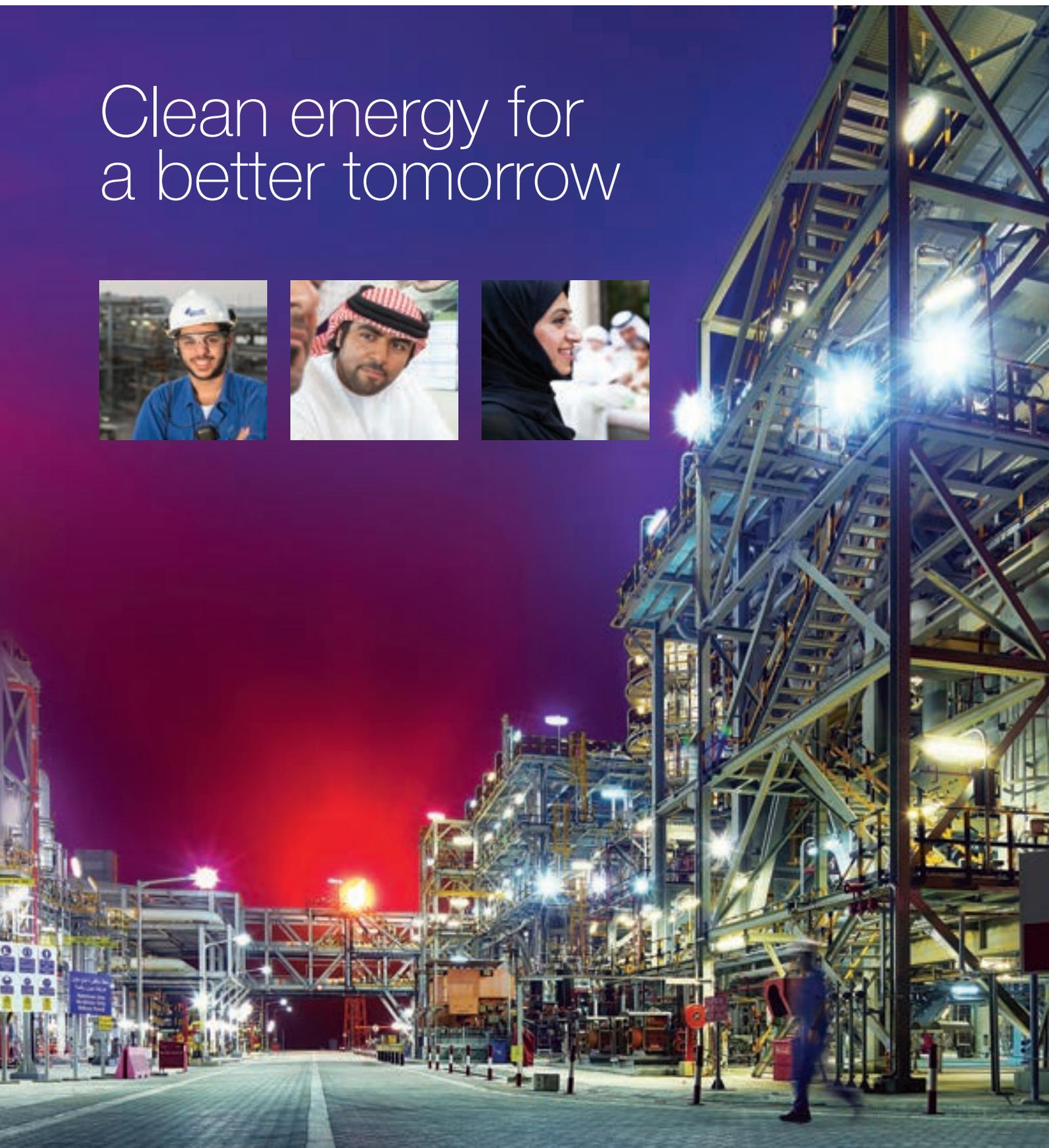




Clean energy for
a better tomorrow





You can also visit our interactive corporate brochure online by using your smartphone with a QR reader to scan this code.

www.adgas.com

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HH Sheikh Khalifa bin Zayed Al-Nahyan
President of the United Arab Emirates





HH General Sheikh Mohammed bin Zayed Al-Nahyan

Crown Prince of Abu Dhabi, Deputy Supreme
Commander of the UAE Armed Forces

CEO's Message

A new role
in fulfilling
the UAE's
national
energy
strategy



It gives me great pleasure to put this corporate brochure in the hands of our valued stakeholders at all levels, sharing with them our journey over the past few years.

In the early 1970s, and during a visit to an oil production facility, the late Sheikh Zayed bin Sultan Al-Nahyan noticed the flaring of associated gas into the atmosphere and inquired how this could be stopped. This gave rise to the birth of ADGAS in 1973, becoming the first LNG production company in the region. Since then, ADGAS has been the regional pioneer in LNG and LPG production and marketing, credits due to the company's compliance with the best international practices, building on the history and expertise of its shareholders, ADNOC, Mitsui & Co, BP, and Total.

Since 2008, ADGAS has reviewed its vision and mission to accommodate the company's anticipated role in the UAE's national energy strategy. After years of hard work on two strategic projects, Offshore Associated Gas (OAG) and Integrated Gas Development (IGD), ADGAS has recently begun to feed the national grid with around one billion standard cubic feet daily of clean energy gas for industrial and residential use. This marks an important shift from our traditional role as an exporting company to also being a local energy supplier, helping Abu Dhabi achieve its 2030 Economic Vision, which stresses the need for clean energy for a sustainable future. This new role will continue to be played by ADGAS as future expansions to the IGD facilities take place, allowing the increase of local supply of gas to the national grid.

Equally, our focus is on our processes and assets to ensure process safety, reliability, and excellent industrial performance. Inspired by ADNOC's guidelines and policies, ADGAS has developed robust HSE procedures and practices, putting the safety and welfare of its employees at the top of its priorities. We have considerably reduced our environmental footprint over the last few years by controlling and minimizing flaring and emissions, while looking for new ways and technologies to further reduce these effects.

Meanwhile, we continue to improve and expand our CSR activities on all fronts. As a committed corporate citizen, ADGAS is increasingly involved in various national issues that range from environment protection to education, public health, charities, and humanitarian issues, to name but a few.

Our most valuable asset and the reason behind our success is our people. We are committed to providing our national workforce with employment opportunities and quality training to sharpen their leadership skills and empower them to be productive elements in society. ADGAS feels proud that it has gone a long way towards the Emiratization of its workforce according to ADNOC's Emiratization objective. In fact, ADGAS is highest in terms of Emiratization percentage among ADNOC Group companies, having achieved a 67 percent target in 2013. We are indebted to our loyal and experienced employees in every achievement we attain.

In recognition of our constant efforts to improve performance and promote quality at all organizational levels, ADGAS was awarded the ISO 14001 accreditation in 2004, a certificate that is reconfirmed every three years following a thorough audit of ADGAS' HSE Management System.

The company's leading position was further honored when it won the 2008 Dubai Quality Award in the industrial organizations category, in recognition of its excellent business practices and procedures. In the most recent assessment of the company's excellence and performance, ADGAS recently won the prestigious Sheikh Khalifa Excellence Award, Gold Category, Oil and Gas Sector 2011-2012.

These prestigious awards not only represent an additional assurance that we are on the right track; they also place a great responsibility on our shoulders to constantly improve our practices.

In the coming years, we will seek to adopt new technologies and practices to cope with the future so that ADGAS can continue performing its role as an industry leader.

On behalf of the ADGAS team, I express our gratitude to our valued shareholders for their trust and support. I also extend my appreciation to our contractors and suppliers for their dedication and commitment. On a personal note, I thank our management and staff, who have shown loyalty and worked hard to make ADGAS what it is today.

Finally, I thank you for taking the time to learn about the history, challenges, achievements, and objectives of ADGAS. I really wish that you will find in this report the details of all above achievements, and that you will find it informative and valuable.

