قطرغاز
QATARGAS
The World's Premier LNG Company

# SUSTAINABILITY REPORT 2014

www.qatargas.com

# ABOUT THIS REPORT

Welcome to the fifth Qatargas sustainability report, covering the company's economic, environmental and social performance in 2014.

In preparing this report we have used a range of reporting guidelines, including the Global Reporting Initiative (GRI) G4 guidelines, the International Petroleum Industry Environmental Conservation Association (IPIECA) / American Petroleum Institute (API) / International Association of Oil & Gas Producers (IOGP) 2010 voluntary guidelines for sustainability reporting, and the Qatar Energy and Industry Sector Sustainability (QEISS) reporting guidelines.

This report has been prepared in accordance with the GRI G4 Guidelines option core. The report has also successfully completed the Content Index Service offered by the GRI. Further details on the preparation of this report and the GRI G4 Content Index can be found in Appendix A.

We invite all stakeholders to provide us with comments and feedback on the contents of this report and our sustainability performance, through the following channels:


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www.qatargas.com


qatargasmedia


Qatargas


QatargasMedia

Qatargas PR


qatargaspr



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# PERFORMANCE HIGHLIGHTS FROM 2014

TWO PLANT
**SHUTDOWNS COMPLETED AHEAD OF SCHEDULE**

**LAFFAN REFINERY 2**
COMPANY LTD. OFFICIALLY INCORPORATED

37 MILLION WORK HOURS COMPLETED WITH
**31 RECORDABLE INJURIES (21% REDUCTION)**

**137,601 HOURS OF TRAINING**
DELIVERED

JETTY BOIL-OFF GAS RECOVERY
**(JBOG) PROJECT COMPLETED**

**100% RELIABLE DELIVERIES**
TO CUSTOMERS

**17 MILLION QAR INVESTED IN CSR**
PROJECTS (37% INCREASE)

**6% REDUCTION IN GHG**
EMISSIONS

QATARGAS NOW
**PRODUCING ULTRALOW SULPHUR DIESEL TO EURO 5**
SPECIFICATIONS

**80% OF PROCUREMENT AWARDS MADE ON LOCALLY**
BASED SUPPLIERS AND CONTRACTORS

**24% QATARIZATION**
RATE

**34% REDUCTION IN FLARING**

QATARGAS DELIVERS
**FIRST LNG TO KUWAIT**

**ZERO LOST TIME INJURIES**
IN 12 YEARS OF OFFSHORE OPERATIONS

**306 FEMALE EMPLOYEES**
(6% INCREASE)

**ZERO SIGNIFICANT SPILLS**
FOR THE PAST 5 YEARS

# 2014 AWARDS

## BEST SUSTAINABILITY REPORT
AWARDED BY THE QATAR MINISTER OF ENERGY AND INDUSTRY FOR THE BEST REPORT WITHIN THE SECTOR

## ARABIA CSR AWARD
AWARDED FOR BEING THE BEST LARGE-SIZED ENTERPRISE IMPLEMENTING SUSTAINABILITY IN THE REGION

## INVESTORS IN PEOPLE (IIP) GOLD
AWARDED FOR BEST PRACTICE PEOPLE MANAGEMENT – THE FIRST COMPANY IN QATAR TO RECEIVE SUCH AN AWARD

## SHELL GOAL ZERO AWARD
AWARDED FOR AN OUTSTANDING SAFETY RECORD

## QATARIZATION CRYSTAL AWARD
AWARDED FOR SUPPORTING THE NATION'S QATARIZATION EFFORTS

## SWORD OF HONOUR
AWARDED BY THE BRITISH SAFETY COUNCIL FOR EXCELLENCE IN OCCUPATIONAL HEALTH AND SAFETY – THE FIRST COMPANY IN QATAR TO RECEIVE SUCH AN AWARD

## GLOBE OF HONOUR
AWARDED BY THE BRITISH SAFETY COUNCIL FOR EXCELLENCE IN ENVIRONMENTAL MANAGEMENT – THE FIRST COMPANY IN QATAR TO RECEIVE SUCH AN AWARD

# MESSAGE FROM THE CEO

As I look back on the year gone by, I can say confidently that it has been another historic chapter in the illustrious 30 year history of Qatargas. As we maintain our status as the largest LNG producing company in the world, we continue to move ever closer to our 2015 vision of being the world's premier LNG company.

For Qatargas, premier means being the best in class globally across a range of economic, social and environmental criteria. To achieve this, Qatargas has invested significant effort and financial resources into strategically important initiatives, some of which were completed in 2014 and are now starting to generate results.

Perhaps one of the best examples is the investment we have made into the Jetty Boil-off Gas (JBOG) recovery project, which was completed in 2014. As the largest project of its kind in the world and one of the largest environmental investments globally, this one billion dollar venture is helping us to reduce emissions and recover 90% of the gas previously lost to flaring during LNG ship loading. The natural gas saved, enough to power 300,000 homes per year, has helped us to improve our environmental performance and be more efficient in utilizing Qatar's natural hydrocarbon resources.

Further demonstrating our commitment to premier, in 2014 we saw a 21% reduction in recordable injuries, a significant rise in employee training and a continued increase in our community investment budget. These achievements and many more can be read about in detail in this report, together with the challenges we still face, including our unrelenting efforts to ensure an incident and injury free workplace.

In recognition of our strong 2014 performance, we received a wide range of accolades nationally, regionally and internationally. This included recognition for having the best approach to sustainability of any large company in the region, and for having the best sustainability report in the Qatar Energy and Industry Sector. We also received specific awards for our health and safety, environmental and human resource best practices.

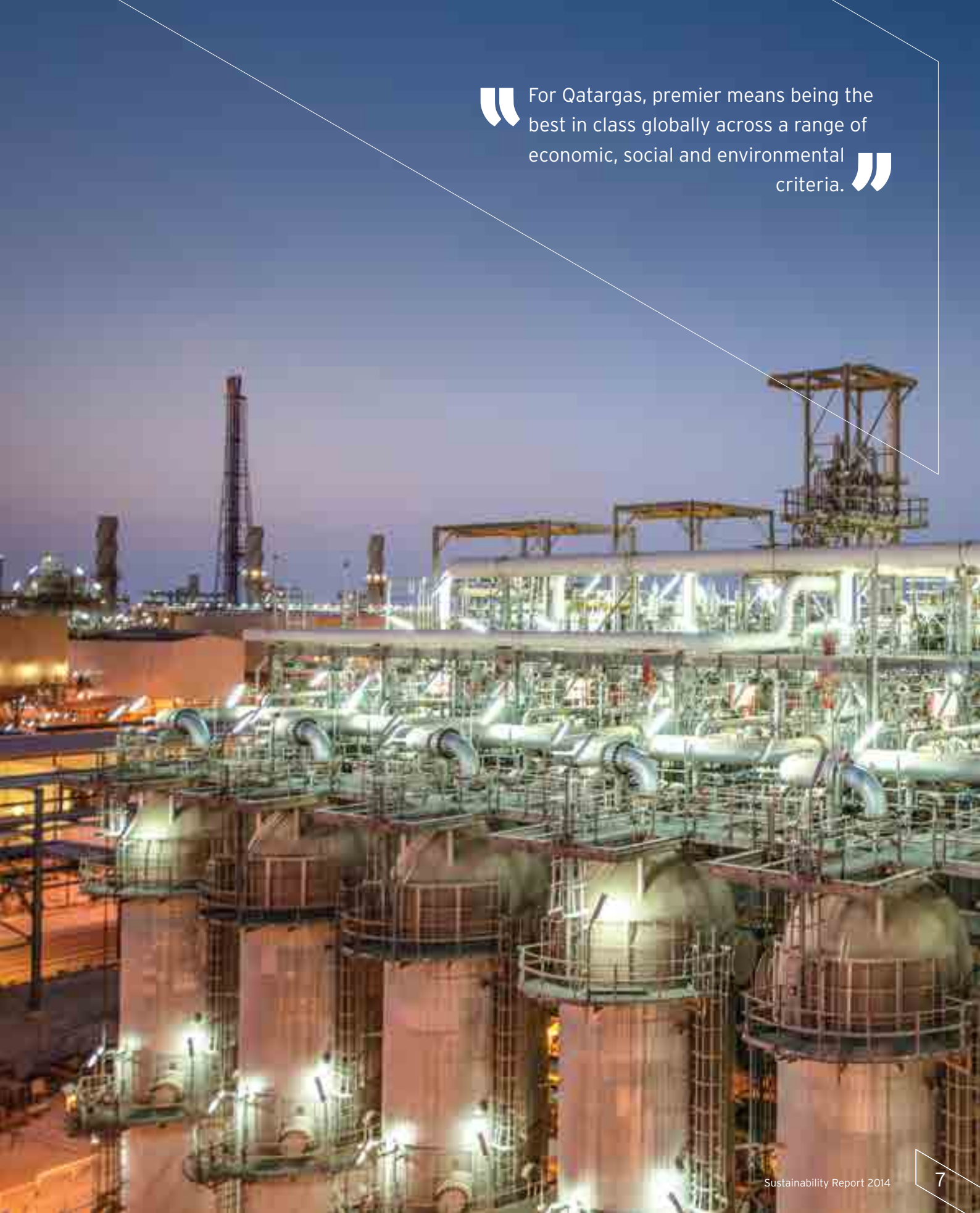
Moving forward, we remain focused on continuous improvement in our performance and to advance above and beyond the premier targets we set ourselves back in 2010. Meeting all but one of our ambitious targets early is testament to the hard work and dedication of the Qatargas team, our business partners and shareholders.

I thank you for taking the time to read this report and for engaging with Qatargas on our journey to being the world premier LNG company.

**Khalid Bin Khalifa Al Thani**
CEO, Qatargas



GRI G4-1 G4-2 G4-14



> For Qatargas, premier means being the best in class globally across a range of economic, social and environmental criteria.

# QATARGAS

## Qatargas

Qatargas is the largest Liquefied Natural Gas (LNG) company in the world. Since 1984, Qatargas has been extracting and liquefying Qatar's abundant natural gas, shipping it to over 20 countries around the world in a reliable, efficient and cost-effective manner.

Every day, around the world, people run on energy from Qatargas.

### What is LNG?

Liquefied natural gas (LNG) is a clear, colourless, non-toxic liquid that is created when natural gas is cooled to minus 162 degrees Celsius. In liquid form, the gas is 600 times smaller making it easy to store and transport around the world.

## The World's Premier LNG Company

After becoming the world's largest LNG company in 2010, Qatargas set its sights on becoming the world's premier LNG company by 2015. A vision was put in place with clear targets and indicators based on international benchmarking. At the end of 2014, Qatargas has met or exceeded all but one of its targets.

### Qatargas Direction statement

We will be the world's premier LNG company.

**Qatargas Vision**

We will be known for our people, innovation, operating excellence and corporate social responsibility.

| | Pillars | Key Performance Indicators | 2015 Premier Target | 2014 Progress |
|---|---|---|---|---|
| **We will set the standard for:** | Safety, health and environmental performance | Loss of primary containment | 0 | √ |
| | | GHG emissions intensity | 0.42 | √ |
| | | Total recordable injury rate | 0 | Improving |
| | Customer satisfaction | Late deliveries | 0 | √ |
| | | Off-spec deliveries | 0 | √ |
| | A high calibre, diverse workforce | Competency (%) | 90 | √ |
| | Efficient and reliable operations | Reliability (%) | 98.5 | √ |
| | | Availability (%) | 96.8 | √ |
| | | Utilization (%) | 94.8 | √ |
| | | Unit cost (USD/ton) | 10 | √ |
| | Financial performance | Sales volume (million tonnes) | 57.1 | √ |

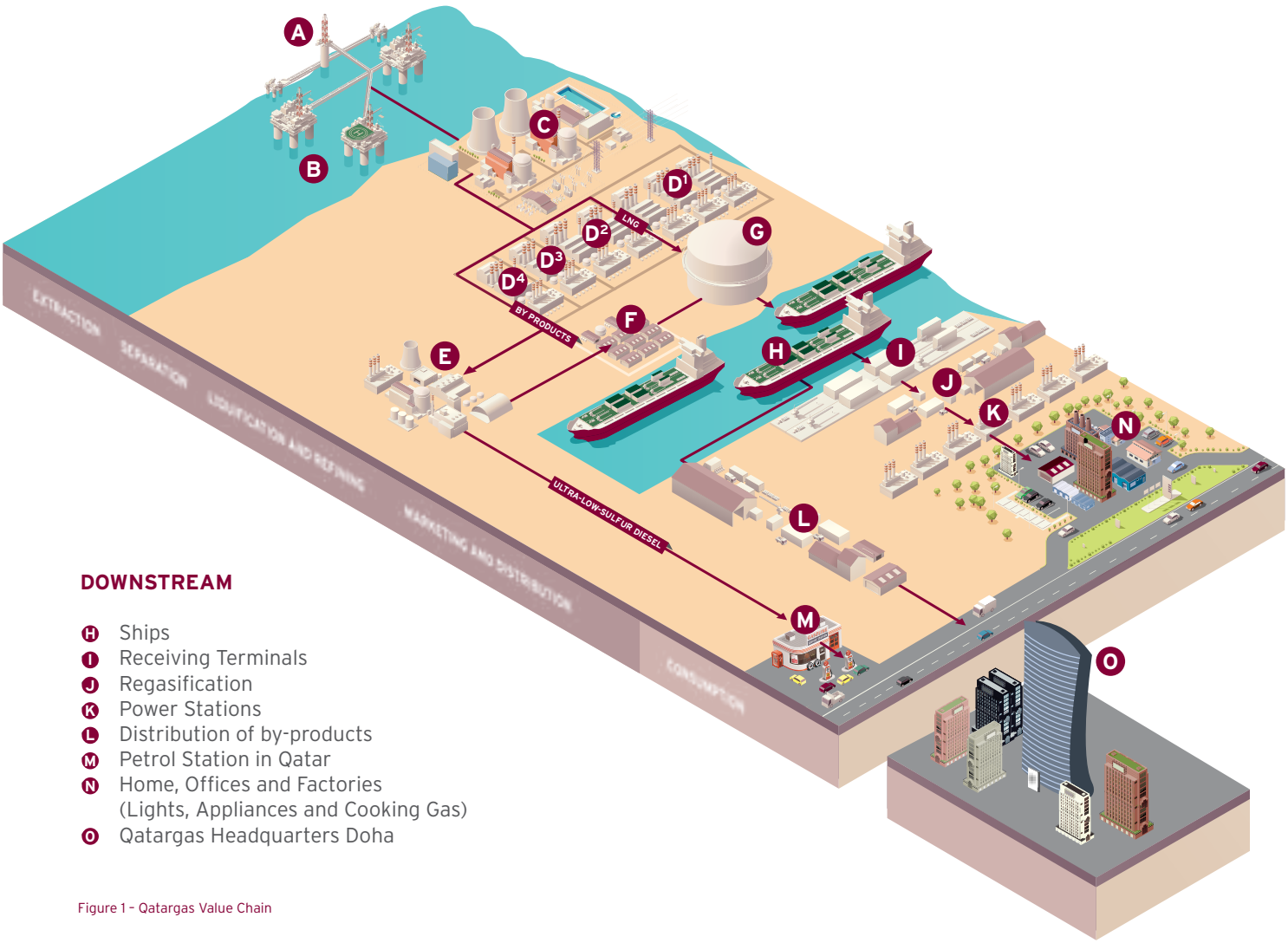
For more information about who we are, and our history, please visit **http://www.qatargas.com/English/AboutUs/Pages/default.aspx**

# Our Value Chain

Qatargas is a fully integrated LNG company with a value chain that runs from the well-head, off-shore Qatar, to our customers all around the world.

## UPSTREAM

- A Offshore Platforms
- B Wells 80 - Qatar's North Field (Largest deposit of non-associated natural gas in the world)
- C Seperation of condensate and gas
- D1 **Qatargas 1** - Train 1 - 3.3 MT, Train 2 - 3.3 MT, Train 3 - 3.3 MT
- D2 **Qatargas 2** - Train 4 - 7.8 MT, Train 5 - 7.8 MT
- D3 **Qatargas 3** - Train 6 - 7.8 MT
- D4 **Qatargas 4** - Train 7 - 7.8 MT
- E Laffan Refinery
- F Common Storage Facility
- G LNG Storage




## DOWNSTREAM

- H Ships
- I Receiving Terminals
- J Regasification
- K Power Stations
- L Distribution of by-products
- M Petrol Station in Qatar
- N Home, Offices and Factories (Lights, Appliances and Cooking Gas)
- O Qatargas Headquarters Doha

Figure 1 – Qatargas Value Chain

## Extraction

Located 80km northeast of Qatar's mainland is the North Field Bravo offshore complex, the heart of Qatargas offshore operations. Natural gas is extracted from over 80 wells and sent via subsea pipelines to Ras Laffan Industrial City.

## Separation

Back onshore, the first step in the process is to separate the gas from condensate. The condensate is stabilised and sent to storage for export. The natural gas flows on into one of seven liquefaction trains in order to be turned into LNG.

## Liquefaction and Refining

To prepare the gas for liquefaction, impurities like sulphur, carbon dioxide and water are removed. Methane is extracted then it goes through the chilling process to minus 162 degrees Celsius and during this process a range of other by-products such as Liquid Petroleum Gas (LPG) and plant condensate are removed. Once liquefied, nitrogen is removed and the LNG is transferred to storage tanks before being loaded onto ships.

Qatargas also operates one of the largest condensate refineries in the world. Using condensate from the Qatargas and RasGas trains, it produces a range of other gas derived products, including:

- LPG
- Helium
- Naphtha
- Kerojet
- Gasoil

## Marketing and Distribution

Qatargas operates a range of storage facilities for LNG and other products, some of which are common storage facilities used by other operators in Ras Laffan Industrial City. Qatargas also operates the Ras Laffan Terminal Operations for all the storage and loading of non-LNG products.

The LNG is transported around the world using a fleet of over 40 long-term chartered vessels designed specifically for Qatargas, as well as short-term charters. The most advanced Q-Flex and Q-Max ships are almost 80% larger and 30% more efficient than conventional LNG carriers.

Terminals around the world are set up to receive LNG vessels from Qatargas, some of which have been purpose built as part of a fully integrated value chain, like South Hook Terminal in Wales. Qatargas engages in marketing all around the world with full-time liaison offices in Japan, China and Thailand (serving South-East Asia).

## Consumption

The vast majority of Qatargas customers are utility companies who use the regasified natural gas for the generation and distribution of electricity. Some pipe the natural gas directly into homes and businesses. More recently, Qatargas has begun selling ultra-low sulphur diesel to Woqod, the national fuel distribution company.

### One Team, One System – the Qatargas Management System (QGMS)

The business process design and documentation effort continued in 2014 and has now impacted more than 60% of the Qatargas Process Model. The process design and documentation effort is currently planned to finish in 2015.

Following design, the process then moves into implementation. Some process changes can be fully realized in a matter of a few months; others may take up to 2 years to fully embed.

Once implemented, the process will then be part of an ongoing continuous improvement cycle which is built to ensure that Qatargas' premier processes remain premier.

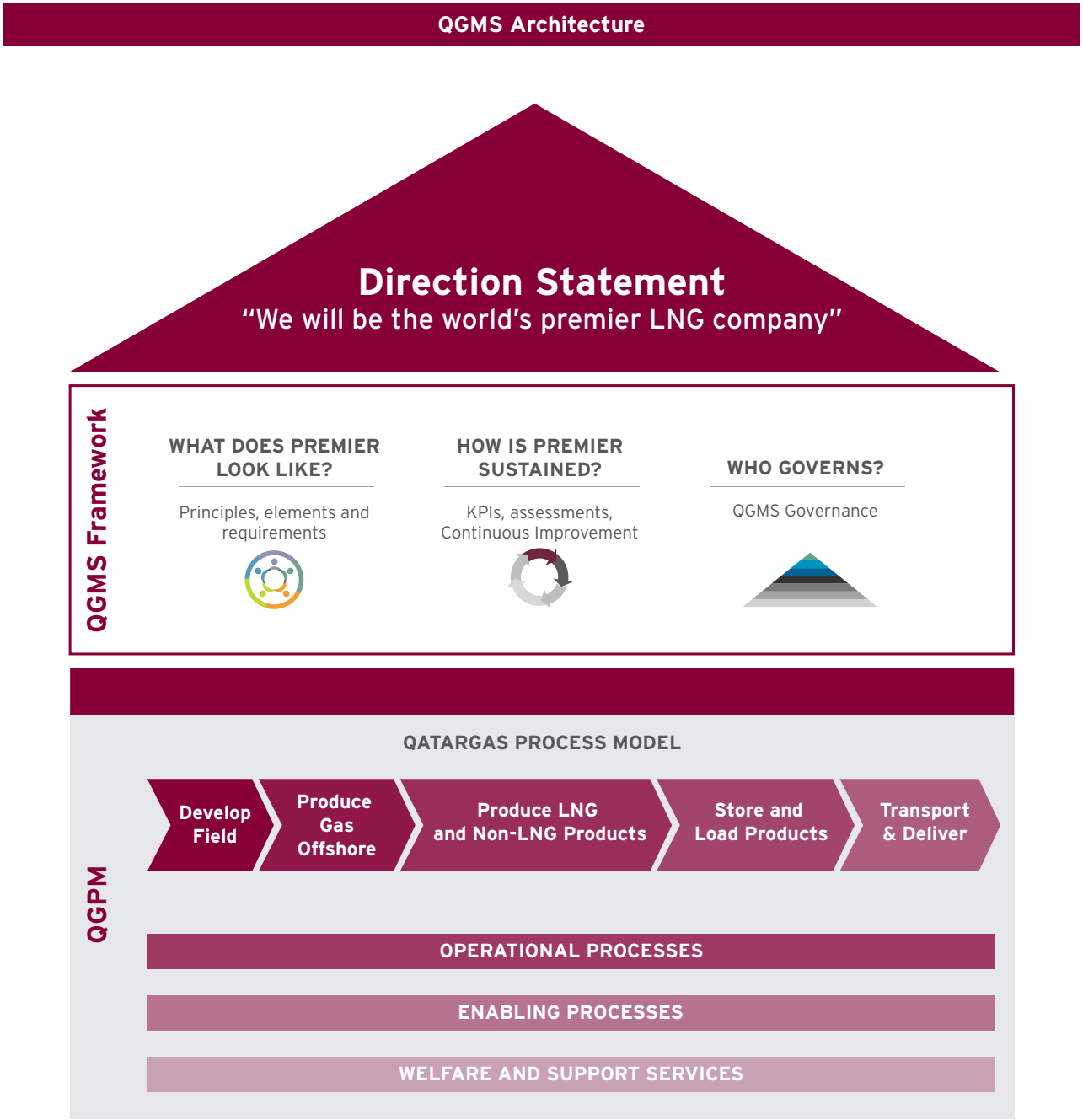
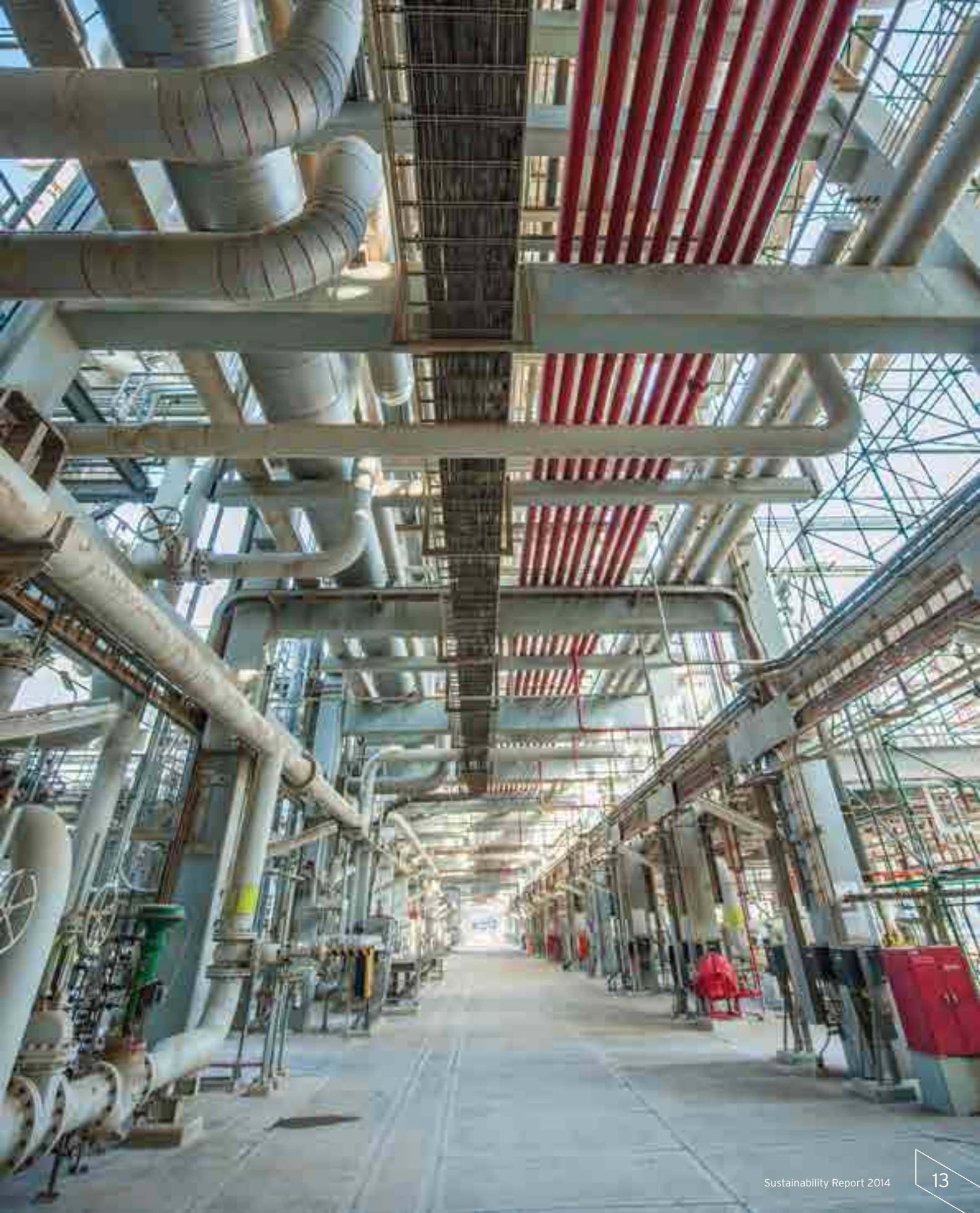
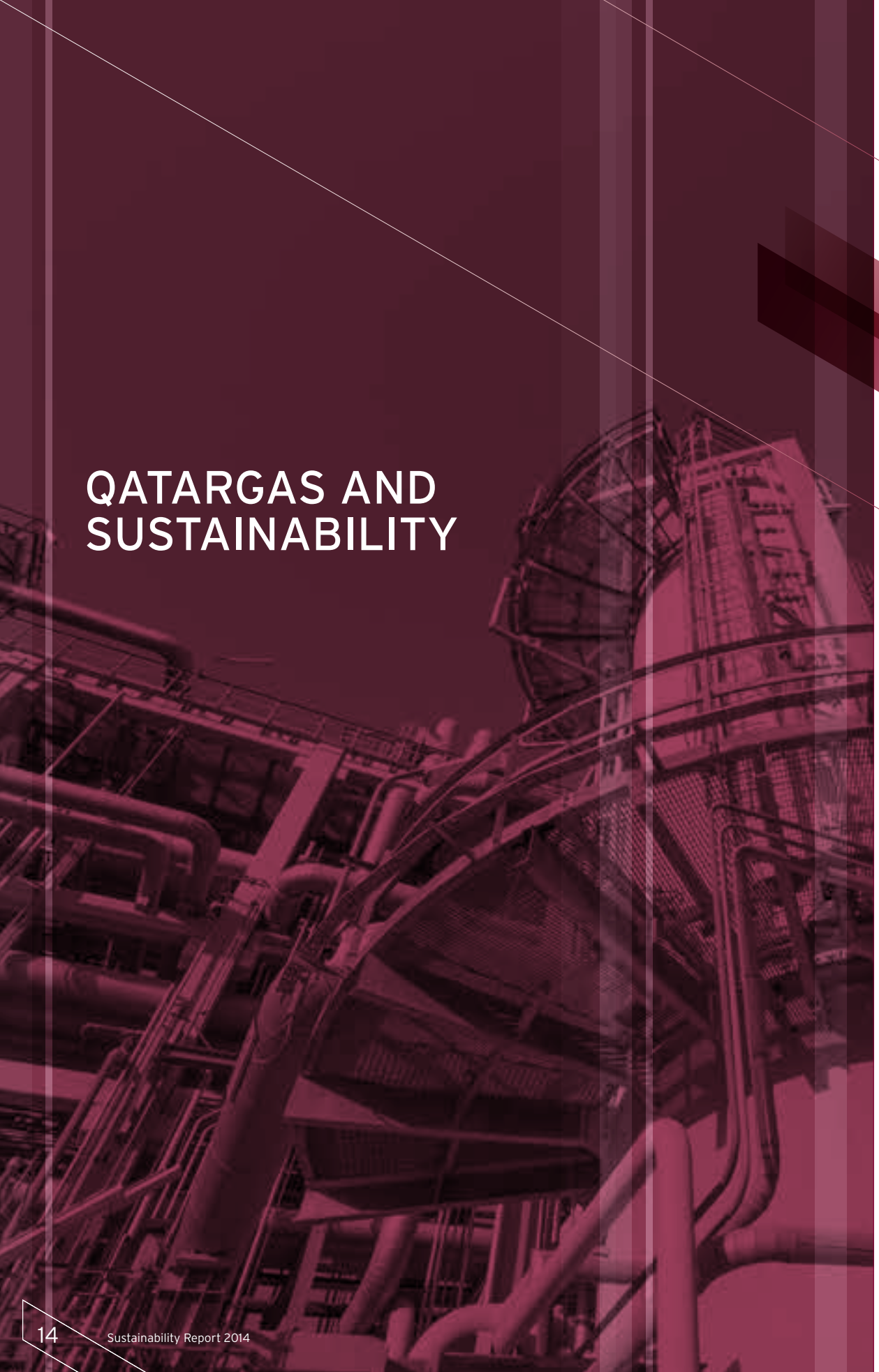



