3.5 times compared to 2021 figures. This was due to QatarEnergy decision to claim and report 100% of the treated sewage effluent (TSE) from Dukhan Concession Area (DCA), MIC and RLIC domestic wastewater treatment plants. The reported TSE is collected from various sources, treated at our domestic wastewater treatment plants, and reused for landscaping at DCA, MIC and RLIC. These efforts reflect our commitment to sustainable water management practices and environmental conservation.



New effluent water treatment plant for NGL complex at Mesaieed

QatarEnergy's commitment to water management is evident in its latest onshore project being executed by Mesaieed Industrial City. The project involves the installation of a new effluent water treatment plant for the NGL complex at Mesaieed. This state-of-thesustainability targets, with a capacity to treat

One of the key benefits of this new plant is that the treated water will be reused for irrigation purposes, reducing the amount of water that needs to be supplied by the national water service provider. resources but also reduces costs for QatarEnergy in the long run.

Another important aspect of this project is the commitment to environmental protection. The plant has been designed to ensure zero discharge of effluents to the sea, thus safeguarding the marine life and environment in the area. This is a crucial step in preserving the delicate ecosystem around the plant and promoting sustainable practices in the region.

The project is expected to be commissioned by March 2026 and is a significant step towards achieving QatarEnergy's sustainability goals.



Protecting water resources

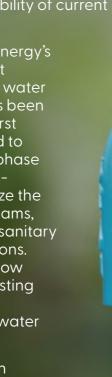
QatarEnergy is committed to reducing its freshwater consumption, as stated in its environmental policies, by developing options to improve water use efficiency and reduce water intensities across all facilities and processes. To achieve this, QatarEnergy has initiated an organization-wide water conservation project, which involves the development of water use flow diagrams and footprints for all operations. However, the main challenge in this initiative is understanding the various water uses, measurement methods and the reliability of current metering and reporting methods.

To address these challenges, QatarEnergy's corporate HSE & Quality Department awarded a contract to international water consultants in 2022. This contract has been divided into three phases, with the first phase starting in 2022 and estimated to be completed in mid-2023. This first phase involves conducting an organizationwide water use survey to characterize the quantity and quality of all water streams, including potable, wastewater, and sanitary water, across QatarEnergy's operations. This survey will help develop water flow diagrams for each facility, assess existing gaps in metering and measurement methods and identify unaccounted water withdrawals and discharges.

In the second phase, water reduction options will be identified for each operation area after consulting and aligning with asset holders and operation managers. These reduction options will then be screened via environmental impact identification and feasibility studies. In the third phase, fit-forpurpose action plans will be finalized in the form of water conservation plans, which will be completed by the end of 2023.

The project has already raised awareness of water conservation practices among relevant internal stakeholders, and ongoing water surveys have helped identify quality assurance and quality control gaps, data gathering challenges, and ways to improve the reliability and completeness of water inventories. The development of water flow block diagrams has helped identify missing and unaccounted water streams, which have been added to 2022 water sustainability data. As a result, additional water discharges and full TSE reuse from all QatarEnergy sewage treatment plants have been reported for the first time.

The water conservation project will continue in 2023, with all water surveys expected to be completed by June 2023. The subsequent second and third phases of the project will be completed by the end of 2023, resulting in water conservation plans for all operation areas.



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Groundwater drainage and discharge system in MIC

Since 2012, there has been visible ponding and flooding in several areas of MIC. This has led to concerns about public health, road safety, infrastructure development and pipeline longevity. Without intervention, it was predicted that by 2030 flooding would impact more than 20 hectares of residential plots and 200 hectares of industrial plots, resulting in damaging infrastructures, extensive repair costs, traffic disruption and a reduction in revenue and industrial development.

To address these issues, QatarEnergy developed an integrated policy that focuses on mitigating and controlling the root cause of increased groundwater and implementing a physical groundwater collection and discharge system. The plan was approved by the Ministry of Environment and Climate Change (MoECC), and two projects were initiated to implement the recommended measures.

These projects seek to create a groundwater drainage system that reduces the groundwater table to a suitable depth to protect infrastructure while minimizing pumping requirements. This system will control and reduce groundwater levels, leading to the sustainable operation and growth of the Mesaieed community and industrial areas. Existing and new assets will be protected, leading to a longer lifespan and reduced maintenance requirements. Additionally, the project will have secondary benefits, such as reducing groundwater infiltration into sewer system, reducing salinity levels in wastewater treatment, and improving public health conditions for residents. Frequent stagnation and flooding of groundwater during the winter period, has the potential to impact the environment and health of residents, which is why we are excited about the completion of this project by mid-2024.



Waste management

At QatarEnergy, we believe that waste should not be viewed as a burden, but rather as a potential resource. Our vision is to shift from waste management to resource management, and we see the waste generated across our operations as a valuable source of renewable resources. Our goal is to follow the waste hierarchy of preferred waste management options, which prioritizes waste prevention, product reuse, material segregation and recycling, resource and energy recovery, and proceeds with safe disposal. This approach helps to reduce environmental impact and contributes to mitigating global warming.

To achieve our goal, we plan to conduct a comprehensive Life Cycle Assessment (LCA) of all the waste streams generated across our various operations in 2023. The objective of this project is to benchmark our waste management practices against international best practices and identify optimal waste management plans that will result in cost savings for QatarEnergy while also identifying circular economy opportunities. This LCA will enable us to identify areas for improvement and opportunities for resource recovery, leading to a more sustainable and environmentally responsible approach to waste management.

To minimize the environmental impact of oil and gas drilling operations, only waterbased drilling fluids that are environmentally friendly are used. In 2022, approximately 15 million Mt of drill cuttings and one million barrels of fluids were discharged, both onshore and offshore.

To ensure that the impact on the environment was minimized, all discharges were closely monitored, tested, and analyzed throughout the year. The results of the environmental analysis reports for 2022 indicate that all discharges were within the established norms, which demonstrates the effectiveness of the robust waste management system in place.

QatarEnergy has also implemented a robust radioactive materials management system to handle wells that may have naturally occurring radioactive materials (NORM). This system involves the identification, monitoring, transportation, and storage of contaminated equipment and waste. Throughout 2022, more than 300 surveys were conducted on active wells, and NORM handling procedures were applied to wells that were classified as having NORM contamination.

All wells that were drilled during 2022 were closely monitored and no NORM contamination was detected. QatarEnergy's commitment to NORM management has contributed to ensuring a more sustainable industry by reducing environmental impacts and meeting regulatory requirements while also protecting people and the environment.

In 2022, there was a 16% increase in nonhazardous waste generation compared to the previous year, mainly due to the inclusion of waste data from RLIC and MIC for the first time in the dataset. Additionally, there was a significant increase in water-based mud and cuttings generated from drilling operations. The generation of hazardous waste increased by 78% compared to 2021, primarily due to an increase in oily sludge generated from Halul offshore and Dukhan operations. However, the recycling of hazardous waste more than doubled (107 % in 2022) compared to 2021, primarily due to the inclusion of recycled waste from industries located in MIC, marking the first time such waste was incorporated in the assessment.



New facility for the storage of hazardous waste

QatarEnergy's hazardous waste storage project is an important strategic initiative of MIC aimed at establishing a safe and compliant facility for the storage of hazardous waste materials generated during refinery operations.

To comply with regulatory requirements, hazardous materials must be stored in an engineered designed storage facility that meets safety standards and prevents any spillage of hazardous waste to the ground.

QatarEnergy has awarded an engineering, construction, and supply (ECS) design contract for the new facility, which is expected to be completed by 2025.

The facility will include shaded storage areas for classified and categorized hazardous waste materials, an unshaded concrete storage area with drainage channels and collection tank, a rest area for personnel, a fence, security and emergency gates, asphalt and external emergency vehicle access roads and a fire alarm system with an interface to refinery fire and gas systems (FGS) and a firefighting network. All utilities, such as electricity, water and surface drainage, will also be included.

The project's specific benefits will ensure high quality standards for waste management and provide a welldesigned facility with a high degree of functionality and inherent safety protection. The concrete storage area with drainage channels and collection tank will prevent any environmental spillage and hazards, ensuring that all waste materials are stored in accordance with the latest standards.





Responsible business conduct and governance

Taking action on climate change

Overview

Biodiversity

Biodiversity plays a crucial role in Qatar's heritage, culture and future. It provides the foundation for food security and sustainable agricultural development by supplying essential resources such as food, medicine, clothing, housing, energy, and raw materials. The country's National Biodiversity Strategy and Action Plan acknowledges that natural habitats also serve as vital ecosystem services, which help mitigate the effects of climate change by absorbing excess flood water, acting as barriers against coastal degradation, and protecting against extreme weather events.

QatarEnergy aims to establish a comprehensive and durable program for the conservation of biodiversity and blue carbon ecosystems. This program will encompass the creation and execution of a strategy dedicated to preserving biodiversity. Among its many initiatives, the program will feature projects to map areas of sensitivity, conduct assessments of baseline conditions and enhancing mangrove forests within QatarEnergy's concession areas. Furthermore, the program seeks to increase awareness about biodiversity not only within QatarEnergy but also among its stakeholders.

It is important to recognize that a loss of biodiversity can impact ecosystems. In the State of Qatar, as in other parts of the world, biodiversity is threatened by factors such as habitat destruction, over exploitation of resources, pollution, and climate change. Therefore, it is crucial to develop and implement effective conservation strategies to ensure the long-term preservation of the country's rich biodiversity. By protecting and preserving the State of Qatar's natural habitats, we can safeguard the future of our communities, our economy, and our planet as a whole.



Saving Ghaf trees

QatarEnergy has always been committed to preserving the environment, and our solar projects in MIC and RLIC have been no exception. During the course of these solar PV projects, eight Ghaf trees (Prosopis Cineraria), an endangered species in the State of Qatar, and some wild bushes were discovered at the project site.

In accordance with the MoECC requirements, QatarEnergy transferred and replanted the Ghaf trees. The MoECC also mandated that QatarEnergy to plant 1000 trees in a designated area in the State of Qatar as compensation for removing the existing wild shrubs and trees. Following the MoECC's instructions, all the Ghaf trees were carefully transferred from the project site to the nearby greenbelt zone and replanted.

In addition to the tree transfers, QatarEnergy also planted 1000 trees in the Simaisma area, as per the MoECC's recommendation, to further contribute to the restoration of the local ecosystem. Thanks to these efforts, the Ghaf trees were saved and new trees planted to help mitigate the effects of deforestation in the area.

QatarEnergy is proud to be part of these conservation efforts and remains committed to protecting the environment for future generations.







Land use

We know that maintaining a healthy and thriving ecosystem is crucial for preserving our planet and sustaining the well-being of society and livelihoods. We therefore prioritize protecting and nurturing our land resources to ensure the enhancement of air and water quality, conservation of biodiversity, and mitigation of climate change. We believe that safeguarding these resources is both a responsibility and an opportunity to promote sustainable development and contribute to a better future.

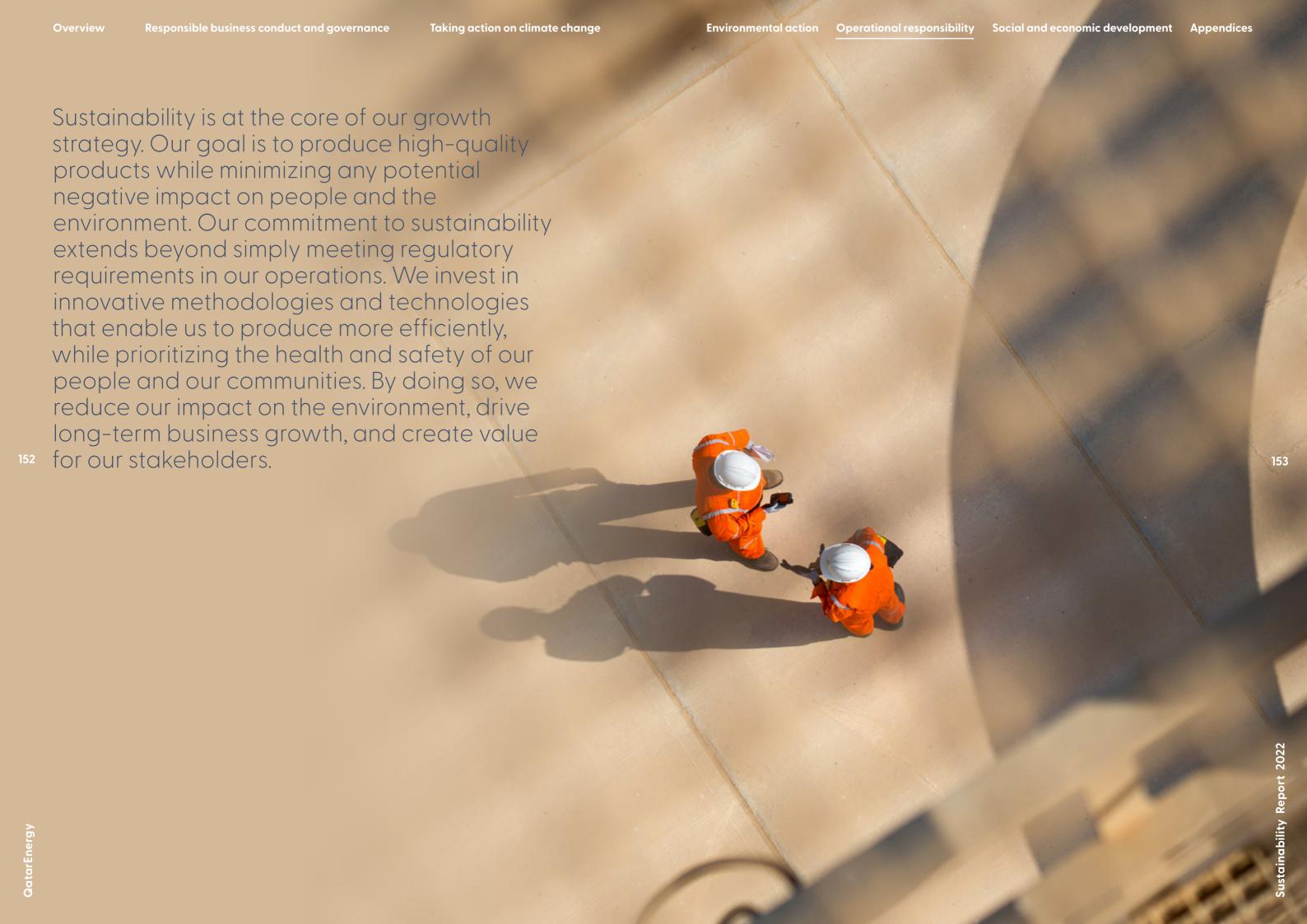
The sustainable and productive use of land is critical to the State of Qatar's environmental vision and is key to achieving its national objectives. QatarEnergy recognizes the importance of land use and is actively contributing towards state-level land use objectives.

In line with Qatar's aim to be more self-sufficient, QatarEnergy is through its affiliated fertilizer company QAFCO improving food security. The company is focusing on crop nutrition solutions and has established key partnerships with Qatari organizations, including Qatar University, to develop high-tech agricultural solutions and support agricultural research.



OPERATIONAL RESPONSIBILITY





Protecting our people

Safety is integral to everything we do at QatarEnergy, and our aim is to make things safer every day for our employees, contractors, partners, and communities. Our work environment allows everyone working for us and working with us, regardless of background, skill level or experience, to work with confidence. We believe that by prioritizing safety in everything we do, we can create a better, healthier, and more productive workplace, and contribute to the long-term success of our business.



