

# THE PIONEER

ISSUE 151 – Quarter One 2016

**QATARGAS  
DIRECTION  
STATEMENT**  
COMMITTED TO  
BEING PREMIER

**PAVING THE  
WAY FORWARD**  
A HOST OF SAFETY  
MILESTONES AND  
RECOGNITIONS



# Qatargas Direction Statement

We are committed to being The World's Premier LNG Company providing reliable, clean energy.

## Pillars

**We lead the industry in:**

- Safety, Health and Environmental Performance
- A High Calibre Workforce
- Efficient and Reliable Operations
- Customer Satisfaction
- Financial Performance

## Values

**We value and respect all our stakeholders. We demonstrate this through:**

- **Incident & Injury Free:** Mutual and genuine care for our people and facilities;
- **Being Environmentally Conscious:** Being compliant and aware of our impact;
- **Integrity:** Conducting our business with transparency and in an ethical manner;
- **People Development:** Developing our people and fostering a culture of learning, innovation, diversity and excellence;
- **Teamwork:** Empowering each other, communicating openly, encouraging initiative and acknowledging accomplishments.

## Mission

**To manage and operate all of our resources safely, efficiently and reliably, we will:**

- Strengthen our Incident & Injury Free (IIF) culture;
- Attract and retain customers through our reputation as a safe, flexible, mature and reliable supplier;
- Be the employer of choice for a high performing national and international workforce;
- Sustain reliability – ensuring asset integrity and plant availability through proactive and effective operations;
- Prioritise and flawlessly deliver projects, and effectively integrate them into existing operations;
- Be socially responsible – actively contributing to social, community and local business partnerships;
- Maximise the value of our people and the efficiency of our facilities and systems.

**Through this we will proudly fuel the fulfillment of the 2030 Qatar National Vision**

## 2020 Vision

**Our road map to sustaining our Premiership status. We will strive to:**

- Sustain an IIF workplace, eliminate hydrocarbon releases and minimise our environmental footprint;
- Retain and develop our expertise through a high calibre, motivated workforce;
- Focus on our core LNG business and successfully operate our gas-derived product facilities;
- Lead the industry in pioneering new LNG applications, establishing new markets and strategic industry partnerships;
- Maximise value through operational efficiency, synergies and resource management;
- Be the most reliable and flexible supplier, building the strongest relationships with all our customers;
- Strengthen corporate resilience through effective business processes.

# THE STATE OF QATAR IS MOVING FORWARD WITH A CLEAR STRATEGY

## ACHIEVING DEVELOPMENT GOALS OF QATAR NATIONAL VISION 2030

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A fast-changing and competitive world requires a high degree of resilience to stay on top. The State of Qatar's gas sector has proved this time and again. It has overcome many challenges, thanks to

strong leadership, robust vision and a well-knit strategy. As we enter a new phase of an increasingly competitive environment for the global LNG industry, we need a renewed direction to keep pace with the challenging times ahead.

The State of Qatar is moving forward with a clear strategy and a high degree of resoluteness to achieve the development goals of Qatar National Vision 2030. The

energy sector, which is the largest contributor to the country's economy, has a critical role to play in this endeavour. The Qatargas Direction Statement thus takes greater significance to convey a message of continued commitment to maintain its leading position.

Over the past three decades, Qatargas has adopted values and principles that have stood the company in good stead. This commitment is clearly expressed and underscored in our new Direction Statement.

As Chairman of the Board, I am confident that the key messages in this document will be fully embraced and accepted wholeheartedly by all Qatargas staff as clear guiding principles to uphold the highest standards of performance and retain Qatargas' premier global position, as it moves with confidence and renewed vigour into the future.

**SAAD SHERIDA AL-KAABI**  
**CHAIRMAN OF QATARGAS**  
**BOARD OF DIRECTORS**





# QATARGAS CORPORATE SCORECARD

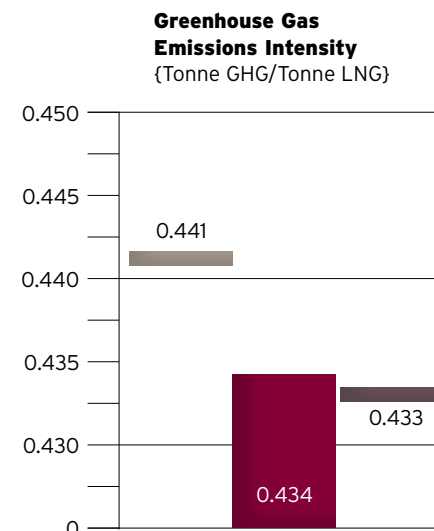
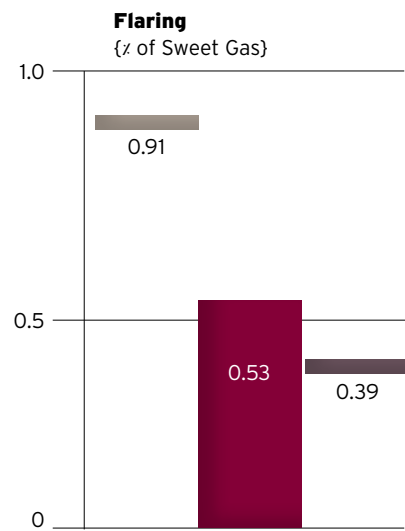
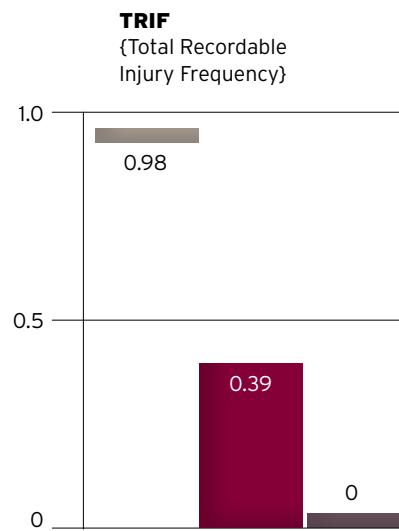
YEAR TO DATE MARCH 2016



# QATARGAS DIRECTION STATEMENT AND VISION 2020

## SAFETY, HEALTH AND ENVIRONMENTAL PERFORMANCE

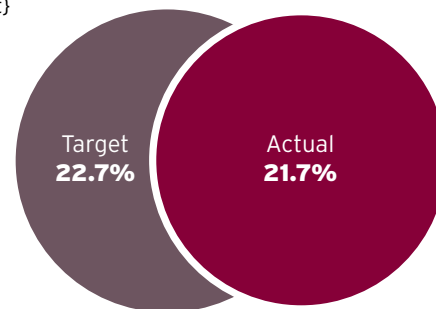
Qatargas outperforming industry



Industry Average  
Actual  
Target

## QATARIZATION

A High Calibre and Diverse Work Force  
(Total Headcount)



## EFFICIENT AND RELIABLE OPERATIONS

	Industry Average	Actual	Target
LNG Reliability	96.5%	95.5%	97.5%
LR Reliability	98.5%	90.5%	91.1%
Expenditure vs Target	N/A	91%	N/A

## CUSTOMER SATISFACTION

	Actual	Target
Reliable Deliveries	100%	100%
Positive Responses to Customer Change Requests	93%	85%

## FINANCIAL PERFORMANCE

	Actual	Target
Sales Volume (Million Tonnes)	14.5	14.6

## WE ARE COMMITTED TO BEING THE WORLD'S PREMIER LNG COMPANY



During 2015 at Qatargas, we were proud to achieve 'Premier Status' by realising our Vision 2015 of becoming the world's premier LNG company. We had achieved or exceeded all of our vision targets and set the standard for the LNG sector.

This is an achievement that resulted from sustained collective performance and high individual commitment amongst our people over many years. It is an achievement we can all be proud of.

Now, in our continuous endeavours to challenge ourselves and set the bar higher, develop new capabilities and remove obstacles, it is time to reach beyond these past accomplishments and established benchmarks to increased and sustainable improvements.

It is time to push beyond the baselines we have successfully created and reach new heights. At Qatargas, there is no room for complacency. We must build on our strengths and continue to deliver excellence in all aspects of our business.

In today's increasingly turbulent market, Qatargas needs to respond intelligently and adapt creatively to the challenges ahead with a relentless focus on safety and performance, sustained operational reliability,

increased synergies and recognised customer satisfaction.

The Qatargas Direction Statement is our road map to achieving this and retaining our 'Premier Status'. Our mission has been defined to manage and operate all our resources safely, efficiently and reliably. A set of corporate values has been defined, forming the foundation of how we should work together and through which we will fuel the fulfilment of the Qatar National Vision 2030.

The Direction Statement also shows how Qatargas will perform in the future and guides us to deliver on our business promises. It informs our approach and strategies and has been designed to inspire and empower our people to innovate.

Safety will continue to be a key focus and we have also introduced some new strategies, which fit well within today's economic forces. We aim to pioneer new LNG applications and to establish new markets with a new portfolio of customers which, combined with our high calibre workforce and continued reliability and flexibility, will ultimately contribute to strengthening our corporate resilience.

The Direction Statement, along with the Vision 2020, is now the compass for Qatargas, showing the way forward to each one of our people and partners. During this new, post-premier phase, we will once again challenge ourselves to break new boundaries, rise to new heights and deliver unprecedented results.

**KHALID BIN KHALIFA AL THANI**  
CEO, QATARGAS

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# THE PIONEER

THE MAGAZINE OF QATARGAS OPERATING COMPANY LIMITED

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# QATARGAS DIRECTION STATEMENT: COMMITTED TO BEING PREMIER

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Qatargas is 'committed to being the world's premier LNG company providing reliable, clean energy'. That is the central message behind Qatargas' Direction Statement, which was recently rolled out across the Company. The associated 2020 Vision is the Company's five-year road map with a focus on helping to fulfil the key objectives of the Qatar National Vision 2030.

The Qatargas Direction Statement underscores the Company's commitment to sustaining its journey as the world's premier LNG company. It has been developed to communicate the Company road map for the next five years to all Qatargas' stakeholders including employees, customers, shareholders and the community. The key messages in the Direction Statement act as the guiding principles, to help ensure the Company upholds its high standards and retains its premier position.

Qatargas has always believed strongly in its people and considers its employees its greatest asset. In developing the Direction Statement, the Qatargas Management Leadership Team (MLT) wanted to further empower its people to innovate, which will play a major role in the Company fuelling the fulfilment of the Qatar National Vision 2030 (QNV 2030).