Figure 2 – QGMS Architecture



# QATARGAS AND SUSTAINABILITY



## Our Sustainability Context

Energy is one of the most important resources required in the development and growth of global economies as well as local communities. As the world's population and economic prosperity continue to grow, so does the demand for energy. The challenge is to satisfy this demand in a responsible and sustainable manner.

Through the provision of reliable and cost-effective energy, Qatargas is playing an integral role in supporting the needs of economies and local communities all around the world. Energy from Qatargas has reached almost 2 billion people to date. By supplying cleaner burning natural gas, Qatargas is also playing a critical role in supporting countries to lower their emissions, improve their air quality and transition to a low carbon economy.

## Our Sustainability Position

As set out in the Qatar National Vision 2030, Qatargas is committed to the optimum use of Qatar's natural hydrocarbon resources, establishing a balance between reserves and production. Qatargas seeks to use technology and innovation to efficiently and responsibly convert these resources into national revenue which is then invested into the development and growth of Qatar.

To deliver on this, Qatargas has set the target of becoming the world's premier LNG company by 2015. This means creating a company that is able to deliver long-term value to all stakeholders, in particular shareholders and ultimately the people of Qatar. The Qatargas Direction Statement clearly outlines the company's approach to delivering on this vision, with a focus on the integrated management of economic, environmental and social factors.

Qatargas Direction Statement
**www.qatargas.com/English/AboutUs/Pages/MissionVision.aspx**

## Deciding what Matters

Within the framework set by the Qatargas long term 2015 vision, we continue to review, act and report on a range of important sustainability risks and opportunities. In 2014, Qatargas conducted a materiality assessment to identify the most critical sustainability aspects for the business and stakeholders.

The assessment involved common identification of material aspects based on:
- Previously identified aspects.
- An internal stakeholder mapping.
- The GRI G4 guidelines and supporting documents
- IPIECA, API and OGP guidelines and supporting documents
- The national priorities as set out in the Qatar National Vision 2030 and National Development Strategy 2011-2016.
- The Qatar Energy and Industry Sector priorities as set out in the 2013 report on sustainability.

The aspects were prioritized through an internal engagement process, with all departments rating each aspect based on impact to the business, and influence on stakeholder decisions. Stakeholders were not engaged specifically in this process. However, their priorities and expectations are consistently mapped through continuous engagement. Verification of aspect ranking was conducted by a third party, and the results of the materiality assessment are represented in the map below. Further details on aspect boundaries can be found in Appendix A.

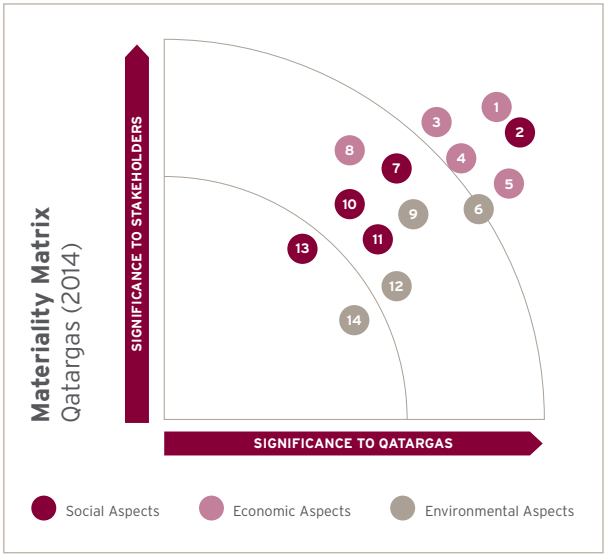



Figure 3 – Qatargas Materiality Matrix

| Ranking | Aspect |
|---|---|
| 1 | Ethics, accountability and governance |
| 2 | Health, safety, security and emergency response |
| 3 | Customer satisfaction |
| 4 | Efficient and reliable operations |
| 5 | Economic performance |
| 6 | Environmental management |
| 7 | Qatarization |
| 8 | Supply chain responsibility |
| 9 | GHG and flaring |
| 10 | Employee developement, satisfaction and retention |
| 11 | Investing in local communities |
| 12 | Energy use |
| 13 | Diversity and equal opportunities |
| 14 | Water management |

## Engaging our Stakeholders

Engagement with stakeholders is a continuous process that is practiced on a day-to-day basis across the ten major stakeholder groups identified below. Qatargas uses a range of formal and informal mechanisms to ensure we understand the expectations of stakeholders and respond to them in a strategic and comprehensive manner. More detail on this can be found in our stakeholder mapping in Appendix C.

| | | | | |
|---|---|---|---|---|
| **Shareholders** | **State of Qatar** | **Local community** | **Employees** | **Non-governmental organizations (NGOs)** |
| **Customers** | **Contractors and suppliers** | **The energy industry** | **The media** | **Pupils, students and potential employees** |

## Managing Sustainability

Implementation of the Qatargas Direction Statement, which captures our sustainability commitments, is the responsibility of every employee and it is communicated and reinforced at every opportunity. Qatargas has a range of policies, procedures and a team in place to further embed sustainability elements into the workings of the organization.

The CSR and sustainability initiative team (CSRIT) is coordinated by the Public Relations Department, and is responsible for the monitoring of sustainability implementation and reporting on performance annually.

| Internal statements or code of conduct relevant to sustainability | Adherence to internationally agreed standards |
|---|---|
| Direction Statement | |
| Code of Business Ethics Policy | |
| Internal Audit Charter | Institute of Internal Auditors 'Code of Ethics' and 'Standards for the Professional Practice of Internal Auditing' |
| Employee Relations Policy | |
| Social Investment Procedure | |
| Safety, Health, Environment (SHE) and Quality Policy | ISO 9001/14001 and OSHAS 18001 |
| Safety, Health and Environment Committee Charter | ISO 14001 and OSHAS 18001 |
| Enterprise Risk Management Process | ISO 31000 |
| Business Continuity Management Policy | ISO 22301 |
| National Graduate Development Programme (NGDP) Policy | |
| Occupational Health Protection Policy | HSE Legal Framework |

## Monitoring and Reporting our Sustainability Performance

A snapshot of our sustainability performance, based on the materiality assessment is provided in the table below. Wherever possible, a benchmark to the Qatar Energy and Industry Sector performance from 2013 and the Qatargas 2015 target is provided.

| | 2012 | 2013 | 2014 | E&I Sector (2013) | Qatargas 2015 Vision Target |
|---|---|---|---|---|---|
| **Governance** | | | | | |
| % independent board members | 91% | 91% | 91% | - | - |
| **Economy** | | | | | |
| Sales volume vs target | 96% | 103% | 99% | - | - |
| LNG reliability | 96% | 98% | 99% | - | 97.2 |
| Reliable deliveries | 100% | 100% | 100% | - | 100% |
| Local procurement | 57% | 44% | 80% | 60% | - |
| **Health and Safety** | | | | | |
| Fatalities | 7 | 0 | 0 | 1 | - |
| Total recordable injury rate (TRIR) | 1.06 | 1.38 | 0.94 | 1.22 | 0 |
| Loss of primary containment | 1 | 0 | 0 | - | 0 |
| Occupational illness | 0 | 0 | 0.53 | 0.48 | - |
| **Environment and Climate Change** | | | | | |
| GHG intensity (tonne of GHG per tonne of LNG) | 0.46 | 0.47 | 0.43 | - | 0.420 |
| Flaring intensity (% of sweet gas) | 1.57 | 1.24 | 0.76 | - | 0.46 |
| Spills over one barrel | 0 | 0 | 0 | 7 | 0 |
| **Workforce** | | | | | |
| Qatarization (%) | 25.8 | 26.1 | 24.1 | 25 | - |
| Female employment (%) | 9.4 | 9.6 | 10.1 | 9.8 | - |
| Turnover (%) | 7.5 | 7.0 | 6.5 | - | - |
| **Society** | | | | | |
| Social investment (QAR) | 7,350,000 | 12,670,000 | 17,317,500 | - | - |

# GOVERNANCE AND RISK MANAGEMENT

**SECTIONS**

- Ownership
- Governance and Operating Structure
- Enterprise Risk Management
- Business Continuity
- Crisis Management

## Ownership

The Qatargas family consists of 6 incorporated joint ventures companies and one unincorporated joint venture operated by Qatargas Operating Company Limited (OPCO). Laffan Refinery 2 Company Limited was incorporated in October 2014, with construction of the plant underway and due for completion in 2016.

| Qatargas Operating Company Limited (OPCO) | | | | | |
|---|---|---|---|---|---|
| Qatargas 1 – Upstream Join Venture / Downstream (QG1) | Qatargas 2 (QG2) | Qatargas 3 (QG3) | Qatargas 4 (QG4) | Laffan Refinery 1 (LR1) | Laffan Refinery 2 (LR2) |

Figure 4 – Qatargas Ownership Structure

Each joint venture has a different ownership structure, leveraging the knowledge and expertise of eight international oil and gas companies. All of the joint venture companies are majority owned by Qatar Petroleum the state-owned oil and gas company that was set up to develop and manage the country's natural energy resources. Qatargas Operating Company Limited (OPCO) is 70% owned by Qatar Petroleum, with the remaining 30% owned by the eight joint venture partners.

| Shareholders |
|---|

## Governance and Operating Structure

The OPCO board of directors consists of 11 representatives, three of which come from Qatar Petroleum and the remaining eight include one representative from each of the remaining shareholder companies. Board members are nominated by each shareholder company and 10 out of the 11 board members are non-executive, independent members. All boards, except for the OPCO Board, have Executive Committees. The OPCO Board also has an Audit Committee.

A new Chairman of the Board of Directors was appointed in September 2014. Eng. Saad Sherida Al Kaabi is Qatar Petroleum's new President and CEO, and has been an instrumental figure in the development of Qatar's oil and gas sector.

## Operating Structure

All aspects of company management, including sustainability topics are the responsibility of the CEO, except for matters to be decided by the shareholders as required by the Articles of Association and Joint Venture Agreement of OPCO. The CEO further delegates his authority to Chief Operating Officers, committees, business groups and individuals.

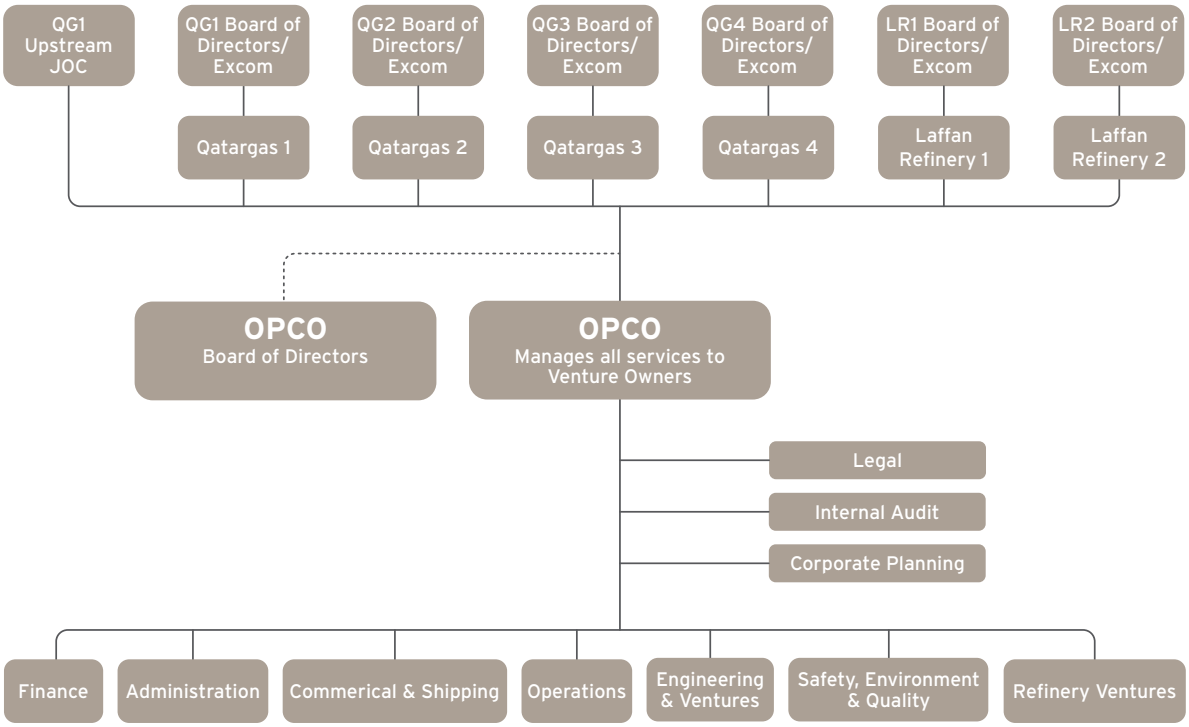



Figure 5 – Qatargas Operational Structure

## Internal Audit

The internal audit function was established by the Board of Directors, assisting them in fulfilling their oversight responsibility for financial reporting, internal controls and compliance with laws and regulations. The internal audit department scrutinizes internal controls in a cyclical manner at least once every 4 years, and reports the results for review and approval to the Board Audit Committee, which in turn, communicates those to the Board of Directors. Internal Auditors are guided in their work by the standards for the professional practice of internal auditing, established by the leading international professional association – the Institute of Internal Auditors.

## Conflict of Interest

Conflict of interest is regulated by the Qatargas Code of Business Ethics, which states that no employee or their immediate family members can in any way be engaged with a business entity involved in business with Qatargas. It is mandatory for each employee to submit an Annual Certification Statement, acknowledging their understanding of the Code principles and their commitment to comply with them. Employees are also obliged to declare all gifts received, engagements outside Qatargas, list of relatives working with Qatargas in an Annual Conflict of Interest Declaration. Results of annual declarations are reported to the Board of Directors.

# Enterprise Risk Management

Risk management is a key process in Qatargas where it is used to mitigate threats and maximise opportunities against key safety, health, envionmental, financial and reputational objectives. Strategic and operational risk registers continue to be the key tool to manage corporate-wide risk. Reviews take place quarterly at executive management and departmental levels to evaluate the key organizational risks and the risk registers are updated accordingly. A company-wide rollout of the enhanced risk management process was kicked off in January 2014. Almost all of the Operations Group were completed in 2014 and the remaining ones together with the support services groups will be covered in 2015. The refined process

introduced several improvements in areas such as risk identification, risk estimation and risk governance.

A parallel project investigating how risks were identified and treated within processes/procedures at an operational level was also kicked off in 2014 and will continue throughout 2015. This 'Operational Risk Management' study will seek to ensure that opportunities for risk identification, management and escalation exist in day-to-day procedures where required and appropriate.

## Business Continuity

Since its launch in late 2012, to provide the organization with the capability of an effective response that safeguards the interests of key stakeholders, reputation, brand and value creating activities, the Business Continuity Management Programme (BCM) at Qatargas has made significant achievements.

Following the official release of departmental Business Continuity Plans and disaster recovery plans for the Information Technology and Industrial Control Systems in early 2014, a comprehensive training campaign started as the first step of embedding BCM into Qatargas culture and creating a BCM-competent workforce.

In 2014, various internal and externally hosted exercises/simulations validated that BCM Programme not only addresses holistically Qatargas' complex business model and unique requirements but also interact seamlessly with other disciplines in overall Incident Response Structure of Qatargas.

Looking ahead, 2015 will be the year for institutionalizing BCM by completing and rigorously testing the implementation of all BCM-related strategies at the same time for further developing the skill set and competency of our workforce with regards to business continuity.

## Crisis Management

Incident prevention remains our number one priority, however, emergency response planning maintains the capacity of being prepared to respond quickly and effectively to a large scale or minimal impact event. This ensures we can respond to any event, identified within the organization as the People, Environment, Asset and Reputation (PEAR) Process.

Our goal is to have a seamless response capability through comprehensive contingency planning, trained personnel and necessary resources to safeguard our people, the surrounding environment, our Assets, the company's reputation and ensure the continuity of the business.

In 2014, crisis management focused on the development of a comprehensive Incident Management team bringing incident management under the PEAR process, integrating the necessary disciplines together as a single team to work towards the same goals. Another area of focus had been to identify when the management team would deem an emergency to move from emergency response to business continuity management. This has been tested through various exercises involving the management.

# ECONOMY

**SECTIONS**

- The LNG Market
- Sales and Distribution
- Financial Performance
- Backing Qatari Businesses
- Production and Expansion

## The LNG Market

Global demand for natural gas continues to rise as it offers an energy solution that is flexible, cost effective and cleaner burning than many alternative fuel sources.

Currently, liquefied natural gas (more commonly known as LNG) is transported to specially designed receiving terminals in 30 countries around the world. Many new countries are expected to begin receiving LNG in the coming years. Six entirely new markets – Egypt, Jordan, Pakistan, Philippines, Poland, and Uruguay – will utilize a combination of onshore facilities as well as new floating storage and regasification units (FSRUs.) As the name conveys, FSRUs allow countries to utilize floating terminals which can generally be built at a faster pace and lower cost than land based alternatives.

In 2014, Asia accounted for 75% of total global LNG demand, with growth expected to continue. Countries such as China and India, which are experiencing increasing levels of urbanization and growing middle classes, increasingly favour the use of natural gas over coal in their fights against severe air pollution. China in particular continues to invest heavily in the construction of new regasification terminals which will make it one of the world's largest natural gas importing markets in the foreseeable future.

In Latin America, the number of LNG importing countries has doubled from three in 2007, to six in 2013, and is expected to reach nine by 2016. Despite strong gas demand growth, the availability and cost of domestic supply and piped gas imports will limit the long-term prospects of LNG imports. Moreover, these markets will most likely be supplied by North American LNG from upcoming regional projects.

LNG demand in Europe has been affected by economic headwinds, Asia's strong pull on flexible cargoes, low cost US coal imports and competition from governmentally subsidized renewable energy sources. However, there are reasons for optimism for a resurgence of Europe's LNG demand as its economy strengthens and the need for supply diversity becomes critical.

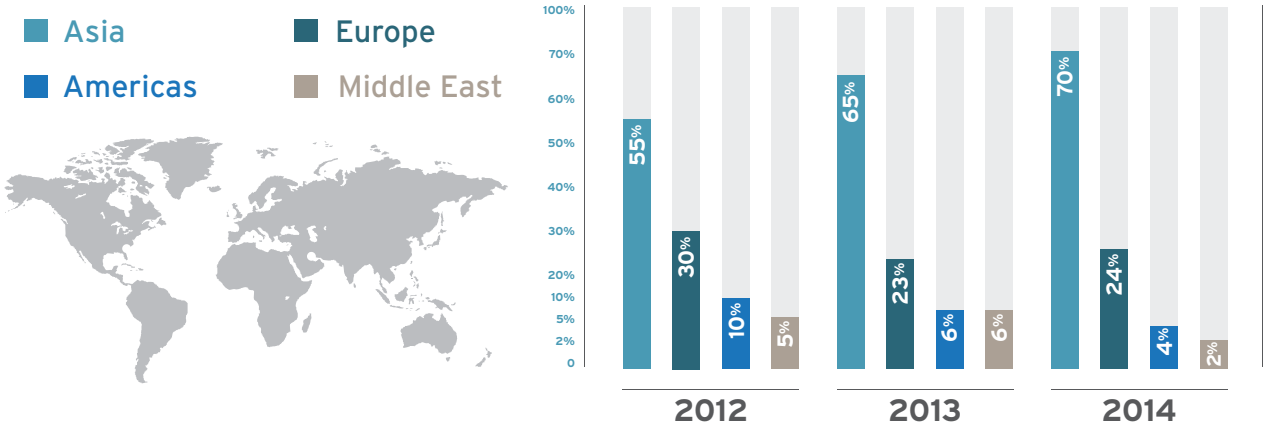
Technological advancements have allowed the United States to virtually switch from being a potential major LNG importer to becoming not only self-sufficient in gas, but also a potentially significant LNG exporter, with its first major project scheduled to come online in 2015.

The State of Qatar has delivered LNG to 27 out of the current 30 LNG importing countries, accounting for 33% of the world's LNG supply.