Sincerely
Fahim Kazim
CEO

ADGAS at a glance



ADGAS OPERATES FROM THREE LOCATIONS:

Das Island – location of process trains, storage and shipping facilities, and plant support functions: operations, maintenance, general technical services, engineering, projects, integrity and quality.

Abu Dhabi – headquarters building, hosting ADGAS' general management and all administrative, financial, and support services.

Tokyo – liaison office to serve ADGAS' principal customer.

JAPAN – TEPCO IS ADGAS' MAIN EXPORT CUSTOMER



ABU DHABI – ADGAS PRODUCTION AND PROCESSING OPERATIONS





◀ In 1973, ADGAS pioneered the gas industry in the region as the first liquefied natural gas producer. Now, with its active role in the Offshore Associated Gas and the Integrated Gas Development projects, ADGAS widens the scope of its role and mandate to embrace its new vision and mission as a direct contributor to Abu Dhabi's national energy strategy.



1,700+

ADGAS employs more than 1,700 people. ▶



2 billion

ADGAS processes an average of 2 billion standard cubic feet of gas per day (2 BSCFD).



The strategic, long-term partnership between ADGAS and its main client, Tokyo Electrical Power Company (TEPCO), has also proved to be of great value for both parties. For about four decades, ADGAS has supplied most of its gas production to TEPCO for power generation. The two companies have worked closely over the years to ensure smooth operation and supply, launching expansion projects, introducing new technologies, and engaging in many integrity and reliability projects.

SHAREHOLDERS – THE EXPERTISE OF ADGAS' SHAREHOLDERS IS INSTRUMENTAL TO THE COMPANY'S SUCCESS



70%



15%



10%



5%

The company's success has been made possible as a result of access to the collective knowledge, experience, and involvement of its shareholders: Abu Dhabi National Oil Company (ADNOC), Mitsui & Co, BP, and Total. Having such world-class energy players as shareholders has enabled ADGAS to acquire the world's newest technologies and best available business practices, building on the vast expertise available and the professionalism and commitment of its employees.

Serving customers and the community

Long-term vision

We will play a key role in the LNG and natural gas industry, creating wealth and value, implementing the National Energy Strategy, and serving our valued customers and community in a socially responsible manner.

Mission

We will achieve our vision through the safe and efficient production, marketing, sale, and delivery of LNG, LPG and natural gases, naphtha, and sulfur – building on our ADGAS history, solid partnerships, and human capital. We will strive to sustain our recognized international reputation for reliability, integrity, and efficiency and to continually improve HSE and business performance. We will attract, develop, and retain competent and dedicated staff.

Our core values

- Health, safety, and environment: being committed to protecting health, safety, and the environment in all that we do.
- Ethical conduct: strict adherence to our codes of ethical conduct.
- Business excellence and quality: striving for the best by setting and reaching challenging targets to rank among the world's best in customer, people, and society satisfaction.
- Learning and continuous improvement: continuously getting better in all that we do, as individuals and as teams.
- Commitment: honoring all our commitments as a company to achieve our corporate goals, and to align personal goals and assume responsibility to deliver on our commitments.



Five-year strategic goals

ADGAS has a crucial role in serving the energy needs of Abu Dhabi and the UAE, while contributing to domestic revenue through substantial export contracts. The five-year strategic plan defines the company's primary goals and how they will be achieved.

National Energy Strategy

- Enhancing our sales strategy to optimize revenues.
- Ensuring plant flexibility by decoupling ADGAS operations from Abu Dhabi Marine Operating Co (ADMA-OPCO) to minimize disruption to upstream activities.
- Supplying gas efficiently to onshore through the Offshore Associated Gas (OAG) and Integrated Gas Development (IGD) projects, providing Abu Dhabi with gas, and exploiting opportunities to enhance ADGAS operations.
- Exploring power generation options to ensure effective and efficient power generation for future offshore requirements.
- Managing Das Island assets effectively through the Das Master Plan and helping realize ADNOC's Das Island Development project, by creating a process and a structure through which ADMA-OPCO and ADGAS jointly manage the future development of the island.

Operational excellence

- Increasing the availability of critical equipment, including spare parts.
- Effectively implementing streamlined reliability-centered maintenance and risk-based inspection.
- Adopting the best operating practices for improving operations and better systemization, thereby reducing plant trips and improving recovery time.

- Reducing controllable opportunity losses and increasing production by identifying reasons for losses and developing and implementing innovative solutions to address such losses.
- Excelling at contracting and purchasing processes by adopting good procurement techniques and procedures that assure an optimal inventory level without risk to operations, and deploying an optimized integrated schemes program.

Health, safety, environment (HSE) and plant integrity and reliability

- Ensuring full compliance with ADNOC HSE codes of practice.
- Establishing the highest level of HSE performance and ensuring sustainability.
- Reducing emissions to the minimum practical level by identifying opportunities and developing emission reduction plans.
- Continuously reducing gas flaring to a minimum possible level.
- Efficiently using energy by identifying opportunities for optimization, including tie-in with onshore power generation facilities.
- Minimizing occupational health impact by establishing an occupational health management system.

People

- Human capital plays a major role in our vision and mission.
- Building a high-performance culture sustained by committed and engaged employees necessitates attracting, developing, and retaining competent and dedicated staff.
- Align people strategies to the mission of ADGAS.
- Improve employee productivity and performance.
- Attract, engage, and develop the right talent.

Major milestones

Four decades of progress

1971

September – Gas Liquefaction Project agreement signed, marking ADGAS' arrival as a major energy producer

1972

December – 20-year sale agreement with TEPCO signed, the beginning of a long-standing relationship that lasts till this day



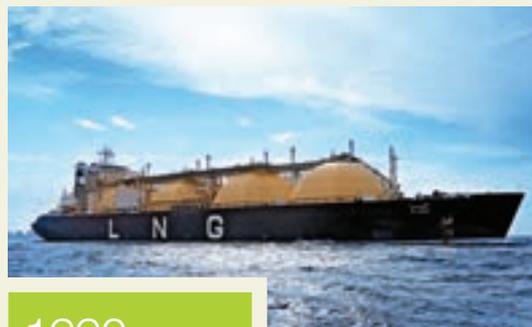
1973

December – The late Sheikh Zayed bin Sultan Al-Nahyan lays the plant's foundation stone



1977

October – The late Sheikh Zayed bin Sultan Al-Nahyan officially inaugurates the plant



1993

June – First sulfur shipment exported to Ruwais facilities

1973

March – Contract signed for the construction of ADGAS plant on Das Island

1975

December – ADNOC's shareholding increased to 51%

1990

October – A new 25-year agreement with TEPCO doubles the purchase of LNG production from 1994



1977

April – First LNG shipment loaded

1994

July – Third LNG train begins production at Das Island, then the largest and most advanced LNG facility of its kind



1997

June – ADNOC's shareholding increased to 70%

2004

June – ADGAS gets ISO:14001 certification for its environment management system

2011

June – Implementation of flare handling and reduction scheme to reduce flaring by eight million cubic feet per day, underlining ADGAS' ongoing commitment to reducing flaring to a minimal level

2014

July – 65 million work hours without lost-time injury



2007

April – ADGAS celebrates the 30th anniversary of the first LNG shipment to TEPCO



1999

June – First direct shipment of sulfur from plant to customers, satisfying commercial and environmental objectives

2008

December – Record total annual production of 8.5 million tons

2010

October – Commissioning of OAG Train 1, thus linking offshore gas production with the onshore facilities at Habshan and initiating decoupling from upstream oil operations and sending gas to Abu Dhabi

2012

September – ADGAS receives Sheikh Khalifa Excellence Award – Gold Category – for the oil and gas sector



2009

April – ADGAS receives Dubai Quality Award

2013

June – Commissioning of the IGD facilities, thus bringing the local gas supply to 1 BSCFI per day



2002

April – New logo launched on the 25th anniversary of the first LNG shipment to TEPCO

Sheikh Zayed's vision

In the early 1970s, during a visit to an oil production facility, the late Sheikh Zayed bin Sultan Al-Nahyan, the founding president of the UAE, noticed the flaring of associated gas into the atmosphere and asked why this was taking place.