The strong messages driving the original Qatargas Vision 2015 to become the world's premier LNG company have been reinforced in the Qatargas Direction Statement, which acts as the Company's road map to ensure its continued success and,

provides clear direction to all employees and partners.

Khalid Bin Khalifa Al Thani, CEO, Qatargas, speaks animatedly about the Qatargas Direction Statement, "We have come a long way since Qatargas was first established and we must continue to deliver value by solidifying the knowledge and experience we have gained, aiming for continuous improvement. In order to maintain our premier position we need to adapt to the challenging market environment, through relentless focus on safety and performance culture, sustained operational reliability, increased synergies and recognised customer satisfaction. Qatargas' MLT has therefore defined this Direction Statement which makes it clear that safety, a high calibre workforce, efficient and reliable operations, customer satisfaction and strong financial performance remain as Qatargas' pillars. In line with the QNV 2030, a set of corporate values has been defined, forming the foundation of how everyone

can work together. Our mission has been defined to manage and operate all of our resources safely, efficiently and reliably. The subsequent 2020 Vision has been designed to show what Qatargas will look like in the future and guide us to continue to deliver on all of our business promises."

### Maintaining premiership

Qatargas is proud to have achieved its Vision 2015 last year, which was to become the world's premier LNG company. Being premier is about striving to optimise resources and get the best results in everything the Company does. It is now time to sustain this position on the global platform. The Direction Statement will help to ensure that the highest standards are maintained and that the Company delivers LNG to its customers safely and reliably in what is an

increasingly challenging and competitive global environment.

Playing a key role in achieving the QNV 2030, Qatargas contributes significantly to the country's gross domestic product (GDP). The Direction Statement seeks to motivate the Qatargas employees by communicating openly, encouraging initiatives, empowering them to create and innovate and acknowledging their accomplishments. It is designed in such a way that each individual working for the Company can find something in it for them, entrusting them to deliver and sustain operational excellence. Working collaboratively, each employee is playing his/her part in achieving the Company's objectives.

### Direction Statement explained

The Qatargas Direction Statement was developed in order to provide clear guidance on where the Company wants to go. It was designed to communicate that the Company values everyone's contribution and that people must push forward in order to maximise this value.

Qatargas CEO continues, "A hugely important step in this direction is the integration of economic, environmental and social factors. We will strive to continue to deliver value to our stakeholders by setting higher standards and achieving new milestones. We

will do this with the utmost commitment to safety and environmental performance. Through our effective business processes we will strengthen our corporate resilience."

The Direction Statement comprises five key pillars, which are Qatargas' key strategic focus areas. Each pillar is linked to the Company's corporate values and helps in monitoring performance.

In developing the mission statement, management asked a number of questions relating to the Qatargas business model and brainstormed with key divisions to ascertain the clearest responses (see right).

**"We will strive to continue to deliver value to our stakeholders by setting higher standards and achieving new milestones. We will do this with the utmost commitment to safety and environmental performance." - Khalid Bin Khalifa Al Thani, CEO, Qatargas.**

Qatargas is proudly fuelling the QNV 2030 as each one of these questions and answers are firmly linked to its key pillars. When the first direction statement was developed Qatargas had just been established. It was a new company seeking to attract the right people. Fast-forward 15 years and it has achieved premier status, boasting a high calibre work force. Qatargas has established a culture that reflects all of its promises and these have now become the Company's core values. The Direction Statement will guide the Company in its endeavours to continue this success by sustaining a premier business model and stretching its people further. In turn, these efforts will contribute to the State achieving its National Vision 2030.

### WHO ARE WE TARGETING?

Every stakeholder - our people, our customers, our shareholders and our community.

### WHY DOES QATARGAS EXIST?

To operate and manage all of its resources safely, efficiently and reliably.

### HOW CAN THAT BE DONE?

A promise by the Company to perform. There is a list of several mission statements within the Qatargas Direction Statement that provide guidance to employees on achieving the Company's vision.

#### We will:

- Strengthen our Incident and Injury-Free culture.
- Attract and retain customers through our reputation as a safe, flexible, mature and reliable supplier.
- Be the employer of choice for a high-performing national and international workforce.
- Sustain reliability - ensure asset integrity and plant availability through proactive and effective operations.
- Prioritise and flawlessly deliver projects, and effectively integrate them into existing operations.
- Be socially responsible - actively contribute to social, community and local business partnerships.
- Maximise the value of our people and the efficiency of our facilities and systems.

### What does the Qatargas Direction Statement communicate?

1. It communicates a commitment to Qatargas Shareholders that everyone will continue to strive to retain the Company's premier position.
2. It communicates with all employees about the Company's premier position in the global field and reinforces the pride that people must take in being premier.
3. It communicates the Company's competitive advantage with Qatargas' customers. Having Qatargas as a supplier means partnering with a business that will consistently deliver reliable and clean energy whenever, and wherever, it is needed.

**2020**

The Direction Statement includes Qatargas' road map to 2020.



Maintaining safe and reliable operations across all assets is a key pillar of the Qatargas Direction Statement.



## Empowering our people to innovate

At Qatargas a culture of commitments has been established and these have become the Company's core values. The Qatargas Direction Statement helps provide the stretch for the coming five years in order to further empower the Company's people to innovate.

Safety remains a key focus at Qatargas and this is made very clear in Vision 2020, which forms a major component of the Direction Statement. Expanding on the key pillar of leading the industry in Safety, Health and Environmental Performance, the 2020 Vision promises that Qatargas will first and foremost, "Sustain an IIF workplace".

The Qatargas Direction Statement also introduces

new strategies such as penetrating new markets and developing a new portfolio of customers, which will ultimately strengthen the Company's financial performance, "Strengthen corporate resilience through effective business processes".

Qatargas CEO explains, "The Vision 2020 is our description of how Qatargas should look in 2020 in terms of our different strategies. We can achieve this by pushing forward and maximising the value of our resources. It is a tool for inspiring genuine care in our people because we truly value everyone's contribution towards breaking boundaries into the future."



"It is a tool for inspiring genuine care in our people because we truly value everyone's contribution towards breaking boundaries into the future." - Qatargas CEO Khalid Bin Khalifa Al Thani.

## Setting the direction

In 2014, the MLT came together to discuss the boundaries of the Direction Statement and how the road map would be developed. They, along with Department Heads, explored in depth the various themes behind the Direction Statement. Throughout 2015, led by Corporate Planning, the Company continued to gather market research and pull together the backbone of the statement.

The Direction Statement outlines Qatargas' competitive values, communicating with the Company's customers, people and stakeholders. It also takes into account environmental considerations and has a very clear focus on safety.

Towards the end of 2015 and during the first months of 2016, the Direction Statement was rolled out across the Company. The main communicative objective of the roll out was that each and every employee could walk away, confident in his or her ability to help fulfil it.

During the roll out, it was important that everyone clearly understood what it meant to be premier, and being part of this success. It is about optimising the resources and getting the best results in everything the Company does. It is about understanding the purpose and meaning in what we do, acquiring wisdom and displaying signs of genuine care and the continued enthusiasm to challenge and break boundaries, embrace change and to move with courage into new territories.



The 2020 Vision promises that Qatargas will first and foremost sustain an IIF workforce.

# IMPROVED EFFICIENCIES AND SYNERGIES

A Synergy Committee has been established between Qatargas and RasGas with the aim of further improving common efforts across the companies in maintaining all their assets and facilities.

Guided by the new Synergy Committee, both Qatargas and RasGas are working collaboratively in a number of areas with the objective of increased efficiencies and cost optimisation.

The framework and operating rhythm of the Committee has already been established, guided by strategic direction from the joint QG-RG Management Leadership Team (MLT) and supported by the CEOs of both companies. The Committee's mandate is to capture, evaluate and track synergy opportunities across different departments at the corporate level.

Jassim Al-Mohannadi, Chief Planning & Risk Officer, Qatargas and Hamad Al Qayed, Chief Corporate Planning Officer, RasGas, are joint chairs of the new committee.

Speaking about the initiative, Al-Mohannadi, explains, "The formation of

this Committee will help both Qatargas and RasGas share industry best practices that are readily available in both the organisations. This will also support Qatargas in its quest to continue fuelling the Qatar National Vision 2030."

Hamad Al Qayed adds, "This Synergy Committee is a top priority of both RasGas and Qatargas CEOs as it will enable both organisations to optimise their potential and continue exploring opportunities for maximising our shareholders' value."

The Qatargas and RasGas Maintenance Departments have already successfully concluded a number of combined service contracts in maintaining assets and facilities and there are more in the pipeline.

Through a series of networking sessions as part of a strategic mindset focused on combining efforts to improve work efficiencies, the Maintenance Departments



Senior management pictured during the first Synergy Committee meeting.

are now also exploring further potential collaborations in the areas of Planning and Scheduling; Development of Contract Management; and Execution and Quality Assurance.

The Synergy Committee will provide further support and guidance on such initiatives, enabling increased visibility, and ensuring clarity

and transparency of the Synergy process.

Composed of an identical number of members from Qatargas and RasGas, covering Corporate Planning, Supply, Maintenance, Reservoir & Production, Offshore, Information Technology, Human Resources and Finance, the Committee will look at all aspects of the business.



Delegates at a recent networking session jointly organised by the Maintenance Departments of Qatargas and RasGas.



# MULTI-PORT DELIVERIES: REVOLUTIONISING LNG SHIPPING PRACTICE

In a first for the LNG sector, Qatargas has once again set industry standards with its first ever multi-port delivery. The initiative is part of the Company's continued efforts to promote increased efficiency and the optimisation of business practices in an evolving market environment.

**4**  
The number of times Qatargas has successfully completed a multi-port delivery.

The new multi-port delivery shipping practice means Qatargas can deliver a Q-Flex cargo of LNG between multiple ports for a single customer. It allows the Company to continue to meet customer requirements through its flexibility while also consistently, safely and reliably delivering LNG around the world. The established benchmark prior to this was to deliver a single cargo to a single location.

Qatargas CEO Khalid Bin Khalifa Al Thani, commended this new approach, stating: "The multi-port delivery initiative demonstrates Qatargas' unique capabilities to meet and exceed its customers' needs and is once again leading the industry in providing new and innovative LNG supply chain solutions."