## Sales and Distribution

Qatargas in particular has delivered LNG to more than 20 countries around the world. Through a combination of solid customer relationships, flexibility to meet changing needs, and an exceptional delivery record, Qatargas is regarded as one of the most preferred LNG suppliers in the world. The table below shows the major regions where Qatargas has sold its volumes in recent years.

### Qatargas Markets Served




### Building New Relationships

Given Qatargas' increased international presence and strategy of extending its reputation as a safe, reliable supplier to emerging LNG markets, the company focuses on supplying commissioning cargoes to new terminals. This activity plays a major role in shaping and building future business relationships and will provide for new opportunities as the global LNG market continues to grow.

### Commissioning New Terminals

To date, 55% of China's new LNG receiving terminals have been commissioned by Qatargas. This includes delivering a commissioning cargo to China National Oil Corporation's (CNOOC) Hainan LNG terminal in 2014. Commissioning cargoes are used to cool down the terminal's equipment to the required operating temperatures, and allow for the conducting of initial tests before commercial shipments can commence. Qatargas actively participates in LNG terminal commissioning activities worldwide, utilizing a robust due diligence process. Preparing a terminal to receive a commissioning cargo requires a formal Qatargas approval process involving the port, terminal, and berth(s) to ensure safe and reliable delivery of the cargo.

In 2014, Qatargas signed its first agreement with Kuwait. The agreement, between Qatargas 2 and Kuwait Petroleum Corporation (KPC), resulted in the delivery of eight LNG cargoes for the year and utilized Qatargas Q-Flex vessels. Also in 2014, Qatargas officially opened its South East Asia Liaison Office in Thailand, its third in Asia alongside offices in China and Japan.

### Reliable Delivery

In 2014, for the third year in a row, Qatargas delivered 100% of all cargoes on time. In a survey completed by Qatargas customers, 85% of responses were positive. This was, in part, due to increased shipping flexibility derived from increased free on board sales, as well as Qatargas' drive to meet customers' needs in a dynamic energy environment.

| Reliable Delivery | 2012 | 2013 | 2014 |
|---|---|---|---|
| Reliable Delivery | 100% | 100% | 100% |

## Financial Performance

As a non-publicly traded company, majority owned by the Government of Qatar, Qatargas is not required to publicly disclose financial performance data and would need full approval from the government and all shareholders in order to do so. It must be noted however, that Qatargas has consistently provided above budget revenues to the State of Qatar and Qatargas shareholders.

| Financial Performance | 2012 | 2013 | 2014 |
|---|---|---|---|
| Sales volume vs. target | 96% | 103% | 99% |

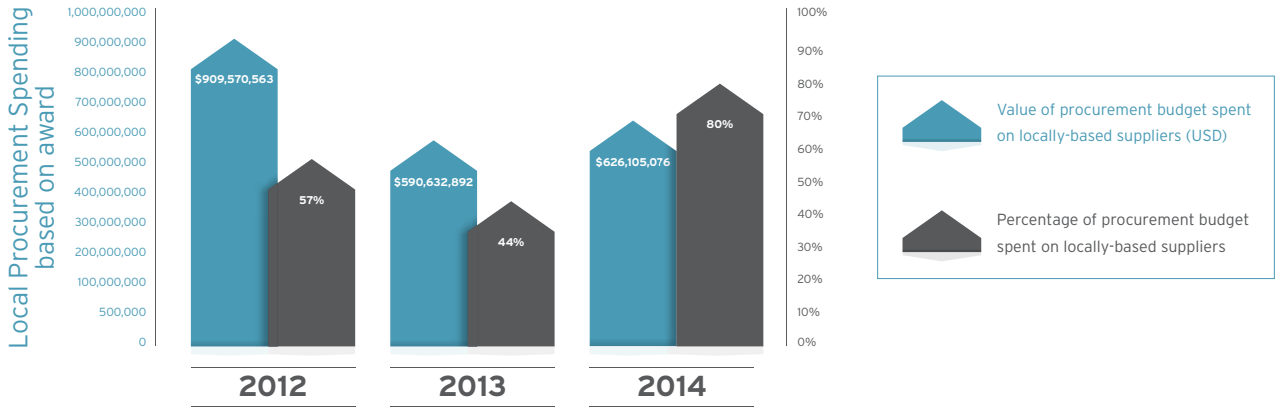
In the past, Qatargas and RasGas have worked together frequently to achieve synergies in many different business areas. The management of both companies have re-emphasized the importance of continuing the synergy initiatives in additional areas in a more formalized way. In 2014, Qatargas and RasGas signed a Charter to work together in order to identify opportunities of synergy to reduce cost.

## Backing Qatari Businesses

Qatargas procurement lays emphasis on procuring goods and services from the local market as far as reasonably possible with a special focus on local small and medium sized enterprises. Notices inviting tenders are published in major local newspapers to ensure maximum local participation. Qatargas strongly encourages its contractors and suppliers to give preference to utilizing the services of local companies and using local materials during the execution of all Qatargas contracts. A "National Price Preference" clause is built into all contracts to ensure preferential treatment is given to local subcontractors. Qatargas spends hundreds of millions of dollars on Qatari businesses, 626 million USD in 2014 alone. Locally based suppliers and contractors received 80% of total procurement spending in 2014, a sharp increase given that in previous years a number of larger, highly technical projects were awarded to overseas companies.

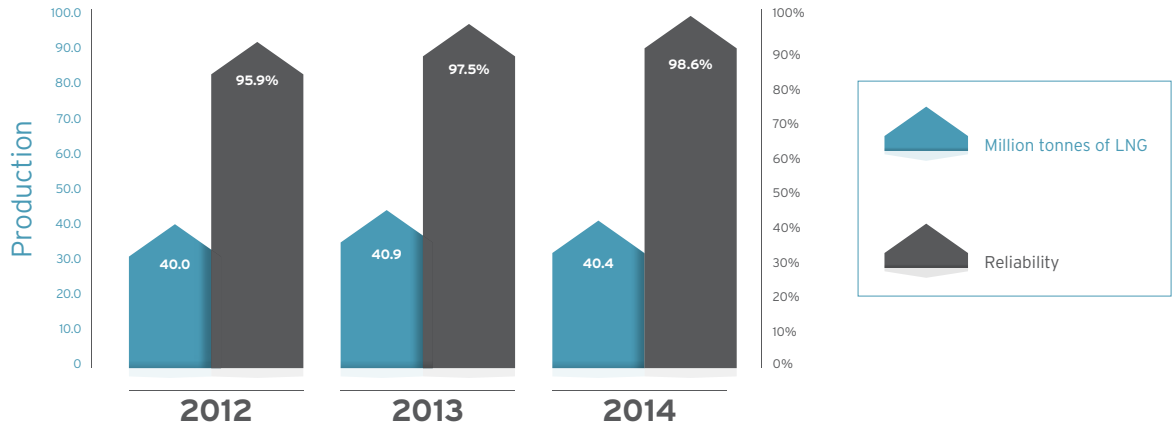
In 2014, an amendment was made to the general contract terms and conditions advising all supplier and contractors to use Qatar Airways as the official carrier for flying personnel and material during execution of all contracts.

In October 2014 Qatargas conducted a Contractors Forum to support the local businesses in which about 150 contractors and suppliers attended. The purpose of the event was to make them aware of upcoming projects and business opportunities in Qatargas, besides seeking their feedback on QG procurement process. Local banks and Qatar Chamber of Commerce also participated.




## Production and Expansion

Qatargas continues to produce LNG close to full capacity, with an ever-increasing reliability rate. A number of projects have been implemented to ensure this production is maintained for many years to come, including planned shutdowns for maintenance and the drilling of new wells. A range of other projects continue to expand the production and utilization of the LNG process by-products in both volume and type.




### Plateau Maintenance Project (PMP)

In the fourth quarter of 2014, the PMP went live after 42 million work-hours delivered over three years. The objective of the project was to ensure production capacity of Qatargas 1 is maintained at 10 million metric tonnes per annum (MTA) of Liquefied Natural Gas (LNG) until 2021 and beyond. The project involved drilling and recompleting offshore wells, adding new onshore facilities for sulphur handling and modifying existing LNG production trains 1, 2 and 3. The whole project was delivered with minimal disruption to existing operations.

## Planned Shutdowns

Two major planned shutdowns were completed in 2014, one on Train 7 and the other on Laffan Refinery, in order to carry out maintenance, upgrades and tie-ins. Planned over several years, both were completed ahead of schedule and without any lost-time injuries.

### Producing Greener Diesel

The Diesel Hydrotreater (DHT) facility was officially commissioned in spring 2014. Built as an addition to the existing Laffan Refinery, the DHT unit is designed to convert light gasoil into ultra-low sulphur diesel to supply the Qatar market. Much of the diesel currently being produced in Qatar had more than 1000 ppm of sulphur, which is detrimental to the people and environment of Qatar. The DHT diesel project is set to produce even less than the benchmark of 10 ppm sulphur and exceed 'best in class' Euro 5 specifications. Early results show that the diesel being produced at the Laffan Refinery is less than 5 ppm of sulphur. Qatargas is the first to build such a facility in the region, a major milestone for the company and the country.

## Laffan Refinery 2

In 2014, His Highness the Emir of Qatar Sheikh Tamim Bin Hamad Al Thani formally laid the foundation stone for Laffan Refinery 2 (LR2) at a special ceremony held at the Qatar National Convention Centre in Doha. The LR2 is the second of its kind to be built in Qatar since Laffan Refinery 1 was inaugurated in 2009. When completed as scheduled in the second half of 2016, LR2 will double the current refining capacity of the Laffan Refinery to about 300,000 barrels per day, and solidify Qatar's position as the largest condensate producer with the largest condensate refining capacity in the world. Together, LR1 and LR2 will be capable of processing about 40% of the condensate produced from Qatar's North Field.

## Ras Laffan Terminal Operations

Qatargas celebrated its 5,000th loading by Ras Laffan Terminal Operations (RLTO) which happened to be the first cargo of ultra-low sulphur diesel produced by the DHT project. This is more environmentally friendly than standard, high-sulphur diesel. RLTO is responsible for the storage and loading of all non-LNG liquid hydrocarbon products and bulk sulphur in Ras Laffan Industrial City produced by various end-users, including Qatargas, Qatar Petroleum, RasGas, Laffan Refinery, Al Khaleej Gas, Dolphin Energy Limited, Qatar Shell GTL, Oryx GTL, Ras Laffan Olefins Company and Barzan. To date, the equivalent of more than two billion barrels of product has been loaded by Qatargas through its Ras Laffan Terminal Operations (RLTO) since it was established in 2006.

# HEALTH AND SAFETY

**SECTIONS**

- Health and Safety Approach
- Occupational Safety
- Occupational Health
- Process Safety and Asset Integrity
- Emergency Response and Security
- Material Safety

## Health and Safety Approach

The health and safety risks associated with the construction, operation and maintenance of some of the largest LNG plants in the world are significant. With an average of 15,000 people working within Qatargas every day, the health and safety of employees, contractors, customers and the community is the number one priority.

The Safety, Health, Environment and Quality Policy sets the direction for Qatargas, which is then implemented on a day-to-day basis through the Safety, Health and Environment (SHE) part of the Qatargas Management System (QGMS). A special senior management committee meets monthly, chaired by the CEO, and has direct oversight of health and safety performance and is involved in the implementation of initiatives designed to drive continual improvement across the business.

Beyond management systems, a major emphasis is placed on building a culture of health and safety. The engagement of employees, contractors, customers and the community is key to success in this area. In 2014, our safety programme was recognized with a Shell Goal Zero Award for 10 million work-hours without a serious incident or release. Qatargas was also recognized by the British Safety Council with the 'Sword of Honour', the only organization in Qatar, and one of only 50 worldwide, to receive such recognition.


Figure 6 – Qatargas 10 Life Saving Rules

## Occupational Safety

In 2014, Qatargas employees and contractors completed over 37 million hours of work ranging from low-risk office work to high-risk construction and maintenance. Taking a one team approach, which does not distinguish between employees and contractors, Qatargas has pioneered an Incident and Injury Free (IIF) programme which places a focus on safety, empowering any individual to stop an activity deemed unsafe. Incident and Injury Free (IIF) in Action was piloted in QG2 and LR in 2014, engaging employees and contractors at all levels with a focus on improving teamwork and promoting safety excellence. Coaches were identified from all departments and trained to educate and support implementation of IIF in Action. They did this by being visible role models, proactively delivering the IIF message and encouraging wide use of three simple steps on the way to incident and injury-free performance: 'Understand', 'Ask' and 'Speak Up'. To keep safety at the front of everybody's mind, Qatargas has initiated a range of safety campaigns focused on some of the most common high-risk activities.

## Occupational Safety Campaigns


HAND INJURIES


FIRE REDUCTION


MANUAL HANDLING

DROPPED OBJECTS CAMPAIGN

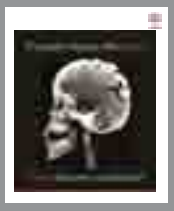








Figure 7 – 2014 Safety Campaigns

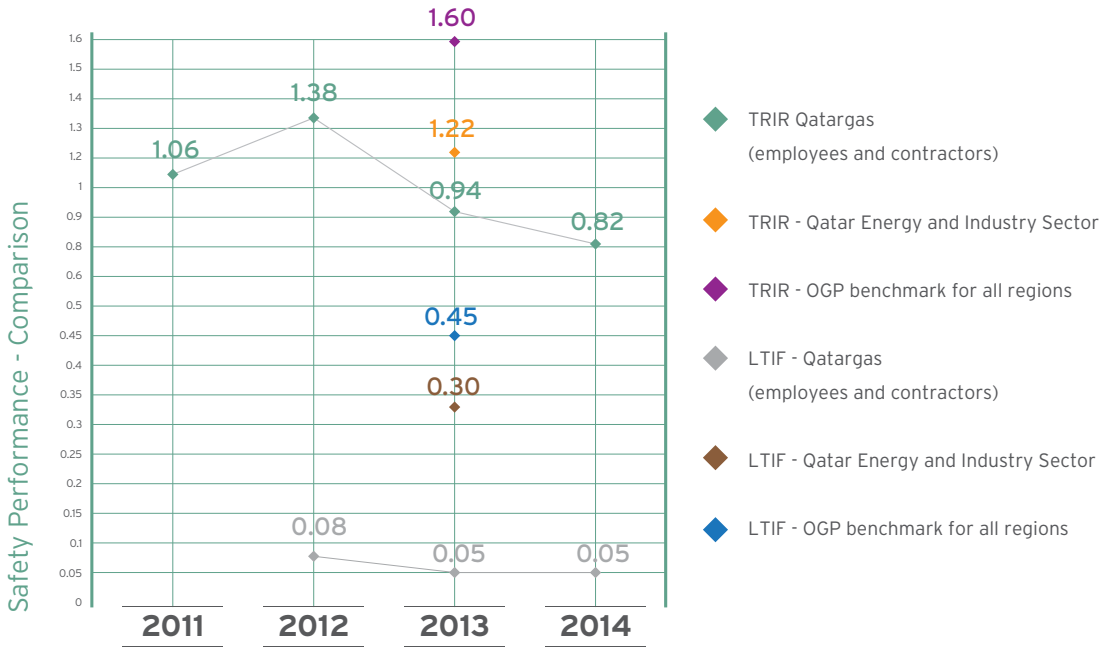
### Occupational Safety Performance

Through the dedication and focus of all employees and contractors, Qatargas has experienced a steady improvement in safety performance over the past four years. Areas for improvement remain, however, with two contractor lost-time injuries in 2014, both of which were fractures, one to the hand and one to the foot, caused by falling equipment. A range of actions have been taken to avoid such incidents in the future, including, but not limited to:

- A full investigation into the root causes of the incident and close out of corrective actions.
- Issuing a safety alert to ensure lessons learnt are appropriately communicated.
- Enhancement of hazard identification and manual handling information sessions.

| Safety Performance | 2012 | 2013 | 2014 |
|---|---|---|---|
| Total work hours (employees) | 5,887,472 | 12,215,468* | 12,241,736 |
| Total work hours (contractors) | 30,270,196 | 29,247,718 | 25,431,259 |
| Fatalities (employees and contractors) | 7 | 0 | 0 |
| Number of lost-time injuries (employees) | 1 | 1 | 0 |
| Number of lost-time injuries (contractors) | 2 | 1 | 2 |
| Number of recordable injuries (employees) | 5 | 9 | 3 |
| Number of recordable injuries (contractors) | 45 | 30 | 28 |

*The significant rise in employee work hours is a result of a new method of calculation based on OHSAS standards. Since the beginning of 2013 we have counted contract hours delivered under direct supervision of a Qatargas employee as an employee work hour.




## Significant safety milestones achieved in 2014

A range of safety milestones were achieved across the organization in 2014, including:

- The Laffan Diesel Hydrotreater (DHT) project was completed in 2014 with a total of **6 million work-hours without a lost time injury.**
- The Jetty Boil-Off Recovery Gas (JBOG) project was completed in 2014 with a record **22,394,115 work-hours without a lost-time incident.**
- The North Field Bravo offshore facility, which comprises nine offshore platforms, has reached **12 years of operation without a lost-time Incident.**
- The Ras Laffan Berth 4 rehabilitation project was successfully completed with **zero lost-time incidents** and one restricted work case for over 1.1 million work-hours.
- The Plateau Maintenance Start-up project completed 42 million work-hours achieving a world-class safety performance of a total recordable incident rate of 0.23 for every 200,000 hours. This exemplary performance makes it an outstanding example of IIF programme application, in particular regarding the use of STOP safety observation programme, with **665,000 safety observation STOP cards provided so far by 6,500 workers** involved in the project.

## Improving Contractors Safety

Qatargas brought together company management, contractors and shareholders in the biannual Contractors' Safety Forum under the theme 'First Line Supervisors, Taking a Stand for Safety'. This event underlined the importance of observing the 10 Life-Saving Rules at all times, and the critical role of first-line supervisors in sustaining the safety culture. The general purpose of the Forum is to share experience on health, safety and environment management approaches by Qatargas and contractors, and discuss the issues of common concern.

## Occupational Health

Qatargas continues to implement its Occupational Health Protection Policy through a team of highly skilled medical professionals who are licensed by the Supreme Council of Health and Industrial Hygienists in approved medical facilities.

The team focuses most of their efforts on the prevention of occupation illness through the mitigation of high-risk health concerns such as heat stress, noise induced hearing loss, and more recently, pandemic outbreak, as well as office ergonomics, fatigue risk management, fitness-to-work and food safety. A combination of ongoing risk monitoring, inspections, employee engagement, health screening and awareness campaigns help to ensure the health and wellbeing of all employees and contractors.

### Health Risk Monitoring and Engagement

Qatargas uses a comprehensive health risk monitoring assessment programme to identify and mitigate risks related to employee and contractor health and wellbeing in the office, onshore and offshore. In 2014, over 100 planned assessments were completed, including a noise survey, and assessments for radiation, air quality, dust monitoring, food safety hygiene, lighting and ergonomics across all operations. Once hazards are identified they are continually monitored, for example, through the Hearing Conservation Program. The program includes periodic noise surveys, reviewing of noise levels for equipment installed, maintenance of hearing equipment, noise related Toolbox Talks, periodic audiometric tests on employees and routine inspection of high noise workplaces. In 2014, there was no shift in the permanent hearing threshold for employees working in high noise areas, due to the sustainable implementation of this programme.

### Heat Stress Management

Through the implementation of a Heat Stress Management program, zero heat related incidents were recorded by employees across all locations. This included mandatory training for all Operations and Monitoring (O&M) personnel on heat stress prevention, providing first aid and enhancing capacity to monitor a self-heat index. Employee and contractor supervisors have also been provided with Train the Trainer experience in order to enable them to implement site-specific heat-stress management plans and recognise heat stress as part of Job Safety Analysis before a task is performed.

A range of awareness campaigns and training events were also implemented, including a campaign during the holy month of Ramadan, a shutdown refresher training program, a train the trainer refresher session, daily SMS alerts and regular site inspections and monitoring.


The medical team promotes employee and contractor participation in the assessment and monitoring of health risks, using a biannual forum, monthly meetings, surveys, questionnaires, plant tours and contractor camp inspections to gather feedback and input for future health related activities.

Qatargas continues to engage directly with contractors to ensure health and wellbeing topics are appropriately addressed. In some cases, Qatargas will conduct camp inspections to ensure:

- Food safety and hygiene standards are met
- Medical care is in place
- Suitable menu options are in place catering to the diverse nationalities
- Dormitories are conducive for proper rest
- Recreation facilities are provided.

## Health Screening

Mandatory medical examinations are conducted on all new and existing employees. Particular attention is given to high-risk group employees engaged in critical activities who are assessed for possible shifts in occupational health. For contractors, especially those engaged in critical activities such as shutdowns or construction, daily random Fit-To-Work screenings are used to ensure all on-site personnel are in good physical and mental condition to complete their designated tasks. In 2014, 13,034 medical mass screenings were conducted for contractors.

### Screening for Ebola

For employees that have travelled abroad, particularly to Ebola affected countries, Qatargas has deployed comprehensive Ebola screening in alignment with the Supreme Council of Health guidelines, providing individuals with travel advice and information on preventive measures. These efforts have resulted in zero suspected Ebola incidents recorded to date.


## Health Awareness

The medical team conducts periodic presentations and workshops to raise awareness on various health issues related to production processes and everyday life, such as obesity, effects of cumulative fatigue, office ergonomics, Naturally Occurring Radiation Materials, effects of exposure to electromagnetic field, to name a few. At a national level in 2014, Qatargas delivered a paper on sustainable employees' protection and health surveillance program prior to hazmat exposure.

Qatargas also hosts and participates in a wide range of health related events and national or international awareness campaigns, designed to encourage employees to take an active interest in their own and family health and wellbeing. In 2014 such campaigns included Diabetes Awareness Day, Cancer Awareness, Food Safety Campaign, Dental Awareness Week and Maternity Day.

• Diabetes Awareness Day

• Maternity Day

• Dental Awareness Week

## Occupational Health Performance

There were two heat related illnesses reported in 2014, both of which were incurred by expansion project contractors, and both of which required medical treatment. Zero heat related incidents were recorded by Qatargas direct employees across all operations, including from the completion of four major shutdowns, two of which were carried out during the hot summer months.

| Occupational Health | 2012 | 2013 | 2014 |
|---|---|---|---|
| Occupational illness other than heat stress (employees and contractors) | 0 | 0 | 0 |
| Recordable heat stress incidents (employees and contractors) | 0 | 6 | 2 |

## Process Safety and Asset Integrity

Process safety at Qatargas is focused on the proactive identification of risks-to-asset integrity and the implementation of preventative measures to ensure physical and non-physical systems responsible for handling hazardous material remain secure. This helps to avoid major accidents, explosions, fires or releases of hazardous substances that could harm individuals and the environment.

A robust monitoring, reporting and analysis mechanism is already in place and based on best-practice leading and lagging Safety Performance Indicators (SPI). The indicators are used to assess the status of key risk-control systems and provide ongoing assurance that risks are being controlled, or provide an early warning should there be a deterioration of control. Risk-control systems fall into three broad categories that provide layers of process safety protection, these include:

- **Operational Integrity** such as operating procedures, plant design and modification, emergency preparedness and permit to work.
- **Mechanical Integrity** such as inspection and maintenance, ignition source prevention, instrument and alarm.
- **Personnel Integrity** such as competence, training, management commitment and incident reporting.

In 2014, Qatargas experienced zero Tier 1 process safety events. Six Tier 2 events were recorded, including gas leaks, steam releases and a molten sulphur spill. All incidents were immediately rectified and incident investigations conducted to avoid similar events in future.

| Process Safety Events | 2012 | 2013 | 2014 |
|---|---|---|---|
| Tier 1 process safety events | 1 | 0 | 0 |
| Tier 2 process safety events | 5 | 1 | 6 |

## Emergency Response and Security

Qatargas has a dedicated team of 24-hour, seven-days-a-week emergency responders and security personnel to maintain the integrity of all onshore and offshore facilities, as well as respond to all types of emergencies. To ensure they are prepared, a range of emergency response exercises and drills are conducted. In total Qatargas completed 282 exercises and drills.

| Emergency Response | 2012 | 2013 | 2014 |
|---|---|---|---|
| Emergency response exercises and drills executed | 238 | 239 | 282 |
| Rate of incident investigations completed based on Qatargas procedures | 100% | 100% | 100% |

Qatargas Security is responsible for mitigating security risks for the company. Qatargas Security personnel are responsible for guarding company assets, conducting risk assessments and implementing security measures, controlling conflicts that may arise among personnel, checking rights of access to the company premises and operational sites, parking and traffic enforcement as well as assist with emergency response. All personnel are unarmed and trained in security operations to deal with all personnel in a polite but firm manner.

National development has also been a major focus area for Qatargas Security Section. In 2014, the Security Section re-organization was initiated with the view of providing a clear succession plan for the national security staff. In addition, individual training plans have been developed for every national staff to ensure both career and personal growth. In 2014, a security infrastructure improvement program was put in place to assess all physical infrastructure in order to improve or upgrade where necessary. The security team also responded to concerns regarding security during travel with the establishment of a Travel Risk Security system overseen by the representatives of HR, IT, Medical and Commercial and Shipping Departments.

