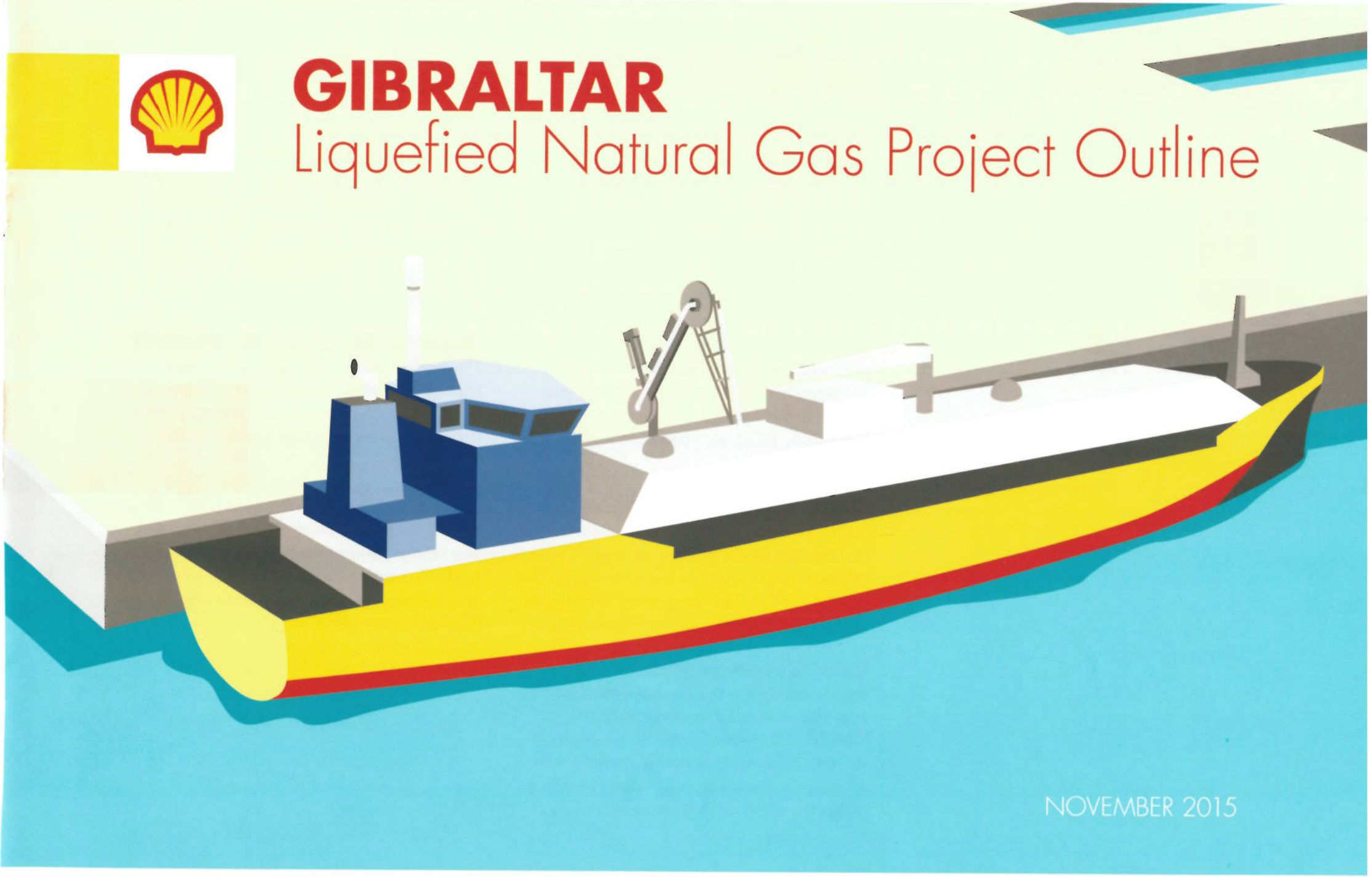
GIBRALTAR

Liquefied Natural Gas Project Outline



NOVEMBER 2015

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GAS - THE RIGHT CHOICE FOR GIBRALTAR

Whether it is to work, travel, heat and cool our homes, and much more, almost every aspect of our wellbeing is linked to the stable and affordable supply of energy. Gas already plays a significant role in this for millions of us across the globe.