## The four successful deliveries

The first multi-port delivery was onboard Q-Flex vessel Al Safliya and delivered a single cargo split between the United Arab Emirates and India in March last year.

The second multi-port delivery was onboard Q-Flex vessel Al Aamriya and

delivered a single-cargo split between the Chinese terminals of Fujian and Tianjin in July last year.

Again in December 2015, the third and fourth multi-port deliveries were made onboard Q-Flex vessels Duhail and Al Shamal, which were split cargoes to Zhejiang - Tianjin and Guangdong-Tianjin terminals in China respectively (see illustration, opposite).

According to Qatargas Shipping Manager Abdurrahman Al-Mulla, "The LNG industry has historically followed a delivery model based on long-term contracts involving the delivery of single cargoes to single buyers. Our Q-Max and Q-Flex vessels are strongly positioned to meet emerging customer needs as their large carrying capacity LNG lends themselves naturally to splitting deliveries."

## The challenges

Delivery to multiple ports and multiple customers complicates the process, which is why strong coordination between all stakeholders is essential. Every terminal has its own specific requirements regarding the volume and the timing of delivery. LNG carriers

also have very carefully prescribed limits governing the maximum and minimum quantity that can be carried. The Ship Owner and Operator therefore coordinate closely to ensure all these requirements are met. The collaboration across all stakeholders ensures the customers' expectations can be met while also maintaining safety standards.

When setting up the new multi-port delivery process, Qatargas first had to ensure they could:

- Gain acceptance from the customer that it was a feasible concept.
- Coordinate between cargo buyers.
- Accurately measure each delivered quantity.
- Maintain ships within their safe operating parameters.

"Finding a solution to all of these activities and other challenges enabled Qatargas to become the first LNG seller in the world to offer this flexibility to its customers," Al-Mulla adds. Key verification checks involved in the process include:

- Safe filling limits of cargo tanks.

- Cargo management.
- Arrival and departure drafts.
- Ship/shore compatibility in every terminal.

## The benefits

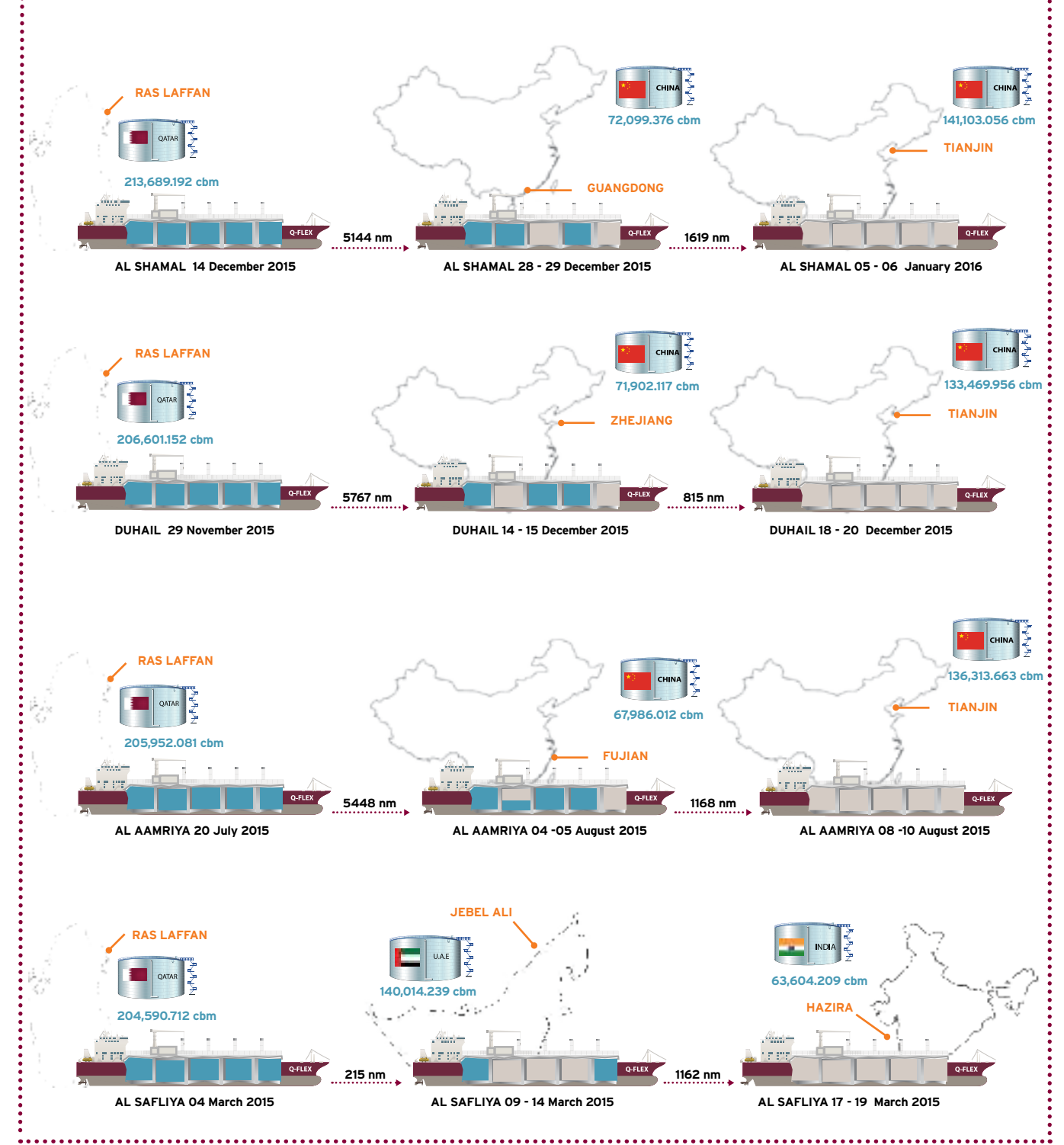
Efficiency, cost optimisation and flexibility are amongst the key benefits of the new shipping practice.

According to Al-Mulla, "Instead of sending two small ships to separate ports it is normally more efficient and less costly to send one large vessel to the two ports. It's all part of the Qatargas value model; with our diverse chartered shipping fleet, we can deliver value to our customers that other suppliers cannot."

He explains that one of the exciting things about shipping is its dynamism. Just like the ships themselves, it seldom stands still. The drive for lower costs and improved environmental stewardship drives new technology and fresh ways of thinking. The Qatargas values of Safety, Efficient and Reliable Operations and delivering Customer Satisfaction will continue to direct these innovative efforts.

**"Finding a solution to all of these activities and other challenges enabled Qatargas to become the first LNG seller in the world to offer this flexibility to its customers."** - Abdurrahman Al-Mulla, Qatargas Shipping Manager.

## QATARGAS RESHAPES LNG SHIPPING PRACTICE





# LNG AS MARINE FUEL

As one of the key pillars in the Qatargas Vision 2020, the Company is determined to continue to lead the industry 'in pioneering new LNG applications, establishing new markets and strategic industry partnerships'. In this regard, working closely with key partners, Qatargas has reached three milestones in the exploration of LNG as a marine fuel.

## LNG: A viable marine fuel alternative?

Qatargas, recently signed two Memorandums of Understanding (MOUs) to explore the development of LNG as a marine fuel, a concept that has the potential to significantly bolster the shipping landscape. The first one was with the Maersk Group and, Shell and the second with United Arab Shipping Company (UASC) and Shell.

These MoUs highlight Qatargas' commitment and innovation to develop new market opportunities through collaboration and strategic partnership.

Merchant shipping currently relies predominantly on heavy fuel oils, but there is a tightening on environmental regulations which will require alternative propulsion solutions for shipping merchants. These include the expansion of sulphur oxides (SO<sub>x</sub>) and nitrogen oxide (NO<sub>x</sub>) regulations and the introduction of measures related to carbon dioxide (CO<sub>2</sub>) emissions.

## The collaboration

Commenting on the first MoU, signed by Qatargas, the Maersk Group and Shell, Saad Sherida Al-Kaabi, Chairman of Qatargas Board of Directors, said: "We are very proud to continue to pioneer new and novel opportunities to utilise Qatar's LNG. We are also proud to partner with industry leaders such as Maersk and Shell to create potential new market opportunities for Qatar's LNG and, at the same time, provide ship operators around the globe with a cleaner fuel alternative to the heavy fuel oils currently in use."

The Maersk Group is the world's largest shipping owner and Qatargas is the world's largest LNG producer. Shell brings its experience in LNG for transport infrastructure to the collaboration. The MOU envisages LNG supplies for the initiative to be made available from Qatargas 4, a joint venture between Qatar Petroleum and Shell Gas B.V., with Maersk Line potentially using the fuel for its merchant vessels.

In April, a second MoU was signed by Qatargas, Shell and the UASC - again, to explore the development of LNG as a marine fuel in the Middle East region. Commenting on this second milestone, Al-Kaabi said that the agreement "demonstrates our commitment to building LNG-fuelled vessels and the supply systems to support it," adding: "This direction by Qatargas and its industry partners is the right path to support a cleaner environment."

# LNG MARINE PROPULSION TECHNOLOGY

Qatargas has also signed a technical collaboration agreement with the Maersk Group to explore opportunities related to the use of LNG marine propulsion.



(From L to R) Nils S. Andersen, Maersk Group CEO, Saad Sherida Al-Kaabi, QP President & CEO and Chairman of Qatargas Board of Directors, Khalid Bin Khalifa Al Thani, Qatargas CEO, and Danny Leek, Shell International Trading Middle East Limited General Manager, pose for a photograph after the signing ceremony at the Qatargas Doha Head Office.



Qatargas CEO Khalid Bin Khalifa Al Thani (fifth from Left), United Arab Shipping Company CEO Jorn Hinge (fourth from Left), and Managing Director and Chairman of Qatar Shell Companies, Michiel Kool (sixth from Left) are pictured along with other officials of the three companies.



(From L to R) Sheikh Faisal Bin Fahad Al-Thani, Deputy Managing Director of Maersk Oil Qatar, Nils S. Andersen, Maersk Group CEO, Saad Sherida Al-Kaabi, QP President & CEO and Chairman of Qatargas Board of Directors, and Khalid Bin Khalifa Al Thani, Qatargas CEO.

The Letter of Intent (LoI) between the Maersk Group and Qatargas aims for technical collaboration on LNG propulsion. Technical improvements to LNG propulsion technology could support an accelerated increase in the share of LNG-propelled vessels in the shipping market, paving the way for a potential large market of LNG as marine fuel for Qatargas.