When told that it was a standard practice in oil production, Sheikh Zayed expressed surprise that a valuable resource such as gas should just be burnt off wastefully. Surely the practice should be stopped and the gas put to more productive use?

This was later translated into a directive from HH Sheikh Khalifa bin Zayed Al-Nahyan, then the Crown Prince of Abu Dhabi, to take all necessary steps to minimize the flaring of associated gases.

By laying the groundwork for natural gases to be captured and sold as fuel, this visionary decision has had a tremendous impact on protecting the country's environment, and contributing to the nation's impressive economic development, ultimately benefiting the citizens and residents of the UAE.

While extensive studies were showing that natural gas was one of the cleanest and most environment-friendly fuels available, several large industrialized countries were looking for a reliable, clean, and efficient energy supply to address their growing demands. Based on these factors, the decision was made to construct a gas liquefaction plant on Das Island, which was already the storage facility for offshore oil, ideally situated just 10 km from the Umm Shaif oilfield.

In 1972, the Tokyo Electric Power Company (TEPCO) signed a 20-year agreement to purchase the LNG to be produced at the plant for use in power generation in and around the Japanese capital. The next year, ADGAS was officially founded as a joint venture between the Abu Dhabi National Oil Company (ADNOC), Mitsui & Co, BP, Total, and Bridgestone.

Later the same year, ADGAS was formally registered and the contract for the construction of the Das Island gas liquefaction plant was signed, with Sheikh Zayed doing the honor of laying the plant's foundation stone.

ADGAS' first shipment of LNG left Das Island on April 29, 1977, making ADGAS the pioneer of the Middle East's gas liquefaction industry. Marking the occasion, Sheikh Zayed, who had maintained an active interest in ADGAS' development, officially inaugurated the Das Island plant in October 1977.

More than 40 years after Sheikh Zayed's astute observation, ADGAS continues to flourish as testimony to his far-sighted vision.



Core operations on Das Island

Doubling capacity and output

ADGAS' operational core is the gas liquefaction, dehydration, and compression plants on Das Island, which consist of three LNG trains that have the capacity to produce around eight million tons of LNG, LPG, paraffinic naphtha, and molten sulfur for exports. The facilities also include five gas processing trains, with capacity to dehydrate and compress one billion standard cubic feet of gas daily and send it through the pipeline to Abu Dhabi Habshan facilities.

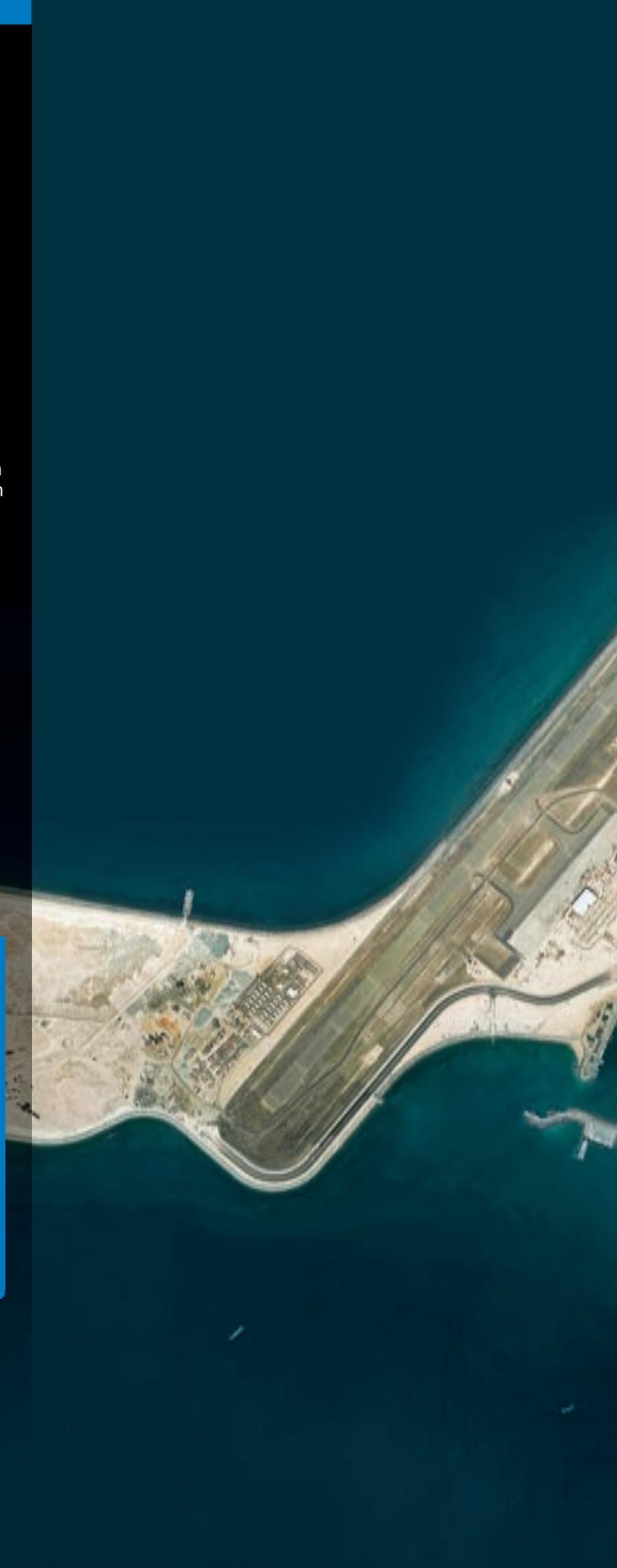
The plant is unique in its ability to process and handle associated and non-associated gases produced during oil production from various oil fields and gas fields. LNG Trains 1 and 2 and OAG Trains 1 and 2 can handle both types of gases at high and/or low pressures, while LNG Train 3 and the 3 trains of IGD exclusively handle high pressure gas. This versatility is vital to allow uninterrupted oil production from various oil fields without any gas flaring.

Das Island, measuring around 4.8 km² in size, plays a major role in the region's oil and gas industry.

15 million tons of total annual gas production, of which around 7.4 million tons are exported and another 7.6 million tons sent through a sub-sea pipeline to Abu Dhabi Habshan facilities.

ADGAS has consistently played a leading role in the Middle East's gas industry by establishing an outstanding reputation for reliability in local and international markets.

15 million





ADGAS has consistently played a leading role in the Middle East's gas industry by establishing an outstanding reputation for reliability in local and international markets.



Our Shareholders

For the past four decades, ADGAS has been the regional pioneer in LNG production and marketing, thanks to the company's compliance with the best international practices, industrial reliability and integrity, and the genuine involvement and support of its shareholders.



ADNOC

Abu Dhabi National Oil Company (ADNOC) was established in 1971 to operate in all areas of the oil and gas industry. Since then has steadily broadened its activity in establishing companies and subsidiaries and creating an integrated oil and gas industry in exploration and production, support services, oil refining and gas processing, chemicals and petrochemicals, maritime transportation, and refined products and distribution.



MITSUI & CO., LTD.

Mitsui & Co Ltd

Mitsui & Co Ltd is one of the world's most diversified comprehensive trading, investment, and service companies. Headquartered in Tokyo, Mitsui & Co maintains a global network of 147 offices in 67 countries, with about 426 subsidiaries and associated companies worldwide.

The company operates in six core areas: metals, machinery and infrastructure, chemicals, energy, lifestyle, innovation and corporate development.



Supportive
shareholders



Strategic
partners



BP

BP is one of the six oil and gas “supermajors”, vertically integrated and operating in all areas of the oil and gas industry, including exploration and production, refining, distribution and marketing, petrochemicals, power generation and trading. It also has renewable energy activities in biofuels and wind power.