Occupational health and safety

To ensure safe and efficient operations, we have structured our processes, equipment, and facilities with safety, efficiency, and productivity in mind. We continually seek to optimize our operations and identify opportunities to improve our safety performance. We have developed a sturdy health and safety management approach that promotes continual improvement, and our processes and procedures provide clear guidance for identifying, managing, and addressing 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 QatarEnergy. We believe that this approach helps us to mitigate risks and prevent incidents, protecting our employees and our contractors.

We believe that effective governance of health and safety related issues requires clear allocation of responsibilities at each organizational tier. We have established a robust system of roles and responsibilities to ensure that every employee and contractor partner understand their role in promoting and maintaining a safe work environment.

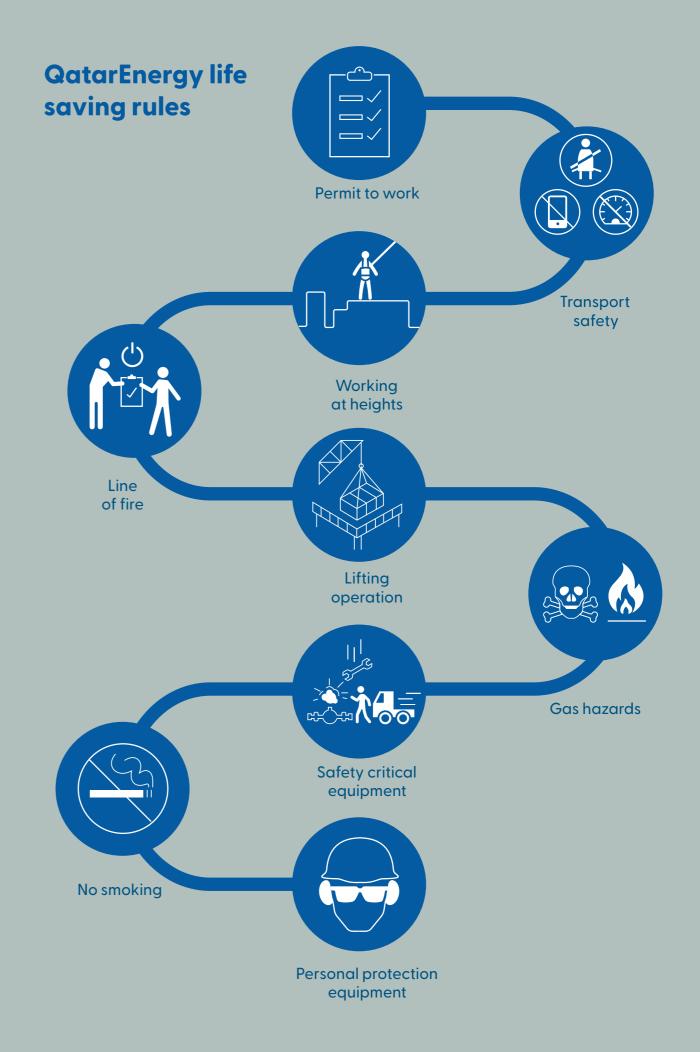
Our ELT provides crucial support to all levels of the organization by monitoring and reviewing our performance against our set health, safety, environment, and quality (HSEQ) targets. They assess significant incidents and provide direction on how we can continually improve our health and safety management approach.

We have developed our Life Saving Rules (LSR) to govern the behavior of our employees and contractors and ensure their safety and protection. Our LSR are based on the International Association of Oil & Gas Producers (IOGP) best practices and reflects our commitment to creating a safe and healthy work environment,

with some minor changes to reflect relevant topics within QatarEnergy.

We monitor the compliance of our employees to our LSR through regular inspections and site visits. We believe that this proactive approach is essential for identifying and addressing any safety risks before they can lead to incidents. Our safety professionals work closely with our employees and contractors to ensure that they understand and comply with our LSR and that they have the knowledge and skills they need to work safely.

We believe that following our LSR makes a significant contribution to preventing incidents and is critical to saving lives. Also, we have established related guidelines and procedures for a wide range of safety areas to support working within the requirements of the rules and we regularly review and update our LSR to reflect the latest industry best practices.



In 2022, we achieved our target of zero fatalities both among our employees and our contractors. Our success in achieving zero fatalities reflects our ongoing commitment to the highest standards of occupational health and safety. It demonstrates our determination to prioritize the well-being of our employees and contractors and to ensure that they return home safely

As we look towards the future, we remain committed to maintaining our zero fatalities record and continuing to enhance our HSE practices. We recognize that there is always more work to be done to improve safety performance, and we are confident 160 that with the continued dedication and efforts of our employees and contractors, we can achieve even greater success in the years to come.

at the end of each day.

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



In 2022, the number of employees' recordable injuries increased due to the relocation of the QatarEnergy headquarters complex, which occurred earlier in the year.

However, it's important to note that the number of contractors' recordable injuries decreased by 14% compared to 2021. This decrease can be attributed to the implementation of stricter safety protocols and measures, resulting in better performance.

Health performance indicators program

Occupational health hazards pose significant threats to the well-being of employees and contractors. It is essential to have effective measures in place to prevent and control such hazards. In line with this, a corporate initiative was undertaken to develop health performance indicators that would ensure effective implementation of occupational hygiene programs and improve compliance. Occupational hygiene leading performance indicators provide assurance that health hazards are being managed. Indicators used include number of health risk assessments completed, number of locations that exceed allowable noise limits, and other similar metrics.

To implement the Health Performance Indicators Program, two international standards were used as reference, namely American Industrial Hygiene Association (AIHA) and IOGP Best Practice. The program's implementation follows a systematic approach, starting with the development of a standard

for health performance indicators which provides the framework for the development of the program's output.

Monitoring leading health performance indicators will provide assurance to management that occupational health hazards are addressed, and potential risks are mitigated. It also helps management to take informed decision with regards to occupational health issues.



QatarEnergy CEO HSE Awards

The QatarEnergy CEO HSE Awards were established to recognize and celebrate those whose contributions have brought step-change improvements to HSE, as well as to safe and reliable operations and wider business performance. These awards are a testament to the internal culture of QatarEnergy, which places health and safety at the center of everything we do.

The inaugural CEO HSE Awards were held in 2022, and HSE efforts that went beyond the scope of work or job description and exceeded expectations were recognized during the event. The awards celebrated those whose ideas and insights created improvements to the HSE practice of QatarEnergy, as well as those whose efforts resulted in an outcome with influence beyond their normal work assignments.

The awards are open to all employees and contractors, and the criteria are described in a corporate procedure and a guideline. To be eligible for any of the CEO HSE Awards, the nominees must meet criteria in any of QatarEnergy's recognition types, such as Doing the Right Thing, HSE Excellence, Demonstrating Care or HSE Collaboration in Action.

Nominations are gathered from all directorates, and the final recommendations are vetted by the ELT and approved by the President & CEO. The evaluation process is both quantitative and qualitative and the review team has the discretion to recommend awards to any deserving nominee if there are strong supporting reasons.

The winners of the CEO HSE Awards are recognized as champions who share traits that contributed to HSE excellence across various QatarEnergy business lines. The awards reaffirms QatarEnergy's

long-standing and unwavering commitment to the highest levels of health, safety and environmental performance. Across the industry in Qatar, there has been an appreciation of the impressive forward-thinking, strong commitment and "above and beyond" efforts of the award recipients.

As preparations are underway for the next year's awards, the CEO HSE Awards have motivated others to act in a way that leads to more nominations for the next edition of QatarEnergy's CEO HSE Awards.



Health and safety with a focus on sustainability

In recent years, QatarEnergy's Healthcare Department has become one of the leading primary health care providers in the State of Qatar. This has been recognized by Accreditation Canada, that awarded the Healthcare Department with the highest level of certification, the Diamond Level, in 2022. Accreditation is a process used in many countries to evaluate the quality of healthcare services provided to patients.

Accreditation demands a variety of testings and calibrations that can provide critical information in measuring pollution through analyzing water, air and noise levels and waste and aid in reducing emissions by analyzing energy efficiency. It evaluates healthcare professionals' understanding to ensure care is appropriate and avoid unnecessary investigations or treatments that contribute to healthcare carbon footprint.

In 2022, QatarEnergy initiated efforts to procure sustainable chemicals, medical devices, and provisions of alternative services, such as supplying repeat prescription medication to clients' doorsteps. This eliminates the need for patients to travel to QatarEnergy Health Center to pick up their medication, thereby reducing CO₂ emissions. The substitution of metered dose inhalers, responsible for hydrofluorocarbon, with a medication based on a dry powdered version is another step towards sustainability.

These initiatives will pave the way for a more comprehensive climate mitigation strategy in the future. This will require integrating environmental impacts into the definition of healthcare value, shifting to a circular economy, and expanding preventive models of care. QatarEnergy plans to institute education and training programs to promote climate literacy across the workforce, embed sustainability in administrative and clinical roles and responsibilities and promote a culture of sustainability and resource stewardship. At QatarEnergy, we believe in re-imagining a society that prioritizes health and well-being through a framework of an environmentally

sustainable health system.

Banna Mohammed Al-Neama

Laboratory Controller

Inspiring leadership mobilizes people

At the Healthcare Department, we do not only care about our people, we also care about our planet.

We are on a continuous journey to reduce our energy and water consumption by choosing efficient laboratory solutions and by minimizing consumables and waste products.

Offshore fitness to work program

The offshore working environment comes with a unique set of health and safety hazards. It is crucial for QatarEnergy that all employees and contractors staff meet the necessary health requirements to perform their duties safely. Medical surveillance is an important part of this health risk management, seeking to confirm that employees potentially exposed to workplace hazards show no biological changes that could indicate damaging exposure.

Some typical challenges we faced. included timely identification of employees unfit for offshore work, difficulty convincing unfit individuals to proceed with treatment for their medical condition, or preventing people declared unfit to travel needed to be persuaded to attend consultations as per their medical surveillance needs.

To address these challenges, QatarEnergy implemented an offshore medical fitness program. Employees were reported for offshore medical assessment as per schedule, where they were provided with a Nursing evaluation, laboratory tests and clinical examinations were conducted to determine their health status. When any illness was detected, proper treatment was started, and the case was reviewed post-treatment.

An offshore medical fitness card was issued to employees who met the health requirements, containing their medical surveillance needs in a coded format. This ensured that employees were fit for their jobs and free from any contagious disease. It also helped to identify any essential adjustments for satisfactory completion of duties, physical and psychological problems and identify and record any adverse impact on the employee from workplace hazards. Early detection of health issues led to early treatment, which was directly related to productivity.

The offshore medical fitness program triggered initiatives to lose weight among employees with a high body mass index diabetes and hypertension. The program conditions in many senior offshore staff, facilitating optimum treatment that proved to be lifesaving.

Given the numerous health benefits of such programs, the plan is to extend the occupational health fitness to work program for onshore-based QatarEnergy employees in Doha.



Fatema Faleh Ahmed Saif Al-Remithi

Head, HSE Performance Monitoring & Reporting

Cultivating a culture of accountability for each other

We actively invest in the training and development of qualified investigators, while at the same time providing employees and contractors with the knowledge and skills necessary to identify and mitigate risks, operate safely and sustainably, and promote a healthy workforce. This multi-faceted approach has proven to reduce workplace accidents and injuries.

Learning from incidents cultivates a culture of safety and accountability.

FIFA World Cup Qatar 2022™ healthcare contribution

During the FIFA World Cup Qatar 2022™ football tournament, QatarEnergy contributed a sizeable team of doctors, nurses, and paramedics to support the nation. The team was released from their routine duties to focus solely on providing health services for the tournament under the operational coordination of the Supreme Committee for Delivery and Legacy.

QatarEnergy's core values of safety, integrity, excellence, respect, collaboration, and responsibility underpinned their approach towards safe, effective, and holistic care during the FIFA World Cup Qatar 2022™. QatarEnergy's staff collaborated with Hamad Medical services, Red Crescent ambulance services and the Supreme Committee to provide safe, efficient, and timely healthcare services to the public.

The clinics were set up at various locations across the State of Qatar, including airports, supporter camps, stadiums, fan zones and popular tourist attractions within Doha. This allowed easy and equitable access to healthcare services for patients from all backgrounds and nationalities. QatarEnergy's healthcare team helped to significantly reduce the burden on hospital and ambulance services.

The informal feedback received from volunteers, spectators, and workforce staff members was overwhelmingly positive. Many praised the care they received during the FIFA World Cup Qatar 2022™ event. The biggest achievement for us was successfully representing QatarEnergy in line with its values during the world's largest sporting event.



Health and safety training

We provide extensive safety training, coaching and engagement opportunities to our people to ensure that they have the knowledge and skills they need to work safely. We believe that by empowering our employees with such knowledge and skills, we can create a culture of safety that permeates throughout QatarEnergy. We rely on our safety professionals who are dedicated to solving complex problems, maintaining safety equipment, and establishing new industry best practices.

In 2022, QatarEnergy made significant strides towards improving the health, safety and environmental (HSE) training of its employees and contractors. Over the course of the year, we almost doubled the amount of HSE trainings conducted, educating over 44,000 individuals through 2,258 training sessions. Our focus was on providing employees and contractors with the knowledge and skills necessary to achieve an incident and injury-free workplace, promote a healthy workforce,

mitigate workplace health risks, identify, and mitigate environmental and process safety risks, operate with industry-leading asset integrity and reliability, and efficiently use natural resources and assets.

QatarEnergy recognized that achieving these goals required the full involvement of everyone, particularly site personnel. Our success in increasing quality HSE training and improving the overall health and safety culture is a testament to this approach.



QatarEnergy is committed to continue enhancing and improving its learning from incidents, as part of its HSEQ management system requirements. To achieve this objective, we have prioritized training and development of competent investigators who can ensure investigation quality – a cornerstone of the learning from incidents process.

During 2022, more than 60 employees of QatarEnergy participated in incident investigation training sessions to enhance their skills and knowledge in this area. We believe that well-trained investigators are essential for effective incident management, and they play a critical role in identifying the root cause of incidents and preventing their recurrence.

To further improve the quality of investigation processes and ensure effective learnings from incidents, we are planning to hold awareness sessions for multiple groups across the organization. These sessions will highlight the key roles and responsibilities when handling HSE incident investigations. Their main objective will be to prevent recurrence of incidents by ensuring effective learnings.

In the next milestone, we plan to focus on better utilization of our resources by building the required competency of HSE incident management. We will train selected personnel on interview methodologies, improved and simplified root cause analysis, and include human factors analysis as a core element of incident root cause analysis. This approach will enable the identification of underlying reasons for human behavior that caused or contributed to the incident outcome.

QatarEnergy's commitment to continuous improvement in its learning from incidents demonstrates its dedication to ensuring the safety and well-being of its employees and stakeholders. By investing in training and the development of competent investigators, we are taking proactive steps to prevent incidents from occurring and promoting a culture of safety and responsibility across the organization.

Moving forward, QatarEnergy is committed to building a systematic management approach to HSE training. We recognize that this is an essential tool for eliminating incidents and preventing injuries in the workplace. By providing employees and contractors with the knowledge and skills necessary to identify and mitigate risks, operate safely and sustainably, and promote a healthy workforce, QatarEnergy is taking a proactive approach to HSE training management that will have long-lasting benefits for the organization and its stakeholders.