According to Khalid Bin Khalifa Al Thani, CEO of Qatargas, "Qatargas has a proven track record of technology innovations for different uses for LNG. In an ever-changing industry, innovation becomes even more important to remain competitive. We look forward to pursuing

this partnership with the Maersk Group, in order to explore new or improved technology for Qatar's LNG carriers and at the same time being able to contribute to the development of alternative cleaner fuel technology for vessel operators."

Maersk Line is the world's largest shipping operator, currently accounting for more than one in six of the world's container vessels. As the cleanest viable marine fuel option, LNG propulsion technology for ships presents an opportunity, not only to reduce SO<sub>x</sub> and other emissions, but also to significantly reduce the transport sector's CO<sub>2</sub> footprint. The transportation sector could represent a new major market

for Qatargas' LNG, and large container vessels are particularly interesting due to the scale of demand.

Qatargas has already gained invaluable experience and capabilities in the retrofit to LNG propulsion when the Q-Max Vessel, Rasheeda, was successfully retrofitted with a gas burning M-Type Electronically Controlled (ME-GI) System in mid-2015. This made it the world's first vessel in which low-speed marine diesel engines were converted to use LNG as a fuel. Later in 2015, Qatargas went on to successfully commission the system, proving for the first time the commercial use of ME-GI technology for maritime propulsion.



# LONG-TERM CONTRACT WITH PAKISTAN STATE OIL

Qatargas continues to establish new markets supplying clean, reliable energy to a new portfolio of customers across global markets. After successfully delivering the commissioning cargo to Pakistan in April last year, Qatargas' discussions with Pakistan State Oil Company Limited (PSO) for a long-term Sales and Purchase Agreement (SPA) have come to fruition.



In April 2015 Qatargas delivered the first commissioning cargo to Pakistan on board the Excelerate Exquisite. This opened new markets of opportunity and a long-term SPA was signed. The first cargo under the new long-term agreement was delivered on board Q-Flex vessel Al Gattara in March 2016.

## Long-term SPA with Pakistan

Qatargas 2, the joint venture between Qatar Petroleum, ExxonMobil and Total has signed a long-term SPA agreement with PSO to supply 3.75 million tons per annum (MTPA) of LNG over a period of 15 consecutive years.

The significant agreement was signed by Saad Sherida Al-Kaabi, Qatar Petroleum President & CEO, and Chairman of Qatargas Board of Directors, and Sheikh Imran Al Haque, Managing Director & CEO of PSO.

Saad Sherida Al-Kaabi described the agreement as

“a very important milestone in Qatar's standing as a reliable energy supplier as it marks the first direct long-term agreement between the two companies.”

Al-Kaabi also spoke about Qatargas' ambitious efforts to lead the development of international LNG trade,

**“This agreement is a very important milestone in Qatar's standing as a reliable energy supplier as it marks the first direct long-term agreement between the two companies.”** - Saad Sherida Al-Kaabi, President & CEO, Qatar Petroleum and Chairman of Qatargas Board of Directors.

stating: “The State of Qatar under the leadership and guidance of His Highness Sheikh Tamim Bin Hamad Al Thani, the Emir of the State of Qatar, is constantly looking to expand and enhance its LNG market share while at the same time helping countries around the world meet their growing energy needs.”

Meanwhile, Khalid Bin Khalifa Al Thani, CEO, Qatargas spoke about the Company's aims to open new markets with new customers: “The signing of this agreement represents a momentous occasion for Qatargas as we continue to play a key role as a world leader in the supply of clean, reliable energy to global markets.”

The long-term agreement, now one of Qatargas' many successes, came soon after the Company delivered its first shipment to Pakistan, last April.

## First LNG cargo to PSO under new agreement

Continuing to supply clean, safe and reliable LNG to nations around the world, Qatargas has recently delivered its first shipment of LNG to Port Qasim in Pakistan, following the long-term agreement.

This first LNG shipment was loaded on the Nakilat-owned Al Gattara Q-Flex vessel, which sailed from Ras Laffan to Pakistan in February.

Khalid Bin Khalifa Al Thani commented on this outstanding success, stating: “I would like to express my appreciation to the “Nakilat” company as well as our partners in Pakistan for the assiduous efforts they put in to offer the necessary support that allowed this endeavour to be a success. We are eager to build and maintain strong bonds with all the parties involved in delivering the first shipment, according to this new partnership.”

The delivery of the shipment to Al Qasim port in Pakistan is proof of Qatargas' continued efforts to develop new procedures for the employment of Q-Flex vessels. The Qatargas chartered Q-Flex fleet is now compatible with 60 LNG terminals globally.

This success is the fruit of several months of dedicated work by Qatargas. The Company has always been intent on supervising all of its operations in detail, from offering technical support to delivering LNG shipments around the world with the utmost in safety and proficiency.

**“The signing of this agreement represents a momentous occasion for Qatargas as we continue to play a key role as a world leader in the supply of clean, reliable energy to global markets.”**

- Khalid Bin Khalifa Al-Thani, CEO, Qatargas.

**3.75 MTPA**

Qatargas to supply PSO with 3.75 MTPA of LNG per annum under a 15 year Sales and Purchase Agreement (SPA).

**“The State of Qatar under the leadership and guidance of His Highness Sheikh Tamim Bin Hamad Al Thani, the Emir of the State of Qatar, is constantly looking to expand and enhance its LNG market share while at the same time helping countries around the world meet their growing energy needs.”** - Saad Sherida Al-Kaabi, President & CEO, Qatar Petroleum and Chairman of Qatargas Board of Directors.



Qatargas-chartered Q-Flex LNG vessel “Al Gattara” moored at Port Qasim in Pakistan.



# PAVING THE WAY FORWARD

Qatargas has demonstrated its success in sustaining an Injury and Incident Free (IIF) workplace, eliminating hydrocarbon releases and minimising carbon footprint through recent recognitions and awards. Each achievement represents an important milestone in maintaining Qatargas' position as the world's premier LNG company.



**Maximising Safety, Minimising Environmental Footprints**

Qatargas successfully achieved its Vision 2015 to become the world's premier LNG company earlier last year. The focus now is on sustaining this position on a global platform via a five-year road map to ensure that the highest standards are maintained. A number of recent company achievements demonstrates Qatargas' ongoing commitment to delivering LNG to its customers safely and reliably in an increasingly competitive global environment.



The Common Liquefied Natural Gas Storage and Loading Asset (CLNGSL) successfully completed seven consecutive years of operations without a Lost Time Incident (LTI) in December.

# 7 Years Without Lost Time Incident

Qatargas demonstrated yet again its unwavering commitment to sustaining an Incident and Injury Free (IIF) workplace with the significant safety milestone achieved by the Common Liquefied Natural Gas Storage and Loading Asset (CLNGSL) when it completed seven consecutive years

of operations without a Lost Time Incident (LTI) in December.

The CLNGSL facilities were built as a shared asset between Qatargas and RasGas in order to store the LNG from the seven Qatargas trains and RasGas Trains 6 and 7 and then also load it when it is ready to be

delivered to their customers across the globe.

Qatargas CEO Khalid Bin Khalifa Al Thani commended the great milestone, stating, "This is a moment of great pride for all of us at Qatargas. This unique safety milestone is further enhanced by a record 693 ship loadings in 2015, and an overall Jetty Boil-Off Gas (JBOG) recovery of nearly 90 percent. All these are the result of the Company's continuous commitment to safety by the leadership and workforce alike and adopting an integrated approach to safety that involves working in a cooperative manner to ensure the health and safety of all employees."

**CLNGSL: KEY PROJECT MILESTONES**

**2008 December**

Began operations during the start-up phase of Qatargas 2 (Trains 4 & 5).

**2009 March**

Qatargas Q-Flex vessel Al Hamla was the first ship to load from Berth 4 during the expansion start-up stage.

**2009 October**

Qatargas Q-Flex vessel Al Kharaitiyat was the first ship to load from Berth 5.

**2011 February**

RasGas Q-Flex vessel Al Sahla was the first ship to load from Berth 6.

**2012 April**

Loading of the 1000<sup>th</sup> cargo.

**2014 March**

The loading of the 2000<sup>th</sup> cargo was achieved less than five years after the first cargo loading at the facility.

**2014 October**

JBOG facilities were added.

**2015 April**

Loading of the 5000<sup>th</sup> cargo.

# Shell 'Goal Zero' Award



Ahmad Helal Al-Mohannadi, Qatargas Chief Operating Officer - Operations, received the award from Michiel Kool, Managing Director and Chairman of Qatar Shell Companies, in a brief ceremony held at the Qatargas offices in Ras Laffan.

**"Our safety programme is first and foremost about caring for our people. Qatargas Management is fully committed to ensure safe operation and to provide a safe work environment for our employees and contractors."** - Ahmad Helal Al-Mohannadi, COO - Operations, Qatargas.

Continuing to deliver on the core value of safety, Qatargas has also recently accomplished ten million man-hours without serious leaks or incidents. Recognising this significant achievement, the Shell Goal Zero Award commends Qatargas for sustaining its Incident and Injury Free (IIF) work environment and constantly pushing the safety first message.

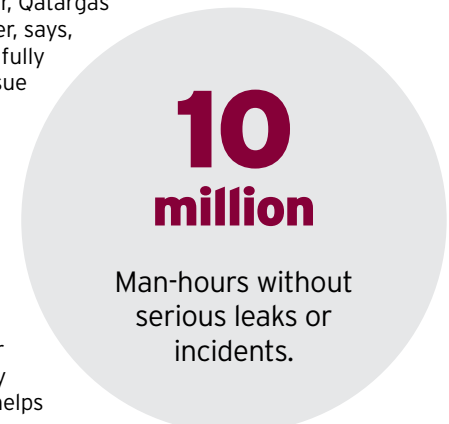
Highlighting the Company's continuous commitment to the highest standard of safety, the award aims to promote and build a strong safety

culture in the industry and recognises and celebrates those that achieve great safety performance.

Ahmad Helal Al-Mohannadi, Qatargas COO - Operations proudly says, "Our safety programme is first and foremost about caring for our people. Qatargas Management is fully committed to ensure safe operation and to provide a safe work environment for our employees and contractors. We accept no compromise in this area. This achievement is the result of our belief in the Incident and Injury Free culture, which is

integrated in all our activities."