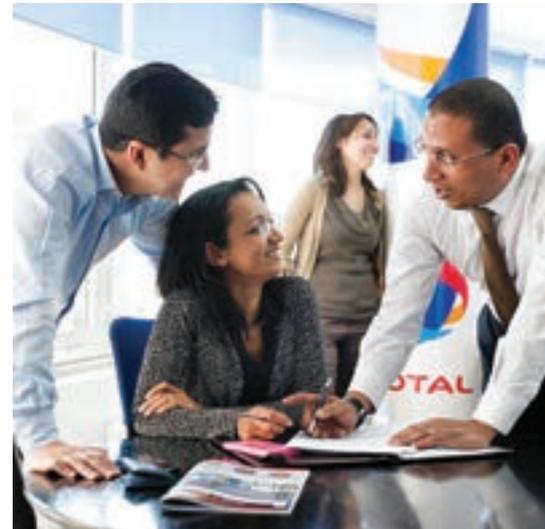
Its origins date back to the founding of the Anglo-Persian Oil Company in 1909. In 1935, it became the Anglo-Iranian Oil Company, and in 1954, British Petroleum.



Total

A leading global oil and gas company, Total is also involved in chemicals and new energies.

Its history begins in the 1920s, with the creation of Compagnie Française des Pétroles which began production in the Middle East in 1924. Over the years it has expanded internationally and diversified its activities into the downstream, refining, marketing, and chemicals sectors. It has also managed to stay innovative, discovering and developing new oil fields.



Business model

Creating wealth and value

We play a key role in the LNG and natural gas industry, creating wealth and value, contributing to the national energy strategy, and being socially responsible in the way we serve our customers and our community.





Integrity and reliability



Effective communication

ADGAS' strategy map illustrates the company's core objectives and their impact on the full spectrum of stakeholders. Contributing to Abu Dhabi's sustainable wealth creation is achieved through key strategic themes and objectives such as operational excellence, developing national talent, and minimizing environmental impact.



Powering the future of Abu Dhabi

Balancing supply and demand

Natural gas is central to the UAE's economic development, fuelling almost 100 percent of the Emirates' electricity generation. Power production alone accounts for almost 60 percent of the country's total gas consumption, the balance being used by industrial activities.

Although Abu Dhabi has the fifth-largest gas reserves in the world after Russia, Iran, Qatar, and Saudi Arabia (about 215 trillion cubic feet), there are many challenges to be faced in accessing and processing these resources and balancing supply and demand.

Consumption of gas for water and electricity production is growing by 11 percent annually, and to meet such high demand Abu Dhabi has devised a strategy based on "meeting the continuous rise in demand for energy, whether from residential or commercial sectors". ADGAS is taking a leading role in the fulfilment of this strategy.

UAE gas consumption has doubled in the past eight years. Currently, consumption is around 2.4 trillion cubic feet, rising by an annual average of five percent due to growing population and increased demand from energy-intensive industries.

2.4 trillion





Shaping Our
City-scape

من أجل عاصمة
مستدامة

Two key projects serve Abu Dhabi's needs

ADGAS has a central role in the UAE's economic development and in Abu Dhabi Vision 2030, ensuring that a sustainable source is available to meet Abu Dhabi's growing demand for clean energy.

This role is performed through the construction and commissioning of the Offshore Associated Gas facilities (OAG) and the Integrated Gas Development (IGD) project, both designed to cater for Abu Dhabi's ever-increasing requirements for natural gas. Both OAG and IGD-E phase II help ADMA-OPCO uninterrupted oil production by processing captured associated gases.

The two projects widen the scope of ADGAS' mandate and vital participation in Abu Dhabi's national energy strategy. The projects are designed to receive, compress, and dehydrate one billion standard cubic feet per day (1 BSCFD) of associated and non-associated gases provided by Abu Dhabi Marine Operating Co (ADMA-OPCO), and then export them through a 30-inch subsea pipeline to Habshan onshore facilities, to be further processed and sent to consumers in Abu Dhabi and to the northern emirates for domestic use.

The IGD projects' civil and marine implementation components represented almost half the development cost. The main challenge was the projects' location on Das Island, a small island with very limited space for extra construction of new gas processing facilities. All available sites had been exhausted by industrial development over the past three decades, so reclamation of more land was necessary.

The new IGD facilities plot and its subsequent site preparation and reclamation works were constrained by the OAG facilities to the east, the 30-inch gas sub-sea pipeline from the north, and the 10-inch Total ABK oil sub-sea pipeline from the south.

Further challenges were imposed by the need to have vertical concrete supporting walls at 12 meters above sea level, instead of simpler inclined revetment slopes that would have encroached over the sub-sea pipelines.

An additional major challenge was meeting the strict HSE requirements concerning societal risk where requirements stipulated that the maximum number of workers should not exceed 800, leading ADGAS to opt for a modularization construction concept for all main structures at the EPC contractor's yard in Korea.

Modularization addressed the issue of societal risk while also drastically minimizing the time needed for final site hook-up works. Modularization also allowed simultaneous construction activities. While the modules were being built in various fabrication yards, civil and marine preparation and reclamation work was ongoing at Das Island.

Due to the nature of the marine civil works, a large quantity of huge rocks had to be transported from Ras Al Khaima quarries and thousands of specially designed concrete blocks weighing 90 tons each were used to confine the new reclaimed site. The blocks were pre-cast in a special batching plant in Ajman and transported to Das on more than 40 barges that made about 600 trips. Each vessel had to comply with ADNOC's requirements for working in oil fields and pass the relevant inspection and vetting necessities.

Economic development



Technical challenges



Strict HSE requirements



Growth fuels demand

The rapid growth of Abu Dhabi, commercially, industrially, and as a global tourism destination, has prompted the need for a strategy to cope with the high demand for energy. With consumption increasing by 11 percent annually, ADGAS is taking a leading role in fulfilling that strategy and satisfying Abu Dhabi's future energy requirements. Demand is rising due to developments such as Saadiyat Island (right), which is now under construction and is expected to be completed in 2020.



Health and safety

ADGAS is committed to maintaining an incident-free work environment and continually improving safety standards at every level of operation.



65 million

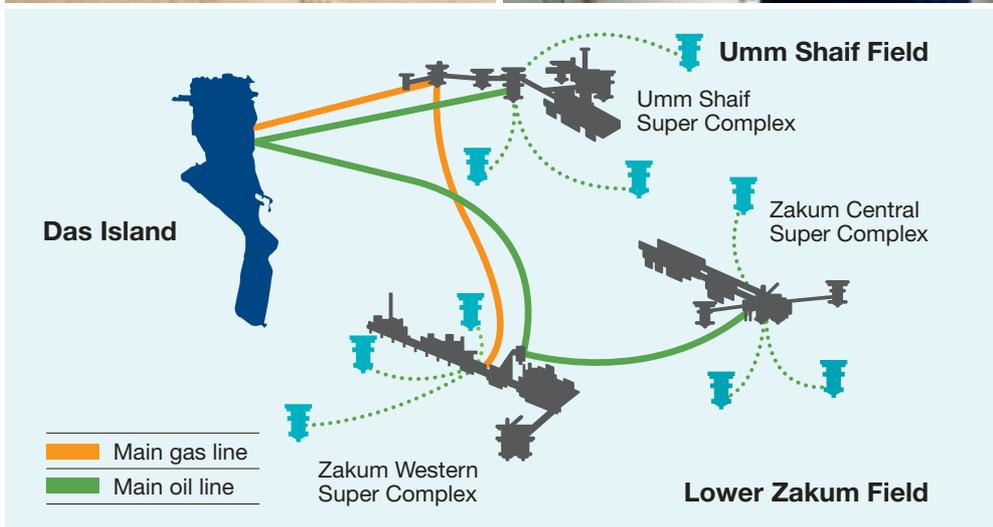
Total ADGAS work-hours without lost-time injury as of July 2014

A unique site with a long history

The diminutive Das Island has been a key strategic hub for Abu Dhabi's oil and gas industry since 1953.