Qatargas continues to raise the awareness of security amongst employees running "Security is everybody's business" campaigns. Beyond focusing on organizational security, campaigns have also been launched to focus on appropriate precautions employees should take to ensure security at home.

Qatargas Security in partnership with Qatargas Medical take a keen interest in ensuring the guard contractors are comfortable and satisfied with their living and work conditions. Regular inspections of guard accommodations are conducted and improvement recommendations provided to contractor management for implementation.

## Material Safety

Qatargas maintains a database of Material Safety Data Sheets (MSDS) that detail the safety management specifications of all materials that could be deemed hazardous in their current or future form. These sheets are provided to anyone handling the material be it employees, contractors, suppliers or customers.

A special committee reviews and endorses each MSDS in accordance with the Qatargas procedure on Hazardous Materials Management, part of the Chemicals Management Program which manages hazardous, pyrophoric and chemical substances from cradle to grave. In 2014, 127 MSDS have been issued in accordance with the list of materials currently used by Qatargas – two more than 2013.

| Product Responsibility | 2012 | 2013 | 2014 |
|---|---|---|---|
| Number of Material Safety Data Sheets | 215 | 125 | 127 |
| Number of new or updated MSDS | 5 | 85 | 3 |

# ENVIRONMENT AND CLIMATE CHANGE

**SECTIONS**

- Our Commitment to the Environment
- Flaring
- GHG Emissions and Climate Change
- Energy Consumption
- Air Emissions
- Water
- Waste
- Environmental Awareness
- Biodiversity
- Spills
- Environmental Expenditure
- Transporting our Product

## Our Commitment to the Environment

Qatargas is proud of the key role that we, as a responsible energy producer, play in supporting Qatar's sustainable development while helping meet the global demand for reliable and cleaner sources of energy. Our approach to environmental management is aligned with the Qatar National Vision (QNV 2030) objective of sustaining the environment for our future generations. Maintaining the highest standards for environmental protection and responsible resource utilization are fundamental requirements of our Direction Statement and represent the premier 'Qatargas way' of doing business. We continue to promote the use of state-of-the-art solutions to further improve the environmental performance of our production facilities.

Our key environmental focus areas have been compliance, flare reduction, GHG and air emissions management, wastewater recycling and reuse and waste management. We added environmental awareness and environmental data management to these focus areas in 2014.

### Environmental Compliance

Compliance with State of Qatar environmental regulations and international conventions ratified by Qatar is fundamental to our business. In 2014, we maintained compliance with our Consent to Operate (CTO) environmental permits issued by the Ministry of Environment (MoE) and received two new CTOs in 2014 for our Diesel Hydrotreater (DHT) and Jetty Boil-off Gas Recovery (JBOG) facilities. Qatargas now has 13 active CTOs, renewed on an annual basis and each with extensive compliance, monitoring and reporting requirements. Our approach to ensuring compliance with our permitting and regulatory requirements is illustrated in Figure 8 below.

**01**

**Defining Requirement Environmental Compliance**

- Requirements from environmental permits and regulations provided to internal stakeholders via Compliance Evaluation Registers for each operating asset.

**02**

**Monitoring, Tracking and Reporting of Compliance Requirements**

- Physical monitoring programs with daily, weekly, monthly and quarterly monitoring frequencies.
- Environmental data collection, consolidation and reviews.

**03**

**Verifying And Reporting Compliance**

- Operations leading to potential non-compliance highlighted immediately.
- High-priority environmental parameters reported weekly.
- Compliance summaries presented at monthly and quarterly asset leadership meetings.
- Compliance status and environmental data summarized in Quarterly Reports submitted to regulators.

**04**

**Rectifying Potential Non-Compliance**

- Immediate or short-term rectification completed onsite by Operations.
- Longer- term rectification requires engineering studies and projects, with a submission of Compliance Action Plans (CAPs) to the regulators.

Figure 8 – Managing Compliance

GRI G4-DMA: Energy, G4-DMA: Water, G4-DMA: Emissions, G4-DMA: Effluents and waste

## Our Systems

We maintain an ISO 14001-certified Environmental Management System (EMS) that encompasses all our activities and services. The EMS principles adopted by Qatargas ensure that environmental issues are assessed and controls implemented to mitigate and minimise potential environmental impacts. In 2014, we commenced integration of our EMS into the Qatargas Management System (QGMS). This included mapping our key environmental processes and conducting validation or adherence checks of our existing systems with the five QGMS principles of **People Driven, Risk Based, Process Oriented, Asset Focused and Performance Led.**

Driven by our growth in recent years and the corresponding increase in environmental compliance and reporting requirements, Qatargas embarked on implementation of an Environmental Data Management System (EDMS) in 2013. Our vision was to replace our existing manual environmental data collection and reporting processes with a platform that was automated, centralized, transparent, easily verifiable and secure to handle the large number of diverse environmental data streams inherent to Qatargas.

The EDMS project was a challenge considering Qatargas' multiple operational assets and diversity of reporting requirements and data streams, ranging from air emissions and wastewater discharges to waste generation rates. These challenges were overcome through typical Qatargas teamwork in time for the platform to go live in early August 2014. The EDMS will gradually replace our traditional, manual reporting process in 2015. The versatility of this system as an automated platform will help promote compliance, facilitate analysis and evaluation and provide proactive inputs to future planning and decision-making.


Figure 9 – Qatargas Environmental Data Management System



GRI G4-DMA: Energy, G4-DMA: Water, G4-DMA: Emissions, G4-DMA: Effluents and waste

## Planning for the Future

To ensure that our environmental successes and vision are sustained into the future, we have developed a 5-year plan focusing on long-term strategies and systems for our key environmental processes as shown in Figure 10 below. These strategies and systems provide a platform for our ongoing and future initiatives and projects while augmenting our existing business support and performance assessment elements.

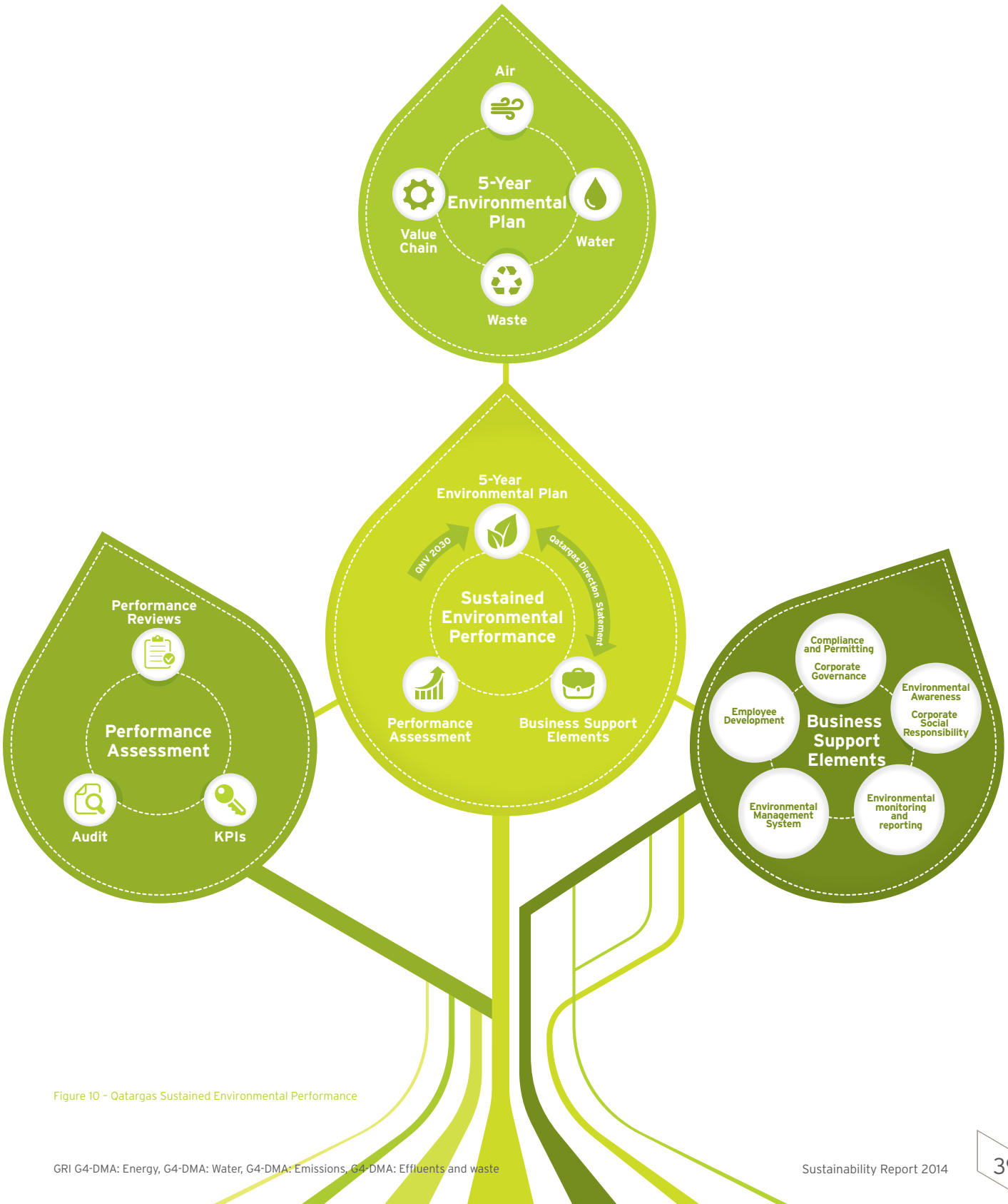
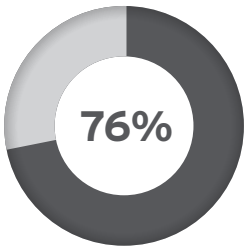



Figure 10 – Qatargas Sustained Environmental Performance

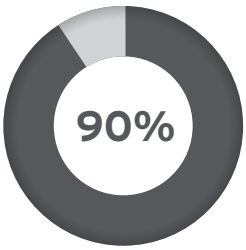
## Flaring

The flare system is a critical process safety element designed to protect equipment during process upsets as well as start-ups and shutdowns of the LNG trains. A small amount of routine baseline flaring is also required during normal plant LNG operations to continuously purge the flare system to prevent air ingress and explosion hazards.

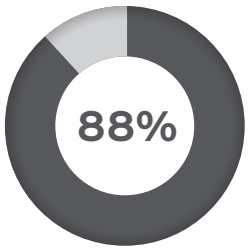
Through a range of operational excellence initiatives and engineering projects, described in detail below, we are proud to have reduced our flaring significantly since 2009.



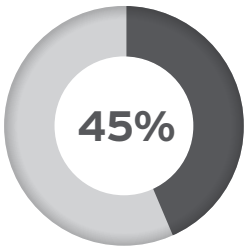

Reduction in total hydrocarbon flaring from 2009 to 2014




LNG loading flare reduction due to Jetty Boil-off Gas Recovery (JBOG) Facilities




Reduction in LNG train shutdown flaring since 2011




Reduction in LNG mega-train purge gas flaring from 2013

### The Qatargas Flare Management System (QG FMS)

The QG FMS is designed to provide management and oversight of flare minimization efforts at our facilities while maintaining operational flexibility, asset integrity and process safety. The key elements of the QG FMS are presented in Figure 11 below.

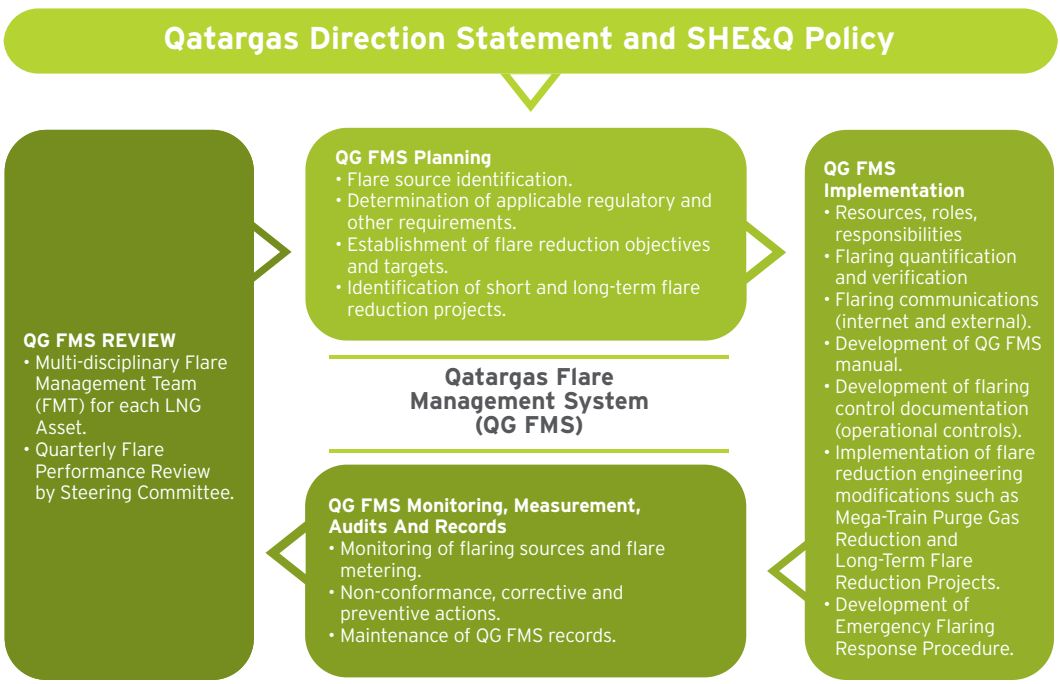



Figure 11 – Qatargas Flare Management System (QG FMS)

## Flaring Performance

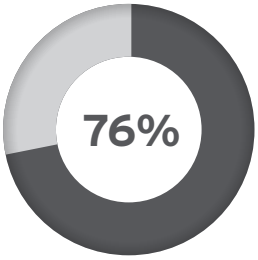
In 2014, we were able to reduce our total hydrocarbon flaring by over 34% from our 2013 totals, as shown in the table below. This reduction was driven by the operational focus brought about by our multi-disciplinary LNG asset Flare Management Teams (FMTs). Our LNG mega-train flaring levels in 2014 were the lowest in our operating history. This was supported by reliable plant operations and a 45% reduction in daily baseline flaring following completion of the Mega-Train Purge Gas Reduction Project in December 2013. Our landmark Jetty Boil-off Gas Recovery (JBOG) Project was successfully commissioned with first ship recovery completed on 6 October 2014.

| Flaring Performance | 2012 | 2013 | 2014 |
|---|---|---|---|
| Routine hydrocarbon flaring (MMSCF)[1] | 22,663 | 18,406 | 15,521 |
| Non-routine hydrocarbon flaring (MMSCF)[2] | 13,569 | 10,914 | 3,775 |
| Total hydrocarbon flaring (MMSCF) | 36,232 | 29,320 | 19,296 |
| Non-hydrocarbon flaring (MMSCF)[3] | 1,618 | 8,621 | 852 |

1. Baseline purge, LNG tankage and LNG jetty loading flaring
2. Trips, upsets and shutdowns
3. Non-hydrocarbon flaring occurs only under exceptional circumstances. These non-hydrocarbon streams (>95% $CO_2$) have been reported separately from the routine and non-routine hydrocarbon flaring that Qatargas is actively working to manage and reduce.

*Note: Above totals exclude flaring from our LR and RLTO facilities which represent a negligible portion of our overall flaring.

The flaring trend from 2009 through 2014 is depicted in Figure 12 based on a ratio of total hydrocarbon flaring (excluding non-hydrocarbon streams) and total sweet gas production.




Reduction in total hydrocarbon flaring from 2009 to 2014

### How was this achieved?

- Management commitment to reduce flaring.
- Flare Management Teams (FMTs).
- Enhanced monitoring, tracking and reporting.
- Reduced flaring during trips, shutdowns and restarts.
- LNG Mega-Train Purge Reduction Project.
- Successful start-up of Jetty Boil-off Gas Recovery (JBOG) Project.
- Reliable plant operations.

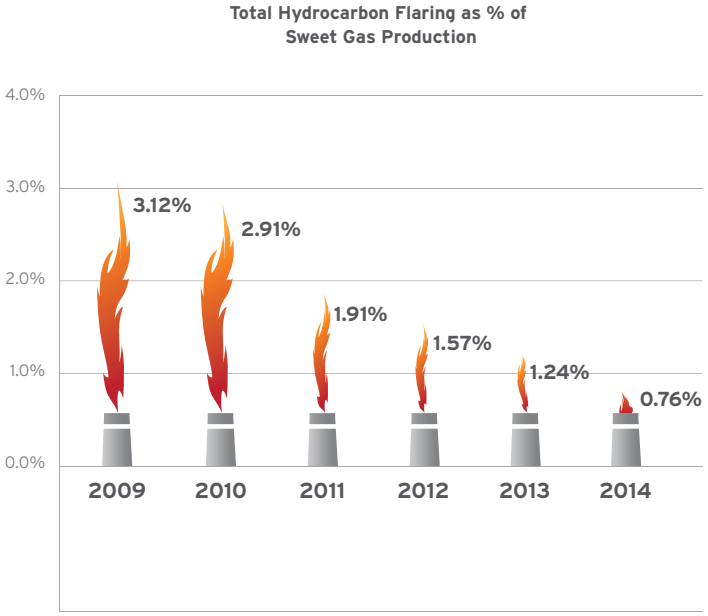
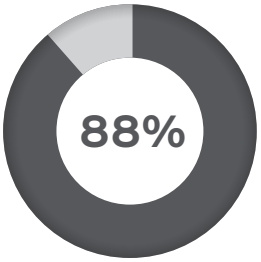



Figure 12 – Flaring Performance

We continued our efforts to reduce shutdown flaring and were able to achieve our lowest shutdown flaring to date for any LNG train during the Train 5 shutdown in September-October 2014. From 2011 through 2014, we have been able to reduce our total shutdown flaring by 88% as shown in Figure 13 below.




Reduction in LNG train shutdown flaring since 2011

### How was this achieved?

- Comprehensive flare minimization plan with targets for each individual unit.
- Enhanced operator training and familiarization with flare minimization requirements.
- Minimization of on-spot flaring in each phase of shutdown and start-up.
- Improved system segregation.
- More effective defrosting.
- Use of Nitrogen vs. fuel gas for purging.

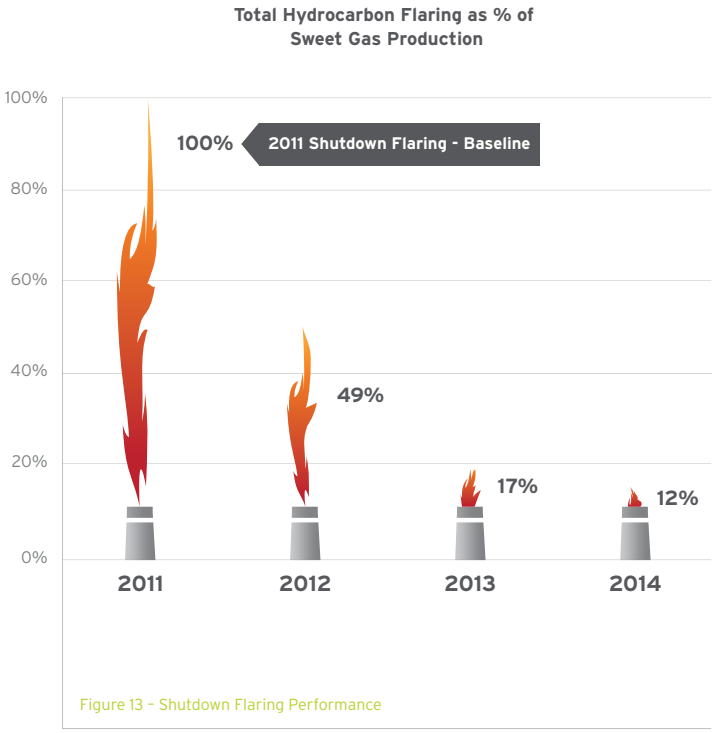



Figure 13 – Shutdown Flaring Performance

## Flare Reduction Projects

Our longer-term flare reduction engineering projects are aimed at reducing flaring from process events which cannot be minimized through operational initiatives alone. The Jetty Boil-off Gas Recovery (JBOG) facility, commissioned in October 2014, is operating at design recovery rates greater than 90% (See case study or Figure 14 below). The flare reduction projects at our LNG mega-trains include purge gas reduction, implemented in December 2013, resulting in a 45% reduction in baseline purge flaring, as well as a long-term project to provide interconnections between trains to re-route and reuse process gas instead of flaring.

## Jetty Boil-Off Gas Recovery (JBOG) Project

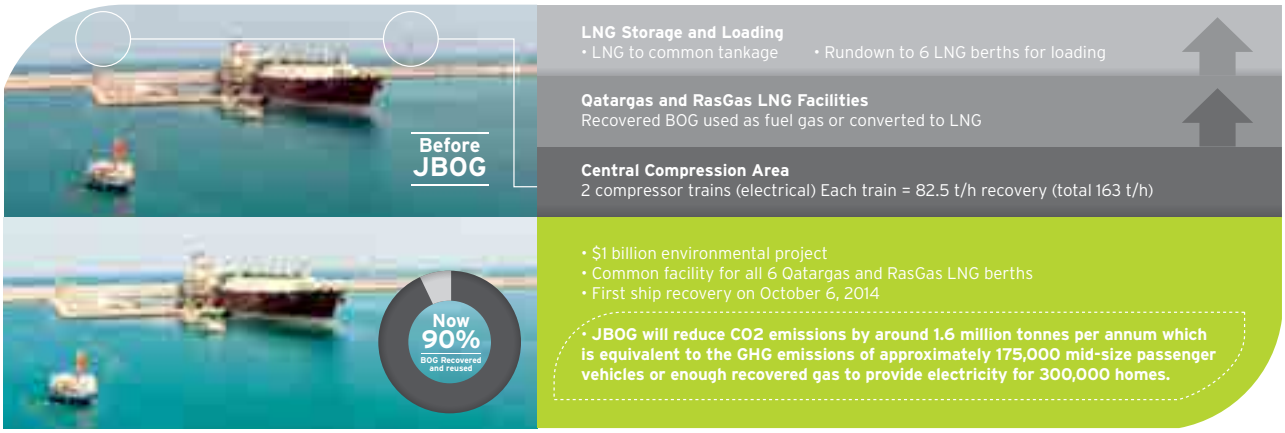
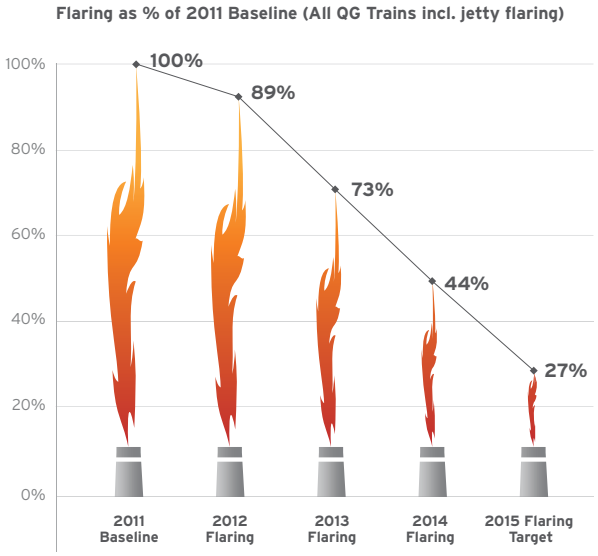



Figure 14 – Qatargas JBOG

## 2015 Flaring Outlook

With JBOG and our continued focus on operational excellence initiatives and reduction in shutdown flaring, we expect to be able to further reduce our 2014 flaring totals by approximately 40% in 2015, culminating in an overall 70 - 75% reduction in flaring from our 2011 baseline.




## GHG Emissions and Climate Change

Managing GHG emissions is a key to mitigating the effects of climate change, motivating companies to reassess their operations and become more energy efficient to reduce GHG emissions. In this context, Qatargas has an established GHG Management Strategy which recognizes the need to proactively address future carbon management requirements.

### GHG Management Strategy

As part of our GHG Management Strategy, Qatargas embarked on a three phased approach, as shown in Figure 15 below, to understand and quantify our emissions profile and explore emission reduction opportunities. In 2014, as part of Phase 3 of this strategy, we completed the technology and life-cycle assessments to identify specific opportunities to further mitigate our carbon footprint. The GHG Management Strategy is being developed further to maintain and optimize emissions reduction for the existing plant with emphasis on future developments. Future projects will be assessed for implementation based on technical feasibility, availability and GHG abatement impacts while the core focus areas for the existing plant will be energy efficiency, waste heat recovery, process integration and flare reduction.