Ibrahim Bawazir, Qatargas 3&4 Asset Manager, says, "My asset team is fully committed to pursue the goal of no harm to people and to protect the environment. We promote a culture where all people involved in our operations share these commitments. Our Incident and Injury Free programme helps us to further improve our safety performance."



**"At Shell, what we call 'Goal Zero' is a deep belief that we can run our operations with no harm to people and no leaks. We are proud to be working with a partner like Qatargas that shares the same belief, making sure that Qatargas staff and contractors go back to their homes safe and sound every day. Shell's Goal Zero Award to Qatargas is a recognition for working with this mind-set in day to day operations."** - Michiel Kool, Managing Director and Chairman of Qatar Shell Companies.



# Laffan Refinery: Safety First

Additional safety milestones at Qatargas' Laffan Refinery asset demonstrate the Company's commitment to the safety of their employees, contractors and local communities, further reinforcing their dedication to an Incident and Injury Free (IIF) workplace. The Laffan Refinery completed two consecutive years of operations without any Total Recordable Injury (TRI), and over six years of operations without any Lost Time Incident (LTI). These accomplishments account for operations since the Refinery's start-up in 2009.

## A collective effort

These safety milestone achievements are the result of Qatargas' leadership and workforce, who always adopt an integrated approach to safety. Both the leadership and the workforce work in a collaborative and cooperative manner to ensure the health and safety of all employees and contractors.

The consistent and collective cooperation between all divisions involved in operations, maintenance support functions and contractors are key to the Company's successful safety record. The collaborative work culture, along with the

management's relentless commitment to strengthen IIF culture made the TRI achievement possible. Both the management and workforce share a common, clear target of continuous focus on personal and operational safety.

## An integrated approach to safety

Several elements of the integrated safety approach in the Laffan Refinery that were successfully implemented, include:

- Specific and recurrent safety tasks.
- Regular multi-discipline meetings.
- Plant visits focusing on SHE (safety, health and environment) matters.
- Continuous reinforcement of the IIF culture.
- Dedicated talks with all working plant personnel.
- Regular recognition of safety findings and safe behaviours.
- Active reporting of all near misses and incidents.
- Strict follow-up of the implementation of all relevant corrective actions.

## Environmentally friendly

Since its inception, the Laffan Refinery was planned as an

environmentally friendly facility, built in line with the highest environmental standards to reflect the Company's commitment to health, safety and environment. The gas recovery system, which captures and compresses gases generated during operations and recycles them as fuel gas, is only one example of the Company's environmentally conscious operations and commitment to minimising its carbon footprint.

The Water Recycling Facility at Laffan Refinery



Laffan Refinery is an environmentally friendly gas recovery system which captures and compresses gases generated during operations and recycles them as fuel gas.

2, initiated late last year, is another key step towards being more environmentally conscious. The Water Recycling Facility, designed to handle the Treated Industrial Water from Laffan Refinery 1 and Laffan Refinery 2 (which is currently under construction), aims at reducing external water consumption of the two plants and eliminating the discharge of Treated Industrial Water. The recycled water is planned to be re-used in the Laffan Refineries 1 and 2 as boiler feed water and cooling water.

# Regional Standout: Winning the GCC Environment Award

Qatargas was once again recognised for its environmental commitment when it won the prestigious Gulf Cooperation Council (GCC) Environment Award for 'Best Industrial Establishment that Complies with Environmental Regulations and Standards' in 2015, a joint award with Bahrain's Gulf Petrochemicals Company.

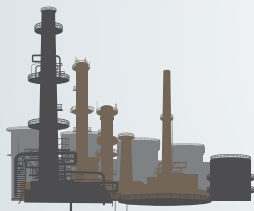
Qatargas participated in the award by delivering a comprehensive report on its environmental performance, listing the environmentally-stringent measures taken by the Company and complying with the relevant international and local environmental regulations and guidelines. The Company's approach to environmental management and practices, in line with the Qatar National Vision 2030 (QNV 2030), demonstrates the key objective of sustaining the environment for future generations. Qatargas continues to promote the use of state-of-the-art solutions to further improve the environmental performance of its facilities.



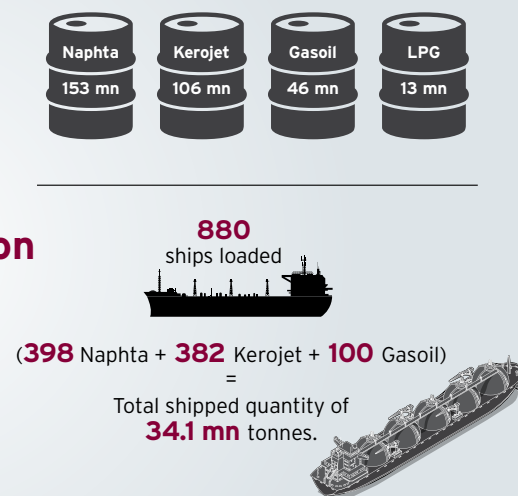
H.E. Ahmed Bin Amir Al Humaidi, State of Qatar's Minister of Environment, presents the Award to Qatargas CEO, Khalid Bin Khalifa Al Thani, as H.E. Dr. Abdul Latif Bin Rashid Al Zayani, Secretary General of the GCC, looks on.

## Laffan Refinery in numbers

- The largest condensate refinery in the world
- A capacity of **160,600 barrels** per day (bpd)
- Operated by Qatargas on behalf of Qatar Petroleum, Cosmo, Exxon Mobil, Idemitsu, Total, Marubeni and Mitsui shareholders.
- Capacity will increase to **306,600 bpd** when Laffan Refinery 2 begins operations.
- **Products:** Naphtha, Kerojet, Ultra Low Sulfur Diesel, Propane and Butane.



**No. of barrels since production began:**



## About the GCC Environment and Wildlife Award

The GCC Environment and Wildlife award is one of the most prestigious recognitions in the region and encourages initiatives that seek to preserve the environment and wildlife. The award inspires and values innovation and creativity, and encourages the industry not only to contribute towards sustainable development, but also to raise awareness on key environmental topics in the GCC states. The ultimate goal is to motivate the Gulf region to foster a more caring attitude towards the regional environment.

The award consists of seven categories and includes the best research works in the fields of environment studies and wildlife. In addition to the award for Environmental Awareness

on Nature and Wildlife, the recognition is also extended to the Best Industrial Establishment that complies with the Environmental Regulations and Standards.

Abiding by and implementing the State of Qatar's environmental regulations is core to Qatargas' business and operations. Each year, the Company maintains its compliance with regulations through Consent to Operate (CTO) environmental permits issued by Ministry of Municipality and Environment. This includes:

- Two new CTOs in 2014 for its Diesel Hydrotreater and JBOG facilities;
- 13 active CTOs that are renewed annually with extensive compliance, monitoring and reporting requirements.



The Company's key environmental focus areas include:

- Compliance.
- Flare reduction.
- GHG and air emissions management.
- Wastewater recycling and reuse.
- Waste management.

Environmental awareness and environmental data management were added to these focus areas in 2014.

In a ceremony held in Doha in January 2016 H.E.

Ahmed Bin Amir Al Humaidi, State of Qatar's Minister of Environment presented the award to Qatargas CEO Khalid Bin Khalifa Al Thani. Also present on the occasion were H.E. Dr. Abdul Latif Bin Rashid Al Zayani, Secretary General of the GCC, and senior officials from the ministries of environment of the GCC states.

Qatargas CEO was thrilled to receive the award on behalf of the Company, stating, "We are delighted to win this prestigious award, which is a

testament to Qatargas' robust environmental performance and its total compliance with the international and local environmental standards and regulations. This recognition underscores once again the effectiveness of the sustainability strategy we follow in all our actions while helping to meet the global demand for reliable and cleaner sources of energy."

"As a leader in the global energy industry, Qatargas has made significant contributions

to a sustainable future for our country and the world at large. Over the past few years, we have made huge financial investments in reducing our carbon footprint, improving air quality, reducing and recycling waste, and judicious use of water," he continued.

The award comes after a series of regional and international recognitions that Qatargas has recently received for its continued performance in environment, safety and sustainability.

**"This recognition underscores once again the effectiveness of the sustainability strategy we follow in all our actions while helping to meet the global demand for reliable and cleaner sources of energy."** – Qatargas CEO Khalid Bin Khalifa Al Thani.

### Other recent awards

- **November 2015:** Sword of Honour and Globe of Honour from the British Safety Council. The Company's Shipping Department won the prestigious awards for the second consecutive year for their commitment to achieving excellent standards of health, safety and environmental management.
- **October 2014:** Arabia Corporate Social Responsibility Award in the "Large Size Enterprise" category across the MENA region.
- **2014:** Best Overall Sustainability Report award for Qatar's Industry and Energy Sector in recognition of its 2013 Sustainability Report, which offered key updates on the Company's economic, social and environment performance.

## A Global Platform: JBOG and Climate Change



Hazim Ali Al-Muraikhi, Environmental Affairs Division Manager, delivered a presentation about JBOG at the COP 21 UN Climate Change Conference.

Showcasing the State of Qatar's efforts to mitigate and combat the severe effects of global climate change, Qatargas presented details of its Jetty Boil-Off Gas (JBOG) Recovery Project at the recent COP 21 UN Climate Change Conference, held in Paris.

JBOG is one of Qatargas' most iconic environmental projects and one of the largest environmental investments in the world. It significantly reduces Qatargas' environmental footprint, a key component in realising

its 2020 vision to sustain its position as the world's premier LNG company. The JBOG facility, built and operated by Qatargas, started operations in October 2014 and recently achieved a major milestone marking its 1000<sup>th</sup> loading, safely recovering approximately 535,000 metric tonnes of LNG.

During the conference Hazim Ali Al-Muraikhi, Environmental Affairs Division Manager, Qatargas, presented the major benefits of JBOG during a session entitled,

'Role of Oil & Gas Technology to address Climate Change Challenges'. Al-Muraikhi emphasised the role the JBOG facility plays in minimising flaring at the six LNG loading berths in Ras Laffan Industrial City. The session provided a platform to discuss the role of oil and gas technologies and research & development in the GCC and across OAPEC countries, particularly in relation to combatting the effects of climate change and raising resilience for response measures.

# FIRE SAFETY AND PREVENTION FOR ALL

In line with the values in the Qatargas Direction Statement to have a 'mutual and genuine care for our people and facilities', the EMS Department continuously strives to ensure the highest international fire and safety standards are adhered to.