Gas can satisfy Gibraltar's requirement for an affordable, reliable and sustainable energy source. Using gas to generate electricity has multiple benefits, most importantly for the environment and air quality, producing less carbon dioxide (CO_2), nitric oxide (NO_x), sulfur oxide (SO_x), soot and particles than other hydrocarbons.

With this project, Gibraltar will have a secure and reliable gas provision via the Liquefied Natural Gas (LNG) terminal, as it won't have to rely on a single source or plant for supply. This also means that LNG has greater flexibility to accommodate sudden demand fluctuations.

What is Liquefied Natural Gas?

LNG is natural gas that has been changed into a liquid state by cooling it to -162°C (-260°F). This means it is 600 times smaller in volume compared to its normal gaseous state, allowing for flexible transportation options without pipelines. In its liquid state, LNG is non-toxic and noncorrosive; it does not explode and cannot burn.

LNG is increasingly considered an economic and more environmentally friendly replacement for gasoil and fuel oil in a variety of applications including marine, heavy-duty transport, industrial, stationary and small-scale power generation. Industry experience demonstrates that with proper handling LNG is a safe and reliable fuel.

About the Gibraltar LNG Terminal

The terminal will receive, store and regasify LNG arriving at the terminal, ready for use in the power plant. Storage and transportation of the LNG requires no refrigeration to maintain it in a liquid state.

The proposed terminal will include a berth for a small LNG carrier (length: 117 m) to dock, and five storage tanks on the adjacent land. Here, the LNG is stored before being warmed up to its original gaseous state, and is then piped to the adjacent power plant.

SHELL - GIBRALTAR'S PARTNER OF CHOICE FOR LNG

Shell has unrivalled expertise in safely and responsibly managing LNG facilities and operations thanks to more than 50 years of LNG experience.

Running a safe, efficient and responsible business

This is the foundation of Shell's approach, which includes having global standards, processes and tools in place to manage safety, environment and community involvement. Shell aims to continuously improve the way it operates to prevent incidents and to avoid or minimise adverse environmental and social impacts across its projects and facilities. Shell reports on its performance in its annual Sustainability Report.

Sharing wider benefits where IT operates

Shell's business is planned for the long term, which means it can be part of a community for decades. There are many countries where it has operated for more than 100 years. Shell helps to develop local economies by creating jobs, sourcing from local suppliers, and paying taxes and royalties. It supports community projects that are based on the needs of the local communities.

As industry leaders in safety, project delivery, and innovation, Shell has the expertise and experience to help the proposed LNG project in Gibraltar succeed. Developing gas infrastructure projects involves more than just steel and concrete. As a responsible energy partner it makes it a priority to respect the environment, the safety requirements and contribute to the communities in which it works.

Benefitting from 50 years of global lng experience

For over 50 years Shell (joint) ventures have operated a diverse portfolio of LNG plants and terminals around the world. With 10 LNG liquefaction plants on five different continents, Shell is a truly global LNG player. The safety performance of these LNG plants is amongst the best in the industry.

