

NOVGERA

LNG Brochure

For customers

**Clean energy solutions
from natural gas.**

Helping economies achieve net zero with clean and effective energy solutions.



Natural gas already accounts for about a quarter of global electricity generation. It is easily stored and can be delivered through pipelines or liquefied and sent by ship. Gas-fired power plants can turn on and off quickly and is the cleanest burning fossil fuel. Gas therefore, is a convenient way to respond to both seasonal and short-term demand fluctuations and meet cleaner energy demands.



What we do

Novgera is a clean energy company offering clean energy products and services. Through our world class partnerships, we are able to develop small scale LNG projects, as well supply LNG and natural gas to energy intensive users. We also enable our customers to switch from less efficient, carbon intensive energy sources to cleaner fuels.



Extraction

Extraction of Natural Gas



Liquefaction

Liquefaction of Natural Gas



Distribution

Distribution of LNG



LNG/ Gas to power

LNG Gas/Power Projects



Small Scale LNG is a scalable method to generate cleaner and reliable energy.

Small-scale LNG has the potential to replace carbon intensive power generation by replacing coal, heavy fuel oil and diesel with natural gas.

LNG can support particularly growing electricity demand in remote areas and islands with the cleanest fossil fuel available for power generation.

Due to the operation flexibility it can be seen as a perfect match with the fluctuating renewables like wind and solar power for investment in a sustainable future energy mix.



Challenges

Meeting both growing energy and rising natural gas demands.



50%

Electricity will account for final energy demand by 2050. Growing from 30% today



40%

of the demand for natural gas will for industrial use by 2025



36.8 Gt CO₂

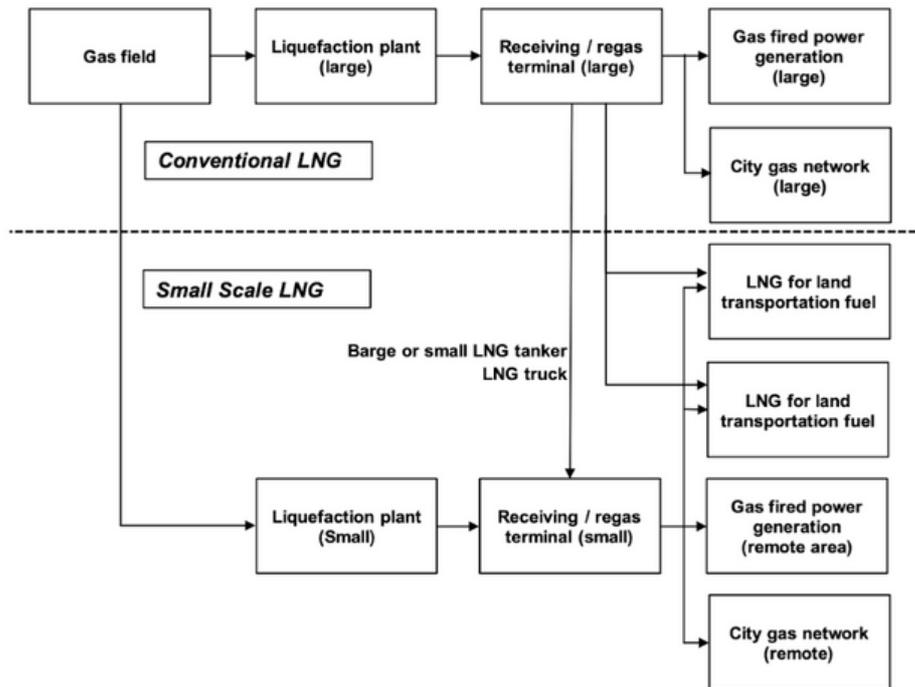
produced from energy combustion and industrial processes



There are many challenges today which need to be addressed. As the middle class population grows. There is a concomitant increased demands for energy, products and food. With the need to achieve net zero and gas supply challenges - this presents medium and longer term challenges to energy security, cleaner power generation and industrial feedstock availability.