**Phase 1**

**Years: 2006 - 2009**

**What it included?**

- Understanding GHG and Climate Change issues and associated implications / risks
- Outlining the process to develop GHG Management Framework and Strategy

**Phase 2**

**Years: 2009 - Ongoing**

**What it included?**

- Establishment of robust and verified asset-wise inventories, data sets, targets and KPIs
- Implementation of GHG Management Strategy

**Phase 3**

**Years: 2013 - Ongoing**

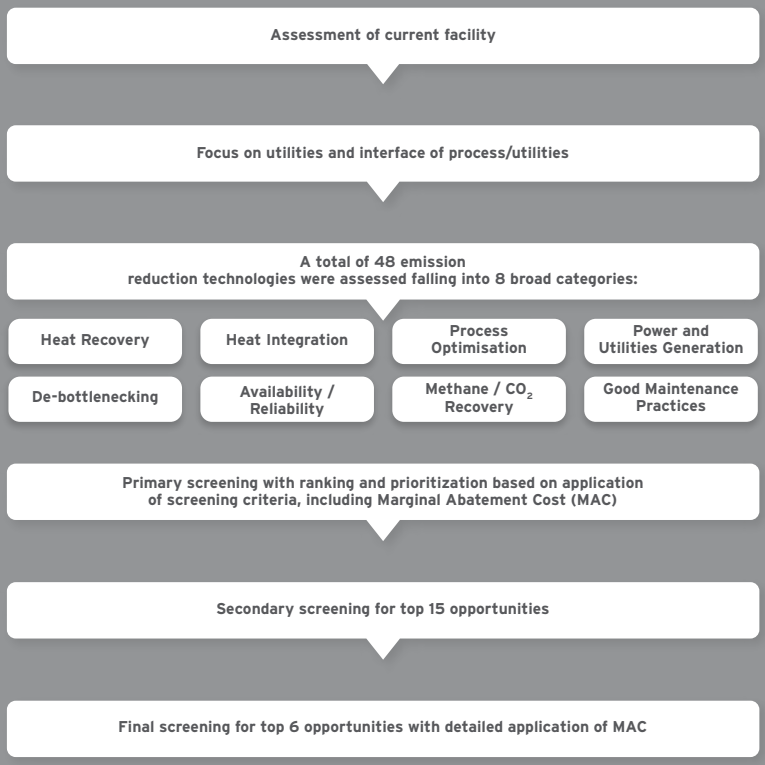
**What it included?**

- Exploring process optimization, enhanced energy efficiency
- Lifecycle GHG assessment and global level benchmarking

Figure 15 - Qatargas GHG Management Strategy

## Technology Assessment

The Phase 3 Technology Assessment identified areas where potential energy savings could be made, realizing process and operational improvements, while further reducing GHG emissions. The approach taken for this study is summarized below.




Significant GHG emission reductions could potentially be realized through implementation of the opportunities identified as part of this assessment. Approval for implementation is dependent on multiple factors such as operational flexibility, waste heat use, reliability and space constraints. Further detailed studies will be conducted to assess the technical, operational and commercial feasibility of the most promising options.

## GHG Performance

The Qatargas GHG emissions inventory is based primarily on the European Union (EU) Monitoring and Reporting Guidelines (MRG2007) with reference to the internationally recognized World Resources Institute (WRI) and World Business Council for Sustainable Development (WBCSD) GHG Inventory Protocol. Our emissions inventories, accounting and reporting procedures are audited and certified annually by Qatar Petroleum (QP) and its external auditors.

Our reported GHG emissions are a combination of $CO_2$, $CH_4$ and $N_2O$ and are presented in units of $CO_2$-equivalent ($CO_2e$) as shown in the table below.

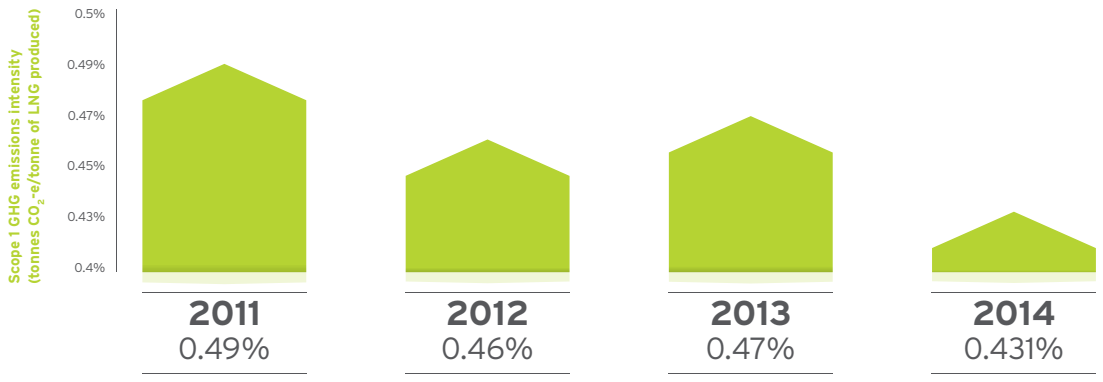
| GHG Emissions | 2012 | 2013 | 2014 |
|---|---|---|---|
| Total GHG emissions (tonnes $CO_2e$) | 25,605,889 | 26,488,023 | 25,037,372 |
| Direct (Scope 1*) GHG emissions (tonnes $CO_2e$) | 19,021,540 | 19,786,093 | 18,431,841 |
| Indirect (Scope 2**) GHG emissions (tonnes $CO_2e$) | 274,982 | 567,618 | 561,197 |
| Other indirect (Scope 3***) GHG emissions (tonnes $CO_2e$) | 6,309,367 | 6,134,312 | 6,044,334 |

* Scope 1 – Direct GHG emissions from within our organizational boundaries. Current focus and forms bulk of our GHG footprint
** Scope 2 – Indirect GHG emissions from outside our organizational boundaries (usually purchased electricity)
*** Scope 3 – Other indirect GHG emissions resulting mainly from product shipping and business and employee travel.



GRI G4-DMA: Emissions G4-EN15 G4-EN16 G4-EN17 G4-EN19

GHG intensity, expressed in tonnes of GHG per tonne of LNG, is another metric that we utilise in trending performance of our Scope 1 (Direct) LNG emissions and is shown in Figure 16.




**Note:** From 2014 onwards, Qatargas GHG intensity is presented in a 3 decimal format to provide better resolution for internal benchmarking purposes.

Figure 16 – GHG Emissions Intensity

In 2013, we set an internal target to achieve a 6-8% reduction in our Scope 1 GHG emissions intensity by 2015. We achieved a 6% reduction between 2013 and 2014; these gains being attributed to a reduction in flaring, as well as the reliable and sustained operation of heat recovery steam generators (HRSGs) at our LNG mega-trains. HRSGs are designed to recover heat from turbine exhaust gas to produce steam, thus reducing boiler fuel gas consumption and consequent GHG emissions.

Approximately 75% of our direct GHG emissions come from fuel combustion. Another 19% occurs naturally in our offshore gas, which is also known as inherent or formation $CO_2$. GHG emissions attributable to flaring have been reduced from 11% in 2013 to 6% in 2014 due to the flare reduction initiatives and projects described earlier.

## Energy Consumption

Qatargas' primary source of direct energy consumption is the combustion of internal fuel gas needed to generate electricity, heat and steam to meet process and utility requirements. Diesel is also used for on-site mobile sources (company vehicles and forklift trucks) and emergency generators. Indirect energy consumption encompasses electricity and water purchased. In 2014, our total energy consumption decreased by approximately six million gigajoules (GJ) or 2% from 2013 consumption levels. This decrease is attributable to enhanced heat recovery via our Qatargas 2 HRSGs and improvements made in calculating waste gas volumes incinerated by our RLTO Common VOC incineration facility. In 2014, Qatargas also began to track elements of energy consumption occurring outside the organization resulting from our activities, including consumption for business travel and use of company-operated vehicles.

| Energy (GJ) | 2012 | 2013 | 2014 |
|---|---|---|---|
| Total energy consumption | 269,914,865 | 280,030,498 | 274,204,429 |
| Direct energy | 269,270,443 | 277,783,752 | 271,957,671 |
| Indirect energy | 644,422 | 2,246,746** | 2,202,376 |
| Energy consumption outside the organization* | | | 44,382 |

* Includes consumption for flights for business travel and use of company-operated vehicles.
** Increase between 2012 and 2013 due to handover of new common storage and loading facilities and increased usage and better energy accounting for our existing RLTO common facilities.

# Air Emissions

The LNG production and condensate refining process result in emissions of Nitrogen Oxides ($NO_x$) and Sulphur Dioxide ($SO_2$) due to operation of combustion units to meet utility and process requirements. Smaller quantities of Volatile Organic Compounds (VOC) are also emitted, primarily in the form of fugitive emissions from process piping components.

| Air Emissions | 2012 | 2013 | 2014 |
|---|---|---|---|
| $NO_x$ (tonnes) | 11,555 | 11,375 | 10,855 |
| $SO_2$ (tonnes) | 14,033 | 12,390 | 12,482 |
| VOCs (tonnes) | 1,157 | 1,658 | 800 |

## $NO_x$

Qatargas has implemented a $NO_x$ Emission Reduction Compliance Action Plan (CAP) for our older QG1 LNG facility to meet revised MoE $NO_x$ emissions requirements. This involved the installation of low $NO_x$ combustion systems at a total of 29 emissions sources starting in 2008, which included our QG1 LNG process turbines, boilers, heaters and Gas Turbine Generators (GTGs). In 2014, the final QG1 GTG was retrofitted with a Dry Low $NO_x$ (DLN) combustion system and the final boiler will be equipped with Low $NO_x$ burners in 2015. Our overall $NO_x$ emissions in 2014 were approximately 4.5% lower than 2013 due primarily to reduced flaring.

### Qatargas CEMS

As per the State of Qatar environmental regulations, Qatargas is required to provide Continuous Emissions Monitoring Systems (CEMS) on all fired units over 25 Mega Watts to measure $NO_x$ emissions as well as other pollutants of concern. Until 2013, there were 45 CEMS installed at Qatargas facilities, with the majority of them at our newer QG2 and QG3 and QG4 LNG facilities. In 2014, we completed implementation of a Compliance Action Plan (CAP) through which a further 26 CEMS were installed at our older Qatargas 1 LNG trains. An additional four CEMS were also commissioned as part of our new QG1 PMP and LR DHT facilities in 2014 which has brought our current CEMS count to 75.

To facilitate CEMS maintenance, testing and performance management considerations, Qatargas established an inter-disciplinary CEMS Management Team (CMT). The CMT manages and oversees CEMS performance, reviews and tracks progress of QG CEMS Projects, including CEMS modification and repairs, and coordinates USEPA-compliant Calibration and Relative Accuracy Test Audits (RATAs) for Qatargas CEMS in line with MoE permit requirements.

## $SO_2$

There was no significant change in our $SO_2$ emissions from 2013 to 2014. Although overall flaring was reduced during the year, the resulting $SO_2$ emissions reduction was partially offset by flaring events involving SRU reject gas and untreated fuel gas at our QG1 and LR facilities in the first half of 2014. A third SRU was also added to our QG1 LNG facility as part of the new PMP unit with a design sulphur recovery rate of 99.25%. This new SRU will significantly improve the availability of our QG1 SRU and LR amine treatment facilities resulting in reduced $SO_2$ emissions from both QG1 and LR.

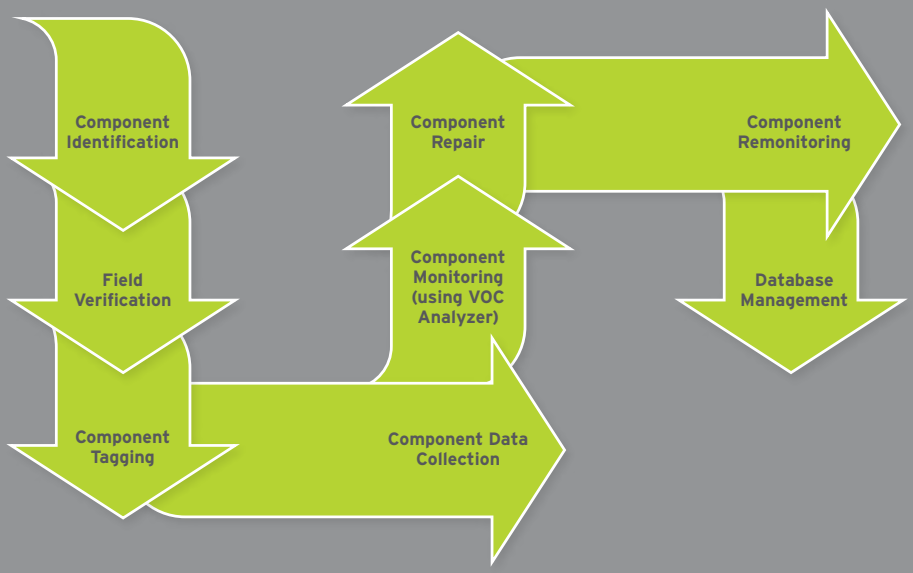
## VOCs

Qatargas saw a marked decrease in our VOC emissions in 2014. This was attributable to our continued implementation of a Leak Detection and Repair (LDAR) program at our LNG, LR and RLTO facilities as well as the significant reduction in flaring, particularly SRU reject gas flaring at QG1, as compared with 2013. We also extended our LDAR program to our RLTO Common LPG facilities where an additional 11,000 components were monitored and identified leakers repaired.

## Qatargas LDAR Program

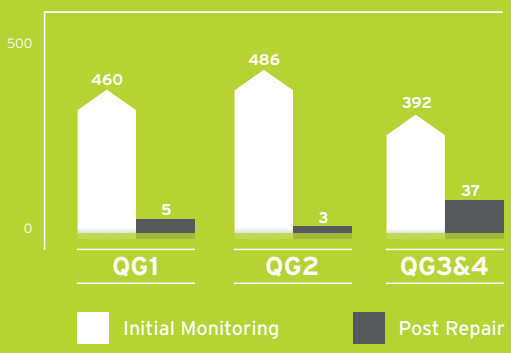
VOCs contribute to atmospheric photochemical reactions leading to the formation of ground level ozone. It is therefore important to minimize fugitive emissions of these compounds to the lowest levels possible. At Qatargas, approximately 72,000 VOC components are monitored as part of a robust fugitive emission Leak Detection and Repair (LDAR) program, established for our LNG, refinery and RLTO storage and loading facilities. The LDAR program has been broadly structured on USEPA 40CFR60 standards and applies to photochemically reactive VOCs such as propane, butane and higher hydrocarbons. The components covered as part of the program include pump seals, compressor seals, valves, pressure relief devices, flanges and connectors and open-ended lines.

The LDAR program comprises the following main steps which are conducted as part of an annual implementation cycle at our various facilities:

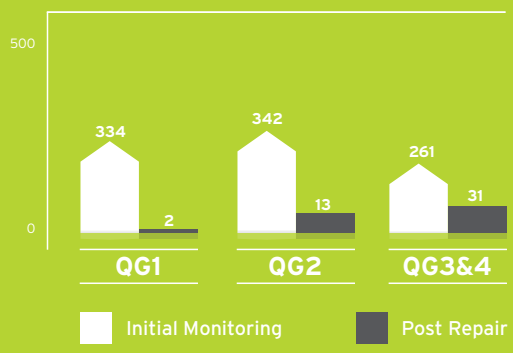



The graphs below depict the significant positive impact of our LDAR program at the QG1, QG2 and QG3&4 LNG facilities between 2011 and 2014, with an average emission reduction of 97%.

**Component Leaks Identified and Repaired During Annual LDAR Implementation (2011-2014)**




**VOC Emissions (Tonnes/Year) Measured and Reduced During Annual LDAR Implementation (2011-2014)**



# Water

Our 2014 water consumption increased by approximately 4% due to the commissioning of the QG1 PMP and LR DHT facilities. The PMP facility also included a new desalination unit which accounted for the increase in desalinated water generated onsite and the accompanying decrease in water purchased from Kahramaa. In addition, the QG1 irrigation system, which was shutdown for modification during PMP construction in 2013, became fully operational again in 2014 allowing for a significant increase in wastewater used for irrigation.

| Water Management ($m^3$) | 2012 | 2013 | 2014 |
|---|---|---|---|
| Seawater used for non-contact, once-through cooling (onshore) | 3,761,597,718 | 3,733,898,900 | 3,762,481,215 |
| Desalinated water consumed | 4,416,617 | 4,329,053 | 4,505,991 |
| From Kahramaa | 2,643,072 | 2,440,410 | 2,407,935 |
| Generated onsite from seawater | 1,773,545 | 1,888,643 | 2,098,056 |
| Treated process wastewater injected into subsurface formations | 1,291,751 | 1,254,375 | 1,237,128 |
| Treated process and sanitary wastewater discharged to sea (excluding non-contact seawater for once-through cooling) | 950,529 | 961,556 | 958,996 |
| Treated process and sanitary wastewater used for irrigation | 74,062 | 60,181 | 104,868 |

Qatargas acknowledges the crucial role industry has to play in advancing the QNV 2030 objective of sustainable water use and has accordingly developed a wastewater management approach centred on the three pillars of reduction, re-use and recycle. The cornerstone of this approach was our decision to commence implementation of advanced wastewater treatment, reuse and recycling units for our production facilities in 2013. These projects are currently in various stages of implementation at our Qatargas 1, Qatargas 2 and Qatargas 3&4 LNG facilities as well as Laffan Refinery.

Our advanced wastewater treatment approach illustrated in Figure 17 builds upon the success of our QG1 Membrane Bioreactor (MBR) Project (expected to come online in 2015) and will include upgrading the existing treatment units at our LNG and LR facilities with MBRs, Reverse Osmosis (RO) and Multi-media Filtration (MMF) by 2016-2017. The treated water will meet desalinated water specifications and will be reused as boiler feed and service water within plant sites.

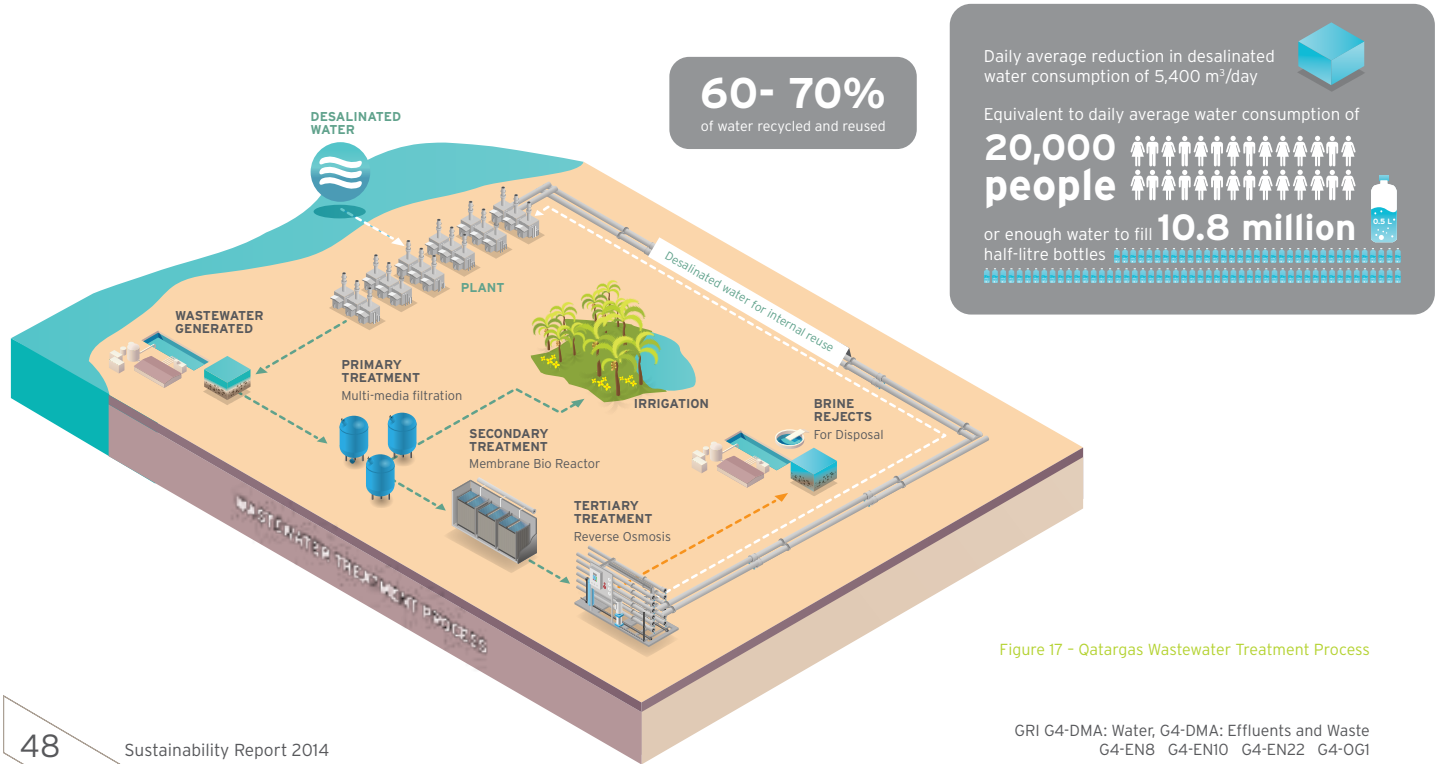



Figure 17 – Qatargas Wastewater Treatment Process



GRI G4-DMA: Water, G4-DMA: Effluents and Waste
G4-EN8 G4-EN10 G4-EN22 G4-OG1

# Waste

Based on the recent rapid expansion of our operating facilities, which resulted in a substantial increase in our overall waste generation rates as well as the diversity of our hazardous waste streams, we recognized the need for a long-term and sustainable waste management approach based on the pillars and elements outlined in Figure 18.

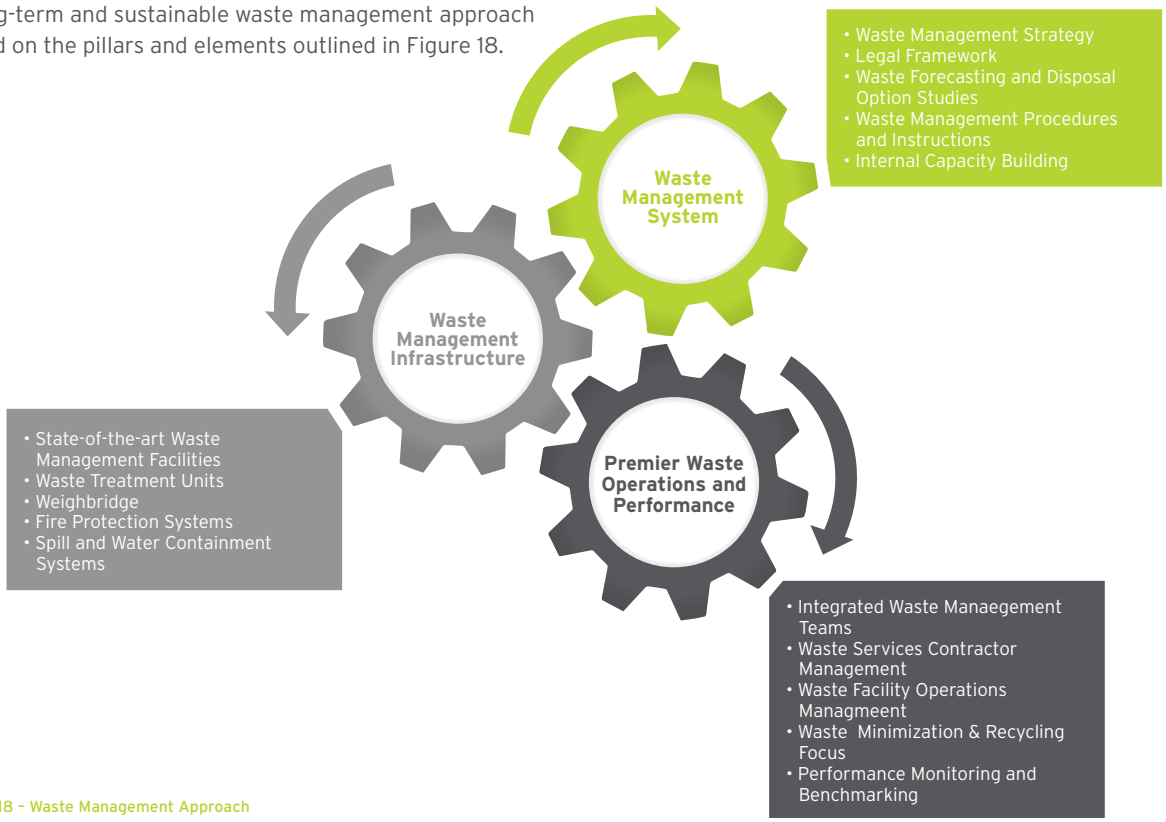



Figure 18 – Waste Management Approach

In line with our long-term waste management approach, Qatargas has commenced development of new, state-of-the-art onsite Waste Management Facilities with construction due to commence in 2015. These newly designed facilities will allow safe and environmentally sound handling, segregation and storage of the wide variety of waste streams we generate, and have provision for additional waste storage capacity during facility shutdowns and turnarounds. These new facilities will also have plot space to accommodate treatment units if required in the future.