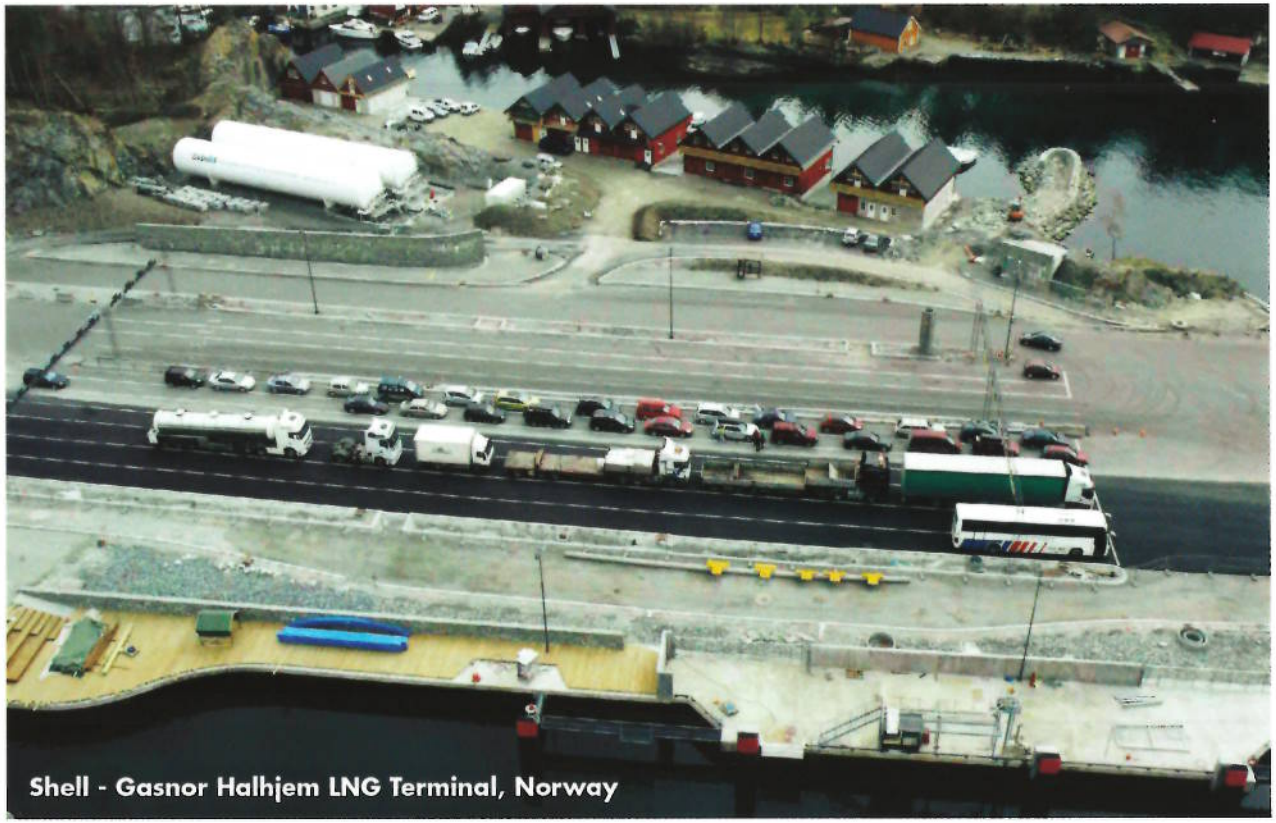
Responsible operations also make good business sense. LNG terminals with good process safety performance are typically more reliable, more efficient and have lower operational costs. And this is Shell's value proposition for Gibraltar. Shell has the necessary logistical, contractual, financing and marketing skills to set up and manage the complex LNG value chain: from a wide LNG portfolio to shipping and finally turning the LNG back into gas and distributing it to customers.

Shell provides advisory services and shares the benefit of its experience in the most updated LNG safety and technical programmes. Public and stakeholder engagement is vital and integral to its approach. It is committed to building constructive relations with its neighbours and local stakeholders, to provide clear, transparent information around its projects, and engaging to understand and respond to concerns. A dialogue is being established with key stakeholders such as the Port Authority, Fire Brigade, and the Airport Authorities, to ensure alignment of operations and provide adequate training to these organisations.