HSE knowledge sharing

QatarEnergy takes safety very seriously, and in order to continuously improve safety performance, we conduct an annual Drilling Operations Incident Review Meeting. This meeting is led by QatarEnergy and includes participation from all operating companies, drilling contractors and service companies in the State of Qatar. The purpose of this meeting is to review all incidents that have lateral learning values, with the aim of improving safety performance, sharing best practices, promoting safety awareness, and demonstrating a commitment to safety.

During the meeting, all incidents are thoroughly reviewed and analyzed, with a focus on identifying areas for improvement and corrective actions. This helps to ensure that safety remains a top priority for all companies involved in drilling operations in the State of

Qatar, and that best practices are shared across the industry to prevent similar incidents from occurring in the future.

The annual Drilling Operations Incident Review Meeting is just one of the many ways that QatarEnergy works to promote safety in the industry. By actively seeking out opportunities for improvement and sharing best practices, we strive to ensure a safer and more sustainable future for all those involved in drilling operations in the State of Qatar.

Contractor management

Our commitment to safety extends beyond our own employees. We work closely with our partners and contractors to ensure that they share our commitment to safety and adhere to our safety standards. We also engage with the communities where we operate to understand their safety concerns and develop solutions that address their needs.

The Contractor Seven Star Program is designed to check that the key aspects of managing occupational health and safety in the workplace are implemented effectively. The program integrates the principles of effective implementation of HSE systems and standards, as well as our Life Saving Rules, into contractor requirements.

This program is reflective of the recognized "PLAN-DO-CHECK-ACT" management cycle and has been extended to all contractors in the Industrial City Directorate. Through this program, we provide our contractors with a structured path for continual improvement in health and safety management.

As part of the annual audit plan, MIC carried out a Contractor Seven Star and **Environmental Management System audit** (for 32 contractors in total) during 2022 and received a QatarEnergy CEO HSE Award.

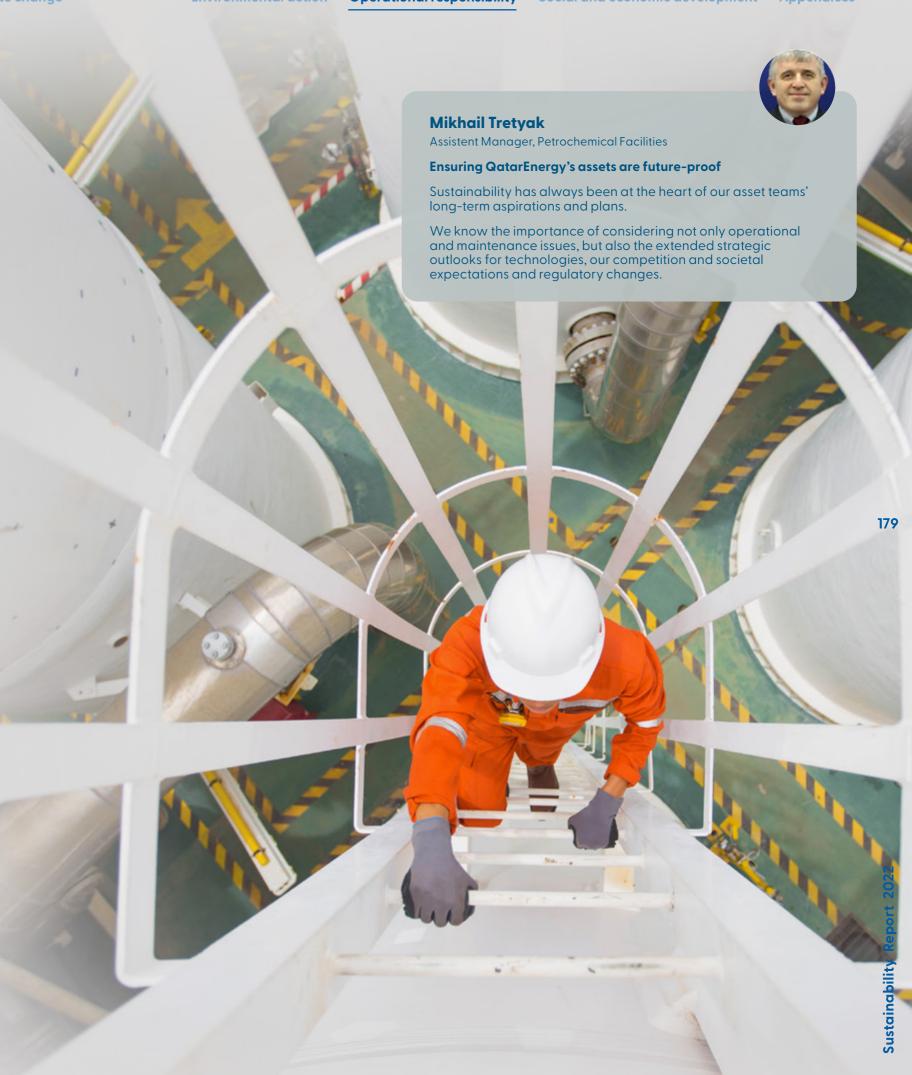
In addition to our audit program, we also support our contractors by conducting self-assessments and internal audits in line with our plans. This helps us to ensure that our contractors are continuously improving their health and safety management practices.

We recognize and celebrate the importance of good health and safety practices by our contractors. To this end, we organize award ceremonies to honor the top-performing contractors who demonstrate a strong commitment to health and safety in their work.

Overall, the Contractor Seven Star Program is an important part of our commitment to maintaining a safe and healthy workplace. We will continue to work with our contractors to ensure that they are meeting our high standards for health and safety and are continuously improving their health and safety management practices.



Achieving top-tier operations requires us to maximize the performance of our assets. Our reliability, availability and maintainability approach enables us to monitor and understand the performance of our assets throughout their entire lifecycle, anticipate potential problems, and mitigate them accordingly. We prioritize maintenance and utilize data and metrics to continuously improve asset performance. We remain committed to integrating sustainability into our operations, to ensure that we operate responsibly and sustainably for the long-term benefit of our employees, customers, partners, and the environment.



Process safety management

At QatarEnergy, process safety is a top priority, and we understand that preventing loss of primary containment events is crucial. This involves ensuring that our production, safety, and utility systems are functional, dependable, available, and maintained to the highest standards of asset integrity. By doing so, we can minimize the risk of hazardous material or energy release. Our commitment to safe operations goes hand in hand with reliable operations, which also translates into high plant availability and efficiency.

That's why we have a comprehensive facility lifecycle management program that covers both process safety and asset integrity. This approach enables us to identify potential hazards, manage risks, and continuously improve our operations to ensure that we operate safely, reliably, and efficiently. We adopted and used the International Center for Chemical Process Safety Risk-Based Process Safety (PSM) framework to develop our standards.



QatarEnergy is committed to a visible process safety culture and will continue to monitor how our Process Safety Management (PSM) system is functioning by conducting evaluations, developing solutions, and pressing for continued improvement.

In 2022, QatarEnergy's ELT approved the adoption of a set of ten core process safety fundamentals (PSFs), aimed at enhancing the safety of the organization's assets, projects, and operations. The PSFs will provide guidance on basic principles to prevent, reduce and ultimately eliminate high-severity process safety events (PSE). The initiative seeks to enable front-line workers, supervisors and managers to raise concerns openly and transparently and emphasize existing good practices to prevent PSE from escalating into catastrophic events.

As QatarEnergy, we remain committed to ensuring the effective implementation of our PSM System to prevent and reduce process safety incidents. As part of this commitment, a comprehensive and sustainable PSM Awareness and Training Program has been approved. The program will be launched in the third quarter of 2023 and is expected to continue until 2025. It will include sessions for all levels of the organization, from Executive Management to front-line workers. SMEs will also attend train-the-trainers sessions to help ensure the program's sustainability. Additionally, computer-based training and further sessions conducted by already trained SMEs will also be used to reinforce the process safety culture.

QatarEnergy also has a commitment to effectively manage major accident hazards associated with the projects and operational facilities and installations. Our standard for Major Accident Hazards

Management (MAHM) requires duty holders to develop and submit a MAHM report, demonstrating that the risks associated with the operations are managed to a level that is considered as low as reasonably practicable (ALARP).

Additionally, projects and operational facilities and installations started to develop bowtie diagrams for identified major accident hazards in the process of preparing the MAHM reports. The bowtie diagrams serve to provide greater visibility to the ELT that the risks of major accidents are being managed effectively. QatarEnergy aims to enhance the effectiveness of our current practices by integrating safety critical barriers and processes with operating management systems. The bowtie diagrams illustrate the controls in place today and why they need to be there in the future. QatarEnergy also uses bowtie in combination with other analyses, such as process safety management leading indicators (Tier-4), to monitor the effectiveness of the barriers designed to reduce the risks of potential major events.

In 2022, QatarEnergy reformulated the PSM leading key performance indicators (KPIs), focusing on the PSM System elements that presented the most challenges based on the analysis of Tier-1 and Tier-2 process safety incidents from 2017 until 2022, and the previous set of leading KPIs recorded from 2018 until 2022. This enabled QatarEnergy to adopt a risk-based approach, placing more focus on the elements that presented higher risks towards effective PSM implementation.

The new set of leading KPIs is focused on four **PSM System elements:**

Element 2 - compliance with standards. Element 8 - operating procedures. Element 10 - asset integrity and reliability. Element 15 - conduct of operations.

	Process safety culture
	Compliance with standards
Commit to	Process safety competency
process sarety	Workforce involvement
	Stakeholder outreach
Understand	Process knowledge management
hazard and risks	Hazard identification and risk analysis
	Operating procedures
	Safe work practices
	Asset integrity and reliability
	Contractor management
Manage	Training and performance assurance
LISK	Management of change
	Operational readiness
	Conduct of operations
	Emergency management
	Incident investigation
Learn from	Measurement and metrics
experience	Auditing
	Management review and continuous improvement

QatarEnergy

Sustainability Report 2022

Sustainability Report 2022

Tahani Al-Zefairi

Senior Business Analyst

Sustainability is at the heart of our operational excellence program, Al Jisr (the bridge), in Mesaieed.

By using Goal Zero as our guiding principle, we commit to develop a high-performance, accountable, and continuous improvement culture with capable people at its heart.

We need to ensure that we never lose the sight of our purpose.

Operational excellence at QatarEnergy

In 2022, QatarEnergy continued its commitment to promote operational excellence through the implementation of our ongoing operational excellence (OE) program. This program is designed to support our continuous efforts to enhance our operations and improve our overall business performance daily.

Through our OE program, we have established a culture of continuous improvement that encourages our employees to identify areas for optimization, implement best practices, and streamline our processes to achieve greater efficiency and effectiveness.

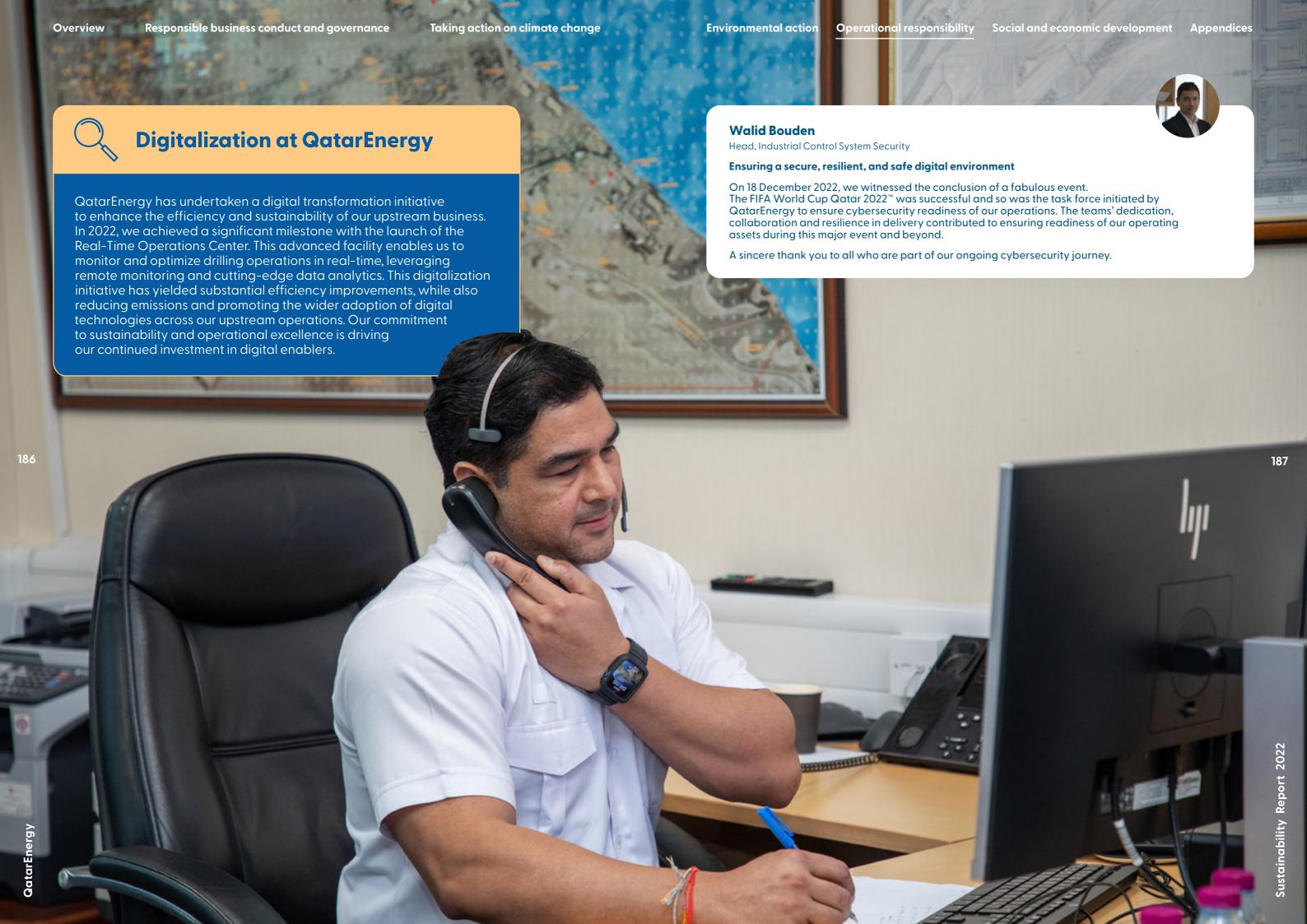
As a prominent player in the energy sector, QatarEnergy recognizes the importance of preparing operations asset owners to take full ownership of new assets and operate and maintain them in a safe, reliable, and sustainable manner.

To achieve this goal, a new operations readiness concept was established in 2022, with the aim of providing operations readiness governance and assurance, as well as having a successful execution of all commissioning and handover activities.

By implementing an operational readiness management framework, we ensure that our activities are carried out effectively and efficiently, contributing to the delivery of QatarEnergy projects much faster, at much lower cost and with flawless production to ramp-up the highest productivity while maintaining the highest standard in quality and HSE.

All projects now have an overall asset holders representation through the formation of an operations readiness support organigram. Team members remain the same until commissioning, start-up, and handover. Looking forward, QatarEnergy aims to have 100% of all green and brownfields projects (CAT-1 to CAT-4) following this process by 2025. By implementing the operations readiness concept and activities, QatarEnergy is wellpositioned to ensure a smooth transition from project delivery to operations and maintenance, contributing to operational excellence within the industry.