## Performance

Qatargas generated approximately 7,065 tonnes of hazardous and non-hazardous wastes in 2014, primarily from several facility turnarounds. Most of the hazardous waste generated from our facility turnarounds are Alumina based molecular sieves which were partly disposed to landfill in 2014, with the remainder scheduled for disposal in 2015.

| Waste Generation and Disposal | 2012 | 2013 | 2014 |
|---|---|---|---|
| Hazardous waste generated (tonnes) | 4,099 | 2,769 | 3,217 |
| Non-hazardous waste generated (tonnes) | 5,500 | 3,103 | 3,849 |
| Total waste generated (tonnes) | 9,599 | 5,872 | 7,065 |
| Waste recycled (tonnes) | 4,569 | 1,775 | 2,038 |
| Percentage of recycled waste relatively to the total waste generated (%) | 48% | 30% | 29% |

## Electronic Internal Waste Transfer (e-IWTF) System

In 2014, Qatargas completed the e-IWTF project aimed at improving and streamlining internal management of waste processes and associated waste data. The objective was to develop a system which will allow Qatargas to transition from the use of paper-based documentation to an automated action management system. The new e-IWTF system was developed and successfully rolled out to all Qatargas assets with 95% of waste transfer requests now being raised using this system.

Overall, the e-IWTF system has significantly improved coordination between waste generators and handlers. This has reduced response times and increased efficiency of our waste operations along with improvement in waste data accuracy and availability. Waste generators benefit from the e-IWTF system by:

- Spending less effort to prepare and submit their waste transfer requests.
- Streamlined waste nomenclature.
- Submitted requests reach the executing recipients who are electronically notified to respond.
- Detailed feedback is provided to waste generators once the waste has been successfully removed from the site.

## Qatargas Old Sulfur Silo Demolition Project

Due to the rapid increase in production in RLC in recent years, the Common Sulfur Plant (CSP) operated by Qatargas RLTO at Ras Laffan Port was constructed to supersede and replace the old Sulfur Storage Silo (Old Silo). The demolition of the Old Silo was a technical and environmental challenge due to its close proximity to the presently operating CSP, the need for safe removal of approximately 12,500 tonnes of granulated sulfur stored in the Old Silo, and the demolition of the cylinder shaped reinforced concrete Old Silo (53 meters in diameter and 37 meters in height). In response to the above mentioned challenges, Qatargas established an Environmental Management Program for the demolition project focused on permitting and regulatory compliance, environmental monitoring and controls as well as waste management planning by identifying and securing waste disposal routes with the main objective to maximize recycling.

All granulated sulfur stored in the Old Silo was moved to the new CSP sulfur storage area and shipped for sale as sulfur product. Scrap steel and concrete represented the two main waste streams from actual demolition. Waste concrete was first cut onsite to smaller pieces no larger than 30 cm in diameter and sent to a RLC land reclamation site. More than 800 truck trips between the Old Silo area and the RLC site were required for the 21,198 $m^3$ of concrete to be removed. Approximately 932 tonnes of scrap metal was provided to metal recyclers.

The demolition of the Old Silo was finished in October 2014 upon completion of area reinstatement activities and RLC environmental inspections. This was the first major demolition project of its scale at Qatargas with more than 95% of waste streams recycled.

Old Silo before demolition

Old Silo area after demolition and reinstatement

## Environmental Awareness

In line with the National Development Strategy (2011-2016) goal of an "increasingly environmentally aware population", Qatargas launched our Go Green environmental awareness program in 2014. The aim of the Go Green program is to foster environmentally conscious attitudes and behaviour within our employees and to eventually build a work culture that promotes:

- **Awareness** and **sensitivity** to the environment and environmental challenges;
- **Knowledge** and **understanding** of the environment and environmental challenges;
- **Attitudes** of concern for the environment and **motivation** to improve or maintain environmental quality;
- **Skills** to identify and help resolve environmental challenges.

Four quarterly, theme-based Go Green campaigns were launched in 2014, each highlighting a key environmental issue as shown in Figure 19 below, including water conservation, energy conservation, waste management and climate change. The campaigns were designed to provide employees with specific actions they could take to help minimize our impact in these areas through posters, email spotlights and Qatargas Pioneer magazine articles. The Go Green program was renewed in 2015 as a corporate objective to focus on a new set of topics and will also be extended to our Al-Khor Qatargas-RasGas Housing Community schools.


Figure 19 – 2014 Quarterly Environmental Campaigns

We have supported the annual QP Environment Fair since its inception where a wide variety of our educational and process related environmental initiatives are showcased for the public. The 2014 Fair theme was "Use of Water in the Oil and Gas Industry" and the Qatargas stand attracted hundreds of visitors, including students from several schools. Our stand focused on our initiatives to reduce water consumption and increase its re-use. Tips and information on water and the importance of this vital resource were highlighted employing several interactive methods. Our advanced wastewater management plans were demonstrated at the stand and we also presented a paper on the "Qatargas Wastewater Reuse Program".

## Biodiversity

Qatargas recognises the importance of Qatar's biodiversity mix. Preserving sensitive habitats and protecting endangered species form part of our commitment to environmental stewardship. In an effort to minimise our impact to nearshore coral colonies during construction of our Qatargas 2 and Qatargas 3&4 LNG Projects, we relocated approximately 4,500 living hard corals from near-shore pipeline routes to a coral reef area known as Fasht al Hurabi in 2007. Qatargas has conducted regular environmental monitoring surveys to determine the success of the relocation programme and establish a baseline for the monitoring of the reef health and viability.

As founding members of the Laffan Environmental Society (LES), we have also supported industry-wide programmes for turtle monitoring and beach protection during the past several years. We instituted an Annual Beach Clean-up Day in 2013 in conjunction with MoE. The 2nd annual beach clean-up was conducted on 17 May 2014 at Al Ghariya beach, about 85 kilometers north of Doha.

## Spills

There were no reportable environmental spills or hydrocarbon releases at Qatargas in 2014. While our pipeline and system integrity initiatives have contributed to preventing the occurrence of spills in recent years, these measures cannot completely eliminate the risk. Therefore, we have emergency preparedness and response plans in place to respond rapidly and completely if such an emergency does occur. To test and refine our response plans, we ran a total of 282 emergency exercises and drills in 2014 involving Qatargas Emergency Management Services (EMS) and Operations, and RLC Fire and Rescue Teams. Our EMS Division has maintained a five-minute response rate in more than 90% of the drills. Timely response to leaks is critical to ensuring the safety of people, environment and assets.

## Environmental Expenditure

In 2014, our expenditure on environmental issues and activities was over 11 million USD. This does not include major engineering projects such as the $1-billion JBOG Project and our other flare reduction, $NO_x$ abatement and wastewater recycling and reuse projects.

| 2014 Environmental Expenditure (USD) | |
|---|---|
| Environmental Management | 192,000 |
| GHG Emissions | 96,320 |
| Other Air Emissions | 634,000 |
| Wastewater Treatment | 24,000 |
| Waste Management | 8,749,609 |
| Biodiversity Protection | 27,000 |
| New Environmental Investments | 1,864,000 |
| **Total Environmental Expenditure (USD)** | **11,586,929** |

## Transporting our Product

Qatargas has the largest chartered fleet of liquefied natural gas carriers in the world. Qatargas uses a fleet that consists of conventional vessels, as well as Q-Flex and Q-Max chartered vessels specifically built for Qatargas. These mega-ships are more efficient with lower air emissions on a per-cargo-ton-mile basis. The Q-Max is 80% larger than the conventional Q-Fleet ships and consumes 40% less energy per cargo-ton mile.

Qatargas continues to study options to further reduce emissions of $NO_x$, $SO_2$, and $CO_2$ from our LNG vessels. An option currently being piloted is the conversion of slow speed diesel engines to burn LNG through Main Engine Gas Injection (ME-GI). A pilot ME-GI will be installed on one long term chartered Q-Max vessel in the second quarter of 2015; once the evaluation of this pilot application has been completed, a decision will be made on expanding the use of this technology to other suitable vessels in the fleet.

In 2014, Qatargas was awarded the British Safety Council Sword of Honour, recognising organizations who have demonstrated the highest levels of excellence in the management of occupational health and safety. Additionally, Qatargas was one of only five organizations worldwide to receive the British Safety Council Globe of Honour that recognises organizations who have achieved excellence in environmental management.

| 2014 Shipping Environmental Impact | QG-1 conventional | Q-Flex / Q-Max* | In-Chartered vessels | TOTAL |
|---|---|---|---|---|
| Number of vessels | 11 | 29 | 9 | **49** |
| Distance travelled (nautical miles) | 1,465,679 | 3,046,812 | 664,157 | **5,176,648** |
| Energy use based on fuel consumption (GJ) | 22,246,076 | 47,546,728 | 9,806,946 | **79,599,750** |
| $CO_2$ emissions (tonnes) | 1,510,589 | 3,756,219 | 770,606 | **6,037,414** |
| $NO_x$ emissions (tonnes) | 19,049 | 103,098 | 20,765 | **142,912** |
| $SO_2$ emissions (tonnes) | 11,889 | 74,728 | 14,703 | **101,319** |
| CAT B waste discharged to sea ($m^3$) | 75 | 174 | 42 | **291** |
| CAT A and other waste incinerated ($m^3$) | 453 | 1,006 | 238 | **1,697** |
| CAT A, C, E and other waste disposed ashore ($m^3$) | 397 | 3,517 | 442 | **4,356** |
| Ballast water exchanged and discharged to sea (tonnes) | 5,748,482 | 19,667,057 | 6,833,518 | **32,249,057** |
| Refrigerant gas replaced in fridges and HVAC (kg) | 1,203 | 6,244 | 1,220 | **8,667** |

*The Q-Flex / Q-Max vessels are owned by Nakilat who also report their environmental data in their own Sustainability Report.

# OUR PEOPLE

**SECTIONS**

- A Premier Team
- Recruitment and Career Development
- Diversity and Equal Opportunity
- Qatarization
- Training
- Engagement, Satisfaction and Retention

## A Premier Team

Becoming the premier LNG company requires a premier team of talented, empowered individuals, supported with the right training and placed in an environment that promotes engagement, innovation, achievement and, ultimately, results.

Qatargas is committed to creating and maintaining a world-class team through targeted recruitment, attentive performance management, and constructive career development and training. We are also committed to promoting diversity. We employ 3,043 staff members from 68 different countries, while focusing particularly on the development and recruitment of Qatari nationals.

### THE QATARGAS TEAM IN 2014

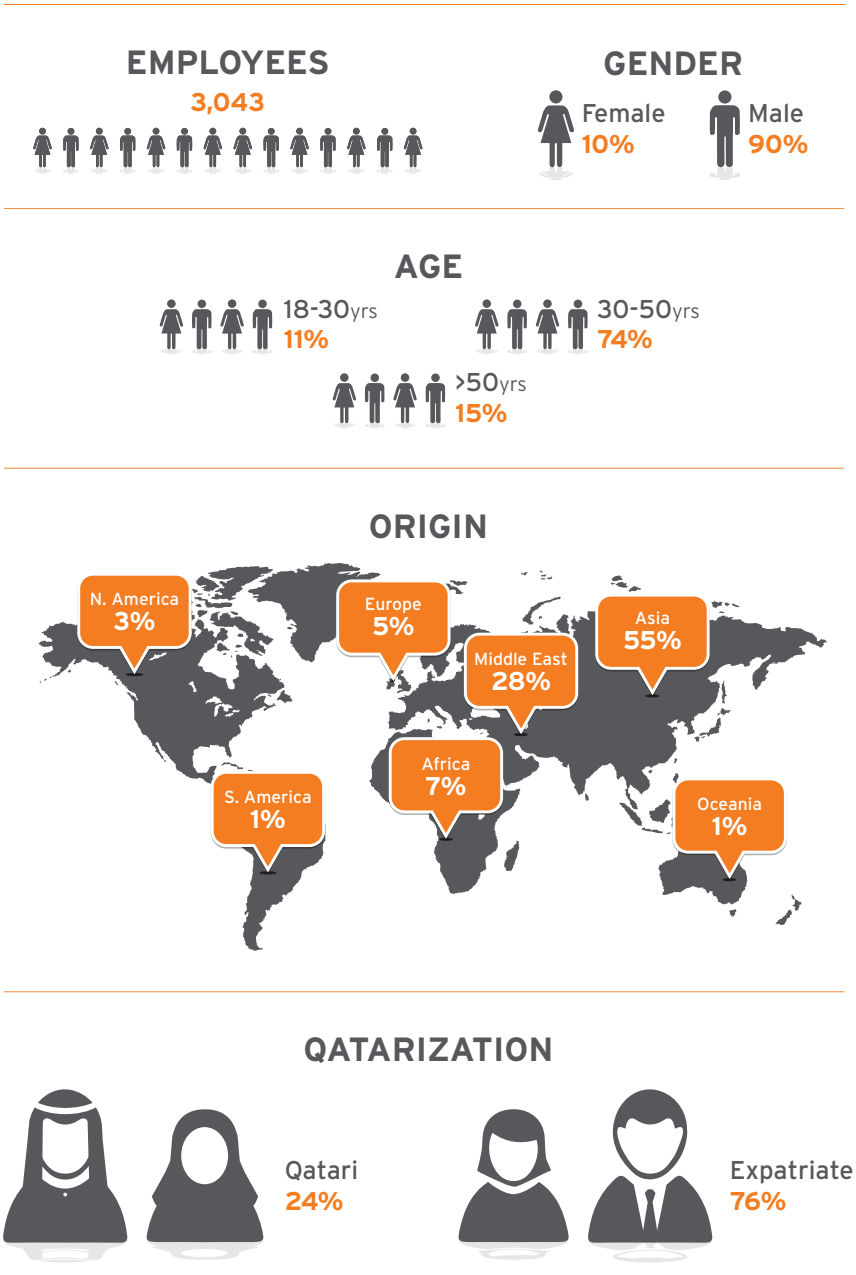



Figure 20 - Qatargas Team in 2014

## Recruitment and Career Development

In 2014, 247 new employees joined Qatargas, expanding the overall workforce by 48. Our recruitment strategy is based on a strong appreciation of the global employment market for our industry. This allows us to both target and select competent talent using direct souring methods, including outreach and engagement, recruitment events and exhibitions. Qatargas also utilises third-party firms to support in sourcing highly specialised positions.

We offer a highly competitive Total Reward package that is benchmarked against a number of global, local and peer group markets through participation in a number of local and international Total Reward surveys. In 2014, a number of salary and benefit improvements were introduced in order to better position specific job families as well as specific benefits in these markets. Furthermore, a review of the Company recognition programme was also conducted to ensure better recognition to those employees demonstrating unique or consistent premier performance.

| The Qatargas Team | 2012 | 2013 | 2014 |
|---|---|---|---|
| Total workforce | 2,850 | 2,995 | 3,043 |
| Permanent contract | 2,082 | 2,288 | 2,412 |
| Fixed term contract | 678 | 610 | 532 |
| Temporary contract | 90 | 97 | 99 |

### Career Progression

Career progression remains a high priority area, with many employees looking for more rewarding career paths. Qatargas HR Department has worked with a number of Organizational Groups in developing and implementing 11 enhanced career ladders in 2014 with clear role defined levels and descriptors (Job Family Models (JFM)). This continues to be a priority in 2015 and additional JFM reviews are targeted across the Organizational Groups within Qatargas.

### Performance Management

Performance management reviews are a critical part of assessing suitability for career progression as well as organizational efficiency and rewards. The performance management cycle at Qatargas includes establishment of Corporate Key Performance Indicators in accordance with the Business Plan, followed by personal KPIs by all Chief Operating Officers, translated down to S.M.A.R.T (Specific-Measurable-Achievable-Relevant-Time-based) objectives which are mutually agreed by employees and their supervisors. The fulfilment of employee objectives is revised and reported to the Corporate Planning Department on a quarterly basis.

A review of each individual employee performance is conducted mid-year, with a final appraisal at the end of each year. The reviews are used to determine performance based rewards or Performance Improvement Plans (PIPs) for employees that do not meet pre-set objectives.

Performance appraisals are not required for project based employees and employees on special assignment. This accounts for 8% of total employees. All other employees are expected to undergo appraisal, and in 2014, 95% of all employee appraisals were completed.

| Performance | 2012 | 2013 | 2014 |
|---|---|---|---|
| Number of employees required to be appraised | 2,774 | 2,921 | 2774 |
| Percentage of employees who received a formal appraisal and review (%) | 100% | 96% | 95% |



GRI G4-10 G4-LA2 G4-LA10 G4-LA11 G4-DMA: Employment


## Diversity

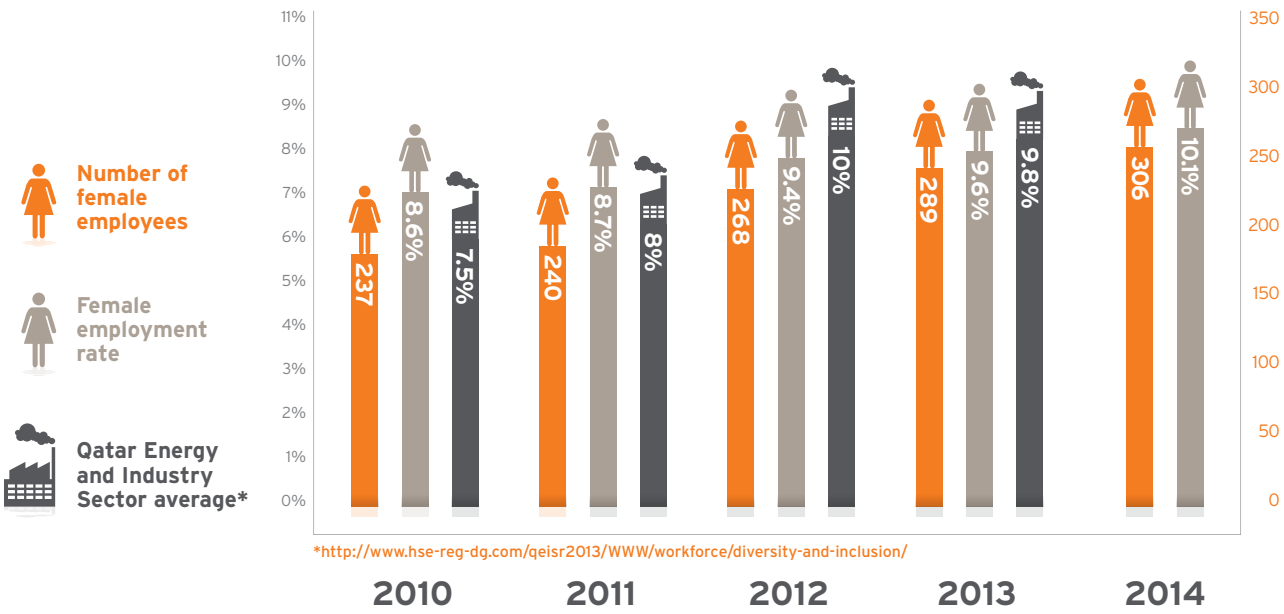
Qatargas actively promotes and protects diversity in the workforce as it provides the opportunity to learn from a wide range of professional experiences that bring new perspectives to everyday operations.

| Diversity | 2012 | 2013 | 2014 |
|---|---|---|---|
| Male (%) | 90.6 | 90.4 | 89.9 |
| Female (%) | 9.4 | 9.6 | 10.1 |
| 18-30 (%) | 12.2 | 12.9 | 11.2 |
| 30-50 (%) | 72.4 | 72.0 | 73.4 |
| >50 (%) | 15.4 | 15.1 | 15.4 |
| Asia (%) | 55.4 | 54.8 | 55.6 |
| Middle East (%) | 23.8 | 24.3 | 28.2 |
| Africa (%) | 11.1 | 12.2 | 7.5 |
| Europe (%) | 5.2 | 4.6 | 4.8 |
| North America (%) | 3.5 | 3.1 | 3 |
| Oceania (%) | 0.6 | 0.6 | 0.5 |
| South America (%) | 0.3 | 0.4 | 0.4 |

Qatargas has a strict Ethics Policy and Employee Relations Policy that apply to the entire workforce. They enshrine the concept of equal opportunity as Qatargas will not tolerate discrimination, on the basis of the race, religious beliefs, creed, colour, sexual orientation, physical disability, mental disability, marital status, age, ancestry or place of origin. Through this policy, Qatargas aims to create a working environment where everyone feels equal and appreciated. The hiring of qualified Qatari nationals and our competence based selection process, underpinned by occupational business requirements, are the only exceptions.

## Female Employment

In line with the goals of the Qatar National Development Strategy 2011-2016, Qatargas continues to actively promote female participation in the workforce. As a result, female employment has risen in real terms, as well as a percentage share of the workforce, consistently for the past five years.




*http://www.hse-reg-dg.com/qeisr2013/WWW/workforce/diversity-and-inclusion/

To help recruit and retain national female employees, Qatargas participates in international events related to female workforce participation, such as the IGU-UNESCO workshop 'Women in Engineering' which was held in Paris. Qatargas also encourages employees to participate in the ExxonMobil's Professional Women's Network (EMRA'A) and Energy and Industry workshops targeted at female employees.

To ensure equality between genders, the Salary Management Policy applies equally to male and female employees alike; any differentiation of salary gradation is based solely upon the position that the employee is holding. Qatargas also ensures job security for female employees that choose to take maternity leave. In 2014, 12 employees took maternity leave, 11 of whom returned to work. Of the employees that returned from maternity leave in 2013, 100% were still employed 12 months after their return.

### Female First

Qatargas Corporate Planning Analyst, Hessa Al Nesf, has become the first Qatari National to be awarded Incorporated Engineer (IEng) status by the Institute of Chemical Engineers – an internationally recognized qualification established by the Engineering Council of the United Kingdom. When Hessa started she was the only female, and the only Qatari national Process Engineer in the plant. Through hard work and dedication, she has achieved this accreditation, as well as the attention and respect of the whole energy and industry sector.



GRI G4-LA3 G4-DMA: Diversity and equal opportunity G4-LA12

## Qatarization

In line with Qatarization objectives of the country, set out in the Qatar National Vision 2030 and the National Development Strategy 2011-2016, Qatargas has set a target to have highly qualified Qatari nationals make up 50% of the total workforce by 2020. In order to achieve this target the company is actively investing in the education and training of young Qataris. Qatargas also has well-established strategies and programmes to attract, develop and retain talented national employees.

Qatargas is currently halfway towards its 2020 target, with another five years remaining. In 2014, the number of Qatari employees dropped reflecting the challenging labour market faced by all companies in Qatar. Nonetheless our ambition and commitment over the long term remains the same. In recognition of our efforts and contribution to national workforce development, in 2014, Qatargas won the prestigious 'Qatarization Crystal Award', selected from over 40 companies for "Supporting Qatarization".

| Qatarization | 2012* | 2013 | 2014 |
|---|---|---|---|
| Number of Qatari employees | 572 | 613 | 602 |
| Qatarization rate (%) | 25.8 | 26.1 | 24.1 |
| Qatarization of management positions (%) | 40.1 | 37.5 | 44.4 |

*2012 figures adjusted due to revised methodology

**"I would like to thank Qatargas for investing in me. When I started I was just Hessa, but through my work and recognition they had the confidence and the trust to invest in my career and now I am a fully accepted professional."**

**Hessa Al Nesf,**
Corporate Planning Analyst

## Recruiting Nationals

Qatargas places a major emphasis on the development of young Qatari nationals before they enter the workforce, supporting their education, particularly in technical programmes, with the potential to join Qatargas upon graduation. This helps to reduce the recruitment of nationals from the existing saturated talent pool.

The Qatargas Outreach Program focuses on partnering with the education sector, reaching out to schools and universities, participating in career fairs, events and presenting in schools and academic institutions. In 2014, Qatargas participated in over 30 networking events in Qatar and abroad, with Qatari employees acting as 'role models' at such events, providing career advice and sharing their experiences with the students.

In 2014, Qatargas also ran a themed 'Hayyakum' recruitment fair, in which we invited selected applicants to interview for opportunities within Qatargas. During this event, we provided a background to a career within the LNG Industry and highlighted our training programmes that are tailored to the personal development requirements of each employee or trainee.

Qatargas currently sponsors scholarships for 10 Qatari students pursuing bachelor degrees in Qatari educational institutions, and 59 Qatari students studying abroad (21 in the USA, 37 in the UK, 1 in Japan).

## Development and Retention of our Nationals

The Development Committee for Nationals is chaired by the CEO and focuses on investment in talent for the long term. To develop and retain national employees, Qatargas provides a combination of training opportunities, competency-based development programmes, international secondments, and support for further education, together with regular engagement, reward and recognition to track and accelerate progress.

A CEO Forum is held annually, providing Qatari nationals with the opportunity to share their experiences of working or training in Qatargas directly with the CEO. In 2014, a total of 20 awards were distributed for Best Graduates, Best Trainees and Best Coaches among Trainees and Graduates.