160 km

Distance from the Abu Dhabi coastline



Powering the future of Abu Dhabi

Various technical difficulties faced during the marine and civil works included unfavorable soil type, installing heavy walls underwater to support the reclaimed land, and adverse weather conditions that obstructed marine operations at the unsheltered location of the IGD facilities on north-western Das, which is exposed to the prevailing waves and currents. These adverse weather conditions seriously hindered progress, especially during winter.

Further constraint to construction was IGD's location on the Das Island runway flight path. A study was carried out to ensure that the high points of the plant stacks and construction cranes did not impose any risk to daily flights. Special height cranes were only operated at night when no flights were taking place, requiring close coordination with ADMA-OPCO and Abu Dhabi Aviation.

While the civil and marine works were being carried out, the project's main contractor HHI's Home Office services including detail engineering, procurement, and fabrication of the process and utilities' units/modules, were taking place in parallel at HHI's yards in Ulsan.

Das Island

Das Island is a unique site with a long history in the oil and gas industry – a connection that began in 1953, when the first oil explorations were carried out in Abu Dhabi's territorial waters. Since then, it has developed into a key strategic hub for Abu Dhabi's oil and gas industry.

Measuring only 2.5 km² (now 4.8 km² after the recent expansion), Das Island is small in size but plays a major role in the region's oil and gas industry. It is the operational heart of ADGAS' business, a source of great pride for everyone at the company, and the home away from home to over 4,000 staff members of ADGAS, ADMA-OPCO, and contractors.

The rectangular island lies just 160 km from the Abu Dhabi coastline, surrounded by the offshore oil fields that it serves.

Das Island was selected as the most suitable base for offshore oil operations by ADMA-OPCO in 1954. When oil production began at the Umm Shaif oil fields in 1962, the island was used as a land base, storage facility, and launch site of ADMA-OPCO's first oil consignment. Due to its strategic location and first-rate facilities, it remains the main oil storage site for the area to this day.

When ADGAS was established in 1973, Das Island was the natural choice for the region's first LNG plant. As ADGAS developed and quickly became the leading LNG producer in the region, the island found itself at the center of a lucrative new revenue stream for the ADNOC Group. Das Island has continued to develop over the years and it now accommodates the industrial operations of both ADGAS and ADMA-OPCO.

As the island accommodates thousands of ADGAS and ADMA-OPCO employees year-round, their comfort and well-being is of paramount importance. ADGAS ensures that all necessary services and facilities are freely available to all staff and contractor employees, many of whom work in shifts to keep operations running smoothly and safely round the clock.

The island is home to more than 15 social, sports, and recreational clubs that cater to residents' favorite hobbies. The island also boasts several shops and restaurants, in addition to convenient medical and administrative services, all designed to promote comfort and well-being for the island's residents.

Environmental protection



Offshore oil operations



3,000 staff members



Investment in environmental protection



- Environmental management cost
- Prevention
- Emissions treatment
- Waste disposal
- Remediation cost



Production volume



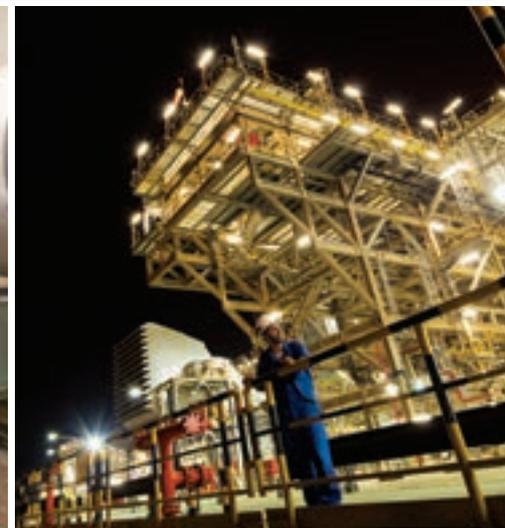
- LNG
- LPG
- PN
- Sulfur



Production lines expand

Further expansions to the gas processing facilities are planned in the future to increase the local gas export by 50%.

↗ 50%



Powering the
future of Abu Dhabi

ADGAS' offshore heartland

When ADGAS was established in 1973, Das Island was the natural choice for the region's first LNG plant. As ADGAS developed and quickly became the leading LNG producer in the region, the island found itself at the center of a lucrative new revenue stream for the ADNOC Group with ADGAS contributing 2.4% of Abu Dhabi's GDP in 2013. Das Island has continued to develop over the years and now accommodates the industrial operations of both ADGAS and ADMA-OPCO.



OAG and IGD facilities process about one billion standard cubic feet of natural gas.

1 billion



Powering the future of Abu Dhabi

Expansion of production lines

ADGAS's operational core started with the gas liquefaction plant on Das Island, two LNG trains being commissioned in 1977, and a third in 1994 that have total production capacity of about eight million tons. Two OAG trains commissioned in 2010 and three IGD trains in 2013 have all become operational, doubling the company's capacity and output for gas processing/handling.

The original design capacity of LNG Trains 1 and 2 was 150 tons per hour for each train. In 1990, ADGAS and its strategic customer, the Tokyo Electric Power Company (TEPCO), signed a long-term agreement to expand and consolidate their operations, which prompted ADGAS to build what was then the world's largest and most advanced LNG train in 1994.

The new LNG train enabled ADGAS to double its production and output levels. Since then, all three trains have consistently operated at 20 percent higher capacity than their original designs, as a result of upgrades and production streamlining carried out by ADGAS experts.

The ADGAS gas liquefaction plant is unique in its ability to process both associated and non-associated gases produced during oil production. LNG Trains 1 and 2 can handle both types of gases at high and/or low pressures, while LNG Train 3 exclusively handles high pressure gas. This versatility is vital because feed gas obtained from Abu Dhabi's offshore oil fields comprises both associated and non-associated gases.

Associated gas is obtained from the Umm Shaif, Zakum, and Bunduq oil fields, while natural non-associated gas is found at the Abu Al Bukhoosh Khuff, Uweinat, Areaj, Umm Shaif Khuff, and the Cap gas fields. In total, the plant receives 12 distinct gas streams and blends them to produce LNG, LPG, naphtha, and sulfur to meet clients' requirements.

In addition, high pressure dense phase gas is exported to GASCO's facilities to fulfil domestic gas requirements. The plant's three trains' capacity is around eight million metric tons a year of LNG, LPG, paraffinic naphtha, and molten sulfur.