The terminal in Gibraltar is a small scale LNG project. Shell is experienced in small scale LNG and will apply this experience in Gibraltar. Gasnor (a 100% Shell-owned small scale LNG operation), has over ten years of operational experience in LNG for marine and small scale LNG in North Western Europe. Gasnor distributes LNG per small scale carriers and trucks throughout Scandinavia. It has three LNG production plants, more than 10 terminals similar to the one in Gibraltar, two ships, and 23 LNG trucks. To date Gasnor has carried out more than 70,000 operations transfers of LNG without incidents and its small scale LNG projects have shown that LNG can be operated safely. The vessel and crew Shell proposes using for Gibraltar are experienced in small scale operations.

Examples of operations and construction

Successful project execution and operation depend significantly on staff competence. Closing the skill gap requires on-the-job experience,



Shell - Gasnor Halhjem LNG Terminal, Norway

and visiting and working at similar projects or operations is one way to achieve this. During the construction of Altamira, the first Mexican LNG-receiving terminal (originally co-owned by Shell), a team was sent to Shell's LNG terminal in Hazira, India, to benefit from the significant operational experience of the staff there.

Safety during construction is paramount and Shell plays a key role in improving industry construction safety performance. The construction of the (large scale) Altamira LNG terminal took six million man hours, which were completed without a single lost time incident. For the Dubai LNG import terminal 2.3 million man hours were recorded without incident.

Examples in technology leadership

Shell has played a leading role in process safety research for many years and has unrivalled technical expertise in the fields of gas and LNG. Its research facilitates the development of optimal and safe designs for LNG facilities and ships. Shell has filed patent applications for 285 LNG technology related inventions since 1959, 175 of which were filed in the last 10 years.

Examples in LNG shipping leadership

Shell is one of the world's largest LNG shipping operators, managing and operating over 40 ships in an industry-wide fleet comprising around 400 carriers. LNG has been shipped across the oceans for more than 50 years and has a very strong safety record. Its safety performance and innovation in shipping operations is consistently among the best in the industry.

DETAILS OF THE PROJECT

The key criteria for the concept and location of the LNG import terminal are:

- safety in design and operation;
- minimum environmental impacts;
- high reliability and availability.

Minimised Impact

The priority has been to minimise the impact of both the construction and subsequent operation phases. Drawing on the vast Shell experience, including the design and construction of ten similar terminals, and industry leading technology

LNG carrier to supply Gibraltar - length: 117 m

and innovation, the LNG import terminal concept has been selected as the most appropriate to support the power plant demand. The design is simple, avoids big construction complexity and is simple to operate. For example, during the construction phase, most parts, such as the storage tanks, will be transported by sea for safety reasons and to limit road congestion in Gibraltar.

The terminal will be located at the North Mole next to the power plant, which has been selected as the safest and best positioning for the natural gas supply to the power plant. A 'small scale' carrier with a total length of 117 m will bring the LNG to Gibraltar and transfer it to storage tanks through a special loading arm. This loading arm is equipped with an Emergency Release System which reduces the risk of spills significantly. The LNG transfer will be performed about twice a month, and at night when port and airport activities are minimal, further increasing the safety.

Safe and Optimised Design

The LNG will be stored in five double wall stainless steel tanks of 1000 m^3 each, after which it will gradually be transferred to the vaporisers where the LNG will be transformed into natural gas responding to the power plant demands. In the vaporisers LNG is heated in a controlled way using the heat from the power plant cooling system. This method minimises the CO_2 emissions. The LNG vessel which Shell proposes to provide for Gibraltar operations will supply LNG for power generation, after all the relevant safety assessments have been completed.

The terminal has been designed to have no significant environmental impact. It will be installed on a reclaimed area and will have zero emissions during normal operation. The noise impact will be minimal because the rotating equipment used is very limited in number and size. The light impact will be similar to a residential area. There is no expected impact on the sea, flora and fauna by the LNG terminal and operations.