### Technical Training Programmes

Technical training programmes focus on progressing Qatari graduates to fully qualified professionals. These include:

- **Lab Technician Training Programme** – initiated in 2014, is a two-year training programme for laboratory technicians designed to combine theory related to day-to-day laboratory tests alongside workplace learning.
- **Targeted Technical Preparation Programme (TPP)** – is a two-and-a-half year programme designed to identify, select and train Qatari nationals who will deliver specialized technical expertise essential to the continuing success of Qatargas. Theoretical training is provided at the College of the North Atlantic Qatar (CNAQ), while the practical component takes place at the Ras Laffan plants. In 2014, 40 Qatari secondary school graduates were recruited for the TPP. Candidates for trainee positions at Qatargas are selected from participants in the TPP programme. The selected candidates follow structured classroom and workplace training programmes in order to gain the required certification and levels of competence in order to fill a permanent position in the company.
- **Technical Training Programme Workplace Learning Phase (WPL) Enhancement** – in 2014, an enhanced version of the TTP was launched, focusing on more efficient workplace learning and shorter probation periods in order to get Qatari trainees into the workforce faster.

### Training and Courses

Qatargas offers a wide range of training courses for Qatari employees to help them continue expanding their capability. These include:

- **Accountancy Training** – provided for 11 Qatari employees and delivered by tutors from Ernst & Young's training academy. This training qualifies the participants to prepare for the professional examinations of the Association of Chartered Certified Accountants (ACCA) – a leading global accounting body.
- **Cadre Leadership Development Programme** – designed for high potential head-level leaders, targeting mainly, but not solely, Qataris. In 2014, 17 new leaders joined phase one and 18 current leaders progressed into phase two.
- **Personal Impact courses** – were rolled out for 59 Qatari graduates throughout 2014, resulting in over 89% participant satisfaction rate.
- **Essential Business Skills Course** – designed to develop positive behaviours, attitudes and communication skills while building confidence.
- **English Training courses** – available to employees at the CNAQ, these ensure rapid upgrade in English language proficiency.
- Qatargas also provides immersive, on-the-job experience to Qatari trainees to familiarise them with real-world working conditions. Graduates from the Legal Department are given the opportunity to work alongside senior lawyers on mega-engineering projects, major LNG supply agreements, corporate governance, anti-trust compliance and shipping.

### Support of Further Education

Qatari employees are provided the opportunity to take up further education, including a Higher National Diploma (HND), Bachelor and Master's Degree programmes at leading international universities and colleges, in Qatar and abroad. The focus is on specialized disciplines, which are critical to Qatargas' business success. Upon successful completion, students are provided with an Individual Development Plan (IDP) and supervised by a subject matter expert.

### Secondments

Qatargas offers development opportunities for Qatari employees by sending them on international secondments and training exercises, including in the USA, UK, Australia, Malaysia, Japan, Italy, UAE and Turkey. This enhances their learning of international best practice, which they can then apply at Qatargas. Examples include secondments to a top London law firm, process safety training in Italy, an ongoing training partnership with Chiyoda in Japan and work assignments in partnership with RasGas in Malaysia.

# Training

Training and development at Qatargas is focused on providing optimal learning and career development opportunities, tailored to individual employee needs. Qatargas uses a recently developed Learning Solution (LSO) system to manage, track and deploy learning courses as required. It combines a portal for learners, where they can complete courses and view training history; for managers and supervisors, where they control training progress assigned to their team members; for instructors, where they manage the course; and for administrators. LSO offers various training methods, including classrooms, e-learning, and virtual training. The primary function of LSO is to align learning courses with organizational objectives, identifying any skills gaps of employees and to offer a corresponding training plan. The list of training programmes at the end of 2014 included over 400 courses covering the full spectrum of process and corporate operations in addition to soft skills and competency development. A total of 137,610 hours of training were provided in 2014; an average of 54 hours per employee. This represents an 87% increase from 2013, which can be attributed to better tracking of in-house training through the LSO and the expansion of 'Supervising the Qatargas Way' (see below). The cost of training increased by 7.6%, reflecting the emphasis on in-house training and development.

| Training | 2012 | 2013 | 2014 |
|---|---|---|---|
| Total hours of training | 42,914 | 86,000 | 137,601 |
| Average hours of training per employee | 24.5 | 28.7 | 53.8 |
| Total cost of spending (QAR) | 6,406,290 | 8,117,729 | 8,741,908 |

### Supervising the Qatargas Way (SQW)

SQW is a three-year course which has been running since 2012. The aim is to support Department Managers, Department Heads and Supervisors in driving Qatargas towards premier status amongst global LNG companies. It utilises what is known as 'Conversation 365', which encourages year-round feedback. The course consists of a series of workshops designed to highlight areas of key importance for business expertise and operational excellence. In 2014, over 750 employees were involved in SQW.

### Leadership Development

Qatargas leaders undergo a specifically designed set of leadership development programmes in accordance with the company wide Succession Plan. This provides evenly distributed depth of knowledge and management skills.

**Executive Leadership Development Programme** provides individual training to the Management Leadership Team (MLT). The programme was launched in 2013 and, to date, has involved psychometric assessments via a specifically designed UK online platform, a special feedback exercise, private coaching sessions and focused leadership development options for each leader.

**Senior Manager Development Programme** is for Department Managers who have completed fundamental leadership training. This programme was launched after all 22 Department Managers completed individual psychometric assessments and a feedback exercise. Moving forward, individual leadership development conversations will be conducted with each leader.

**Cadre Leadership Programme** is Qatargas' signature leadership development programme. There are now 34 Qatargas leaders participating in the Programme, 28 of who are Qatari nationals.

Figure 21 – Qatargas Leadership Development Programmes



GRI G4-DMA: Training and education G4-LA10

# Engagement, Satisfaction and Retention

Understanding and addressing employee needs and concerns is a critical part of creating an open and engaging workplace that people connect with. Qatargas listens to its employees through a range of formal and informal mechanisms. As a result, employee retention has increased.

## Engagement

Employees at Qatargas can engage with the organization through various channels of communication, including: Town Hall meetings, 'Ask the CEO' on the intranet, performance reviews, employee surveys, online HR portals and helpdesks, lunch-and-learn sessions and of course through direct engagement with line managers and top management.

Various events are also conducted throughout the year for employees and their families. In February 2014, Qatargas held its annual Gala Dinner for its employees and spouses, where 21 CEO Awards were presented to those employees that have provided the most valuable contributions to the company. More than 4,000 Qatargas employees and their family members joined sport activities during the National Sport Day.

In addition, there are events such as the Learning Olympics, the Gold Edition of which was held twice in 2014. As many as 508 employees participated in fun learning events including a 'Writing Constructive Feedback for Mid-Year and End Year Appraisal' workshop. Workshops on the SAP Learning Management System, a survey and on-the-spot analysis of preferred learning styles were also conducted.

## Satisfaction

Qatargas conducts a range of surveys to collate opinions and ascertain employee engagement and satisfaction. Throughout 2014, Qatargas addressed issues raised in the 2013 Employee Opinion Survey through the Corporate Employee Opinion Action Plan. By the end of 2014, all recommended interventions, relating to management style, Total Reward Model, career progression and image in the local community had been implemented.

| Our employees are concerned with... | Qatargas has responded by... |
|---|---|
| Management style | Increasing its delivery of 'Supervising the Qatargas Way', 'Cadre Leadership Development Programme' and the Senior and Executive Development Programmes. For more information, see page 62. |
| Total Reward Model | Benchmarking and reviewing its total rewards package, and altering various levels to reflect the employment marketplace. For more information, see page 56. |
| Career progression | Developing 11 enhanced career ladders in 2014, with more to be added in 2015. For more information, see page 56. |
| Image in the local community | Establishing a cross-functional team to develop a plan for changing the community's perception of Qatargas. |

Figure 22 – Responding to Employee Feedback

In February of 2014, Qatargas conducted an Individual Performance Management (IPM) Customer Survey. Employees provided their feedback on IPM and the Performance Management Process. The analysis of 399 responses has brought up a list of actions to be implemented in 2015 that will help to improve performance management and the satisfaction of the workforce.

A survey of the Administration Group's performance was conducted, resulting in an overall satisfaction level of 88.7%, in the categories of communication, job knowledge and performance, and customer care. An action plan has been developed to address gaps identified in the survey.

## Grievance

The Employee Relations policy of Qatargas sets out a formal grievance mechanism that applies to all employees. In 2014, six grievance cases were formally logged, six of which were resolved. None of the cases were related to labour practices. Employees have the right of appeal against disciplinary action for dismissal and to escalate grievances to a higher authority within Qatargas.

Qatargas takes a zero tolerance position on harassment and in such cases, disciplinary action up to and including dismissal may be invoked in accordance with Company policy. The Company ensures that employees do not suffer any detriment for raising their concern. In 2014, no cases of harassment were formally reported.

## Retention

Qatargas continues to focus on keeping its best and brightest. At the Long Service Awards ceremony, nearly 500 employees were presented with certificates and mementos as a token of appreciation from Qatargas for their long-standing and loyal service to the company.

| Turnover | 2012 | 2013 | 2014 |
|---|---|---|---|
| Turnover rate (%) | 7.5 | 7.0 | 6.5% |
| Male (%) | 7.3% | 7.1% | 6.5% |
| Female (%) | 8.8% | 5.9% | 6.9% |
| 18-30 (%) | 6.3% | 4.7% | 6.7% |
| 30-50 (%) | 6.59% | 6.3% | 4.8% |
| >50 (%) | 12.5% | 12.4% | 14.5% |

In 2014, 199 employees departed Qatargas, a reduction in real and percentage terms over the previous year. In order to ensure business continuity and to avoid skills gaps, Qatargas implemented a new Corporate Succession Policy in 2014. It provides a systematic programme to ensure a ready pool of candidates to meet the immediate and long-term succession needs for all key positions.



GRI G4-LA1 G4-DMA: Labour practices grievance mechanism, G4-DMA: Human rights grievance mechanism G4-LA16 G4-HR3 G4-HR12

# SOCIETY

**SECTIONS**

- Our Contribution to Society
- Engaging the Local Community
- Qatargas CSR Programme
- Ethical and Responsible Conduct

## Our Contribution to Society

The needs of the country and society have been clearly set out in the Qatar National Vision 2030 which focuses on development across economic, social, environmental and human spectrums. Qatargas was set up by the government to turn Qatar's abundant natural hydrocarbon reserves into the financial resources required to deliver on this vision. It is our duty to ensure we conduct our operations in a way that is ethical, responsible and has a positive effect on the local community and country as a whole. We do this through our CSR programme, Ras Laffan Industrial City Community Outreach Programme (COP) and the ongoing enforcement of ethical policies internally and across our supply chain.

## Engaging our Local Community

The Qatargas plant is located in Ras Laffan Industrial City (RLIC) which is close to the Northern Qatar communities, including Al Khor and Al Thakira. Together with other energy and industry sector entities operating in RLIC (such as RasGas, Qatar Petroleum, Al Khaleej Gas, Pearl GTL, Dolphin Energy and ORYX GTL) we are a founding member of the RLIC Community Outreach Programme (COP). The RLIC-COP was set up to coordinate the response of all companies to the needs of the local communities in a meaningful and scaled-up manner. As a result there is now a full time Community Outreach Officer based in Al Khor engaging directly with the community and developing initiatives to tackle local concerns. In 2014, Qatargas spent 2.5 million QAR on various COP initiatives including:

- Developing recreational games and shaded areas at the beaches and parks of Al Khor
- Supporting the Al-Khor Hospital Training Centre
- Supporting a disaster management camp, run by the Qatar Red Crescent
- Conducting a community survey to determine further infrastructure and service needs
- Al-Ameera Training and Awareness Program for developing women's skills
- Al Thakhira Beaches Refurbishment project by supplying beach sand
- Safe Spring programme focused on delivering key safety messages to the community
- "Maqad Al-Duha" to improve skills and capabilities of individuals within the community.

| The community are concerned about... | | Qatargas has responded by... |
|---|---|---|
| Air quality |  | Completing its 1 billion USD into the Jetty Boil-off Gas (JBOG) project to reduce flaring emissions by 90%. Implementing an air emissions management strategy and continuous monitoring of emissions. For more information, see page 42. |
| Waste management |  | Developed and implemented a waste management policy and procedure. Qatargas now recycles over 29% of its waste. For more information, see page 48. |
| Large numbers of expatriate labour force |  | Careful management of access by large numbers of construction workers to local towns and the provision of bus services for employees and contractors to reduce congestion. For more information, see page 67. |
| Business and job opportunities |  | Investing in its Qatarization initiative and giving preference to Qatari based suppliers and contractors. Over 80% of procurement spending is on Qatari based companies. For more information, see page 25. |
| Communication and transparency of the industry |  | Founding member of the RLIC-COP, conducted GRI based sustainability reporting, and active contributor to the Energy and Industry sector sustainability programme and report. For more information, see page 67. |
| Capacity building of local community |  | Cooperation with non-governmental organizations like INJAZ to offer capacity building programmes in Al Khor and northern communities. For more information, see page 67. |

Figure 23 – Responding to Community Feedback

### Al Khor Community

The Al Khor Community (AKC) is a vibrant, fast growing housing complex for employees of Qatargas, RasGas and Al Khor International School (AKIS). Currently, it has over 12,000 residents from 50 different nationalities, which makes it the largest housing community in Qatar.

Qatargas takes a proactive role in engaging with the community through its website, newsletter, handbooks and various committees and events. The goal is to create a safe and vibrant living environment for all. Some of the CSR initiatives run within the community in 2014, include:

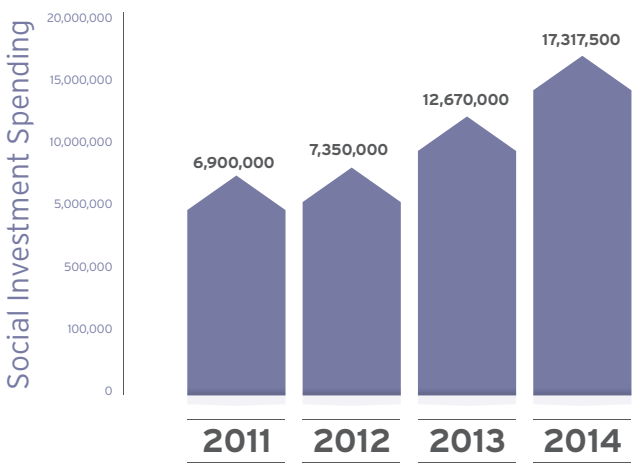
- **Campaigns** – like the Breast Cancer Awareness drive and Biggest Winner Competition to help community members manage their weight and live healthy lifestyles. We also ran the AKC road safety campaign, and have begun the expansion of the corporate 'Go Green' campaign into the community.
- **Training and classes** – on fire safety (1,257 residents attended) to provide lifesaving tips on how to avoid fire and how to react in an emergency.
- **Fundraising** – for Typhoon Haiyan, for lifesaving surgery to be provided to a lifeguard's daughter and for the Indian Prime Minister's National Relief Fund.

More information on the AKC can be found on the website – **www.akcommunity.org**

## Qatargas CSR Programme

The Qatargas CSR programme focuses on investing in activities that are important to society as defined by the Qatar National Vision 2030. All investment decisions are made by following a structured selection process in accordance with the Qatargas Social Investment Policy and Procedure developed in 2012. The goal of the policy is to make Qatargas a conscientious, responsible and responsive corporate citizen, recognized as such by national and international community.

The focus areas for CSR investment in 2014 included education, health, safety, environment, sports, community development and culture. Spending on the CSR programme has increased 150% since 2011, reflecting a commitment from the management to ensure Qatargas contributes directly to the needs of the local and national community.




Total CSR spending (QAR)

## Knowledge and Education

We actively support both research and education, thus laying foundation for a strong scientific basis of the country and availability of local technical expertise. Qatargas continues to sponsor a Chemical Engineering Research Chair at the Engineering Faculty of Qatar University. Qatargas is also an active member of the local academic and research community, supporting the Gas Processing Center and Engineering Programme at Qatar University and the Mary Kay O'Connor Process Safety Center at Texas A&M University Qatar, participating in the Industry Advisory Boards of both Universities. The Qatargas Engineering Manager is also a member on the judging panel of the Department of Chemical Engineering at Qatar University's Plant Design Competition.

Qatargas continues its support and leadership on the Board of Trustees for Qatar Independent Technical School (QITS), where the Qatargas Learning and Development Manager is a Vice Chairman, and the Head of Qatarization is a Board Member. Qatargas has also provided strategic direction to support a new Information and Communication Technology Vocational Education Framework for Qatar - an initiative led by the Supreme Council of Information and Communication Technology.

As part of the Cadre Leadership Programme, a workshop dedicated to sharing Qatargas leaders' knowledge was conducted among the students of Al Khor International School. Qatargas participants in the Programme appeared as role models for the students, and have contributed with a great success in building our visibility and reputation within the local community. We also participate in and supported a range of national and international scientific events, including:

- Middle East Turbomachinery Symposium.
- 3rd Texas A&M Qatar Research and Industry Forum.
- 7th Society of Petroleum Engineers Middle East Health, Safety, Environment and Sustainable Development Conference and Exhibition.

## Environment

To raise environmental awareness among the public, the Qatargas "Go-Green" campaign was extended to Al-Khor Community School students. The purpose is to spread consciousness in using water and energy resources wisely, managing waste and raising concern about climate change issues among young people. As the next generation of managers and business leaders, we hope the campaign will ingrain the importance of environmental topics right from the start.

Qatargas provided Gold Sponsorship to the 7th GCC Quality conference titled "The Quality and Environmental Challenges". Held under the patronage of His Highness Sheikh Tamim Bin Hamad Al Thani, Emir of the State of Qatar, the event was focused on addressing the most critical environmental issues for GCC countries.

In cooperation with the Ministry of Environment, Qatargas led the 2nd annual beach clean-up drive on 17th May at Al Ghariya beach, under the slogan "Our Beaches - Keep them clean, Enjoy them more".

## Health and Safety

Qatargas actively looks to get involved in initiatives that promote safe behaviour, raise public awareness on health issues, and support people in need of medical treatment in a bid to improve the wellbeing of the general population.

Some of the most important initiatives that Qatargas has been involved in include:

- A partnership with the Qatar Cancer Society in order to raise awareness about cancer through a TV ad, to boost the fight against the disease.
- Hosting "Diabetes Awareness Day" in cooperation with Qatar Diabetes Association, including various informative sessions and blood sugar tests for the public.
- Furnishing the newly established Al Khor Hospital's Training Centre which serves the health needs of the northern communities in Qatar.
- Participating in the World Blood Donor Day for the past several years in cooperation with Hamad Medical Corporation, and organizing blood donation campaigns in order to disseminate the culture of blood donation in society.
- Supporting Rehabilitation and Awareness Programs for Drug Addicts by Arshedny Centre, which is a specialized, non-profit organization providing scientific programs in counselling, rehabilitation, training and prevention of drug abuse.
- Organizing the Ramadan Road Safety Campaign, which included; a road safety TV commercial titled 'Precious moments – don't waste them – drive safely', information packages for drivers distributed on the road during Ramadan, events to promote safe driving messages and information booths set up in major shopping malls.
- Sponsoring "The Bigger Picture" event aimed at increasing public awareness on Intellectual and Developmental Disabilities (IDD) and to reduce the societal stigmatization of disability.


## Sports

Sport has become a critical part of encouraging people to live an active and healthy lifestyle, helping to put a focus on the prevention rather than curing of serious diseases. Qatargas has invested heavily in the promotion and support for sporting activities including:

- Title sponsor of the "Qatargas League" for the second season 2014-15: as many as 18 reserve and second division teams participate in the Qatargas League. Qatargas hopes that its support for the league will go a long way in taking Qatar's football to new heights, especially as the country is getting ready to host the World Cup in 2022.
- Official sponsor of all tournaments organized by the Asian Football Confederation during the next two years.
- Title sponsor of the Qatar Open Badminton Championship, organized by the Qatar Badminton Association.
- Title sponsor of the Qatar Open Chess Championship organized by the Qatar Chess Association.
- Sponsor of Qatar Minor Ice Hockey Association (QMIHA) - non-profit, amateur, youth ice hockey league established in 2001.
- Sponsor of the Qatar Golf Association Junior Golf Programme.
- Support of the American Chamber of Commerce Golf Tournament.
- Gold Sponsor of the Doha Oilmen's Golf Tournament 2014 which was held in the Doha Golf Club.

### Relief Efforts

Qatargas continues to provide support in the event of natural and humanitarian disasters around the world. Follow on from our support for Syria, Somalia and Philippines, in 2014 Qatargas donated two million QR towards the Gaza Relief fund set up by Qatar Red Crescent. The fund aims at easing the sufferings of the people of Gaza following the war in June 2014.

## Ethical and Responsible Conduct

The Code of Business Ethics Policy is the governing document for ensuring Qatargas operates in a fair and responsible manner. It covers the activities of everyone directly related to the activities of the company, whether employee or otherwise. The Ethics and Conflict of Interest Committee (ECIC) is responsible for the correct implementation of the Code and for solving any issues and concerns that may rise in accordance with the Code's provisions.

All employees are informed of the principles provided in the Code through induction and the signing of an annual certification statement to clarify that they have read and understood the principles. Employees are responsible for immediately reporting any violations of the policy to the ECIC, and may also request the ECIC's advice and guidance on ethical matters or breaches in the policy at any time. The ultimate recourse for resolving any conflict is the ECIC. Any violation of company policy can lead to civil or criminal proceedings and/or disciplinary actions, depending on the severity of the violation.

### Corruption

The Ethics Policy includes clauses dealing directly with corruption. It is the task of ECIC to investigate any potential or actual situation of corruption, fraud or conflict of interest. Annual Conflict of Interest Declarations are signed by all employees to ensure this policy is enforced. Anti-corruption requirements for Qatargas employees are expected to be fully adopted and implemented by contractors also.

## Investment and Procurement Practices

Suppliers of goods and services to Qatargas are assessed for health, safety and environmental practices. This includes safety performance assessed through indicators such as injuries, accidents, and lost time associated with their services rendered to other customers or for previous services provided to Qatargas.

The Code of Business Ethics Policy also address issues related to human rights and labour practices, covering the activities of our suppliers and contractors. Overall Qatargas has around 2,500 contracts with significant suppliers and contractors, all of which contain mandatory clauses with respect to human rights. In 2014, 79% of new suppliers and contractors were screened for risks related to labour practices.

## Governmental Relations

Qatargas as a company is not involved in any significant public policy development or lobbying activity. Liaising with governmental authorities in Qatar and overseas is required in order to ensure compliance with laws and regulations, and support the expansion of the company into new markets and commissioning or new terminals.

It is Qatargas policy to conduct business in compliance with all laws and regulations that may be applicable in whichever country the company operates in. In 2014, no cases of non-compliance with international, national, regional or local laws and regulations have been identified or reported.

GRI G4-73 G4-DMA: Supplier assessment for labour practices, G4-DMA: Investment, G4-DMA: Supplier human rights assessment G4-LA14 G4-HR1 G4-HR10

# APPENDICES

# Appendix A – Report Scope and Boundaries

The development of this report has been guided by the Global Reporting Initiative (GRI) 4th Generation (G4) Sustainability Reporting Guidelines, and the International Petroleum Industry Environmental Conservation Association / American Petroleum Institute (IPIECA/API) Oil and Gas Industry Guidance on Voluntary Sustainability Reporting 2010. GRI G4 is a globally recognized framework for reporting on an organization's economic, social, and environmental performance whereas IPIECA/API guidance is considered as a reference in the oil and gas industry. A GRI G4 Content Index is included in Appendix B.

## How we Define Report Content

### Materiality

The following material issues were identified during the materiality processes conducted in 2014, as detailed on pages 10 and 11 of the report. For each material aspect the boundary is provided below.

| Aspect | Boundaries | | |
|---|---|---|---|
| | Material within Qatargas | Excluding | Material outside of Qatargas |
| Health, safety, security and emergency response | Yes | | Neighbouring community (Qatar)<br>Suppliers and contractors (Qatar) |
| Customer satisfaction | Yes | | Customers (Globally)<br>Suppliers and contractors (Globally) |
| Efficient and reliable operations | Yes | Qatargas HQ | Suppliers and contractors (Qatar) |
| Economic performance | Yes | | Shareholders (Globally) |
| Environmental management | Yes | | Suppliers and contractors (Qatar) |
| Qatarization | Yes | | |
| Supply chain responsibility | Yes | | Suppliers and contractors (Qatar) |
| GHG and flaring | Yes | Qatargas HQ | Neighbouring community (Qatar) |
| Employee development, satisfaction and retention | Yes | | |
| Investing in local communities | Yes | | Neighbouring community (Qatar) |
| Energy use | Yes | | |
| Diversity and equal opportunities | Yes | | |
| Water management | Yes | | |

### Stakeholder Inclusiveness

As captured in Appendix C, we have identified and considered our key stakeholders, and we have outlined throughout the report how the company engages them, identifies their priorities and responds to the issues raised by them.

### Sustainability Context

As much as possible we have tried to set the report content within the sustainability context of Qatar and the region. The most significant element of this is the influence of the Qatar Energy and Industry Sector Sustainability (QEISS) Programme, the Qatar National Vision 2030 and National Development Strategy 2011-2016. Whenever possible, Qatargas performance has been placed in comparison to sector performance or national goals set out in these frameworks.

### Completeness and Boundaries of this Report

The report covers all our operations in Qatar - Qatargas 1 (QG1); Qatargas 2 (QG2); Qatargas 3 (QG3); and Qatargas 4 (QG4) - offshore platforms and onshore LNG Trains 1 to 7; the Laffan Refinery; Ras Laffan Terminal Operations (RLTO - the storage and loading facilities located at Ras Laffan port), as well as transportation activities to and from Qatar by our LNG ships. Qatargas activities and facilities outside Qatar are excluded from the scope of this report. Contractors, suppliers and clients' data are not included in this report unless otherwise stated. Qatargas does not publish an annual financial report.