ADGAS' new role

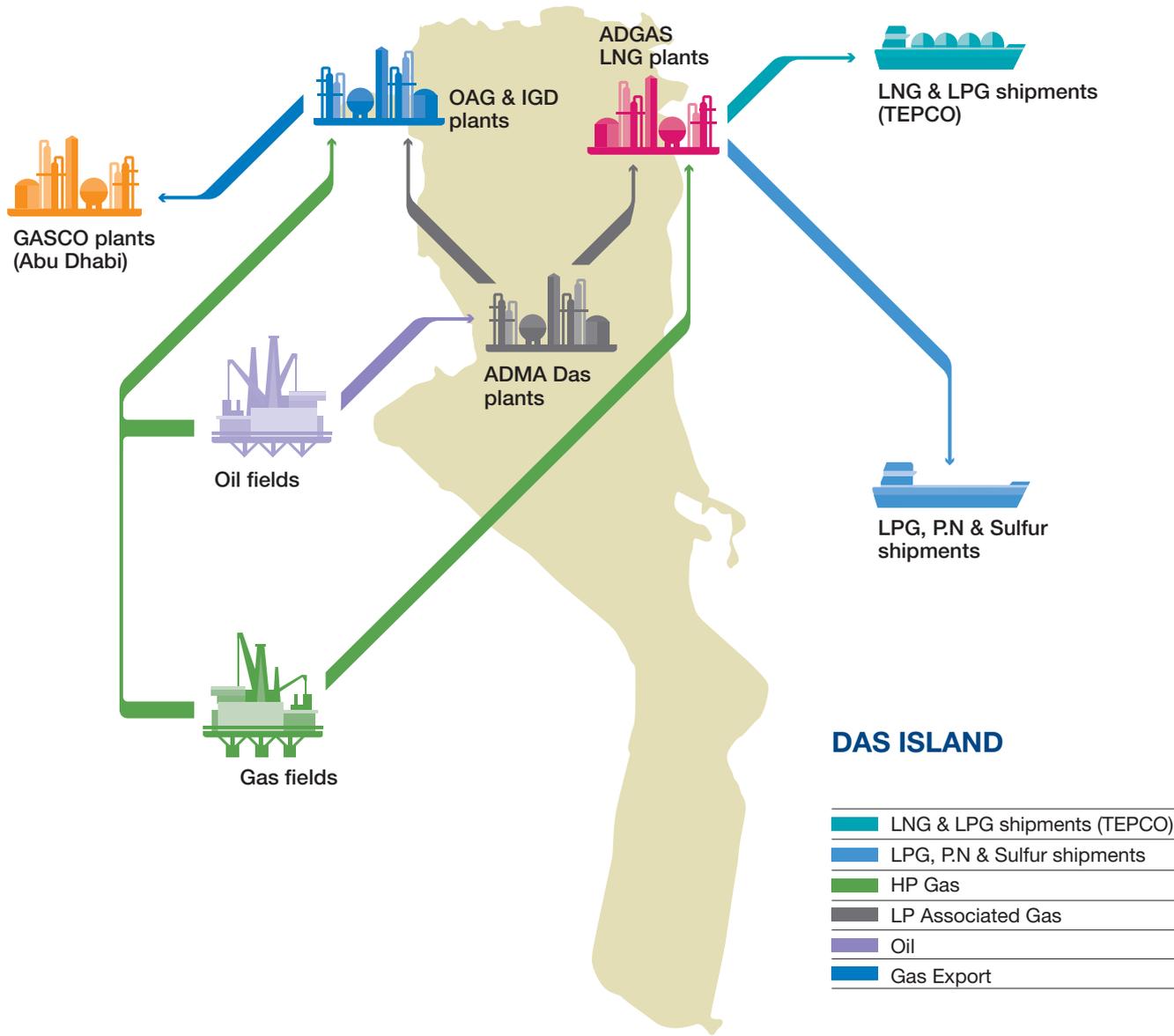
Traditionally, ADGAS has concentrated on export markets, selling LNG and other products mainly to Japan, and the rest of the Far East, maintaining excellent relationships with existing and potential end-users, and ensuring reliable supply.

The last five years have witnessed a shift in the role of ADGAS, with the installation and operation of the ADNOC sole-risk projects, the OAG, and the IGD. OAG Plant has two identical trains processing mainly the associated low pressure gases from ADMA. The gas is dehydrated, compressed to 154 Barg pressure, and sent through a sub-sea pipeline to onshore GASCO facilities for separation of NGL, before being fed to the sales gas header. OAG has production capacity of 200 mmscfd of low pressure Gas.

IGD plant has three identical trains processing 800 mmscfd of high pressure gas from ADMA-HAP, where it is dehydrated, compressed to 154 Barg pressure, and sent to onshore GASCO facilities through the same sub-sea pipeline along with export gas from OAG.

Now, with an increasing emphasis on domestic consumption, and in line with the national energy strategy and Abu Dhabi Economic Vision 2030, ADGAS has worked closely with sister companies to ensure the smooth operation of its facilities, especially ADMA-OPCO, which provides the feed gas, and GASCO, which receives the dehydrated and compressed gas for further processing and transmission to Abu Dhabi. These close partnerships are vital to our business and to the smooth, efficient, and safe operation of our industrial facilities.

The gas journey



<p>Oil fields</p> <p>Abu Dhabi Marine Operating Company (ADMA-OPCO) produces crude oil from Umm Shaif/Zakum/El Bunduq fields around Das Island.</p>	<p>ADMA Das plants</p> <p>Crude oil from Umm Shaif/Zakum/El Bunduq fields is phase separated at ADMA separators in ADMA-OPCO facilities on Das Island. The oil produced is exported by ADMA and the associated gases sent to ADGAS.</p>	<p>Gas fields</p> <p>There are high pressure offshore gas fields around Das Island such as ABK, GG II, Cap, US Khuff, Uweinat, and Zirku. The offshore high pressure gas is supplied to ADGAS for processing at LNG, OAG, and IGD facilities.</p>	<p>ADGAS LNG plants</p> <p>ADGAS captures the associated gas from ADMA-OPCO. Trains 1&2 process both LP and HP gases to produce 180 T/hr of LNG per train. Train 3 processes only HP gas to produce 384 T/hr of LNG. Propane, butane, paraffinic naphtha, and molten sulfur are produced as secondary products.</p>
<p>OAG & IGD plants</p> <p>The OAG facilities can send up to 200 mmscfd through the 30-inch marine pipeline to GASCO facilities at Habshan. The Integrated Gas Development Project (IGD) comprises three trains capable of delivering 800 mmscfd to GASCO through the same pipeline.</p>	<p>LNG & LPG shipments (TEPCO)</p> <p>LNG and, sometimes, LPG produced at ADGAS plants is shipped to our main client (TEPCO) in Japan by eight LNG ships operated by NGSCO. Excess production is sold on the international spot market.</p>	<p>LPG, P.N & Sulfur shipments</p> <p>LPG and paraffinic naphtha are shipped to various buyers in Japan, Europe, and America. Molten sulfur produced as a by-product is shipped to Ruwais, where sulfur from various ADNOC Group companies is pelletized and sold.</p>	<p>GASCO plants (Abu Dhabi)</p> <p>Around one billion SCFD of dry high pressure gas is exported from OAG and IGD facilities at Das Island to GASCO plants at Habshan, where it is further processed to separate LNG and sales gas.</p>

Powering the
future of Abu Dhabi

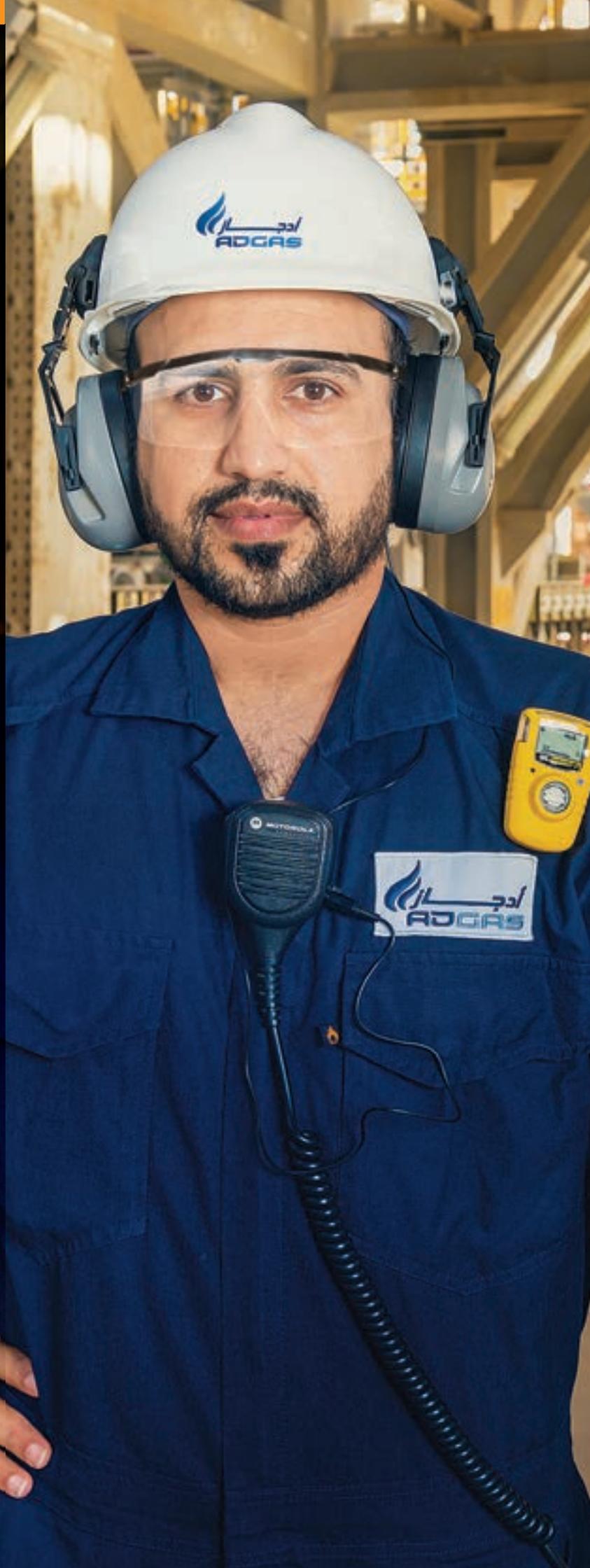
Employment: Emiratization

ADGAS is firmly committed to recruiting and developing Emirati nationals – providing them with the skills and education necessary to meaningfully contribute to the company's progress and to society in general. ADGAS' Emiratization drive is intended not only to produce competent professionals, but also cultured, well-developed human beings, making positive contributions both inside and outside the workplace.