Industry experience demonstrates that with proper handling, LNG does not pose greater risks than other fuels such as gasoline or diesel. When in a liquid state, LNG will neither burn nor ignite or explode. There will be multiple layers of protection put in place at the LNG facility in Gibraltar, each of which is designed to prevent and/or mitigate the effects of an incident.

ENSURING SAFETY AT THE LNG TERMINAL IN GIBRALTAR

Personal and process safety is central to Shell's business. Its goal is for all of its facilities to operate with no leaks and no incidents that may cause harm to employees, contractors, neighbours or the environment. Shell has a global set of standards that detail the safety risks that need to be managed and who is accountable. This is called the Health, Safety, Security, Environment and Social Performance (HSSE & SP) Control Framework and it defines the controls for managing its operations safely and responsibly.

Location of the Facility

Gibraltar is a small, densely populated territory. Shell has done extensive work to identify the safest location for the LNG terminal based on its knowledge and practical experience in LNG operations. The location on the reclaimed land west of the new power plant is considered to be the safest location for providing gas to the new power plant.

The UK Health and Safety Executive (HSE) plays a role to provide advice that allows local planning authorities to make an informed decision in respect of the planning process whilst fully understanding the risks.

The proposed Gibraltar LNG terminal has followed this HSE process, which enables the Government of Gibraltar to consider whether the development of a LNG project is acceptable in a particular location.

Lloyd's Register has also conducted an assessment of the concept and concluded that the solution is based on thorough engineering practise compliant with relevant legislation and practices for this kind of facility, as applicable for Gibraltar and the UK HSE.

State of the art Technology and process

Gibraltar LNG will have multiple safety systems in place and the terminal design incorporates a number of proven and tested technologies that are in use in small scale LNG plants around the world. These systems are independently assessed under HSE regulation to ensure best available techniques are used. This will allow the project to meet the stringent safety requirements designed to limit the probabilities and consequences of any potential incidents.