Vessel vetting

Vessel vetting is a crucial process in the marine supply chain that ensures the safety, efficiency, and compliance of vessels used for transporting goods. This involves a comprehensive evaluation of a vessel's safety, operational performance, crew qualifications, and compliance with international regulations and industry standards. Vessel vetting helps to identify potential risks and hazards associated with a vessel and its operations, and appropriate measures are taken to mitigate these risks and ensure the safe transport of goods.

QatarEnergy understands the significance of a robust vessel vetting system and has established an in-house This ensures that all vessels employed for QatarEnergy related business or calling at QatarEnergy ports and terminals meet our stringent safety, quality and environmental standards.

Since its inception in 2009, SQA has continuously adapted to ensure that the best possible vetting systems are in place. In 2022, the Serdal application migrated to a web-based platform, which enables it to work with next-generation technology. The system is now preparing to adopt SIRE 2.0, the latest version of

the industry-standard Ship Inspection Report Program, which provides a new approach to vessel vetting tailored to the risk profile of individual vessels by assessing their performance influencing factors.

QatarEnergy is aware of the potential of artificial intelligence (AI) in improving the accuracy and speed of the vessel vetting process. Therefore, we have incorporated the latest AI technology in Serdal and keep collaborating with business partners that use Al extensively in their vetting solutions. However, the importance of employing

experienced human resources well-qualified to carry out the job cannot be overlooked. Serdal employs experienced and well-trained personnel best suited for carrying out vessel screenings on behalf of QatarEnergy.

By adopting advanced technologies and collaborating with industry partners, QatarEnergy is setting new standards for vessel vetting, ensuring a safer and more sustainable maritime industry.



Replacing dune sands as a backfill material

QatarEnergy currently uses dune sand as a backfill material for its buried onshore pipelines, however, the availability of licensed dune sand is limited, creating a need to promote alternative sources for backfill material. One key driver for the use of dune sand is QatarEnergy's single layer fusion bonded epoxy (FBE) pipeline coating, which is not compatible with many other backfill materials. To address this issue, QatarEnergy plans to align its pipeline coating selection with the Shell DEP approach, allowing for the use of more robust 3-layer coating systems, such as 3-layer polyethylene coatings (3LPE). This coating system has a FBE corrosion coating base layer, an adhesive and a polyethylene topcoat that provides mechanical resistance to abrasion

and damage. The 3LPE coating system is widely used and does not require any further qualification for use.

Moving forward, all projects in the "define stage" will use 3LPE coatings in conjunction with alternative backfill materials, such as quarry sand, which is a processed by-product. The goal is to maximize environmental, social and economic benefits and minimize the use of imported fill materials with excavated and processed trench spoil for pipeline backfill instead.

The long-term benefits of this approach include protecting Qatar's natural resources, reducing the project's environmental footprint and reducing road traffic risk by taking many truck journeys off the Qatari roads, thereby providing a social benefit.





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Health and safety in Ras Laffan Industrial City (RLIC)

In 2022, RLIC successfully managed to carry out its operations and deliver its services in an uninterrupted, safe, and timely manner. The efficiency and effectiveness of the operations ensured sustainability, business continuity, safety, cost optimization, operational excellence, and customer satisfaction.

RLIC has also been compliant with the ISO 45001 requirements, with more than 800 inspections completed in 2022. Major incident investigations were conducted through the Tripod Beta approach, while 12 management walkthroughs were completed in the same period. 4639 electronic permit-towork reviews were conducted, and 199 HSE training sessions were carried out with over 3500 participants.

To promote learning and sharing of lessons learned, a safety forum was held in 2022 as a common platform for occupational health and safety management systems between the industrial cities.

To further promote safety, several campaigns were conducted, such as Best Mooring Practices, Best Lifting Practices, and Stay Safe Campaign at cargo and service berths. Road safety enforcement campaigns were also conducted regularly across RLIC at various hotspots through the Ministry of Interior approved portable cameras. Effective operation and synchronization of QatarEnergy's in-vehicle monitoring system for fleet vehicles were also achieved.



Our top priority is to maintain a state of readiness to promptly and effectively handle any emergency situations that may arise. To achieve this, we have formulated a comprehensive Standard for Emergency Preparedness and Response which is applied to QatarEnergy and our joint ventures and subsidiaries. We have comprehensive emergency response plans that are which are compliant with both national regulations and international best practices.

QatarEnergy's fire and rescue services is at the forefront of emergency response, where we have the mission to save lives, protect assets and the environment in the industrial cities and concession areas. During 2022, we launched the Istijaba Program to transform the capabilities of our fire and rescue services in line with leading fire brigades in the world.

Our firefighters have demonstrable capabilities to respond to all type of incidents where our mission is to save lives, protect assets and the environment. Emergency exercises and drills form the foundation of our emergency preparedness, and we work very closely with all the industries in Ras Laffan Industrial City, Mesaieed Industrial City and Dukhan to enhance and maintain a mutual state of readiness to respond to any adverse incidents.

Business continuity

We also recognize the importance of business continuity management in ensuring the smooth and continuous operation of our critical business activities. To achieve this, we have established a Business Continuity Management System (BCMS) that covers all business-critical assets and processes.

This system enables QatarEnergy to react quickly and effectively to serious incidents, protecting its reputation and ensuring continued business operations.

In 2022, QatarEnergy's BCMS team continued to monitor the COVID-19 pandemic situation with a focus on

supporting a successful delivery of the FIFA World Cup Qatar 2022™. The team implemented various measures to minimize the impact of the infection on employees, contractors, visitors, and communities while supporting major shutdowns and turnarounds.

To drive operational excellence across QatarEnergy, the BCMS team implemented an automated solution for business continuity planning fully aligned with the ISO 22301:2019 standard. The system aimed to reduce risks and improve QatarEnergy's ability to respond, react, and recover from any disruptions while optimizing resources and integrating business processes.





- 2022 performance highlights
- Our ambition to create shared value for all
 - Caring about our people
 - Attracting, developing, and retaining talent
 - Contributing to Qatar's future through our Qatarization program
 - · Care and well-being

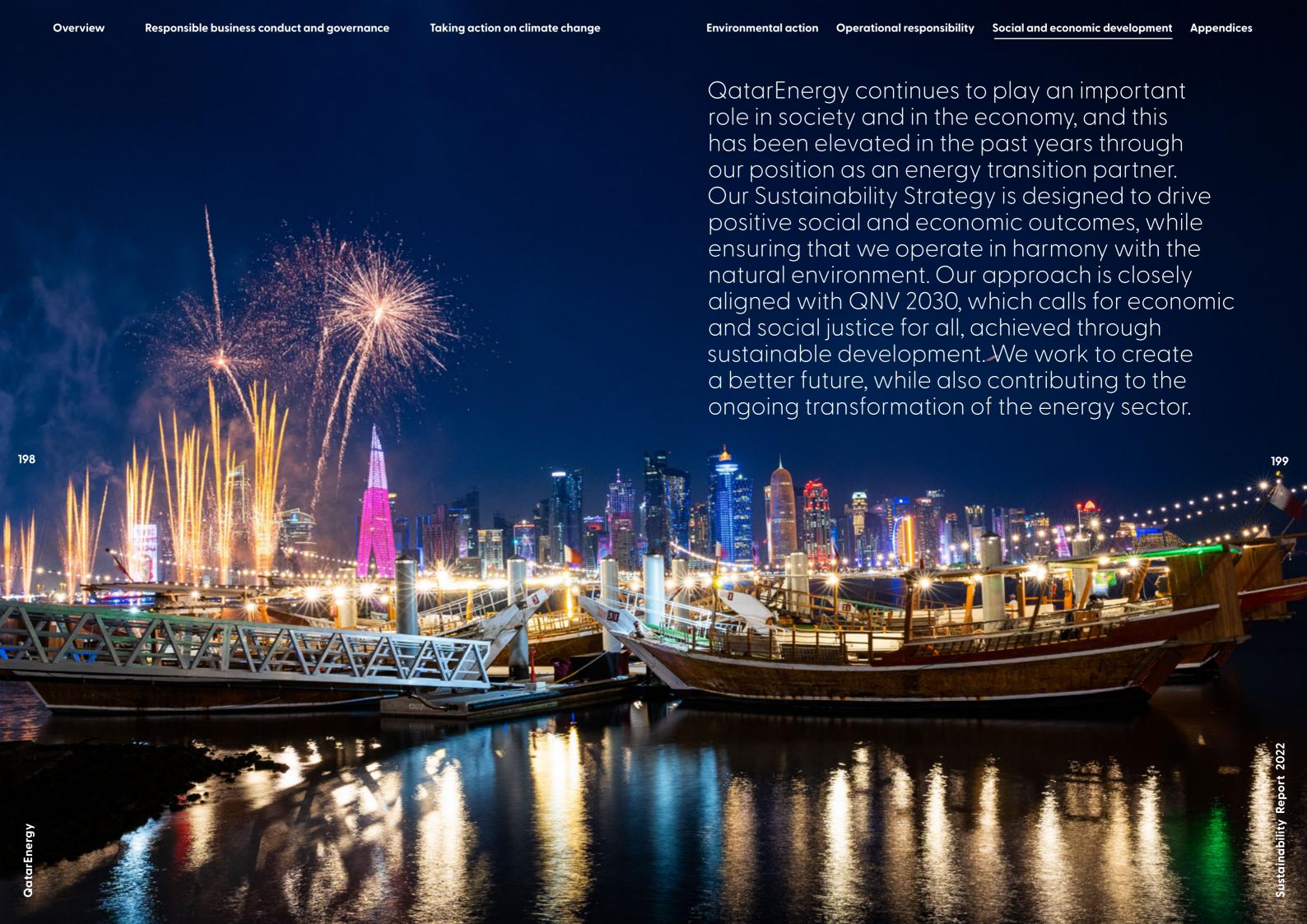
Creating and growing value

- Responsible procurement
- Resilient and competitive energy sector
- Investment opportunities
- In-country value
- Supplier development

— Sharing benefits

Social responsibility contributions





2022 performance highlights

hours of training per employee on average

582

new joiners into **QatarEnergy**

188

new suppliers in-country value certified

77%

of goods and services sourced in Qatar

suppliers on development programs

Over 22

million QAR

spent on social responsibility through partnerships

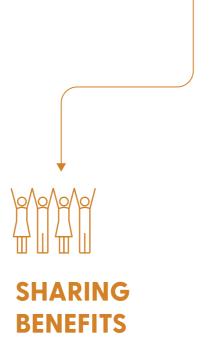
Report 2022

Operational responsibility

Our ambition to create shared value for all

Our driving ambition at QatarEnergy is to create shared value for all through our commitment to sustainable, responsible, and locally relevant solutions that accelerate social and economic progress. As an energy transition partner and a key player in Qatar's economy, we recognize that our unique position presents a powerful opportunity to make a lasting and meaningful difference for society.

We firmly believe that our success is directly tied to the success of the communities in which we operate. That's why we are dedicated to working hard every day to achieve our social and economic development goals, enabling everyone to participate and benefit. Our unwavering commitment to creating shared value through our activities is at the heart of everything we do.





Caring about our people

People are at the heart of our business strategy. We believe that a diverse and engaged workforce is key to a successful business. QatarEnergy strives to be a great place to work, whether our employees are building lifelong careers with us or developing skills to help them on their professional journeys. This is achieved through providing support and opportunities to help our employees reach their full potential.



Attracting, developing, and retaining talent

In an industry that's rapidly transforming, QatarEnergy's workforce is evolving to keep pace with the skills and capabilities needed to embrace the future. To attract and retain talent we strive to offer our employees a differentiating experience and an inspiring workplace that encourages collaboration, innovation, and personal growth.

In 2022, we continued our commitment to our People Agenda, which included the initiation of an integrated strategic workforce planning process. We conducted multiple workshops to understand the strategic drivers required professional competencies for of each department and their impact on people, allowing for well-informed plans to close the gap between the current workforce

and future requirements. We also grouped inter-related job roles into job families and launched the new job families for subsurface and surface engineering. By mapping the each job role, we were able to develop and implement learning solutions that enabled employees to close competency gaps and improve their performance.

During 2022, regular classroom training became possible again and QatarEnergy delivered more than 180 thousand hours of training, both virtual and classroom, with an average of 21 hours of training per employee. We also launched a coaching program for senior and junior leaders and delivered the Foundation of Directorship and Director Excellence programs in partnership with the International Institute for Management Development for Qatari leaders in the sector. 207

To enhance accessibility to policies and processes, we further improved our People Portal Platform, providing easy access to services and information related to talent management, learning and development, and human resource policies and procedures. This platform also served as a central source for managing annual leave allowances, accessing learning and benefits, and documenting performance appraisals.

Finding the right talent is key to our business and the recruitment department successfully onboarded a record-breaking number of 582 new recruits. The voluntary attrition rate of less than 3% illustrates our people are making a choice to stay.



Contributing to Qatar's future through our Qatarization program

As underpinned by our Respectful Workplace Policy, we value diversity and commit to providing an inclusive culture that allows everyone to make and be recognized for their contribution. In alignment with the State of Qatar's efforts to encourage the growth of Qatari talent. Qatarization is an essential component of QatarEnergy's strategic workforce planning and forms a crucial element of our talent strategy. We have created a five-year workforce plan that ensures that we have the right people available at the right time. This plan enables us to evaluate our business needs for Qatari nationals over a specific period and devise appropriate recruitment and development strategies to meet those requirements. It focuses on the need to train and develop Qatari nationals for critical positions at QatarEnergy, using a competency-based approach.

Qatarization is an important aspect of our commitment to supporting the development of the Qatari workforce in the energy sector. Our initiatives go beyond our direct employees to promote Qatarization across the entire industry. We believe that developing the skills and capabilities of Qatari nationals is essential to the growth and success of the sector as a whole.

We offer scholarships to Qatari nationals who are pursuing higher education in fields related to the energy sector. By supporting their education, we are helping to build a pipeline of talented individuals who will contribute to the growth and success of

the industry in the future. A key initiative is our internship program, which provides Qatari nationals with hands-on experience in the energy sector. Through this program our sponsored students and recent graduates are given the opportunity to work alongside experienced professionals, gaining valuable knowledge and skills that will help them succeed in their careers.

As a demonstration of the value to be gained from an integrated and multi-faceted approach to talent development and knowledge sharing, we have zoomed-in to see how the Subsurface Development and Exploration team is doing it.

Khalid Mohammed Al-Hitmi

Executive VP Subsurface Development & Exploration

Investing in the next generation

Investing in young professionals is essential and our duty. By unlocking the next generation's full potential and equipping them for navigating the ever-changing landscape, will not only secure the future, but also shape the course of tomorrow's progress.

Knowledge transfer is the bridge between the past and the future.

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Four examples of how one group in QatarEnergy is enabling everyone to participate and benefit

Maerifa is knowledge

The Maerifa Knowledge Sharing Program was launched in 2016, to develop the technical skills of associates within the Operated Onshore Oil Field Development Department of the Subsurface Development and Exploration Directorate. Starting with 15 young associates focused on subsurface technical skill development, Maerifa now covers a broad range of multi-disciplinary technical learning seminars and has grown to include 173 employees which range from associates to senior staff levels.

What truly acted as game changer was the commitment to open the door – inviting in other departments in, even external subject matter experts, to share their perspectives from other industries. This allows Maerifa as a cross-directorate, external facing program to build skills, enhance knowledge and establish networks – holding true to its meaning. Its humble beginnings should act as inspiration across the organization.

Nadia Menia

Senior Exploration Geologist

Fostering curiosity and sharing

I strongly believe in the power of knowledge sharing and collaboration, especially for our young associates.