All ADNOC companies including ADGAS have a target of 75% Emiratization by 2017.

75%
Emiratization





**Powering the
future of Abu Dhabi**

Employment: Emiratization

ADGAS employees are the engine that drives the company. Our excellent results have only been achieved due to the quality, commitment, and loyalty of our employees. No effort is spared in making sure that all employees' welfare, health, and safety are protected to create a healthy and productive workplace.



Productive
workplace



Intensive
training



Leaders of
tomorrow



The company strives to sustain its position as a regional leader by developing and promoting strategies that ensure industrial reliability, business efficiency, and open communication with its employees, contractors, and clients alike.

This is coupled with ADGAS' long-established role as a responsible corporate citizen within the UAE community.

Over the years, the company has launched scores of social and environmental initiatives that put it at the forefront of social progress and make sustainability an embedded concept in all corporate policies and procedures.

Within this social role, ADGAS believes that one of its vital duties is to recruit, qualify, develop, and retain local talent. A great diversity of financial and human resources are directed towards this goal. Many young recruits join the company each year, where they are trained, developed, and given all possible opportunities to assume future leading roles within the organization.

New employees go through intensive programs of learning and development, in the classroom and on the job, to ensure they have the appropriate skills to perform their roles effectively. On successful completion of their training, they are assigned to their respective job disciplines in various ADGAS divisions or departments.

For example, detailed management of the IGD project was required to ensure the technical integrity of the modules built in Korea by HHI. This also called for full compliance with ADGAS' plan to use IGD as a training platform for local employees by involving young nationals in project management and execution.

In response, HHI assigned a training coordinator who developed an overall training plan and provided ADGAS engineering personnel with training opportunities at its Home Office in Korea. A total of 24 trainees received a combined 72 months of experience with HHI.

ADGAS' "Leaders of Tomorrow" program is linked to strategic Emiratization objectives such as developing competent leaders and strengthening their skills. The program consists of two-day group coaching events run over four years.

Selected employees first receive coaching in specific management and leadership theory, followed up by real application in the workplace. One-to-one mentoring is provided between events. In the final two years, further coaching focuses on specific individual development needs.

The program greatly supports management succession planning, and gives an accurate assessment of ability and potential for promotion to executive positions.

Partnerships

The close partnership between ADGAS and TEPCO, the Tokyo Electric Power Company, is a source of great pride for everyone at ADGAS. For more than four decades, this strong, mutually beneficial union has been based on the core principles of respect, trust, and reliability.



“TEPCO’s first purchase agreement with ADGAS was 2.06 million tons of LNG per year. The current agreement upped the order by 137.9% to 4.9 million tons until 2019, plus 900,000 tons sold short-term after Fukushima disaster until 2015, taking the annual total to 5.8 million tons.”

5.8 million



Partnerships

Tokyo Electric Power Company (TEPCO) is ADGAS' major customer, having signed a 20-year agreement in 1972 to purchase the plant's annual production of LNG and LPG in 1993. A second sales and purchase agreement was later signed in 1993, covering another period of 25 years.

Since 1972, LNG and LPG supplies have been delivered in accordance with established timetables and strict programs designed in compliance with the highest international safety standards. The ties between ADGAS and TEPCO have been reinforced and developed through the stable, reliable, and consistent flow of liquefied gas from Das Island to Tokyo Bay.

Our exceptional commitment to these schedules is evident in the involvement of high-level management in managing the relationship with our main customer. A further testimony to our commitment to this special relationship is the establishment of a permanent office, Tokyo Liaison Office (TLO), with its personnel at TEPCO's location to ensure accurate and timely communication, which in turn ensures that TEPCO's requirements are promptly addressed.

The long-term strategic partnership has proved to be of great mutual benefit. The two companies have worked closely over the years to ensure smooth operation and supply, launching expansion projects, introducing new technologies, and engaging in many integrity and reliability projects.

The strength of the relationship was amply demonstrated by ADGAS' response to the tsunami that hit Japan a few years ago, when extra efforts were made to help TEPCO meet its commitments, an attitude much appreciated by our friends in Tokyo and Japan.

Although TEPCO is our primary customer, ADGAS applies the same diligence and quality to other customers, mainly in Korea and the rest of the Far East, and continues to diversify the sale of its products (LNG, LPG, paraffinic naphtha, and sulfur) to global markets. The marketing team schedules semi-annual customer visits to better understand evolving needs and gauge perceptions that will enable enhanced customer satisfaction.

These routine visits are supplemented by meetings on the sidelines of major regional and global industry conferences and seminars. The overall excellent perception of ADGAS in the eyes of its customers is essentially the outcome of the sound management of customer relationships.

ADGAS regularly conducts customer surveys designed to measure perceptions on a five-point scoring system covering image, satisfaction levels, products and services, support and services, and loyalty. Customer satisfaction is exceptionally high, with zero cases of breaching customer privacy and/or losses of customer data.

International standards



Gas fueled power plants



Customer satisfaction



Japan's largest utility

TEPCO is the largest electricity utility in Japan and the fourth largest in the world.

2013 Products Export



■ LNG to TEPCO	74%
■ LPG	16%
■ Naphtha	6%
■ Sulfur	4%

2013 Export Market



■ Japan	92%
■ Other Asia Countries	8%

Sustainability

Community

ADGAS and all staff members support a wide range of worthy local initiatives, events, and causes throughout the year. From charitable events and social causes to educational, economic, and health programs and initiatives, ADGAS is proud to provide financial assistance, donations, and sponsorships that make a difference.



Educational, humanitarian and healthcare projects are central to ADGAS' community involvement.



↙ 57%

Reduction in flaring and emissions since 2009

ADGAS has been very successful in dramatically reducing its volume of emissions and improving ambient air quality.

Sustainability

Community

If we search for a keyword that best describes the values of ADGAS, that word would be “responsibility”. In its established policies and everyday activities that target its internal workforce or its external stakeholders and community, ADGAS acts as a responsible employer and a responsible citizen.



Sharing
concerns



Technical
evaluation



Quality
of life



We have been blessed by the unconditional support extended to us by the UAE leadership since the early 1970s, when the late Sheikh Zayed bin Sultan Al-Nahyan laid ADGAS' foundation stone as an environmental and economically feasible enterprise. Therefore, we try to pay back what we have long received.

We realize that we work within a community to which we are accountable. The issues and concerns of this community are at the core of our business, and we continuously work to address them in the best way we can. Some examples of how we approach our responsibilities towards our local community are:

Educational support

ADGAS believes that extending its success into the future depends largely on a sustainable flow of qualified graduates, especially in technical disciplines. To this end, ADGAS provides considerable support to academic achievement. It sponsors academic activities and disciplines that serve the oil and gas industry, such as the Higher Colleges of Technology's Industry Award, ADNOC Technical Institute functions, and UAE students' educational trips to Das Island.

Health awareness

ADGAS shares its community's concerns about the health issues faced by the population. In the UAE's opulent society, diseases such as diabetes, high blood pressure, and heart problems are common – and national campaigns are staged to combat such diseases.