Solution

Our Vision Is to use LNG to build a cleaner future



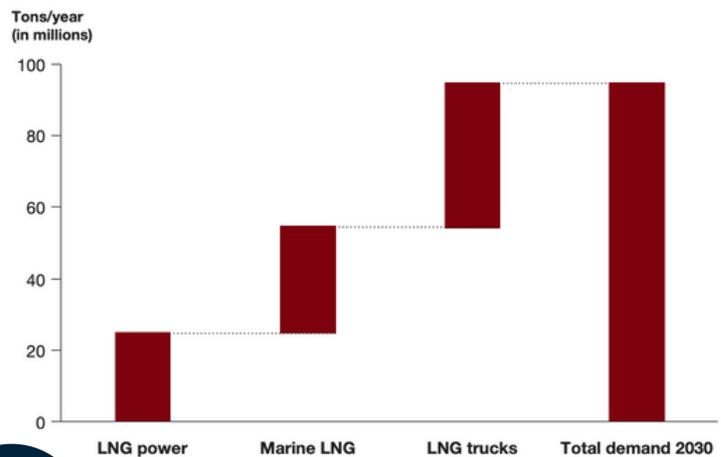
Our vision is to use small scale LNG solutions to meet growing energy and industrial demands, and decarbonise existing power generation.

About Us

Our ssLNG

partnerships can deliver a return to the environment and to our customers

ssLNG demand is estimated to grow to 100Mt by 2030



Source: Engie, research



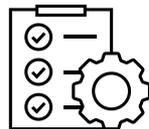
SSLNG has the advantages of lower initial investment costs compared with conventional LNG, which means that supplies can come online in a relatively short period of time, and it also has flexibility in terms of logistics and operation not found in pipeline supply.

Our LNG Ambition

Our ambition is to reduce emissions in power generation. Provide clean and reliable power to promote economic growth. As well as to provide cost effective feedstock for industrial users. In addition to providing a positive return on investment to all our customers.