A cross-discipline program like Maerifa not only enhances technical skills but also broaden perspectives and foster a culture of curiosity.

Learning opportunities for young professionals

When coring was required for the CO₂ (WAG) injection pilot project for enhanced oil recovery at the Dukhan field, team members recognized this as an opportunity for hands-on learning and invited young associates early in their careers who had never witnessed coring jobs before. This provided the young associates with a unique opportunity to learn from experienced professionals and gain hands-on coring experience in this innovative pilot project. Exposure to operations have proven again and again to be essential in developing skills and expertise, enabling the individuals to contribute effectively to their teams' success in the short and long term.

Two young Qatari geologists, Sharifa Al-Marri and Khalid Al-Yazeedi, also benefited from the opportunity as they were empowered to apply and practice their coaching and leadership skills.

This initiative illustrates the importance of proactively creating two-way, hands-on learning opportunities for young professionals.



Abdulla Hussain Alansi Alvafei

Senior Planning Engineer

Stepping forward, learning to lead

I couldn't be happier seeing our efforts with young talent paying off as they now lead and guide the next generation of our workforce.

This ensures not only business continuity but is also a testament to the value of nurturing and empowering our young future leaders.

Broadening beyond

The International Upstream & Exploration Department of QatarEnergy operates in 17 countries worldwide. It is essential that staff in the department have a complete understanding of the size, scale and safety exposures related to operations, in especially deep-water drilling. One of the key opportunities for QatarEnergy staff to gain practical experience and develop their skills further is through international rig visits.

When Hadeel Abdulrahman Y. A. Ahmed was invited to spend three weeks on the Deep Sea Bollstarig operated by Shell offshore Namibia, she did not hesitate. As one of the young associates who joined the hands-on coring operations at the Dukhan field (in the State of Qatar) and after a few days in the field there, she had the confidence to embrace opportunities to gain broader experience. Preparing for her visit, Hadeel had to undergo cold water helicopter underwater escape training in Aberdeen, Scotland, to comply with safety regulations for personnel transfer from shore to rig. During her time in Namibia, Hadeel witnessed multiple drilling operations, mud logging and borehole wireline evaluation programs, gaining insights into the operational process and personal safety standards required for deep-water drilling operations. She partnered with a female associate from Shell, creating a valuable opportunity for both to share their technical knowledge and learn from this cross-cultural exchange.

This broadening experience equipped Hadeel with additional knowledge and expertise, cultural sensitivity, and courage – all contributing to making her an even stronger explorer.

Hadeel Abdulrahman Y. A. Ahmed

Associate Geologist

Discovering what is out there

Thanks to the support and encouragement from my leaders and peers, I spent three weeks on the offshore Deep Sea Bollsta rig in Namibia. It was truly a unique experience and an opportunity to learn in real time what the challenges are and how to overcome them. Having direct access to the experts there in the field, enhanced my confidence and was a step-change in my learning journey.

I am a geologist and have discovered that the best way of learning is out in the field.

Lead to success

In 2021, five ladies stepped into team head roles, an extraordinary milestone for the Subsurface Development and Exploration Directorate. These appointments are a result of ongoing investment in talent development and the provision of an inclusive culture that allows everyone, to make and be recognized for their contribution.

In the same year, a leadership program called Lead to Success was developed, aiming to prepare young nationals who have been recently promoted to leadership positions. The program is specifically designed for those working on subsurface projects and wells, with training content tailored to their field.

In 2022, the program included a series of workshops, including Transition from Individual Contributor to Team Lead, Coaching for Performance, and Strategy. These workshops covered essential leadership skills such as effective communication, team management, performance coaching and strategic planning.

The program is an investment in the development of the next generation of diverse leaders, ensuring that they are wellprepared to meet the challenges of their roles and drive QatarEnergy's success.



Maryam Al-Bishri

Head, Asset Planning

Trusting in diverse leaders

With the ongoing support and guidance from management, I'm eager to take on new challenges and responsibilities to make a positive impact and contribute to the team's overall success.

I'm grateful for the trust and confidence placed in me.

Care and well-being

At QatarEnergy, we prioritize the health and well-being of our employees. It is a fundamental part of our core values, and it influences how we approach our relationships with those who work for and with us. We believe that creating a supportive work environment that promotes well-being is not only the right thing to do, but it also makes good business sense.

By providing our employees with favorable working and living conditions, and fostering respectful interactions where everyone has a voice, we create a culture of collaboration and motivation. We are clear on our requirements of contractors to ensure they also treat their employees with respect and care. Our approach to employee well-being has proven to strengthen our people's commitment to QatarEnergy and promote teamwork, resulting in improved organizational performance and productivity.

Our commitment to promoting employee well-being is deeply rooted in our respect for human rights. We believe that everyone has the right to a safe and healthy work environment. Not only are we committed to upholding this right ourselves, but we also expect our business partners to do the same. We recognize that promoting human rights is not just a moral obligation, but it is also essential for the long-term success of our business. By respecting and

promoting the well-being of our employees and encouraging our business partners to do the same, we are taking concrete steps to respect human rights and promote sustainable development.

At QatarEnergy, we believe that going the extra mile on healthcare, is one of the main contributors to employees' success and overall satisfaction. For that reason, we provide extensive healthcare coverage to our employees and their dependents, ensuring access to general practice, laboratory, radiology, pharmacy,

and dental clinics across all our operating locations. Additionally, we recognize the importance of vaccinating against COVID-19, and in collaboration with the Ministry of Public Health, we have provided vaccines to all our employees and their families, while also supporting the wider energy sector employees.

We also offer wellness programs such as annual medical checkups, weight loss and smoking cessation programs and sessions on improving mental health resilience and managing stress, to promote a healthy lifestyle and well-being among our employees. By conducting regular awareness campaigns, we aim to inform and instill behavioral change on key issues such as smoking and early cancer detection.



At QatarEnergy, our people are at the center of everything we do, and their passion and dedication are what drives us

forward. We believe our people's influence extends beyond our

organization. As we partner with businesses and communities,

we see firsthand the positive impact that our team members have on those around them. They embody the values that we stand for and their commitment to creating shared value is felt

As we move forward, we remain committed to placing our people at the forefront of our efforts to drive positive change. They are the ones who will help us create a better tomorrow not just for ourselves, but for our business partners, our communities,

and the world at large. We are proud of the role they play in

One of our long-standing and most valued programs is the QatarEnergy privilege program, through which we provide special discounts for products and services from more than 90 companies covering 30 business sectors, including restaurants, airlines, department stores, events and more, all within the State of Qatar. This program is aimed at enriching the lives of our employees as well as their family members.

throughout the wider community.

In addition, we have an employee assistance program, which is an anonymous hotline for employees that provides independent 24-7 access to a range of professional support services. These services include remote and in-person counseling, legal and financial guidance, and wellness coaching. This program aims to assist employees with issues that can potentially impact job performance, health, and mental and emotional well-being.

QatarEnergy employee benefits









Awareness campaigns



Wellness programs



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Vaccination campaign



Responsible procurement

At QatarEnergy, we have established a world-class supply chain that is designed to tackle any challenges that may arise on a global scale. Our success is driven by the quality of engagement we maintain with our diverse portfolio of local and global contractors and suppliers. We pride ourselves on forming business relationships that are built on mutual respect and aligned with our values, with a focus on maintaining the highest standards of business ethics and compliance with our Code of Conduct.

Our commitment to QNV 2030 means that we prioritize the procurement of goods and services locally, as evidenced by our increasing annual procurement spend. Our dedicated contractor and supplier performance management resources allow us to maintain a constant dialogue with our partners, with the goal of developing and maintaining optimal relationships. We understand that our success is directly tied to the success of our contractors and suppliers, and we strive to create a mutually beneficial environment that drives continuous growth and development for all parties involved.

Our procurement expenditure plays a crucial role in supporting strategic supply chain initiatives within the energy sector, driving economies of scale, and fostering sustainable growth.

Hajar Mohammed Al-Kuwari

Senior Category Specialist

Supporting local businesses through strategic sourcing

We emphasize the importance of developing local vendors and are very proud of the fact that 77% of our procurement budget in 2022 went to them. A steady increase in our local contribution is a testament to the growing strength of Qatar's economy.

Through extensive collaboration, we have built a diverse portfolio of suppliers and contractors.

Procurement spend breakdown

		2021	2022
	2020	2021	12.5
Indicator	2020	9.7	9.6
Total procurement spending, billion QAR	9.2	7.5	77%
Total procurement spending on suppliers in Qatar, billion QAR	6.4	74%	6,602 221
Goods and services sourced locally	69%	6,331	3,337
Number of registered suppliers	5,833	3,130	51%
Number of registered suppliers based in Qatar	2,947	50%	
Percentage of Qatari registered suppliers	50%		
			22

Resilient and competitive energy sector

In addition to QatarEnergy's commitment, to provide a source of cleaner energy, we are dedicated to contributing to the development of diverse economic capacities throughout the State of Qatar.

We recognize that building a resilient and competitive energy sector in the State of Qatar requires dedicated collaboration and partnerships with other companies within the sector.

Most notable in this respect will be the Tawteen program, which aims to establish a sustainable and competitive in-country supplier base capable of meeting the energy sector's requirements, create clusters of investment opportunities, promote in-country value contributions, and support the development of local suppliers in partnership with other energy companies in the State of Qatar.

QatarEnergy's proactive leadership of the Tawteen program, and continuous collaboration with the partnering companies in the energy sector in the State of Qatar, have led to significant achievements in terms of investment, job creation, and support for local businesses.

Since its inception, the program facilitated investments worth of QAR 10 billion, created nearly 4,000 jobs, and signed Memorandums of Understanding (MoUs) with 6 international anchor companies.

14 Tawteen partners





























Investment opportunities

The cluster development team at QatarEnergy is dedicated to enhancing and fortifying our supply chain base by creating investment opportunities that will localize products and services in diverse fields within the energy sector. Our aim is to stimulate growth and development in subsurface operations, maintenance, repairs, digital technologies, chemicals and metals, engineering services, light equipment and other services that form the energy sector's supply chain. By providing investment opportunities in these various areas, we can cover a broad range of services, including drilling inspection services, recycling, and maintenance. Our approach creates a platform for localizing services, which will not only improve the efficiency of our operations but will also foster economic growth within the region.

The international community has also taken notice of the efforts put forth by the Tawteen partners, with six international anchor companies signing Memorandums of Understanding (MoUs), thereby committing to a total investment of more than 5 million QAR and the creation of 957 jobs. These international partnerships are opening new opportunities for the energy sector in the State of Qatar.



Taking a creative and big picture approach to investment opportunities

Under the investment cluster development achievements, several major projects were launched, from which two focused specifically on waste to products, with the aim to increase the economy's circularity. The first project focused on reducing the incineration of hazardous waste by introducing new technology using a thermal desorption process to treat the waste. The second project involved the treatment of spent caustic associated with a deactivated catalyst in normal alpha olefin process using caustic soda. The strategy is to set up a facility to treat spent caustic, recover and sell sodium aluminate, which will contribute to the circular economy and reduce the environmental impact.

Both projects have been awarded and the building of manufacturing facilities has started, which will bring significant benefits through being more environmentally friendly and further promoting circularity. Additionally, the projects will contribute to reducing environmental impact by reducing air and noise pollution and generating a minimal amount of solid waste. Overall, these achievements highlight the QatarEnergy's commitment, and RLIC's in particular, to promoting sustainable development and reducing the environmental impact of its operations.



Khalid Hamdan Ahmad Malallah Al-Ahmad

Cluster Transformation Lead

Creating a circular economy within the sector

In 2022, the Tawteen team deepened our focus on sustainability. One of the outcomes was a waste-to-product strategy to reduce waste within the sector. In the same year, two investment opportunities were launched to turn waste into valuable products that can be put to market.

A circular economy contributes to the local economy, while at the same time reducing the sectors' environmental footprint.

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In-country value

The in-country value (ICV) program aims to create more local value in the supply chain by incentivizing companies to use local goods and services and contribute to the local economy. This initiative is a critical component of QatarEnergy's commitment to localizing Qatar's energy sector and supporting the QNV 2030.

To achieve this, we launched Qatar's first digital ICV portal in 2020 under the Tawteen program. The portal provides a comprehensive baseline to assess suppliers and monitor their performance over time. We measure supplier ICV contributions using a formula that considers local purchases, the development of local human and business capabilities and capital investments. Participation in the ICV program is voluntary, but we encourage and reward suppliers who invest in ICV by providing them with a commercial advantage when bidding for tenders offered by QatarEnergy or Tawteen partners.

20 Companies implementing in-country value program













































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The Tawteen team, encourages suppliers across all sectors in the State of Qatar, to invest in all dimensions that constitute ICV. What has started off as a voluntary initiative with a few committed partners, has proven its value to such an extent, that the ripple effect can be felt even beyond the energy sector.

Responsible business conduct and governance

Overview

Taking action on climate change

Supplier development 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.

Through the Tawteen Program, we provide business support, capabilityand talent development, and strategic support to suppliers and entities to ensure cooperation, integration, effectiveness, and capabilities within the supply chain.

The 18 suppliers on the Development Program have received a wide range of direct benefits, 15 benefited from land allocation support, nine received allocation of funds, and nine received project execution support for the construction of their new facilities.

It was a privilege to congratulate the eight suppliers with their qualification certificates, and confirmation for us on the importance of investing in local suppliers.

At QatarEnergy, we believe that economic growth and sustainability go hand in hand. By working together with our business and supply chain partners, we can drive meaningful change that benefits everone, including broader society. We all share a vision for a sustainable future.

Our local procurement, investments in cluster development, supplier development, and in-country value programs align with QNV 2030 and support the sustainable development of its people. As we collectively move forward on this journey, we are confident that this collaboration will continue to create a multiplier effect that will drive positive change for years to come.



Sharing benefits

As an energy corporation, we recognize our role and the ripple effect of our efforts. This includes creating employment opportunites, supporting local procurement, operating in a socially responsible manner and investing in social development.

In our interactions with stakeholders, we adhere to the principles of respect, collaboration, and open dialogue, whether it is with local communities, educational institutions, government stakeholders, or broader society.

Understanding that building trust-based

partners, including government entities, private companies, energy sector players, non-profit organizations, and schools.

Recognizing the potential of our people, we actively encourage and support our employees to volunteer and participate



Social responsibility contributions

Our social responsibility investments are an important opportunity to make a positive contribution to social and economic development.

In 2022, we started the journey to develop and initiate a strategic approach to social responsibility that promotes partnering and creates shared value for all parties involved, contributing to sustainable societies and communities.

We proactively aim to raise awareness of the importance of energy, the energy transition, and sustainability, driving the infusion of knowledge, capabilities, and practices. We focus also on improving and consolidating community well-being to empower resilient and sustainable living. Reflecting QatarEnergy's identity as a proud Qatari corporation, emphasizing our values, business culture and contribution to foster a solid grounding of who we are remains a key aspect of our social responsibility approach.

At QatarEnergy, our long-term ambition is to be a source of inspiration for others and continue investing strategically in communities and broader society.

Our Social Responsibility Strategy 2023-2027 was recently endorsed and approved. Developing the strategy was an inclusive process, to reflect the various views of the QatarEnergy directorates, and it involved consultations with relevant stakeholders and evidence-based information, towards a structured and coherent plan.

This strategy establishes a clear direction and outlines the strategic shift towards a more structured and proactive approach when designing, implementing, and monitoring the social responsibility programs and projects within dedicated themes and focus areas.