The Qatargas Emergency Management Services and Security (EMSS) Department has once again been recognised by the Qatar General Directorate of Civil Defense (QGDCD) for their continued collaboration and commitment towards fire prevention, both at Qatargas and in the wider community.

Demonstrating their passion and commitment to fire safety, the Department extends its efforts in Fire Safety, Fire Prevention and Emergency Response Challenges beyond the Company's operating and administrative facilities and residential compounds, to the local community.

Qatargas regularly organises community awareness activities on fire prevention and life-saving training and also conducts fire safety and fire prevention lessons in local schools.

### Emergency response preparedness

The Company holds everyone's safety as a vital component of its daily operations and conducts regular activities to ensure emergency response preparedness.



Qatargas has recently conducted an unannounced emergency exercise at its Doha Headquarters in close collaboration with Qatar General Directorate of Civil Defense (QGDCD).

Qatargas has recently conducted an unannounced emergency exercise at its Doha Headquarters in close collaboration with QGDCD. Such exercises, and planning for the unexpected, helps to ensure that effective safety and security measures are in place, strengthening the Company's emergency response preparedness strategy.

"This exercise tested multiple elements of our emergency response plan, building on the capabilities we have developed over the past few years to respond to, and manage, emergencies," explains Randy Stadler, Chief Safety, Environment and Quality Officer, Qatargas. "It provided an opportunity for continuous improvement in additional planning or changes in our response procedure."

Responders from Hamad Medical Corporation, Qatargas Initial Response Team, Qatargas Medical Team and trained Floor Wardens from both Qatargas and Qatar Petroleum formed part of the collaborative effort, which was initiated without their prior knowledge in order to test and stimulate a real emergency and response scenario. The exercise specifically tested:

- Emergency notifications.
- Safety of staff within protected lobbies.
- Phased evacuation of personnel who are at greater risk.
- Effectiveness of the rescue operations.
- Medical aid.



Brigadier Aman Saad Al-Sulaiti, Assistant Director of QGDCD, presenting a memento to Hassan Abu Khamis, Qatargas EMS & Security Manager.





# TRAIN 6 SHUTDOWN COMPLETED

Qatargas Management Team pose for a photograph along with the Train 6 Shutdown team.

Qatargas recently wrapped up the scheduled shutdown of its key LNG Train 6, in a successful operation that showcased everything that makes it the world's premier LNG company.

**"The shutdown was completed successfully, safely and with the desired quality of Qatargas."** – Ibrahim Bawazir, Qatargas 3&4 Asset Manager.

At exactly 4:50 am on the clear, fresh morning of Friday, 25 March, Qatargas' biggest asset, Qatargas 3's Train 6 LNG production plant, resumed operation after a planned 24.2-day maintenance shutdown. It marked the end of an enormous shutdown project that, according to Ibrahim Bawazir, Qatargas 3&4 Asset Manager, Onshore Operations Department, "was completed successfully, safely and with the desired quality of Qatargas".

The numbers make impressive reading, even if they only tell a fraction of the story. That 24.2 day period, for example, was in fact 5.8 days ahead of the planned 30-day shutdown schedule. And with zero recordable injuries, externally reportable environmental incidents or property damage, the project was a resounding success in all its key performance indicators (KPIs). This

prompted Bawazir to praise the Shutdown Team for its "outstanding housekeeping throughout the outage". "One year of preparation and hard work resulted in the outstanding and enjoyable time we have spent together in the past 25 days of shutdown," he said. "All of the above and more would not have been achieved without every single person."

Teamwork was - as always, with projects like these - an essential part of the success of the Train 6 shutdown project. "The hard work and dedication of the Qatargas teams and its contractors have been the key success of this achievement," remarked Abdelhamid Boutalbi, Shutdown Manager, Maintenance Department. "Once again Qatargas has demonstrated that teamwork, working safely

and delivering quality work without any waste can help on beating any challenging schedule. The extended scope of work was very challenging, and the number of people involved was another challenge to manage, reaching a peak of 3746 on site."

The Shutdown Team completed approximately 1.2 million man-hours of work

**1.2 million**

Man-hours of work have been completed without a single recordable incident.

without a single recordable incident, working together to ensure that the plant will run reliably and efficiently for the next three years. This is crucial to Qatargas's business: Train 6 ships its LNG predominantly to our markets in the United States, Asia and Europe, and at full operational capacity, the train is capable of providing approximately one and a half billion cubic feet of gas per day. Regular and thorough shutdowns are vital in ensuring that the train continues to work at its full capacity, operating safely, efficiently and reliably.

The shutdown project was a monumental undertaking. It involved the major inspection shutdown of an entire LNG train, including slug catcher cleaning, manwaying and cleaning of four mega-size seawater headers, a major shutdown of two sulfur recovery unit plants, and critical and essential electrical works in all the related substations.

The entire project involved 47 open-flame jobs, 20 service contracts, 85,370 of material spares and a massive of 1419 individual work orders. Despite the complexity of the shutdown project, the team achieved all of this with zero leaks

or rework during or after the shutdown, and the entire project was completed within budget and ahead of schedule, without any recordable wastage of time or resources. The record of 1450 incident- and injury-free (IIF) cards is one of the most satisfying of the entire operation, serving as a testament to Qatargas' culture of safety in the workplace.

"As always, Qatargas Management was very supportive, and full confidence was put on the concerned organisations to deal and manage this shutdown with all the support of our different departments," said Boutalbi.

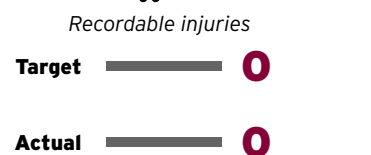
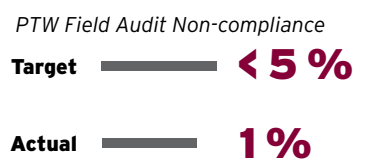
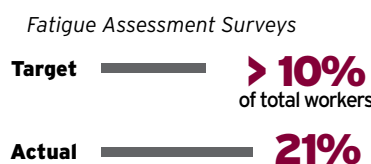
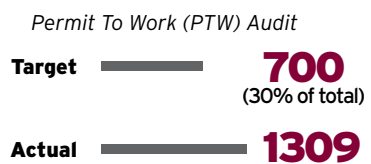
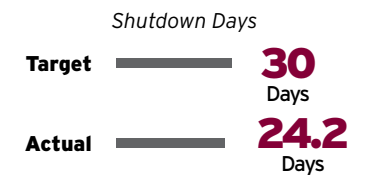
All in all, the LNG Train 6 shutdown project provided a perfect example of Qatargas' employees and external contractors doing what they do best: working as a team, while showing mutual and genuine care for people and facilities. It also confirmed what Qatargas Chief Operating Officer - Operations, Ahmad Helal Al-Mohannadi said at the recent Qatar Process Safety Symposium: "Safety in Qatargas is not just a word or a commitment alone. It is translated into every action and appears in every task."

**"Once again Qatargas has demonstrated that teamwork, working safely and delivering quality work without any waste can help on beating any challenging schedule."** – Abdelhamid Boutalbi, Shutdown Manager, Maintenance Department.



The LNG Train 6 shutdown project provided a perfect example of Qatargas employees and external contractors doing what they do best: working as a team, while showing mutual and genuine and mutual care for people and facilities.

## Train 6 Shutdown: Key Statistics







Delivered on board the Q-Flex LNG vessel Al-Hamla, the 500<sup>th</sup> delivery is another milestone for the State of Qatar's LNG industry.

# QATAR'S 500<sup>TH</sup> CARGO TO SOUTH HOOK, UK

The delivery of the 500<sup>th</sup> LNG Cargo to the UK's South Hook terminal is testament to Qatargas' relentless drive and ambition to being the world's premier LNG company. This achievement is additional proof of Qatar's ability to provide the UK with one fifth of its natural gas needs, while also providing LNG to other countries around the world.

## A record-breaking success in the UK

Qatargas 2 has successfully delivered its 500<sup>th</sup> LNG cargo to the South Hook LNG Terminal at Milford Haven in the United Kingdom (UK). Delivered on board the Q-Flex LNG vessel Al-Hamla, on 24 March 2016, the 500<sup>th</sup> delivery is another milestone for the State of Qatar's LNG industry.

Seven years after the delivery of its first LNG shipment to South Hook in March 2009, Qatar continues to be a safe, reliable LNG supplier, providing approximately 20 percent of the UK's total natural gas needs. Qatargas and RasGas also deliver LNG to other terminals in the UK, bringing the total number of Qatari LNG cargoes delivered into the UK to approximately 600.

**600**

The number of LNG cargoes delivered to the UK from Qatar.

This record-breaking success has been facilitated by the prospering relations between Qatar and the UK, which continue to grow from strength to strength. And as the UK's domestic sources of natural gas decline, imported LNG will become an increasingly important source of clean and reliable energy, a requirement Qatargas 2 is well positioned to meet.

Saad Sherida Al-Kaabi, the President and CEO of Qatar Petroleum (QP), described the delivery as "another significant achievement for Qatar's LNG industry".

He continued, "this milestone reaffirms the importance of Qatari LNG as pillar for the energy industry and the security of global natural gas supplies. It also highlights Qatar Petroleum's commitment to the reliable supply of clean energy to its customers around the world".

## South Hook LNG Terminal

Ground-breaking in terms of both its size and its strategic importance, the South Hook LNG Terminal is

one of the most prominent LNG receiving terminals of the Qatargas 2 value chain, the first ever joint venture between QP, ExxonMobil and Total.

Fully-commissioned in 2010, South Hook is one of the biggest and most advanced LNG terminals in the world, comprising five immense LNG storage tanks, each one 95 metres in diameter and 44 metres in height. It has elevated the UK to being one of Europe's largest LNG importers.

## The process

Natural gas is extracted from the North Field in Qatar and pumped ashore where it is refined, processed and liquefied at the LNG Plants located within the Ras Laffan Industrial City. At the LNG Plants, the natural gas is

cleaned of impurities and subsequently supercooled to a temperature of minus 161 degrees Celsius at which point it changes from its gaseous state into a liquid. The liquefied natural gas or LNG is one six hundredth of its original volume, making it more efficient to transport in sea-going LNG vessels. If transported in its gaseous state the natural gas would need 600 carriers to transport the same amount that one LNG vessel can carry.