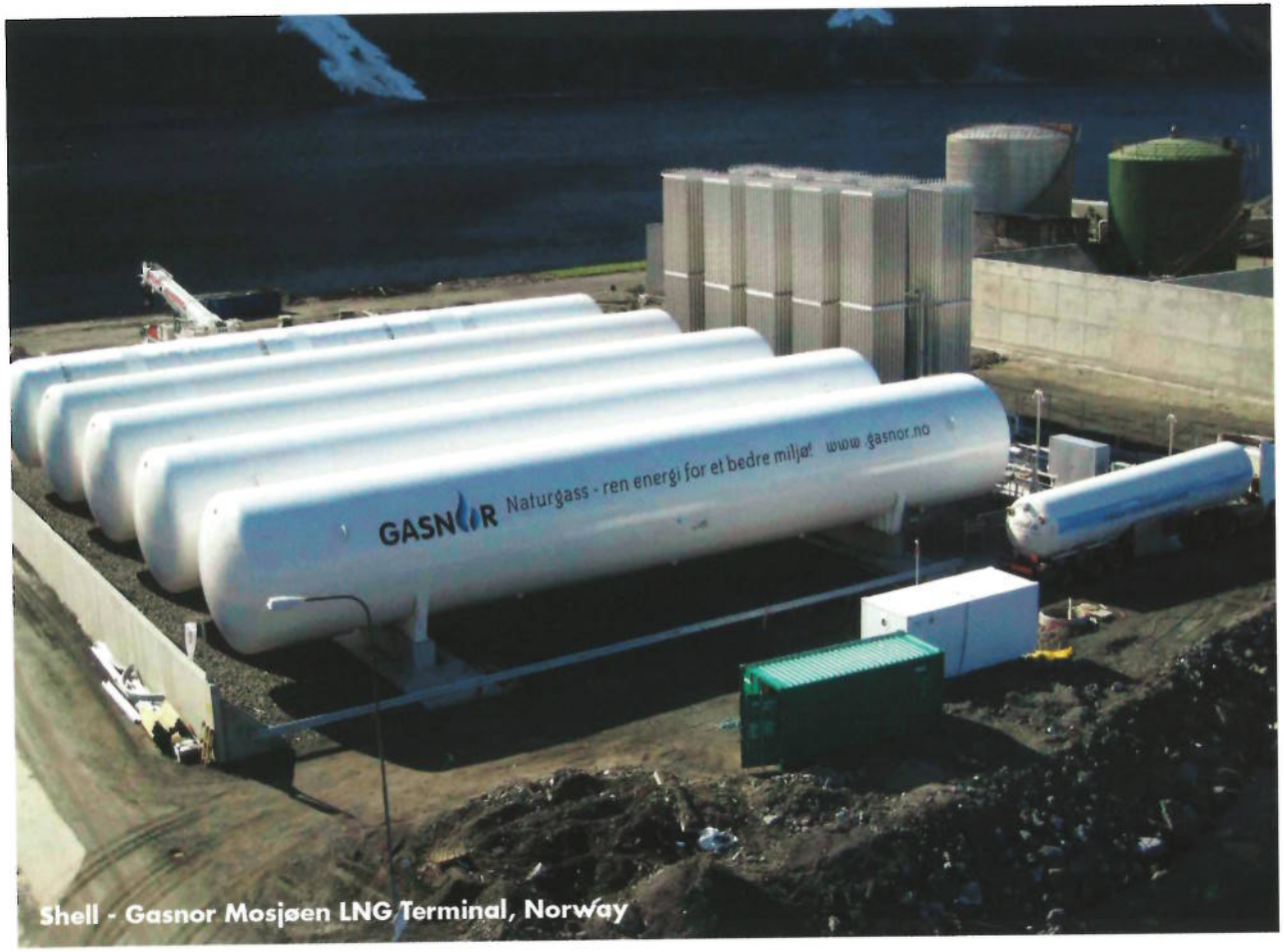
The state of the art techniques and processes include:

- LNG transfer arm with automated safety release systems to immediately seal loading points in case of unexpected or emergency uncoupling.
- Double walled stainless steel tanks, which provide a robust and safe solution to storing LNG.
- Automated safety and leakage detection systems that are used on site for controlling and monitoring purposes.
- Restrictions on unloading time for LNG to avoid any potential conflict with the airport operations and the cruise ships.
- Emphasis on training and safety culture, working through strict management systems, including detailed risk assessments, mitigating barriers and safety behaviours.
- Together with the government and emergency services, the terminal will maintain and regularly test a Major Emergency Plan. This ensures the right protocols are in place to ensure a swift and coordinated response in the unlikely event of an emergency.

CONTROL OF HAZARDS

Extensive work has been done during the design phase to minimise the potential harm to people, the environment and industrial areas. In addition, considerable operational safety measures are implemented to reduce the risk and consequence of a potential incident.

In its liquid state, LNG is non-toxic and non-corrosive; it does not explode and cannot burn. However, due to its low temperature, direct exposure to LNG poses the risk of cold burns and possibly respiratory damage from breathing cold vapours. In the unlikely event of a spill, the major



Shell - Gasnor Mosjøen LNG Terminal, Norway

associated hazard could be the formation of a vapour cloud. While such a cloud will normally disperse into the atmosphere with very limited impact to the environment, the cloud is flammable under certain specific conditions.