Corporate social responsibility priority areas



Education and awareness



Capability building



Community well-being



Environment and sustainability



Identity



Slim Sakka

Social Responsibility Specialist

Investing with strategic intent maximizes long-term value

We are excited about our new social responsibility strategy. Building on existing and ongoing initiatives, we aim to intentionally maximize value for Qatar's society, create a positive presence and legacy and share our social responsibility story to inspire others.

Building a better place for our communities and broader society, complements the creation of business value – both are essential for long-term success.

Blood donation during FIFA World Cup Qatar 2022™

During the FIFA World Cup Qatar 2022™, QatarEnergy Healthcare Department organized a blood donation campaign in collaboration with Hamad Medical Corporation. The event encouraged our employees, partners, and stakeholders from different locations to participate in the noble cause of donating blood, which is crucial for saving lives in case of emergencies.

Despite the challenges posed by the COVID-19 pandemic, QatarEnergy's healthcare team ensured that all necessary precautions and protocols were followed to guarantee a safe and successful campaign. They communicated internally with different directorates and externally with Hamad Medical Corporation to avoid any inconveniences and prepared different locations with different requirements, keeping safety as a top priority. They also arranged for refreshment snacks, standby paramedics, and all necessary equipment to perform a stress-free campaign.

Through their efforts, QatarEnergy Healthcare Department successfully registered a total of 587 donors across Doha, Mesaieed and Ras Laffan. Of those registered, 393 individuals donated blood. The success of the blood donation campaign was a testament to QatarEnergy's core values of safety, integrity, excellence, respect, collaboration, and responsibility. The biggest achievement was the pride and honor of representing QatarEnergy, in line with its values, on an international scale during the largest global sporting event.

The contribution to the Hamad Medical Corporation and the FIFA World Cup Qatar 2022™ campaign was crucial for ensuring the availability of sufficient blood supplies in anticipation of any emergency. These efforts truly reflect QatarEnergy's commitment to giving back to the community and making a positive impact on society.



Community Outreach Program engaging with local stakeholders

Ras Laffan Industrial City Community Outreach Program (RLIC-COP) was established in 2010 as a collaborative effort between the six industry leaders operating in Ras Laffan: QatarEnergy, Qatargas, Pearl GTL, Dolphin Energy, ORYX GTL and Al Khalij Gas. This program aims to build a respectful and trustworthy partnership between the energy industry and the local community in Al Khor and the northern areas of the State of Qatar. By fostering two-way engagement with community members and stakeholders, RLIC-COP encourages co-creation, innovation and collective decision-making that benefits everyone involved.

برنــــامج راس لفــــان للتــــواصــــل الإجــــتماعــــــي

Ras Laffan Industrial City Community Outreach Program





Pearl GTL







The program implements a variety of projects that promote respectful interactions between industry and the local community in Al Khor and surrounding areas. RLIC-COP also provides direct benefits through social development programs, and partners with public institutions to support cultural, educational, health, environmental and safety initiatives that benefit the local community as a whole. Overall, the program strengthens trust and cooperation between the industrial companies located in the northern region of the State of Qatar and the community they serve.



Dana Rashid A. M. Al-Thani

Head, Social Responsibility

Partnering multiplies our collective contributions

Together with our five major energy business partners in RLIC-COP has made significant contributions to meet the needs of the local community in Al Khor and northern areas of Qatar. It is personally hugely rewarding to see how our collective investments have maximized the value gained, and even more so, how others are inspired to also join hands in their community outreach programs.

Joining hands with our partners, allowed for multiplication of our community investments.



Maqad Al Duha Program

The Magad Al Duha program, supported by RLIC-COP and managed by Al Khaleej Gas (ExxonMobil) on behalf of the consortium, is a multi-year initiative aimed at reaching out to elderly and retired women in the northern region of the State of Qatar. The program provides support for female retirees and senior citizens in the community and aims to preserve traditional Qatari culture and transfer knowledge to the younger generations.

Specialized training workshops are conducted to raise awareness of health and safety and personal skills development for the elderly women, which helps them face the challenges in their lives. Site visits to schools, patients in hospitals and women's cultural centers are also organized to encourage full participation in various community projects and meaningful activities.

In 2021, the Qudorat Center opened a dedicated center for the participants of the Magad Al Duha Program, which provided a positive learning environment for the elderly and the new generations. The initiative strengthened the relationship between RLIC-COP and local companies in the northern region.

In 2022, the Magad Al Duha Program hosted activities and events during the FIFA World Cup Qatar 2022™ to promote Qatari culture, traditions, and heritage. The program is playing a significant role in preserving the culture and traditions of the State of Qatar and providing opportunities for personal development through leadership, diversity, and teamwork.

Majedah Al-Kawari

Director of Qudorat Center for Development

Preserving and promoting Qatari traditions

This program invests in caring for Qatari women blessed with long life. Meeting together regularly, contributes to psychological, health, social, religious, and recreational health, and well-being.

This far, 200 Qatari ladies have benefitted from this program. But more than that, they had opportunities to share their cultural and social experiences to the benefit of visiting schoolgirls and foreigners, directly contributing to keeping our Qatari heritage alive.

We celebrate these ladies as valued members of our society.

Our older generation is the key for keeping our Qatari values alive from generation to generation, and even beyond our borders.



Honoring an ancient tradition of the State of Qatar

Falconry has been an integral part of Qatari heritage and culture for centuries. It has been a symbol of pride and prestige for the Qatari people, who have mastered the art of training and breeding falcons. However, with the changing times, the tradition of falconry is gradually disappearing, which has become a major concern for the Qatari society.

In light of this, the RLIC-COP has taken the initiative to preserve and promote Qatari falconry through its partnership with the Qatar Society of Al Gannas.

The project, managed by Qatar Shell GTL on behalf of the consortium, aims to support the annual Ras Laffan Falconry Championship, which brings together falcon hunters from all over the State of Qatar to showcase their skills and compete for the title of the best falcon hunter in the region.

Through this project, RLIC-COP is not only preserving the ancient traditions of Qatari falconry but also promoting it among the younger generation.

The project encourages youth to learn and appreciate the art of falconry and understand its cultural significance. It ensures that the tradition of falconry continues to be passed down from one generation to the next.

The partnership between RLIC-COP and Qatar Society of Al Gannas is a testament to their commitment to preserving and promoting Qatari cultural heritage. It reflects the importance of preserving cultural traditions and passing them on to future generations. The project will undoubtedly contribute to the preservation of Qatari falconry and ensure that this ancient tradition continues to thrive in the years to come.





Celebrating Qatari falconry heritage

The Ras Laffan Falcons Championship is not only building the legacy of the falcon – it is also strengthening relationships between the participants while increasing the number of interested parties and participation from Al Khor City and the northern cities in particular.

social and human development, while at the same time playing an important environmental role. It encourages participation in the breeding of falcons, promotes sustainable hunting concepts and emphasizes the importance of balancing heritage conservation and environmental conservation.

We express our sincere thanks and appreciation to RLIC-COP and supporting partners for the generous sponsorship and their continued support. It is a successful example of the constructive role of major institutions in supporting the development of their communities and nurturing their

This is a great momentum. We encourage other organizations to also work together – it benefits everyone.



The Majlis Project

Al Khor & Al Thakhira Majlis is a project that was delivered with the support of the RLIC-COP and Al-Khor & of the consortium, aims to introduce the public to the traditional and popular (Al Majlis), and to provide a space for

The majlis is an important place that of the Qatari culture. It is used as a meeting space for prominent figures within the State of Qatar as well as a communal gathering

past, contribute to the QNV 2030 under the social pillar, provide a space for functions and connect people.

The inauguration ceremony was Council (Shura Council of the State of Qatar), representatives of RLIC-COP

the region and members of the municipal among others. Overall, Al Khor & Al Thakhira preserve Qatari heritage and culture while providing a space for the community to come together and connect.







Through our efforts, we have witnessed firsthand how collaboration can drive positive change and create lasting value that benefits our entire ecosystem.

We remain committed to our vision of enabling everyone to participate and benefit and will continue our efforts to cause a meaningful ripple effect.

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APPENDICES



- Appendix A:
 Glossary and acronyms
- Appendix B:Disclaimers and clarifications
- Appendix C:GRI standards content index
- Appendix D:Performance data

- Appendix E: Assurance statements
- Appendix F:Equity shares

Appendix A: Glossary and acronyms

Glossary

Term	Definition
Scope 1 (Emissions)	Scope I emissions refer to greenhouse gas (GHG) emissions directly generated by an organization's own activities or operations. These emissions are a result of sources that are owned or controlled by the organization.
Scope 2 (Emissions)	Scope 2 emissions refer to indirect greenhouse gas (GHG) emissions that are associated with the consumption of purchased or acquired electricity, heat, or steam by an organization. These emissions are categorized as indirect because they occur as a result of activities outside of an organization's direct control, but are still related to its operations.
5C carbon management framework	QatarEnergy's Climate Change Mitigation Strategy is structured around five pillars, referred to as "The 5Cs": consolidate, curb, create, compensate and circulate.
Aiming for Zero Methane Emissions Initative	An industry-led effort that seeks to achieve near zero methane emissions from oil and gas operations by 2030.

Acronyms

Abbreviation	Definition
3LPE	3-Layer polyethylene
AAQM	Ambient air quality monitoring
AHT	Anti-human trafficking
Al	Artificial intelligence
AIHA	American Industrial Hygiene Association
BCMS	Business continuity management system
CAPEX	Capital expenditure
CCS	Carbon capture and storage/ sequestration
CEO	Chief Executive Officer
CO ₂	Carbon dioxide
CO ₂ -eq	Carbon dioxide equivalent
СТО	Consent to operate
CY	Calendar year
DCA	Dukhan Concession Area
DE	Director excellence
DEL	Dolphin Energy Limited
ECS	Engineering, construction, supply
EE	Energy efficiency
EITI	Extractive industry transparency initiative
ELT	Executive Leadership Team
ENVID	Environmental impact identification
EPAs	Exploration and production sharing agreements
ESG	Environmental, social and governance
ETS	Emission trading system
EU	European Union
FBE	Fusion bonded epoxy
FGS	Fire and gas systems
FOD	Foundation of directorship
FRP	Flare reduction project

Responsible business conduct and governance

GECF	Gas Exporting Countries Forum
GHG	Greenhouse gas
GJ	Gigajoule
GRI	Global reporting initiative
GTL	Gas-to-liquid
GW	Gigawatt
HQ	Headquarters
HSE	Health, safety, environment
IC	Industrial City
ICV	In-country-value
IMD	International Institute for Management Development
IOGP	International Association of Oil & Gas Producers
IPCC	Intergovernmental Panel on Climate Change
ISO	International Organization for Standardization
JV	Joint venture
KBBL/day	Kilobarrels per day
Kg/h	Kilogram per hour
KPIs	Key performance indicators
Kt	Kiloton
LCA	Life cycle assessment
LDAR	Leak detection and repair
LNG	Liquified natural gas
LSR	Life saving rules
LTIR	Lost time injury rate
MAHM	Major accident hazards management
MENA	Middle East and North Africa
MGP	Methane guiding principles
MIC	Mesaieed Industrial City
MIC MMscf	
	Mesaieed Industrial City

MoECC

Ministry of Environment and Climate Change

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MoU	Memorandum of Understanding
MPCL	Mesaieed Power Company Limited
MRR	Monitoring and reporting regulation
MSm³/d	Mega standard cubic meter per day
Mt	Million tons
MTPA	Million tons per annum
MW	Megawatt
MWh	Megawatt hour
MWp	Megawatt-peak
NCCAP	National climate change action plan
NFE	North Field East
NFS	North Field South
NGL	Natural gas liquids
NGO	Non-governmental organization
NOC	North Oil Company
NORM	Naturally occurring radioactive materials
NOx	Nitrogen oxides
OE	Operational excellence
OGMP	Oil & gas methane partnership
PM	Particulate matter
PMO	Project management office
PS1	Production station 1
PSE	Process safety events
PSFs	Process safety fundamentals
PV	Photovoltaic
QA	Quality assurance
QAFAC	Qatar Fuel Additives Company
QAFCO	Qatar Fertiliser Company
QAPCO	Qatar Petrochemical Company

QAR	Qatari Riyal
Q-Chem	Qatar Chemical Company
QEWC	Qatar Electricity and Power Company
QG	Qatargas
QMC	Qatar Melamine Company
QNV	Qatar national vision
QPD	Qatar Petroleum Development Co Ltd. (Japan)
QVC	Qatar Vinyl Company
RAM	Reliability, availability, and maintainability
RGPC	Ras Girtas Power Company
RLIC	Ras Laffan Industrial City
RLIC-COP	Ras Laffan Industrial City Community Outreach Program
RLOC	Ras Laffan Olefins Company
RLPC	Ras Laffan Power Company
UN SDG	United Nations Sustainable Development Goal
SGE	Statement of GHG emissions
SMEs	Subject matter experts
SO ₂	Sulfur dioxide
SQA	Ship quality assurance
SRU	Sulfur recovery unit
TSE	Treated sewage effluent
TVA	Toxic vapor analyzer
UER	Umm-Er Radhuma
UHP	Umm Al-Houl Power
UN	United Nations
US EPA	US Environmental Protection Agency
VOCs	Volatile organic compounds
WAG	Water alternating gas
wt%	Weight percentage

Appendix B: Disclaimers and clarifications

This Report may include projections, estimates, plans, initiatives, expectations, goals and other forward-looking statements. These forwardlooking statements reflect management's current expectations and assumptions. They are aspirational and not guarantees or promises that goals or targets will be met. Forward-looking statements are inherently subject to certain risks and uncertainties, which could cause actual results to differ materially from these forward-looking statements. Although we believe that the expectations reflected in these forward-looking statements are reasonable, no assurance can be given that any projection, plan, expectation or goal set forth in this report can or will be achieved. QatarEnergy undertakes no obligation to correct, revise, or update any forward-looking statements, estimates or goals included in this Report.

The information on the geographic footprint map in the Overview section, is for reference only. While every effort has been made to ensure that the information is correct QatarEnergy does not warrant that it is complete or accurate. For more information, consult: www.qatarenergy.qa. The map does not necessarily reflect international borders or other locations accurately.