# How we Ensure Quality and Relevance

## Balance

The report aims to present a balanced and unbiased picture of Qatargas. Data presented shows both positive and negative performance, with explanation of both.

## Comparability

The data and information presented in this report has gone through an iterative review process to catch any potential inaccuracies, with an external consultant conducting a limited logic and context based review. Internal auditing of systems and processes used to measure performance has been conducted. Some has also been externally assured, and this has been stated whenever it is the case.

In a limited number of cases we have had to restate data presented in our 2013 Sustainability Report. Reasons for any restatements are clearly noted in the relevant sections of the report.

Quantitative data disclosed in the report originates from various sources:

- Economic data is extracted from our finance IT system;
- Production data originates from our production database;
- Workforce data is extracted from our human resources IT tools;
- Environmental data is determined through direct measurement, calculation on the basis of specific or standard conversion factors and estimates depending on parameters. Our EDMS is also now providing an increasing amount of data and information.

## Timeliness

The report is due to be released at the end of May 2015. This should give us the opportunity to engage stakeholders with a document that is relevant and timely.

## Clarity

The report has been developed in a way that caters to the various users of the report. Clear signposting of content is provided throughout the report, and additional information is also marked for those requiring additional information. The report has also been translated into Arabic.

## Cautionary Statement

The report contains forward-looking statements. All statements, other than statements of historical fact are, or may be deemed to be forward-looking statements. Forward-looking statements involve known and unknown risks and uncertainties that could materially affect expected results of operations, cash flows and business prospects, because they relate to events and depend on circumstances that will or may occur in the future. Although every effort has been made to ensure the accuracy of these statements, readers should not place undue reliance on forward-looking statements which speak only as of the date of this report.

# Appendix B – GRI G4 Content Index


| GENERAL STANDARD DISCLOSURES | | |
|---|---|---|
| **General Standard Disclosures** | **Page** | **External Assurance** |
| **Strategy and Analysis** | | |
| G4-1 | 6 | - |
| G4-2 | 6, 15, 20, 21 | - |
| **Organizational Profile** | | |
| G4-3 | 2 | - |
| G4-4 | 9, 11 | - |
| G4-5 | 10 | - |
| G4-6 | 10,11 | - |
| G4-7 | 19 | - |
| G4-8 | 24 | - |
| G4-9 | 9, 17, 55 | - |
| G4-10 | 55, 56, 57 | - |
| G4-11 | 0% as collective bargaining is not recognised in the State of Qatar | - |
| G4-12 | 10, 25 | - |
| G4-13 | No major changes | - |
| G4-14 | 6, 15, 43 | - |
| G4-15 | 15, 16 | - |
| G4-16 | 52, 68 | - |
| **Identified Material Aspects and Boundaries** | | |
| G4-17 | 19, 20 | - |
| G4-18 | 75 | - |
| G4-19 | 75 | - |
| G4-20 | 75 | - |
| G4-21 | 75 | - |
| G4-22 | 76 | - |
| G4-23 | 76 | - |
| **Stakeholder Engagement** | | |
| G4-24 | 16, 80, 81 | - |
| G4-25 | 80, 81 | - |
| G4-26 | 80, 81 | - |
| G4-27 | 80, 81 | - |
| **Report Profile** | | |
| G4-28 | 2014 calendar year | - |
| G4-29 | 2013 Sustainability Report | - |
| G4-30 | Annual | - |
| G4-31 | 2 | - |
| G4-32 | 77, 78, 79 | - |
| G4-33 | No external assurance was conducted | - |
| **Governance** | | |
| G4-34 | 19 | - |
| G4-35 | 20 | - |

| | | | |
|---|---|---|---|
| G4-36 | 20 | | - |
| G4-37 | 19 | | - |
| **Ethics and Integrity** | | | |
| G4-56 | 9, 16, 72 | | - |

| **SPECIFIC STANDARD DISCLOSURES** | | | |
|---|---|---|---|
| **DMA and Indicator** | **Page** | **Omissions** | **External Assurance** |
| **CATEGORY: ECONOMIC** | | | |
| **Material Aspect: Economic Performance** | | | |
| G4-DMA | 25 | | |
| G4-EC4 | None received | | |
| **Material Aspect: Market Presence** | | | |
| G4-DMA | 59 | | |
| G4-EC6 | 59 | | |
| **Material Aspect: Procurement Practices** | | | |
| G4-DMA | 25 | | |
| G4-EC9 | 25,26 | | |
| **CATEGORY: ENVIRONMENTAL** | | | |
| **Material Aspect: Energy** | | | |
| G4-DMA | 37, 38, 39, 45 | | |
| G4-EN3 | 45 | | |
| G4-EN4 | 45 | | |
| G4-EN6 | 45 | | |
| **Material Aspect: Water** | | | |
| G4-DMA | 37, 38, 39, 48 | | |
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| **Material Aspect: Emissions** | | | |
| G4-DMA | 37, 38, 39, 43, 44 | | |
| G4-EN15 | 44 | | |
| G4-EN16 | 44 | | |
| G4-EN17 | 44 | | |
| G4-EN18 | 45 | | |
| G4-EN19 | 44, 45 | | |
| G4-EN21 | 46 | | |
| **Material Aspect: Effluents and Waste** | | | |
| G4-DMA | 37, 38, 39, 48 | | |
| G4-EN22 | 48 | | |
| G4-EN23 | 49 | | |
| G4-EN24 | 52 | | |
| **Material Aspect: Transport** | | | |
| G4-DMA | 53 | | |
| G4-EN30 | 53 | | |
| **Material Aspect: Overall** | | | |
| G4-DMA | 53 | | |
| G4-EN31 | 53 | | |

| | | |
|---|---|---|
| **CATEGORY: SOCIAL** | | |
| **SUB-CATEGORY: LABOR PRACTICES AND DECENT WORK** | | |
| **Material Aspect: Employment** | | |
| G4-DMA | 55, 56 | |
| G4-LA1 | 64 – region is considered Qatar | |
| G4-LA2 | 56 | |
| G4-LA3 | 58 | |
| **Material Aspect: Occupational Health and Safety** | | |
| G4-DMA | 29 | |
| G4-LA6 | 30, 31 | |
| G4-LA7 | 32, 33 | |
| **Material Aspect: Training and Education** | | |
| G4-DMA | 62 | |
| G4-LA10 | 56,62 | |
| G4-LA11 | 56 | |
| **Material Aspect: Diversity and Equal Opportunity** | | |
| G4-DMA | 57, 58 | |
| G4-LA12 | 57, 58 | Confidentiality constraints - Board of directors composition is considered confidential as per shareholder company requirements |
| **Material Aspect: Supplier Assessment for Labour Practices** | | |
| G4-DMA | 73 | |
| G4-LA14 | 73 | |
| **Material Aspect: Labour Practices Grievance Mechanism** | | |
| G4-DMA | 64 | |
| G4-LA16 | 64 | |
| **SUB-CATEGORY: HUMAN RIGHTS** | | |
| **Material Aspect: Investment** | | |
| G4-DMA | 73 | |
| G4-HR1 | 73 | |
| **Material Aspect: Non-discrimination** | | |
| G4-DMA | 57 | |
| G4-HR3 | 57, 64 | |
| **Material Aspect: Supplier Human Rights Assessment** | | |
| G4-DMA | 73 | |
| G4-HR10 | 73 | |
| **Material Aspect: Human Rights Grievance Mechanism** | | |
| G4-DMA | 64 | |
| G4-HR12 | 64 | |
| **SUB-CATEGORY: SOCIETY** | | |
| **Material Aspect: Local Communities** | | |
| G4-DMA | 67 | |
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|---|---|
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| **OIL AND GAS SECTOR DISCLOSURES** | |
| G4-OG5 | 48 |
| G4-OG6 | 41 |
| G4-OG13 | 34 |

## Appendix C – Stakeholder Engagement Mapping

The stakeholder groups identified below were selected to represent those entities, organizations or peoples that are most affected by, or affect Qatargas most. For each we have summarised the priorities of that stakeholder group, how and when we engage with them, and our response to their expectations. Engagement specifically on the report was only completed with employees.

| Stakeholders | Stakeholder Priorities | Engagement Method | Qatargas Response |
|---|---|---|---|
| **Shareholders** | • Maintenance of safe & reliable operations<br>• Financial returns<br>• Preserve QG reputation as a reliable LNG supplier<br>• Participation in local economic and social development | • Board and ExCom meetings<br>• Annual shareholder market presentations<br>• Shareholder meetings and discussions<br>• Shareholder relations<br>• Official engagements – e.g. signings<br>• Coordinated crisis communications<br>• Liaison offices<br>• Sponsorship collaboration (eg QMA, Exhibitions, etc...)<br>• Qatargas contributions to QP Annual Report | • Compliance with principles of transparency, ethical standards and good governance<br>• Board meetings<br>• Routine reports<br>• Internal auditing<br>• Strict SHE practices<br>• Excellent standards of performance<br>• Maximizing Return on Investment |
| **State of Qatar** | • Management of natural resources<br>• Contribution to quality of life<br>• Environmental protection<br>• Financial returns<br>• Development of national talent<br>• Compliance with regulations | • Job creation<br>• Contribution to development of the State of Qatar's new Environmental Guidelines<br>• Participation in the Ministry of Energy's "Quality Qatarization Strategy"<br>• Through Qatar Petroleum<br>• Coordinated crisis planning and communications | • Alignment with State of Qatar 2030 Vision<br>• Compliance with government regulations<br>• Maximizing profits<br>• Commitment to Qatarization<br>• Timely data reports for QP and government authorities<br>• Routine SHE and sustainability reporting<br>• Participation in national celebrations and functions |
| **Local Community** | • Responsible business practices<br>• Minimal environmental impacts<br>• Employment opportunities<br>• Safe operations<br>• Development of national talent<br>• Continuous engagement with local community | • Social investment programs<br>• Membership of RLIC Community Outreach Program (COP)<br>• Contribution to local community<br>• Sponsorship of social events<br>• Engagement with local authorities<br>• Educational/employment opportunities<br>• Business opportunities for local small businesses<br>• Site visits | • Active social outreach and contributions<br>• CSR compliance and initiatives<br>• Participation in social events<br>• Assistance to educational institutions<br>• Environmental initiatives<br>• Safe operations<br>• Rewarding opportunities for local business partners |
| **Employees** | • Safe and healthy working conditions<br>• Competitive pay and benefits<br>• Continuous career development<br>• Open and transparent communications<br>• No blame culture<br>• Listening, supportive management | • Internal Communications Strategy (incl. Communication Values)<br>• Interactive security announcements and safety exercises<br>• Regular departmental/team meetings<br>• Qatargas_All Email<br>• Website and portal<br>• Objectives and Performance Appraisal System<br>• Employee opinion surveys<br>• Corporate newsletters - Pioneer<br>• Town hall meetings<br>• CEO Forums for Trainees and Graduates | • Equal opportunities and fair treatment<br>• Safe working conditions promoting employee health and welfare<br>• Competitive salaries and rewards<br>• Open and transparent communications<br>• HR policies promoting personal and professional development, engagement and empowerment<br>• Training programs<br>• Acceptable standards of accommodation |

| | | | |
|---|---|---|---|
| | | • Ask the CEO channel<br>• CEO intranet address to new joiners<br>• Employee/management self-service (Online)<br>• HR Service Desk<br>• Walk-in open clinics<br>• Department away days<br>• PR Spotlight<br>• Monthly key messaging pack for managers<br>• Quarterly key messaging pack for supervisors<br>• Corporate welcome program<br>• Lunch & Learn sessions<br>• Learning Community Day<br>• Learning Souq<br>• Premier Leadership Events (PLEs)<br>• Long-Service Awards, Spot Awards, CEO Awards, Farewell Awards<br>• Social platforms (Gala Dinner, Family Days, National Sports Day, Social Clubs, Winter Camp)<br>• Updated Policies and Procedures | |
| **Customers** | • Reliable, timely supplies of LNG and associated products<br>• Quality products | • Contracts and agreements<br>• Country Liaison Offices<br>• Regular meetings and site visits<br>• Conference and exhibitions<br>• Contractual arrangements<br>• Signing ceremonies<br>• General publications<br>• Material Safety Data Sheets (MSDS) | • Global customer relations<br>• Regular, responsive dialogue<br>• Customer satisfaction surveys<br>• Production of quality products<br>• Reliable supplies<br>• On-time products loading<br>• Provision of excellent logistics and services |
| **Contractors / Suppliers** | • Fair contract bidding/awarding<br>• On time payment<br>• Good working conditions | • Website<br>• Contractual arrangements and bidding/ tendering process<br>• Day to day liaison<br>• Prequalification meetings<br>• Third-party endorsement<br>• Safety communications and related initiatives (e.g. Incident & Injury Free (IIF), Safety Training Observation Program (STOP), Hydration...)<br>• Medical inspections | • Ethical standards<br>• Fair bidding and awarding process<br>• Effective contractor management<br>• Contractor monitoring to assure health and welfare compliance |
| **The Energy Industry** | • Timely, responsible communication<br>• Information/Data sharing | • Membership of official/global energy sector bodies<br>• Conference and exhibitions<br>• Energy-related publications<br>• Delivery of technical papers<br>• Sponsorship collaborations (e.g. SIGTTO, etc...)<br>• Keynote speeches<br>• Best practice sharing<br>• Crisis management collaboration | • Data sharing and exchange<br>• Ethical relationships |
| **The Media** | • Strategic global media engagement<br>• Timely access to accurate company information<br>• Access to senior Company spokespersons<br>• Speedy access to corporate locations/facilities | • Strategic global media engagement program<br>• Communication plans<br>• Press releases<br>• Holding statements<br>• Media tours<br>• Press conferences and briefings<br>• Fast fact sheets<br>• Interviews<br>• Round tables<br>• Social media platforms | • Knowledgeable company spokespersons<br>• Accurate, regularly updated publicity |
| **Non-Governmental Organizations (NGOs)** | • Responsive communications<br>• Contribution support to local NGOs | • Presentations/Briefings<br>• Educational programs<br>• NGO support strategy | • Knowledgeable company spokespersons<br>• Accurate, regularly updated publicity |
| **Pupils / Students / Potential Employees** | • Accurate accessible information about career opportunities<br>• Compelling Employee Value Proposition (EVP)<br>• Contribution to Educational Establishments | • Targeted recruitment campaigns<br>• Donations to educational institutions<br>• University endowments - Faculty Chairs<br>• Scholarships<br>• Internship opportunities<br>• School outreach programs<br>• Career fairs<br>• Educational events (GASNA, etc...)<br>• Participation in curriculum committees<br>• Sponsored research activities<br>• Guest lectures<br>• Faculty visits/assignments<br>• Student projects | • Dynamic, supportive relationships with educational/academic communities<br>• Clearly differentiated and compelling EVP<br>• Talent attraction and retention<br>• Enhanced symbiosis between industry and academia |

# Appendix D – Glossary and Acronyms

| | |
|---|---|
| API | American Petroleum Institute |
| BAC | Board Audit Committee |
| BAT | Best Available Technique |
| Bbls | Barrels |
| BCM | Business Continuity Management |
| BIA | Business Impact Analysis |
| BOD | Board of Directors |
| Bpsd | Barrels Per Stream Day |
| CDM | Clean Development Mechanism |
| CDP | Career Development Programme |
| CEO | Chief Executive Officer |
| CER | Certified Emission Reductions |
| CFC | Chlorofluorocarbon |
| $CH_4$ | Methane |
| CNOOC | China National Offshore Oil Corporation |
| $CO_2$ | Carbon Dioxide |
| COO | Chief Operating Officer |
| CoP | Conference of Parties |
| COP | Community Outreach Programme |
| COSHH | Control of Substances Hazardous to Health |
| CPR | Cardio Pulmonary Resuscitation |
| CSP | Common Sulphur Project |
| CSR | Corporate Social Responsibility |
| CTO | Consent To Operate |
| DEFRA | UK Department for Environment, Food and Rural Affairs |
| DG | HSE Regulations and Enforcement Directorate |
| ECIC | Ethics and Conflict of Interest Committee |
| EDMS | Environmental Data Management System |
| EMS | Emergency Management Services |
| EPC | Engineering, Procurement and Construction |
| ERM | Enterprise Risk Management |
| ESIA | Environmental and Social Impact Assessment |
| ESS | Employee Self Service |
| EU | European Union |
| FEED | Front-End Engineering Design |
| FMP | Flare Management Plan |
| FMT | Flare Management Team |
| FSC | Forest Stewardship Council |
| GGFR | Global Gas Flaring Reduction |
| GHG | Greenhouse Gas |
| GIS | Geographic Information System |
| GRI | Global Reporting Initiative |
| GWP | Global Warming Potential |
| HCFC | Hydrochlorofluorocarbon |
| HFC | Hydrofluorocarbon |
| HFO | Heavy Fuel Oil |
| HND | Higher National Diploma |
| HR | Human Resources |
| HRA | Health Risk Assessment |
| HSE | Health, Safety and Environment |
| HVAC | Heating, Ventilation and Air Conditioning |
| IA | Internal Audit Function |
| IChemE | The Chartered Institution of Chemical Engineers |
| IDP | Individual Development Plan |
| IET | The Institution of Engineering and Technology |
| IIF | Incident & Injury Free |
| IOGP | International Association of Oil & Gas Producers |
| IPCC | International Panel on Climate Change |
| IPIECA | International Petroleum Industry Environmental Conservation Association |
| ISO | International Organization for Standardisation |
| IT | Information Technology |
| ITP | Individual Training Plan |
| IUCN | International Union for Conservation of Nature |
| JBOG | Jetty Boil-Off Gas |
| JCI | Joint Commission International |
| JVA | Joint Venture Agreement |
| KEPCO | Kansai Electric Power Company |
| KPI | Key Performance Indicator |
| L&D | Learning and Development |

**Butane** - Either of two isomers of a gaseous hydrocarbon, C4H10, produced synthetically from petroleum and used as a household fuel, refrigerant, and aerosol propellant and in the manufacture of synthetic rubber.

**Carbone Dioxide** - $CO_2$ is a colourless gas and the main greenhouse gas of concern as per the Kyoto Protocol. In oil and gas activities, $CO_2$ is mainly associated with fuel combustion and flaring.

**Chlorofluorocarbon** - Any of various halocarbon compounds consisting of carbon, chlorine, and fluorine, once used widely as refrigerants in cooling systems. CFCs are listed in Annex A or B of the Montreal Protocol on Substances that Deplete the Ozone Layer.

**Condensate** - A straw-coloured or colourless liquid hydrocarbon mixture of over approx. 500 API gravity, which may be recovered at the surface from some non-associated gas reservoirs.

**Corporate Social Responsibility** - Continuing commitment by business to behave ethically and contribute to economic development while improving the quality of life of the workforce and their families as well as of the local community and society at large.

**Flaring** - A process of safe disposal of waste or unused/unusable gases required to ensure the safety and integrity of the facility.

**Global Warming Potential** - Total contribution to global warming resulting from the emission of one unit of a given gas relative to one unit of the reference gas, carbon dioxide, which is assigned a value of 1.

**Greenhouse Gas** - A gas that contributes to the greenhouse effect by absorbing infrared radiation. Atmospheric emissions of GHGs from oil and gas operations include $CO_2$, $CH_4$ and $N2_0$ emissions from combustion sources, gas flaring, or fugitive emissions.

**Helium** – A colourless, odourless, tasteless, non-toxic, inert, monatomic gas present in natural gas and extracts and sold as a by-product.

**Hydrochlorofluorocarbon** - A compound composed of hydrogen, chlorine, fluorine, and carbon atoms; used as replacement for CFCs as refrigerants because of its lower ozone depletion potential.

| | |
|---|---|
| LCA | Life Cycle Assessment |
| LDAR | Leak Detection and Repair |
| LEF | Living Earth Foundation |
| LES | Laffan Environmental Society |
| LLGM | Low Load Gas Model |
| LNG | Liquefied Natural Gas |
| LOPC | Loss Of Primary Containment |
| LPG | Liquefied Petroleum Gas |
| LSFO | Low Sulphur Fuel Oil |
| LSMGO | Low Sulphur Marine Gas Oil |
| LTI | Lost Time Injury |
| MBR | Membrane Bio Reactor |
| MDO | Marine Diesel Oil |
| MLT | Management Leadership Team |
| MM | Million |
| MMScf | Million Standard Cubic Foot |
| MOC | Management of Change |
| MoE | Ministry of Environment |
| MoI | Ministry of Interior |
| MRG | Monitoring and Reporting Guidelines |
| MSDS | Material Safety Data Sheet |
| MT | Metric Tonnes |
| MTA | Million Tonnes Per Annum |
| $N_2O$ | Nitrous Oxide |
| NDS | National Development Strategy |
| NGO | Non Governmental Organization |
| $NO_x$ | Nitrogen Oxide |
| OHSAS | Occupational Health and Safety Assessment Series |
| OPCO | Operating Company |
| PFC | Perfluorocarbon |
| PIP | Performance Improvement Plan |
| PLE | Premier Leadership Event |
| PMP | Plateau Maintenance Project |
| PSI | Process Safety Incident |
| QAR | Qatar Riyal |
| QDMC | Qatargas Doha Medical Centre |
| QG | Qatargas |
| QG-PSP | Qatargas Process Safety Programme |
| QITS | Qatar Independent Technical School |
| QMSI | Qatargas Management System for Continuous Improvement |
| QNV | Qatar National Vision |
| QP | Qatar Petroleum |
| QPR | Quarterly Performance Review |
| QRC | Qatar Red Crescent |
| RALF | Receiving And Loading Facility |
| RCS | Risk Control System |
| RLIC | Ras Laffan Industrial City |
| RLTO | Ras Laffan Terminal Operations |
| RMC | Risk Management Co-ordinator |
| SAP | System Application and Products |
| SEQ | Safety, Environment and Quality |
| SHE | Safety, Health and Environment |
| $SF_6$ | Sulphur Hexafluoride |
| SIGTTO | Society of International Gas Tanker and Terminal Operator |
| SME | Subject Matter Expert |
| $SO_2$ | Sulphur Dioxide |
| SPA | Sales and Purchase Agreement |
| $tCO_2eq$ | Tonnes Carbon Dioxide Equivalent |
| TAFE | Technical And Further Education |
| TAMUQ | Texas A&M University at Qatar |
| TDLC | Training and Development Liaison Committee |
| TEPCO | Tokyo Electric Power Company |
| TRIF | Total Recordable Injury Frequency |
| UAE | United Arab Emirates |
| UK | United Kingdom |
| UN | United Nations |
| US/USA | United States of America |
| USD | United States Dollar |
| VPSHR | Voluntary Principles on Security and Human Rights |
| VOC | Volatile Organic Compounds |
| WBCSD | World Business Council for Sustainable Development |
| WRI | World Resources Institute |

For more definitions, please consult our online glossary at:
**http://www.qatargas.com/English/MediaCenter/Glossary/A/Pages/default.aspx**

**Hydrofluorocarbon** - Compound consisting of hydrogen, fluorine, and carbon; it is a fluorocarbon emitted as a by-product of industrial manufacturing that contributes to the greenhouse effect.

**LNG** - Natural Gas can be liquefied, e.g., at atmospheric pressure by cooling to about - 160 ºC (-256 ºF). It consists of liquefied methane ($C_1$) and ethane ($C_2$) and sometimes includes propane ($C_3$) and butane ($C_4$).

**LPG** - Mixture of hydrocarbon gases (propane and butane) used as a fuel in heating appliances and vehicles. It is increasingly replacing chlorofluorocarbons as an aerosol propellant and a refrigerant to reduce damage to the ozone layer.

**Methane** - An odourless, flammable greenhouse gas, which is the major constituent of natural gas. In the oil and gas industry, $CH_4$ is mainly associated with fuel combustion, flaring, venting and fugitive emissions.

**Naphtha** - Any of several highly volatile, flammable liquid mixtures of hydrocarbons distilled from petroleum, coal tar, and natural gas and used as fuel, as solvents, and in making various chemicals.

**Nitrogen Oxides** - Chemical compounds of nitrogen and oxygen. $NO_x$ are produced primarily from the combustion of fossil fuels and contribute to the formation of ground level ozone.

**Nitrous Oxide** - A colourless greenhouse gas which is emitted as a combustion process by-product.

**Ozone Depleting Substance** - A compound that contributes to stratospheric ozone layer depletion.

**Propane** - A colourless gas, $C_3H_8$, found in natural gas and petroleum and widely used as a fuel.

**Sulphur Dioxide** - A colourless, extremely irritating gas produced by fuel combustion and by many industrial processes. In oil and gas activities, $SO_2$ results primarily from sulphur removal processes and the flaring of sour gas.

**Venting** - Process by which gas is released to atmosphere from an open pipe without combustion.

**Volatile Organic Compound** - Any organic compound with a vapour pressure of 0.01 kPa or greater, a temperature of 293.15 Kelvin or a corresponding volatility under specific conditions of use.

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