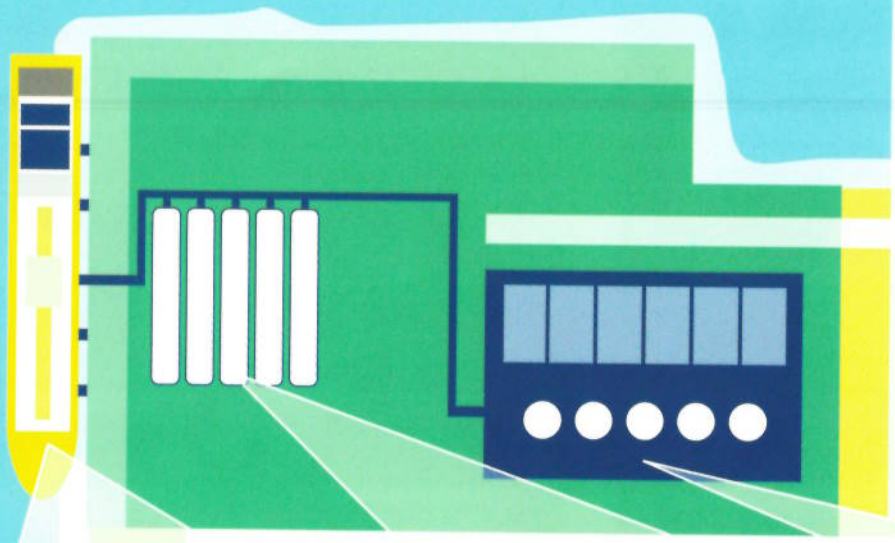
In over 50 years of operations the LNG industry has a strong safety track record. Shell, with its subsidiary Gasnor, has extensive experience in operating and maintaining similar facilities in Scandinavia, which has had no material incidents in over 10 years of operations and more than 70,000 LNG transfers.

LNG IN GIBRALTAR:

- LNG is a safe and environmentally friendly product
- Stringent safety controls and standards ensure safe design and operations
- Conclusions of HSL land use planning advice and Lloyd's Register safety review support the development
- Shell is industry leader in LNG technology and safety
- Terminal design includes multiple safety and monitoring systems and state of art technologies

SHELL'S COMMITMENT TO SAFETY AND ENVIRONMENT

At the Gibraltar LNG terminal, safe operation is the highest priority. Shell places stringent controls upon itself to make sure that all its safety processes will be implemented and followed effectively. Shell's safety standards are among the most stringent in the industry. Additionally, Shell is also governed by numerous UK and European regulations.



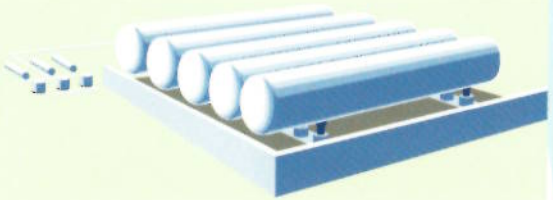
SECURE AND SUSTAINABLE ENERGY FOR GIBRALTAR

Liquefied Natural Gas (LNG) can satisfy Gibraltar's requirement for an affordable, safe, reliable and sustainable energy source. Using gas to generate electricity has multiple benefits and can provide an environmentally friendly supply of energy for years to come.

LNG is natural gas that has been changed into a liquid state by cooling it to -162°C (-260°F). Therefore it is 600 times smaller in volume compared to its normal gaseous state, allowing for flexible transportation options by sea, without pipelines.

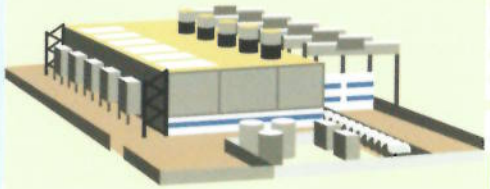
LNG VESSEL

A small scale LNG carrier will bring the LNG to the Gibraltar Port. This will be done approximately twice a month at night, when other port and airport activities are minimal.



LNG TERMINAL

The LNG will be stored in five double wall stainless steel tanks, from where it will gradually be warmed with existing heat from the powerplant and returned to gas. From here the gas will travel along a short pipeline to the power plant.



POWER PLANT

The gas is used to fuel the new power plant, which will ultimately provide electricity to the homes and businesses of Gibraltar.