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Appendix C: GRI standards content index

GRI standard	Disclosure	Reference
GRI 2: General	2-1 Organizational details	"QatarEnergy as a business"
disclosures 2021	2-2 Entities included in the organization's sustainability reporting	"About the report"
	2-3 Reporting period, frequency and contact point	"About the report"
	2-4 Restatements of information	There are no restatements of information in Sustainability Report 2022.
	2-5 External assurance	Appendix E: Assurance statements
	2-6 Activities, value chain and other business relationships	"QatarEnergy as a business"
	2-7 Employees	Undisclosed
	2-8 Workers who are not employees	Undisclosed
	2-9 Governance structure and composition	"Governance structure"
	2-10 Nomination and selection of the highest governance body	Undisclosed
	2-11 Chair of the highest governance body	"Governance structure"
	2-12 Role of the highest governance body in overseeing the management of impacts	"Governance structure"
	2-13 Delegation of responsibility for managing impacts	"Governance structure"
	2-14 Role of the highest governance body in sustainability reporting	"Sustainability governance"
	2-15 Conflicts of interest	Undisclosed
	2-16 Communication of critical concerns	"Managing our business with integrity and respect"
	2-17 Collective knowledge of the highest governance body	"Managing our business with integrity and respect"

Reference

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	GRI 2: General disclosures 2021	2-18 Evaluation of the performance of the highest governance body	Undisclosed
		2-19 Remuneration policies	Undisclosed
		2-20 Process to determine remuneration	Undisclosed
		2-21 Annual total compensation ratio	Undisclosed
		2-22 Statement on sustainable development strategy	"QatarEnergy and Sustainability"
		2-23 Policy commitments	"QatarEnergy and Sustainability"
		2-24 Embedding policy commitments	"QatarEnergy and Sustainability"
		2-25 Processes to remediate negative impacts	"QatarEnergy and Sustainability"
		2-26 Mechanisms for seeking advice and raising concerns	"Managing our business with integrity and respect"
		2-27 Compliance with laws and regulations	"Managing our business with integrity and respect"
		2-28 Membership associations	"QatarEnergy businesses"
		2-29 Approach to stakeholder engagement	"About the report"
		2-30 Collective bargaining agreements	Not applicable
	GRI 3: Material topics	3-1 Process to determine material topics	"About the report"
	2021	3-2 List of material topics	"About the report"
		3-3 Management of material topics	"About the report"

GRI standard	Disclosure	Reference
GRI 201: Economic performance	201-1 Direct economic value generated and distributed	Appendix D: Performance data
2016	201-2 Financial implications and other risks and opportunities due to climate change	Undisclosed
	201-3 Defined benefit plan obligations and other retirement plans	Undisclosed
	201-4 Financial assistance received from the government	Undisclosed
GRI 202: Market Presence 2016	202-1 Ratios of standard entry level wage by gender compared to local minimum wage	Undisclosed
	202-2 Proportion of senior management hired from the local community	Undisclosed
GRI 205: Anti-Corruption 2016	205-1 Operations assessed for risks related to corruption	Undisclosed
2010	205-2 Communication and training about anti-corruption policies and procedures	Undisclosed
	205-3 Confirmed incidents of corruption and actions taken	Undisclosed
GRI 302: Energy 2016	302-1 Energy consumption within the organization	Appendix D: Performance data
	302-2 Energy consumption outside of the organization	Appendix D: Performance data
	302-3 Energy intensity	Appendix D: Performance data
	302-4 Reduction of energy consumption	Appendix D: Performance data
	302-5 Reductions in energy requirements of products and services	Not applicable

GRI standard	Disclosure	Reference
GRI 303: Water and Effluents 2018	303-1 Interactions with water as a shared resource	"Water management"
2010	303-2 Management of water discharge-related impacts	"Water management"
	303-3 Water withdrawal	Appendix D: Performance data
	303-4 Water discharge	Appendix D: Performance data
	303-5 Water consumption	Appendix D: Performance data
GRI 304: Biodiversity 2016	304-1 Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	Undisclosed
	304-2 Significant impacts of activities, products and services on biodiversity	"Biodiversity"
	304-3 Habitats protected or restored	"Biodiversity"
	304-4 IUCN Red List species and national conservation list species with habitats in areas affected by operations	"Biodiversity"
GRI 305: Emissions 2016	305-1 Direct (Scope 1) GHG emissions	Appendix D: Performance data
	305-2 Energy indirect (Scope 2) GHG emissions	Appendix D: Performance data
	305-3 Other indirect (Scope 3) GHG emissions	Undisclosed
	305-4 GHG emissions intensity	Appendix D: Performance data
	305-5 Reduction of GHG emissions	Appendix D: Performance data
	305-6 Emissions of ozone-depleting substances (ODS)	Not applicable
	305-7 Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	Appendix D: Performance data

306-4 Waste diverted from disposal Appendix D: Performance of 306-5 Waste directed to disposal Appendix D: Performance of 306-5 Waste disp	GRI standard	Disclosure	Reference
waste-related impacts 306-3 Waste generated Appendix D: Performance of 306-4 Waste diverted from disposal Appendix D: Performance of 306-5 Waste directed to disposal Appendix D: Performance of 402-1 Minimum notice periods regarding operational changes GRI 403: Occupational Health and Safety management system 403-1 Occupational health and safety management system 403-2 Hazard identification, risk assessment, and incident investigation 403-3 Occupational health services 403-4 Worker participation, consultation and communication on occupational health and safety 403-5 Worker training on occupational health and safety 403-6 Promotion of worker health 403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships 403-8 Workers covered by an occupational health and safety management system Undisclosed			"Waste management"
306-4 Waste diverted from disposal Appendix D: Performance of 306-5 Waste directed to disposal Appendix D: Performance of 306-			"Waste management"
GRI 402: Labor Management Relations 2016 GRI 403: Occupational Health and Safety 2018 403-1 Occupational Health and Safety management, and incident investigation 403-4 Worker participation, consultation and communication on occupational health and safety 403-5 Worker training on occupational health and safety 403-6 Promotion of worker health 403-7 Prevention and mitigation of occupational health and safety inhealth and safety management system 403-8 Workers covered by an occupational health and safety management system Undisclosed		306-3 Waste generated	Appendix D: Performance data
GRI 402: Labor Management Relations 2016 GRI 403: Occupational Health and Safety 2018 403-1 Occupational Health and Safety 2018 403-2 Hazard identification, risk assessment, and incident investigation 403-3 Occupational health services "Protecting our people" 403-4 Worker participation, consultation and communication on occupational health and safety 403-5 Worker training on occupational health and safety 403-6 Promotion of worker health "Protecting our people" 403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships 403-8 Workers covered by an occupational health and safety management system Undisclosed		306-4 Waste diverted from disposal	Appendix D: Performance data
Management Relations 2016 GRI 403: Occupational Health and Safety 2018 403-1 Occupational health and safety management system 403-2 Hazard identification, risk assessment, and incident investigation 403-3 Occupational health services "Protecting our people" 403-4 Worker participation, consultation and communication on occupational health and safety 403-5 Worker training on occupational health and safety 403-6 Promotion of worker health "Protecting our people" 403-7 Prevention and mitigation of occupational health and safety linked by business relationships 403-8 Workers covered by an occupational health and safety management system Undisclosed		306-5 Waste directed to disposal	Appendix D: Performance data
Occupational Health and Safety 2018 403-2 Hazard identification, risk assessment, and incident investigation 403-3 Occupational health services "Protecting our people" 403-4 Worker participation, consultation and communication on occupational health and safety 403-5 Worker training on occupational health and safety 403-6 Promotion of worker health "Protecting our people" 403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships 403-8 Workers covered by an occupational health and safety management system Undisclosed	Management	·	Undisclosed
Safety 2018 403-2 Hazard identification, risk assessment, and incident investigation 403-3 Occupational health services "Protecting our people" 403-4 Worker participation, consultation and communication on occupational health and safety 403-5 Worker training on occupational health and safety 403-6 Promotion of worker health 403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships 403-8 Workers covered by an occupational health and safety management system Undisclosed	Occupational	•	"Protecting our people"
403-4 Worker participation, consultation and communication on occupational health and safety 403-5 Worker training on occupational health and safety 403-6 Promotion of worker health 403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships 403-8 Workers covered by an occupational health and safety management system "Protecting our people" "Protecting our people" "Protecting our people" "Dudisclosed Undisclosed			"Protecting our people"
consultation and communication on occupational health and safety 403-5 Worker training on occupational health and safety 403-6 Promotion of worker health "Protecting our people" 403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships 403-8 Workers covered by an occupational health and safety management system Undisclosed		403-3 Occupational health services	"Protecting our people"
health and safety 403-6 Promotion of worker health "Protecting our people" 403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships 403-8 Workers covered by an occupational health and safety management system Undisclosed		consultation and communication on	"Protecting our people"
403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships 403-8 Workers covered by an occupational health and safety management system Undisclosed			"Protecting our people"
occupational health and safety impacts directly linked by business relationships 403-8 Workers covered by an occupational health and safety management system Undisclosed		403-6 Promotion of worker health	"Protecting our people"
health and safety management system		occupational health and safety impacts	Undisclosed
403-9 Work-related injuries Appendix D: Performance d		· · · · · · · · · · · · · · · · · · ·	Undisclosed
		403-9 Work-related injuries	Appendix D: Performance data
403-10 Work-related ill health Appendix D: Performance d		403-10 Work-related ill health	Appendix D: Performance data

GRI standard	Disclosure	Reference
GRI 404: Training and Education 2016	404-1 Average hours of training per year per employee	Undisclosed
Education 2010	404-2 Programs for upgrading employee skills and transition assistance program	Undisclosed
	404-3 Percentage of employees receiving regular performance and career development reviews	Undisclosed
GRI 405: Diversity and Equal	405-1 Diversity of governance bodies and employees	Undisclosed
Opportunities 2016	405-2 Ratio of basic salary and remuneration of women to men	Undisclosed
GRI 410: Security Practices 2016	410-1 Security personnel trained in human rights policies or procedures	Undisclosed
GRI 413: Local Communities	413-1 Operations with local community engagement, impact assessments, and development programs	"Sharing benefits"
2016	413-2 Operations with significant actual and potential negative impacts on local communities	Undisclosed
GRI 416: Customer Health and Safety 2016	416-1 Assessment of the health and safety impacts of product and service categories	Undisclosed
	416-2 Incidents of non-compliance concerning the health and safety impacts of products and services	Undisclosed
GRI 418: Customer Privacy 2016	418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data	Undisclosed

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Appendix D: Performance data

Ethics and compliance			GRI 2-23	Policy co	mmitments		
Code of Conduct - Completions	-	-	8,039	8,099	8,310		
Conversation Cafés – Conducted	-	-	-	-	2		
Conversation Cafés - In-person attendees	-	-	-	-	700		
Ethics Moments issued	-	-	12	12	6		
Point Bulletins issued	-	-	-	-	6		
Policy Embedding videos	-	-	-	-	6		
Integrity Ambassadors - Total	-	-	55	74	70		
Human rights			GRI 2-23	Policy co	mmitment		
Anti-Trafficking - Training (hours)	-	-	-	-	450		
Director engagement GRI 2-23: Embedding policy commitments							
Webinars	-	-	-	-	3		
Training (hours)	-	-	-	560	2082		
Connect Newsletters	-	-	-	-	3		
Climate Change and Environmental Action							
Emissions ^{1, 2,3}			GR	l 305: Em	issions 201		
Total Greenhouse gas emissions (GHGs) - Equity basis							
Scope 1 - Direct total GHGs (million tons CO ₂ -eq)	34.70	33.69	34.79	35.35	39.53		
Scope 2 - Energy indirect total GHGs (million tons CO ₂ -eq)	1.34	1.69	1.80	1.55	1.91		
Total Greenhouse gas emissions (GHGs) - Operated basis ⁴							
Scope 1 - Direct total GHGs (million tons CO ₂ -eq)	4.48	4.99	5.19	5.78	5.45		
Scope 2 - Energy indirect total GHGs (million tons CO ₂ -eq)	0.43	0.76	0.62	0.62	0.62		
Total Greenhouse gas emissions (GHGs) from LNG - Equity bo	ısis						
Scope 1 - LNG (million tons CO ₂ -eq)	22.05	21.30	21.35	21.16	22.95		

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	2018	2019	2020	2021	2022		
Scope 1 - LNG, sequestration (million tons CO ₂ -eq)	0.48	0.56	0.63	0.60	0.59		
Scope 2 – LNG facilities (million tons CO ₂ -eq)	0.42	0.43	0.34	0.36	0.40		
Total Greenhouse gas emissions (GHGs) Breakdown by sector -	Equity bas	is					
Scope 1 - Upstream (incl. LNG facilities) (million tons CO_2 -eq)	28.58	27.47	27.73	27.82	32.16		
Scope 1 - Downstream (refining, GTL & terminals) (million tons CO_2 -eq)	2.08	2.24	1.89	2.33	2.25		
Scope 1 - Petrochemicals (million tons CO ₂ -eq)	4.03	3.98	5.16	5.20	5.12		
Scope 2 - Upstream (incl. LNG facilities) (million tons CO ₂ -eq)	0.70	1.02	1.01	0.83	1.17		
Scope 2 - Downstream (refining, GTL & terminals) (million tons CO_2 -eq)	0.31	0.35	0.33	0.30	0.26		
Scope 2 - Petrochemicals (million tons CO ₂ -eq)	0.33	0.32	0.46	0.42	0.47		
Greenhouse gas emissions (GHGs) Intensity - Equity basis							
Upstream (incl. LNG facilities) (million tons $\rm CO_2$ -eq /million tons hydrocarbon production)	0.240	0.233	0.228	0.240	0.265		
LNG (million tons CO ₂ -eq /million tons hydrocarbon production)	0.307	0.299	0.296	0.301	0.305		
Downstream (refining, GTL & terminals) (million tons CO ₂ -eq/million tons hydrocarbon production)	0.171	0.190	0.186	0.213	0.190		
Petrochemicals (million tons CO ₂ -eq /million tons hydrocarbon production)	0.614	0.612	0.702	0.882	0.847		
Flaring ⁵							
Flaring (upstream, operated & non-operated) (million tons CO_2 -eq)	2.46	2.12	2.1	2.08	2.26		
Flaring (upstream, operated & non-operated) (MMSCF gas flared, QRG basis)*	35,409	30,507	35,186	33,055	33,254		
Flaring (LNG) (MMSCF gas flared, QRG basis)*	21,091	16,894	21,706	17,564	15,818		
Flaring intensity (LNG) (MMSCF gas flared, QRG basis* / MMSCF sweet gas production, %)	0.47%	0.38%	0.49%	0.39%	0.35%		
* Normalized figures based on heating value @1000 Btu/Scf known as "Qatar Reference Gas" (QRG).							

	2018	2019	2020	2021	2022		
Other emissions							
SO ₂ emitted (tons)*	227,022**	73,697	40,887	38,742	38,945		
NOx emitted (tons)*	11,222**	10,970	13,849	13,565	11,635		
VOC emitted (tons)*	1,901	1,860	2,017	2,229	2,598		
Methane emitted (tons)/ total monetizable products (tons), %, for LNG facilities	0.008%	0.005%	0.007%	0.005%	0.003%		
* Operated assets only. ** Values changed (due to change in methodology for the years 2015-2018) compared to 2018 SR.							

Energy⁵			G	SRI 302: E	nergy 2016
Direct energy consumption (GJ) (QatarEnergy operated assets)*	61,247,627	65,703,102	73,421,919	79,157,502	78,019,578
Upstream** (incl. LNG) (gigajoules per ton production)***	3.76	3.87	3.88	4.08	3.87
Refining & GTL (gigajoules per ton production)	1.26	1.38	1.49	1.36	1.21
Chemical plants (gigajoules per ton production)	20.37	21.35	21.21	20.98	20.80

^{*2021} Data onwards include energy used by a new asset.

 $[\]ensuremath{^{***}}$ Restated to include our non-operated offshore assets.

Water management ⁶	GRI 303: Water and effluents 2018					
Water discharged other than to sea (m3)	13,630,788	14,122,336	32,011,210	24,598,968	28,437,630	
Water discharged to sea (excludes non-contact cooling water) (m3)	295,105	522,935	289,510	201,205	2,088,453	
Water recycled or reused (m3)	1,552,201	1,578,736	1,680,982	1,611,687	7,211,672	

^{**} Inclusion of a new asset from 2022 onwards.