The Qatari LNG is then loaded onboard Qatargas' Q-Flex and Q-Max vessels and

transported over the 6,140 nautical miles to the UK. The voyage takes

approximately 18 days through the Arabian Gulf, the Red Sea, the Suez Canal, and the Mediterranean. After the LNG is unloaded at the South

Hook Terminal, it is stored in onshore LNG storage tanks. When required, stored LNG goes through a regasification process, transforming it from its liquid state to a gas before it is distributed for residential, industrial and commercial use via the UK's National Transmission System.

## The benefits

Qatargas 2 supplies the UK with 20 percent of its LNG demand. The South Hook terminal at Milford Haven has the capacity to process approximately 15.6 metric tonnes of LNG per year.

Qatargas' selection of Milford Haven as an LNG portal has played a key role in raising the strategic importance of Milford Haven and turning it into an important energy centre within the UK. This portal also plays an essential role in supplying the entire country with power, playing a vital role in supporting the overall economy.

**20**

The percentage of the UK's LNG demand met by Qatar.

**"This milestone reaffirms the importance of Qatari LNG as a pillar for the energy industry and the security of global gas supplies. It also highlights Qatar Petroleum's commitment to the reliable supply of clean energy to its customers around the world."**

- Saad Sherida Al-Kaabi, President and CEO, Qatar Petroleum.



Fully-commissioned in 2010, South Hook is one of the biggest and most advanced LNG terminals in the world.



# BOLSTERING TIES WITH JAPANESE BUYERS

Seventeen years running, the annual technical meeting between Qatargas and the Japanese buyers' consortium of Chubu Electric and seven other Japanese buyers, is one of the many initiatives in place to continue to build on and strengthen ties with Japan.

Labelled the 6 MMT (six million tonnes) Technical Meeting, it is held with the objective of exchanging operational and technical information to enhance and improve the safe operation of supply and receiving LNG between Qatargas and the Japanese long-term buyers.

The six million tonnes of LNG are covered under two LNG Sales and Purchase Agreements (SPA) with Chubu Electric and seven Japanese

buyers. The two SPAs are jointly operated, with all the eight buyers forming a buyers' consortium.

This year the Qatargas delegation was led by Jassim Darwish, Sales Administration Manager and Ali Yousuf Al Baker, General Manager Japan Liaison Office, while the Japanese delegation was headed by Hideki Fujiwara, Manager of Power Generation Management Section, Chubu Electric Power Co., Inc.



Delegates are pictured in Osaka, Japan during the 17<sup>th</sup> annual 6 MMT Technical Meeting between Qatargas and the Japanese buyers' consortium.

# NURTURING THE FUTURE GENERATION

Engaging the younger generation with educational initiatives through schools and universities is one of the measures in place to meet the Company's 2020 Vision.

## Under the Hayyakum Program, in 2015 Qatargas:

Recruited **60** nationals



Offered **16** scholarships



Enrolled **44** nationals in the Technical Training Program



Completed **22** internships for Qatari students



The memento presented by Dr. Hassan Rashid Al-Derham, President of Qatar University to Ahmad Yousuf Hassan Al-Saai, Technical Training Officer at the Qatarization Division of the Learning and Development Department at Qatargas, appropriately recognises Qatargas for "Partnering for Students' Success".

Qatargas has been officially recognised by Qatar University for the support it provides through their ongoing partnership. By offering employment, scholarship and internship opportunities to university students, the Company encourages them to consider entering the oil and gas sector upon graduation.

As part of the *Hayyakum* outreach programme, which includes delivery of in-class presentations to IT, Finance, Engineering and Business students, Qatargas aims to instill passion and interest in the sector and demonstrate the many dimensions a career

with Qatargas can offer.

The *Hayyakum* programme also supports students from Texas A&M University and regularly expands to high schools throughout Qatar. Representatives from the Qatargas Engineering and Human Resources Departments, as well as the Qatarization and National Development Division at the Learning & Development Department, to name a few, formed a team visiting 16 schools across Qatar delivering presentations on the different opportunities Qatargas offers to national graduates and trainees.

# CAREER DEVELOPMENT OPPORTUNITIES

Testament to the long-term relationship between Japanese engineering firm Chiyoda Corporation and Qatar, there is continuous collaboration on technical, operational and business requirements.

Six Qatargas engineers have recently completed a seven-week training course at Chiyoda Corporation offices in Japan. This is in line with Qatargas' 2020 Vision to retain its premier status by, for one, building strong relationships with customers and contractors.

Two engineers each from the Ventures, Maintenance and Engineering Departments were the lucky Qataris to travel to Chiyoda's headquarters which is a large Japanese engineering company specialising in industrial facilities, particularly oil refineries and LNG facilities, in Yokohama, Japan. It was also the main contractor for Qatargas 1, 2, 3 & 4 LNG plants.

The engineers participated in the training courses while also experiencing authentic Japanese culture.

The training covered different aspects of process engineering, mechanical engineering, safety and environmental engineering, piping and material engineering, advanced engineering and project execution.

Apart from classroom and practical training sessions, the course also included site visits to Chiyoda Research Park, Chiyoda Control System Security Center, Ebara Corporation, Hitachi Zosen Corporation, and the Hibiki LNG Receiving Terminal.

**112**

The number of engineers from Qatar that Chiyoda Corporation has provided training opportunities to.



The six Qatargas engineers who attended the training in Japan pose for a photograph with Shogo Shibuya, President & CEO of Chiyoda, and Ali Al-Baker, General Manager of the Qatargas Japan Liaison Office, and other officials at the Chiyoda Headquarters in Yokohama.



## Personal experiences

"The training had me perform under challenging situations and in a very professional atmosphere. It set high standards of quality for my work and I am aiming to transfer the knowledge I gained to my role at Qatargas. I hope I will help improve the quality of productivity as well as realise specific goals." - **Fahad Mohammed Al-Hajri, Mechanical Engineer, Maintenance.**

"The training was very in depth and covered all engineering aspects. This was very useful to me as our Maintenance Department works on a lot of projects with the Engineering Department, so I got to understand how the whole work line works. I would definitely recommend this training course." - **Jabara Mahmoud Al-Moutawa, Rotating Equipment Engineer, Maintenance.**

"The whole experience met my expectations and I was very impressed with the engineering disciplines covered such as maintenance, construction and project processes. I will definitely recommend this training to anyone who wants to improve their knowledge and skills." - **Khalifa Ali Shaheen, Construction Coordinator, Ventures.**

"Actually it exceeded my expectations. Their presentation and delivery of information was very good and will be very helpful to me as I interact with different people from different disciplines. It will undoubtedly help me communicate and discuss things with them with more confidence." - **Ibrahim Al-Hassan, Process Engineer, Engineering.**

"I feel like I successfully acquired the skills needed and that the training lived up to my expectations. I gained a deeper knowledge of the practical aspects of LNG business and feel that the multi-disciplinary topics covered during the training will be very beneficial for my career development as a young engineer. I am truly proud to have completed this training." - **Eman Elhmod, Process Engineer, Engineering.**



# SAVING THE SEA

Faced with an enormous environmental challenge, Qatargas found a solution that helped deliver an environmental protection programme, save a precious marine ecosystem, and create a sustainable model of ecological preservation in the process.

Ten years ago, Qatargas started work on the expansion projects that would eventually become Qatargas 2, Qatargas 3 and Qatargas 4. This work involved laying a pipeline underwater in the resource-rich area of the Arabian Gulf, north of Ras Laffan. There was a huge obstacle in the way, though: 4500 coral colonies lay directly in the path of that proposed pipeline.

Coral reefs are a vital part of the global ecosystem. Marine biologists call them

“the rainforests of the sea”, because of their priceless contribution to the natural world. These diverse underwater ecosystems, held together by the calcium carbonate structures formed by corals, occupy less than 0.1 percent of the world’s ocean surface, yet they provide a home for at least 25 percent of all marine species - both flora and fauna including fish, molluscs, worms and crustaceans. Protecting this rich yet fragile bio-diversity is an environmental imperative.

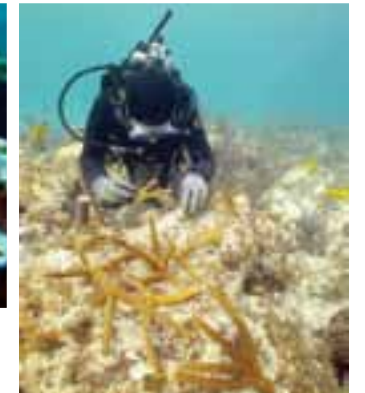
## 4500

Coral colonies were restored as part of the Qatargas coral relocation project.

The Arabian Gulf region contains some of the most unique coral reef ecosystems on Earth. Laying the pipeline through the reef wasn’t an option: coral reefs are extremely sensitive to changes in water temperature. Qatargas had to find a way around the problem.

One of the Company’s core values, as outlined in the Qatargas Direction Statement, requires that it remains environmentally conscious, compliant to environmental laws and constantly aware of its impact on the natural environment. The Company needed an innovative solution to the challenge - and, thanks to its Environmental Affairs Division, that’s exactly what it got.

In October 2006, the Qatargas Environmental Affairs Division, working closely with Qatar’s Ministry of Municipality and Environment (MME), started implementing an ambitious, unique environmental programme that lasted for eight years: the Qatargas Fasht Al Hurabi Coral Restoration Project. This programme involved moving the corals from their existing location to southeast of Al-Khor. Here, in the coastal waters of Fasht Al Hurabi, 22 sites were selected for the reattachment and restoration of those 4500 coral colonies. The reattachment area covered about 1750 square metres.



The relocation operation lasted over five months, as scientists carefully detached the coral colonies from the seafloor, transported them safely to their new location and re-attached them to the seafloor. But the project didn’t end there.

Rather than simply digging up the coral, and transporting and transplanting these precious organisms a few kilometres down the coast, the Qatargas Environmental Affairs Division team set about making sure that the coral survived in its new habitat - and continuously monitored its adaptation, survival and health. This would also help to understand if the project could be replicated elsewhere.

Ultimately, the team aimed to create a dataset, which would monitor the survival and health of the transplanted corals in comparison to control corals, in order to allow for the evaluation of the viability of other, similar large-scale coral transplantation projects. In February 2007, immediately following the reattachment activities, each of the corals at Fasht Al Hurabi was numbered

and tagged as part of a baseline survey for future monitoring. Careful monitoring programmes have been conducted since then to provide this qualitative and quantitative information.