ADGAS is closely involved in sponsoring these campaigns, encouraging healthy lifestyles, participating in walking events, arranging specialized presentations and lectures, issuing various health-related messages for internal and external audiences, and organizing blood donation campaigns. The company's staff newsletter, ADGAS News, regularly carries articles that address health issues.

Humanitarian issues

As a socially responsible organization, ADGAS has always been committed to the concept of "giving back" to society. It arranges events for children with special needs, donating heavily to institutions that provide a better quality of life for this challenged group of people. The company also sponsors Red Crescent campaigns and Civil Defense initiatives.

National events

As a responsible corporate citizen, ADGAS is always present at the UAE's national celebrations and functions, sharing in the national life and contributing to the achievements of this distinguished country, such as participating in UAE National Day. Other national and/or cultural festivals are often supported and indirectly sponsored, including the Palm Date Festival and the Camel Racing Festival.

Environment

ADGAS' commitment to protecting and enhancing the environment is fundamental to the way we work, using various initiatives to manage our operations' impacts on environmental issues ranging from climate change to waste reduction and use of resources.

Environmental management system

ADGAS is ISO:14001 certified by Lloyd's Register of Quality Assurance. ADGAS believes that prevention of pollution is the best way forward for managing environmental aspects. It has therefore adopted a formal system for optimizing energy efficiency at various stages of project design. The system is of particular relevance to new projects, as identifying and capturing improvement opportunities during the design phase is the most cost-effective means of developing energy-efficient processes. This procedure addresses all phases of project development from project concept to plant operation. Its adoption identifies the gaps between "proposed design" and best practice energy design. It also provides a framework for closing these gaps, or, by value engineering, to rationalize the deviation by a thorough technical-economic evaluation of project economics.

Air dispersion modeling was carried out for evaluating SO₂ air concentration at Das Island for the LNG train and studied the impact of sulfur recovery unit efficiency on the overall SO₂ concentration at Das Island.

ADGAS produces a clean source of energy that generates less carbon dioxide. The company is striving to reduce its operational impact on the environment and is planning to drastically reduce its emissions and flaring.

Twice a year, ADGAS routinely monitors stack emission sources (boilers and gas turbines) and ambient air quality on Das Island using chemical analysis. Ambient air quality is evaluated in six different locations for a range of harmful emissions.

ADGAS is involved in several projects to improve its environmental performance. Among these, flaring reduction schemes are top priority. Other projects include energy management and optimization, materials and water consumption, waste disposal, and transportation.

As part of the drive to adopting more sustainable, environment-friendly energy, and to embrace Abu Dhabi's strategy of using compressed natural gas as an alternative fuel for vehicles, ADGAS has started to convert some of its cars to operate on CNG, a step that encourages the use of clean energy, protects the environment, and embraces the shift to sustainable development in the UAE.



Quality assurance



Clean energy



Sustainable development



Sustainability

Health and safety culture

ADGAS was awarded ISO 14001 accreditation in 2004, following a thorough audit of the company's HSE management system. The certificate is reconfirmed every three years, subject to passing further audits.



Awards and recognition



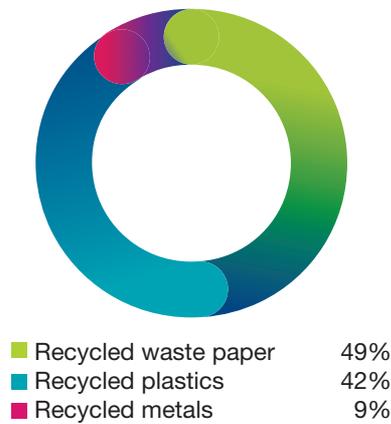
Excellent practices



Workforce protection



Waste reduction



The company's leading position was further honored when it won the 2008 Dubai Quality Award in the industrial organizations category, in recognition of its excellent business practices and procedures. Further acknowledgment of ADGAS' excellence and performance came in the form of the Sheikh Khalifa Excellence Award, Gold Category, Oil and Gas Sector for 2012.

In addition to these excellent awards, ADGAS also achieved in August 2013 the extraordinary milestone of 55 million man hours without a single lost-time injury, which makes it one of the best oil and gas companies with high HSE standards.

ADGAS strives to sustain its position as a regional leader by developing and promoting strategies that ensure industrial reliability, business efficiency, and open communication with its employees, contractors, and clients alike. This is coupled with ADGAS' long-established role as a responsible corporate citizen within the UAE community. Over the years, the company has launched scores of social and environmental initiatives that put it at the forefront of social progress, and make sustainability an embedded concept in all corporate policies and procedures.

ADGAS aims to satisfy customers by producing the best natural gas products, which are subject to intensive lab analyses before they are shipped.

The Product Quality Department also carries out regular testing, verification, and approval of all incoming raw materials, outgoing products, and process streams for ADGAS and ADMA-OPCO operations on Das Island.

Major hazards and business risks associated with production assets are managed through a management framework called AIRMS (Asset Integrity and Reliability Management System), and the company's environment management system gained ISO-14001 accreditation in 1994, audited and re-certified every three years.

The robust HSE Management System, that ADGAS is implementing in line with the ADNOC HSEMS, allows ADGAS to effectively and safely manage all the risks associated with the variety of activities conducted on a daily basis.

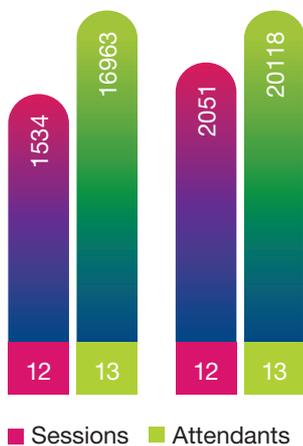
To make sustainability a daily business, employees receive training on safety and environmental issues, and are encouraged to participate in activities within the community through several partnerships and initiatives.

Strict HSE and quality control measures are taken throughout the production stages to ensure compliance with customers' quality and HSE criteria. Occupational healthcare is a constant priority in ADGAS' endeavors to provide employees with a healthy workplace. Regular surveys assess exposure to hazardous materials such as isocyanate-based paints, benzene, toluene, ethyl benzene, xylene, and welding fumes.

Bi-monthly monitoring of the thermal working environment takes place to ensure compliance with thermal work limits, as advocated by the Health Authority-Abu Dhabi. This allows for an estimation of the maximum safe work rate for working in heat with the prescribed work-rest cycles for workers.

Health and safety culture

HSE training sessions conducted



Detailed ambient noise monitoring is undertaken to protect the affected workforce from the harmful effects of industrial noise. This is based on the occupational health risk assessment recommendation and the fact that noise is one of the most important occupational health risks affecting the workforce in ADGAS.

A thorough survey of naturally occurring radioactive material (NORM) showed results were well within exemption limits and did not demonstrate the presence of NORM sources in ADGAS facilities. ADGAS' concern for its employees extends to their families, running regular campaigns on themes such as road safety, heat stress, and fires at home. All employees are encouraged to spread these messages to their families and friends.

ADGAS medical coordinators are also available to give medical advice to employees and their families. ADGAS offices have also been designed to create a healthy working environment, following best-practice ergonomics and complementing the company's commitment to encouraging employees to adhere to a healthy lifestyle.

In line with core ADGAS values and commitment to ethical behavior, the business ethics program "Tanbeeh" has been established for employees, contractors, and stakeholders to further enhance good governance and develop a culture of transparency.

Tanbeeh provides an additional channel to communicate concerns confidentially through a secure telephone line and a web-based reporting tool. ADGAS has partnered with EthicsPoint, an independent service provider, to host the reporting system for ADGAS. This system allows the communication of employee concerns efficiently and anonymously, to eliminate any real or imagined fear of retribution.

In addition to conventional reporting methods, Tanbeeh provides ADGAS employees and other stakeholders with a round-the-clock reporting facility in multiple languages to make suggestions, ask questions, or report concerns about business practices, safety, violations of law, and company policies in a secure environment.