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12	0.12	0.17	
06	0.12	0.32	
13	0.12	0.12	
	3	9	
ļ	36	31	
34	0.53	0.56	2
12	0.19	0.57	
40	0.63	0.55	
	1	0	
	1	2	
	2	1	

2018	2019	2020	2021	2022

Waste management⁵		GRI 3	06: Efflue	ents and v	waste 2020
Total waste generated during the year (tons)	73,749*	81,357	96,427	125,662	150,570
Non-hazardous waste generated (tons)	68,146*	74,360	79,347	117,829	136,647
Hazardous waste generated (tons)	5,603*	6,998	17,080	7,833	13,924
Total waste recycled (tons)	3,017	2,646	1,789	2,488	4,150
Non-hazardous waste recycled (tons)	1,043	1,062	907	949.9	969
Hazardous waste recycled (tons)	1,974	1,584	882	1,538.3	3,181
Percentage of non-hazardous waste generated	92.4%	91.4%	82.30%	93.76%	90.75%
Percentage of hazardous waste generated	7.6%*	8.6%	17.70%	6.23%	9.25%
Percentage of non-hazardous waste recycled	1.5%*	1.4%	1.10%	0.80%	0.71%
Percentage of hazardous waste recycled	35.2%*	22.6%	5.2%	19.63%	22.84%
Non-hazardous waste to landfill (tons)**	-	-	-	-	135,678
Hazardous waste to landfill (tons)**	-	-	-	-	10,743
Total waste to landfill (tons)**	-	-	-	-	146,421
Total spill to the environment (Hydrocarbon) (m³)**	-	-	-	-	39
*Numbers restated **New indicators reported for the first time in 2022 as per GRI-306-3 gu	idelines				

Biodiversity				304: Bioc	diversity 2016
Total number of turtle nests protected*	-	-	-	-	230
Total number of hawksbill turtle hatchlings released to the sea*	-	-	-	-	14,335
* New indicators reported for the first time in 2022 as per GRI-304-3 guid	lelines.				

2018	2019	2020	2021	2022

GR	403: Occ	upation	al health	and safety
8,142	8,536	8,359	8,404	8,274
16,364,732	16,092,008	16,991,535	16,009,100	15,736,175
59,225,391	54,599,800	60,127,799	57,325,311	56,301,465
9	4	1	2	5
11	14	8	7	7
0.26	0.25	0.12	0.12	0.17
0.55	0.25	0.06	0.12	0.32
0.19	0.26	0.13	0.12	0.12
16	11	2	3	9
29	30	24	36	31
0.60	0.58	0.34	0.53	0.56
0.98	0.68	0.12	0.19	0.57
0.49	0.55	0.40	0.63	0.55
0	2	0	1	0
	8,142 16,364,732 59,225,391 9 11 0.26 0.55 0.19 16 29 0.60 0.98 0.49	8,142 8,536 16,364,732 16,092,008 59,225,391 54,599,800 9 4 11 14 0.26 0.25 0.19 0.26 16 11 29 30 0.60 0.58 0.98 0.68 0.49 0.55	8,142 8,536 8,359 16,364,732 16,092,008 16,991,535 59,225,391 54,599,800 60,127,799 9 4 1 11 14 8 0.26 0.25 0.12 0.19 0.26 0.13 16 11 2 29 30 24 0.60 0.58 0.34 0.98 0.68 0.12 0.49 0.55 0.40	16,364,732 16,092,008 16,991,535 16,009,100 59,225,391 54,599,800 60,127,799 57,325,311 9 4 1 2 11 14 8 7 0.26 0.25 0.12 0.12 0.19 0.26 0.13 0.12 16 11 2 3 29 30 24 36 0.60 0.58 0.34 0.53 0.98 0.68 0.12 0.19 0.49 0.55 0.40 0.63

Process safety and asset integrity					
Number of Tier 1 process safety incidents	1	1	3	1	2
Number of Tier 2 process safety incidents	8	8	6	2	1
Number of Tier 3 process safety incidents	525	632	646	766	753

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.

2018 2019 2020 2021 2022

Social and economic development					
Growing our talents			GRI 40	01: Emplo	yment 2016
New joiners	-	-	-	481	582
Voluntary attrition (%)	-	-	-	3	2.6
Training hours total	193,073	206,005	45,088	201,444	181,879
Average hours of training per employee	23.71	24.13	5.75	23.97	21.1
Special recognition award	-	-	-	485	814

Economic performance		GRI 201:	Economic	: perform	ance 2016
Crude oil production (KBBL/day)	229	246	295	289	294
North Field Alpha Lean Gas (MMSCF/day)	694	681	717	632	661
Total refinery throughput (KBBL/day)	104	110	107	107	95
Total revenue ('000 QAR)	118,507,388	108,331,608	76,442, 485	120,283,088	188,954,028
Total expenses ('000 QAR)	73,637,723	69,415,662	55,711, 810	65,701,733	98,686,412
Net operating profit ('000 QAR)	51,457,387	44,979,038	28,852,669	61,648,957	97,448,799
Share in profits of joint ventures and associates ('000 QAR)	48,934,617	40,634,833	19,759,382	53,031,856	83,644,348
Net profit for the year ('000 QAR)	73,324,837	65,460,501	41,212,033	97,891,280	154,559,164

Local economic contribution		GRI 204	Procure	ment pra	ctices 2016
Total procurement spending ('000 QAR)	8,350,000	11,640,000	9,198,422	9,600,000	12,542,124
Total procurement spending on suppliers based in the State of Qatar ('000 QAR)	4,820,000	9,200,000	6,385,682	7,400,000	9,596,125
Percentage of local procurement spending (%)	58%	79%	69%	75%	77%
Number of registered suppliers	10,055	5,268	5,833	6,331	6,602
Number of registered suppliers based in the State of Qatar	4,262	2,662	2,947	3,130	3,337
Percentage of Qatari registered suppliers (%)	42%	51%	50%	50%	51%

2018 2019 2020 2021 2022

Tawteen Program		GRI 203:	Indirect e	econom <u>i</u> c i	mpacts 2016
Total program investment value ('000 QAR)	-	-	-	-	10,000,000
Total jobs created	-	-	-	-	3,767
International anchor partners MoUs	-	-	-	-	6
International anchor partner investment ('000 QAR)	-	-	-	-	5,300,000
International anchor partner jobs created	-	-	-	-	957
Investment opportunities launched	-	-	-	69	9
Investment opportunities awarded	-	-	-	46	6
Supplier ICV certifications	-	-	-	800	188
ICV Certifiers	-	-	-	12	12
ICV audit waves	-	-	-	3	2
ICV contribution ('000 QAR)	-	-	-	-	8,290,000
Supplier development program registration status	-	-	-	-	51
Suppliers actively on development program	-	-	-	-	18
Suppliers achieving qualification	-	-	-	-	8
Suppliers supported on land allocation	-	-	-	-	15
Suppliers supported with fund allocation	-	-	-	-	9
Suppliers supported with new facility construction	-	-	-	-	9

Support to our society		GR	l 413: Loc	cal comm	unities 2016
Amount spent for social responsibility ('000 QAR)	38,120	29,184.35	20,090	20,600	22,500

- 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. Inclusion of a new asset from 2022 onwards.
- $4. \quad \hbox{Prior to 2019, Qatar Energy used the SANGEATM software to quantify and report its greenhouse gas (GHG) emissions. The software}$ includes the GHG calculation methodologies from both API Compendium 2009 and related subparts of the USEPA MRR (Subparts $C, P, W \ and \ Y). \ In \ 2019, \ Qatar Energy \ on shore \ assets followed the EU ETS \ Monitoring \ and \ Reporting \ Regulation (MRR) \ to \ quantify \ and \ Reporting \ Regulation (MRR) \ to \ quantify \ and \ Reporting \ Regulation (MRR) \ to \ quantify \ and \ Reporting \ Regulation (MRR) \ to \ quantify \ and \ Reporting \ Regulation (MRR) \ to \ quantify \ and \ Reporting \ Regulation (MRR) \ to \ quantify \ and \ Reporting \ Regulation (MRR) \ to \ quantify \ and \ Reporting \ Regulation (MRR) \ to \ quantify \ and \ Reporting \ Regulation (MRR) \ to \ quantify \ and \ Reporting \ Regulation (MRR) \ to \ quantify \ and \ Reporting \ Regulation (MRR) \ to \ quantify \ to \ quantify \ Regulation (MRR) \ to \ quantify \ to \ quantify \ Regulation (MRR) \ to \ quantify \ Regulation (MRR) \ to \ quantif$ report GHG emissions. From 2020 onwards, all QatarEnergy assets are following the EU ETS MRR.
- 5. Calculated on 100% equity share basis. Not prorated to QatarEnergy equity share value.
- 6. 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.

Appendix E: Assurance statements



LRQA Independent Assurance Statement

Relating to QatarEnergy's Assertion in the Sustainability Report for the CY 2022.

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 2022 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 practice and is in accordance with ISAE 3000 and ISAE 3410.

Our assurance engagement covered Qatar Energy'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 2021 for Greenhouse Methodologies for Oil and Gas Industries,
 - World Resources Institute / World Business Council for Sustainable Development Greenhouse Gas Protocol: A corporate accounting and reporting standard, revised edition Jan 2015 (otherwise referred to as the WRI/WBCSD GHG Protocol) for the GHG data¹.
- Reviewing whether the Report has taken account of:
 - International Petroleum Institute Environmental Conservation Association (IPIECA), Petroleum Industry Guidelines for Reporting Greenhouse Gas Emissions 2011.
- 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.

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

LRQA's responsibility is only to QatarEnergy. 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

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.

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Table 1. Summary of QatarEnergy Key Data for CY2022:

Scope of GHG emissions All Assets	Million Tonnes CO ₂ e	Million Tonnes CO ₂ e (on QatarEnergy equity basis)
Direct GHG emissions (Scope 1)	101.49	43.32
Energy indirect GHG emissions (Scope 2, Location-based)	4.76	2.18
Total	106.25	45.50

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

Note 2: 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 and 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 2022.

Observations

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

· Communicate QatarEnergy requirements & expectations from international JVs in relation to timely completion and submission of GHG assurance statements & inventory sheets to facilitate an effective 3rd party verification of Entities data.



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 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 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 Quality Assurance and Inspection Middle East, AlJaber Business Center W.L.L, Lusail, 1st Floor. P.O Box 23850, Doha, Qatar

LRQA reference: QAT00000072

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13th June, 2023

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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)

Ras Laffan Power Company (RLPC)

Mesaieed Power Company Ltd (MPCL)

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)

TotalEnergies EP Golfe (Al-Khalij).

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 CO ₂ e Total	Million Tonnes CO ₂ e QatarEnergy Equity Basis
Direct GHG emissions (Scope 1)	31.49	22.95
Energy indirect GHG emissions1 (Scope 2, Location-based)	0.57	0.40
Total	32.06	23.35

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 CO ₂ e Total	Million Tonnes CO ₂ e QatarEnergy Equity Basis
GHG emissions - State of Qatar Assets (Scope 1 + Scope 2, Location-based)	101.50	44.39
GHG emissions - International Assets (Scope 1 + Scope 2, Location-based)	4.75	1.11
Total	106.25	45.50

Scope of GHG emissions By Sector	Million Tonnes CO ₂ e Total	Million Tonnes CO ₂ e QatarEnergy Equity Basis
Upstream Sector Direct GHG emissions (Scope 1)	46.81	32.16
Downstream Sector Direct GHG emissions (Scope 1)	11.76	2.25
Petrochemicals Sector Direct GHG emissions (Scope 1)	12.33	5.12
Total (Scope 1)	70.91	39.53
Upstream Sector Energy indirect GHG emissions (Scope 2, Location-based)	1.63	1.17
Downstream Sector Energy indirect GHG emissions (Scope 2, Location-based)	0.37	0.26
Petrochemicals Sector Energy indirect GHG emissions (Scope 2, Location-based)	1.46	0.47
Total (Scope 2)	3.45	1.91

Indicator	Unit	2022
Water discharged (to Sea)	m^3	2,088,453
Water discharged (other than Sea)	m^3	28,437,630
Water recycled or reused	m^3	7,211,672
SO2 emitted	Tonnes	38,945
NOx emitted	Tonnes	11,635
VOC	Tonnes	2,419
Particulate Matter (PM) Emitted	Tonnes	1,165
Sulfur Dioxide (SO2) Intensity	tons/10^3 Tonnes HC	1.43
Oxides of Nitrogen (NOx) Intensity	tons/10^3 Tonnes HC	0.43
Volatile Organic Compounds (VOC) Intensity	tons/10^3 Tonnes HC	0.09
Particulate Matter (PM) Intensity	tons/10^3 Tonnes HC	0.04
Total waste recycled	Tonnes	4,150
Total waste generated during the year	Tonnes	150,571
Non-hazardous waste generated	Tonnes	136,647
Hazardous waste generated	Tonnes	13,924
Non-hazardous waste recycled	Tonnes	969
Hazardous waste recycled	Tonnes	3181
Percentage of non-hazardous waste generated	Percentage	90.75%
Percentage of hazardous waste generated	Percentage	9.25%
Percentage of non-hazardous waste recycled	Percentage	0.71%
Percentage of hazardous waste recycled	Percentage	22.84%
Non-hazardous waste to landfill (tons)	Tonnes	135,678
Hazardous waste to landfill (tons)	Tonnes	10,743
Total Waste to Landfill (tons)	Tonnes	146,421
Total Spill to the Environment (Hydrocarbon)	m^3	39
Total number of turtle nest protected	Number	230
Total number of hawksbill turtle hatchling released to the sea	Number	14,335



Indicator	Unit	2022
Direct energy use	GJ	78,019,578
Direct GHG emissions (scope 1)	MillionTonnes CO ₂ eq	5.45
Indirect GHG emissions (scope 2)	MillionTonnes CO ₂ eq	0.62
Flaring	MMSCF	13040

Annex 3-B - Safety Parameters (QatarEnergy Operated Assets only)

Indicator	Unit	2022
Employee headcount	Number	8,274
Work hours - employees	Hour	15,736,175
Work hours - contractors	Hour	56,301,465
Employee fatalities	Number	0
Contractor fatalities	Number	0
Total fatalities	Number	0
Employee total recordable injuries	Perl	9
Contractor total recordable injuries	Perl	31
Number of Tier 1 process safety events	Number	2
Number of Tier 2 process safety events	Number	1
Number of Tier 3 process safety events	Number	753
Employee lost time injuries	Number	5
Contractor lost time injuries	Number	7
Lost time injury rate (employees and contractors)	per 1 million working hours	0.17
LTIR of employees	per 1 million working hours	0.32
LTIR of contractors	per 1 million working hours	0.12
Total recordable injury rate (employees)	per 1 million working hours	0.57
Total recordable injury rate (contractors)	per 1 million working hours	0.55
Total recordable injury rate (employees and contractors)	per 1 million working hours	0.56

Sr. No.

Operator ventures

QatarEnergy's effective share as at 31 Dec 2022

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Appendix F: Equity shares

oration of Singapore	24.5%
any (Singapore) Pte Ltd.	14.7%
	0% (Note 1)
	F30/

1	Qatargas (QG)	
А	QG - LNG Companies	Refer to Table B below
В	AKG	AKG-1: 0% AKG-2: 20%
С	Bazan	93%
D	Laffan Refinery	51%
E	Laffan Refinery 2	84%
2	Dolphin Energy	0% (Note 1)
3	QAFCO	Refer to Table B below
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	QEWC	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 Khalij 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 2022

	share as at 31 Dec 2022
QG1 Upstream	100%
QG1 Downstream	100%
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 vary from time to time.

Note 2: QG 3&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 QG 3&4 for the purposes of accounting and reporting of GHG emissions is 69.25%.

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