The results of these surveys are clear. The transplanted coral colonies at the study site are reproducing successfully, and are showing similar recovery to the control corals. This proves that these colonies have long-term viability, despite facing re-occurring temperature stress events during summer.

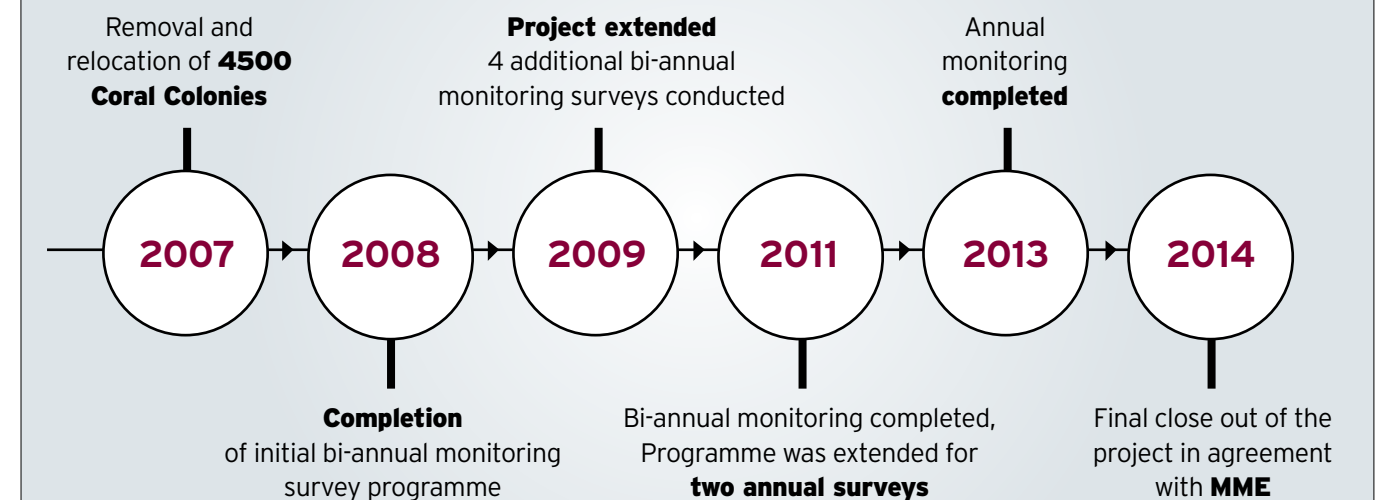
With the relocation project, Qatargas successfully minimised its environmental footprint - with the monitoring programme that followed, it laid the

groundwork for similarly successful projects in the future.

From an environmental point of view, the project has helped to mitigate the impact of Qatargas’ expansion projects. From an industry point of view, it has shown the possibilities - and viability - of using coral relocation as an option for coral reef conservation and management in the Arabian Gulf, especially if the coral specimens are transplanted to areas where the physical and environmental conditions are conducive to coral recruitment and growth.



### QATARGAS CORAL RESTORATION PROJECT





# SUPPORTING LOCAL BUSINESS

Qatargas expressed its unwavering support to local contractors and suppliers through its recent participation in the *Mushtarayat* conference and exhibition.

Qatargas recently participated in *Mushtarayat*, the first-ever government procurement and contracting conference organised by Qatar Development Bank. The Qatargas pavilion showcased the supply and procurement opportunities available to local contractors and suppliers seeking to expand their businesses and work with Qatargas.

The *Mushtarayat* Conference and Exhibition aims to promote sustainable government procurement systems, as well as establish liaisons between Qatari small and medium-sized enterprises (SMEs) and major government buyers. It enjoyed a robust turn-out by the public and private sectors who offered Qatari SMEs important contracting opportunities.

As part of its ongoing support for local business, Qatargas also organises an annual Contractor Forum which supports local contractors and suppliers in their bid for two-way communication.

Through such activities, the Company is demonstrating its commitment to positively support local SMEs and effectively contribute to the economic development objectives - one of the main pillars of the Qatar National Vision 2030 (QNV 2030).



Qatargas officials and employees pose for a photograph at its pavilion in the *Mushtarayat* conference and exhibition at QNCC.

# TWIN BLOOD DRIVES

The recently-organised blood donation drives is part of Qatargas' ongoing efforts to be a corporate role model for the community. As one of the Company's annual Corporate Social Responsibility initiatives, the campaign encourages collective voluntary work among the members of the community for a better future.

Qatargas has recently organised twin blood drives at its headquarters in Doha and at Ras Laffan, in collaboration with Hamad Medical Corporation (HMC).

Qatargas has been organising such blood donation drives for its employees in collaboration with Hamad Medical Corporation (HMC) for 15 years now. The Company has also been recognised by HMC in

recognition of its contribution as gold sponsor of the HMC-organised annual World Blood Donor Day celebration in Qatar.

Qatargas seeks to spread awareness on the importance of voluntary blood donation among local community members and to further promote social responsibility through these regularly organised campaigns and other initiatives.



Blood donation drive in progress at Qatargas Doha Head Office.

Qatargas continues to promote the importance of physical activity and wellness in building a strong society by organising various sporting events throughout the year. This is in line with the human development pillars of the Qatar National Vision 2030 (QNV 2030), as well as the objectives of the Company's own Corporate Social Responsibility programme.

## NATIONAL SPORTS DAY

Qatargas organised a number of sporting events and activities in celebration of National Sports Day and in line with its ongoing commitment to support the health and wellbeing of the community. More than 4000 Qatargas employees and their families participated in the events, which were held across various locations.

The Qatargas organising committee worked hard to safely engage all participants in the scheduled activities. The medical team was also on hand in an allocated area where they conducted medical examinations, enabling attendees to test their blood sugar levels, blood pressure and Body Mass Index.



Qatargas CEO, Khalid Bin Khalifa Al Thani, and senior officials pose for a group photo with employees and their families at the start of the Company's Sports Day activities at Al Gharafa Sports Club.

**"Qatargas' support for various sporting activities is aligned with the objectives of the Human Development pillar of the Qatar National Vision 2030."** - Azzam Abdul Aziz Al-Mannai, Public Relations Manager.

## CHESS CHAMPIONSHIP

The third edition of the Qatargas Chess Championship, organised by the Qatar Chess Association (QCA) and sponsored by Qatargas, enjoyed the participation of around 120 players between 6 and 16 years old.



Qatargas Public Relations Manager, Azzam Abdul Aziz Al-Mannai, General Secretary, QCA, Mohammed Ahmed Al-Medaihki and other officials pose for a photograph with winners of the 3<sup>rd</sup> Qatargas Chess Championship.

## SUPPORTING JUNIOR GOLF

Qatargas is supporting the sixth edition of the Junior Golf Program organised by the Qatar Golf Association. This partnership aims to encourage talented young players to later join the national team.



Participants and organisers of the Junior Golf Program are pictured after a successful day out on the course.

## PROPPING UP JUNIOR ICE HOCKEY

In the context of Qatargas' continuous Pearl Sponsorship of the Junior Ice Hockey, Catherine Headley, QMIHA President, noted: "We would like to sincerely thank our sponsor Qatargas for championing the sport of ice hockey for our children here in Qatar and for making our tournament a grand success."



Hamad Al Awi, Head of Business Support at Qatargas' Public Relations Department (second from Left) and Catherine Headley, QMIHA President (Extreme Right), and other QMIHA officials pose for a photograph with a group of players in the Under-9 Tournament.

SPORT ACTIVITIES

# QATARGAS FLARE SYSTEM



Designed for safety and environmental protection, the Qatargas Flare System is the latest awareness initiative launched by the **Qatargas Go Green campaign**.

### Sight of a Flare?

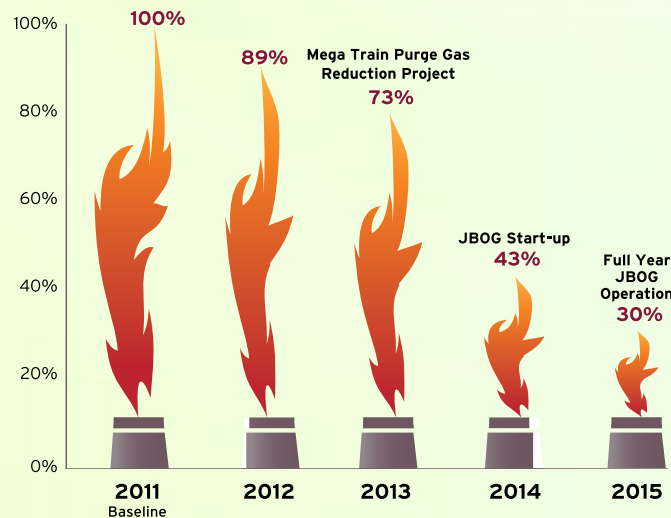
From outside the Ras Laffan Industrial City (RLIC) fence, a flame burning at the top of the flare stacks can look alarming. It is common for neighbouring residents to worry that something is wrong when they see smoke or flames coming from the stacks. Although the sight of the flares may cause concern, routine or baseline flaring is a normal and vital part of keeping the gas processing facilities running safely.

### Why do we Flare?

Flaring typically takes place to burn off gases released by pressure relief valves during routine plant operations and unplanned flaring events such as trips and shutdowns. The flaring system ensures maximum combustion of hydrocarbon gases while minimising emissions to the air.

### Why do we see Black Smoke in Flaring?

Occasionally, black smoke coming from the flare stack can be noticed. This can happen due to incomplete combustion of the flared gas. Qatargas maintains a steam-assisted flaring system to minimise the possibilities of smoke during flaring. Operational personnel constantly monitor the flare stack to avoid black smoke during flaring.



### Are there any Flaring Regulatory Requirements?

The Ministry of Municipality and Environment (MME) and the Industrial City Directorate (ICD) regulate flaring quantity, duration and allowable smoke at all industrial facilities in Qatar. Qatargas reports flaring emissions to regulatory authorities.

### What is Qatargas doing to Reduce Flaring?

Qatargas has undertaken various Operational and Engineering initiatives which have helped reduce flaring by nearly 70 percent from 2011 to 2015. As the Company moves ahead in its flare reduction journey, it expects to achieve flaring reduction of about 85 percent by 2020.