**Reduction
in emissions**



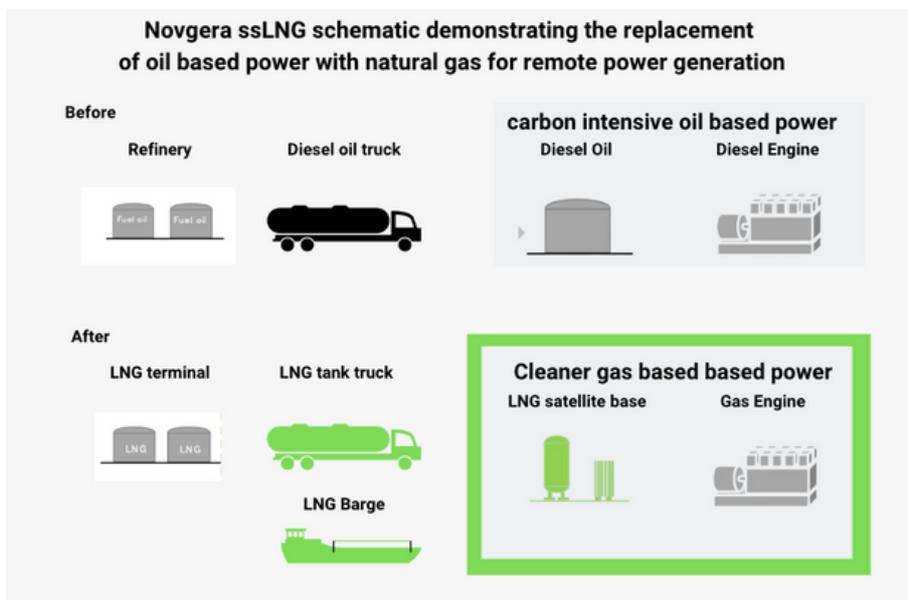
**Over 14% return
on investment**



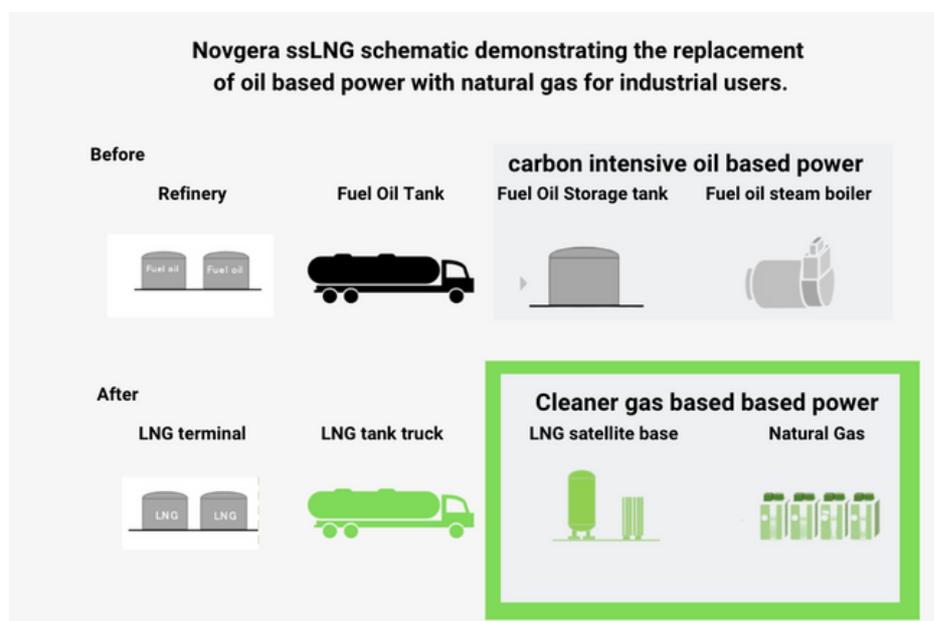
**Reduction in
operational costs**

Our LNG Solutions

We can replace carbon intensive based power generation with natural gas



We can provide cleaner and more efficient in power generation for industrial users.



Gas for

Industrials

Why choose LNG ?

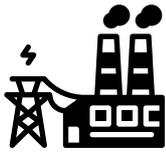
ssLNG can be used for a wide range of industrial applications and processes, such as heating, cooling, drying, processing and food production.

It is already widely used in a variety of industries worldwide wherever natural gas isn't available. Sectors that rely on LNG include food processing, bottling of beverages, pet food manufacture, dairy products manufacture, aggregates and asphalts - to name just a few.

Clean-burning and low carbon, LNG is an effective, tried-and-tested alternative to expensive, oil-based systems for businesses concerned about costs and sustainability.



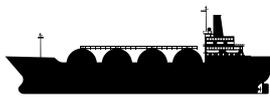
Utilities can use Cleaner power



20%

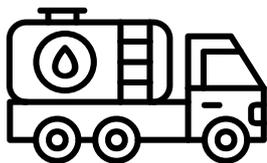
Electricity demand today
globally is met by natural gas

Natural gas accounts for about a quarter of global electricity generation. Advances in LNG technology has lowered to cost of gas and LNG infrastructure enabling gas to meet power demands in remote areas. In addition to this, switching to natural gas can also provide utilities with a positive return on investment. Our LNG-to-Power projects can help utilities switch gas for existing power generation or develop new gas fired power generation projects.



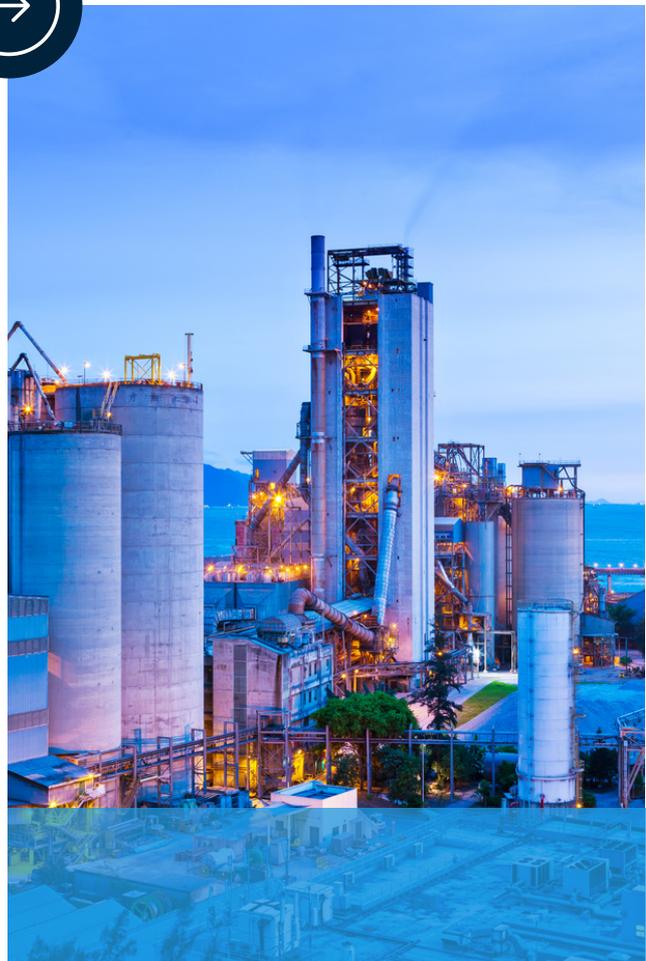
4,300 bcm

projected natural gas
demand by 2025



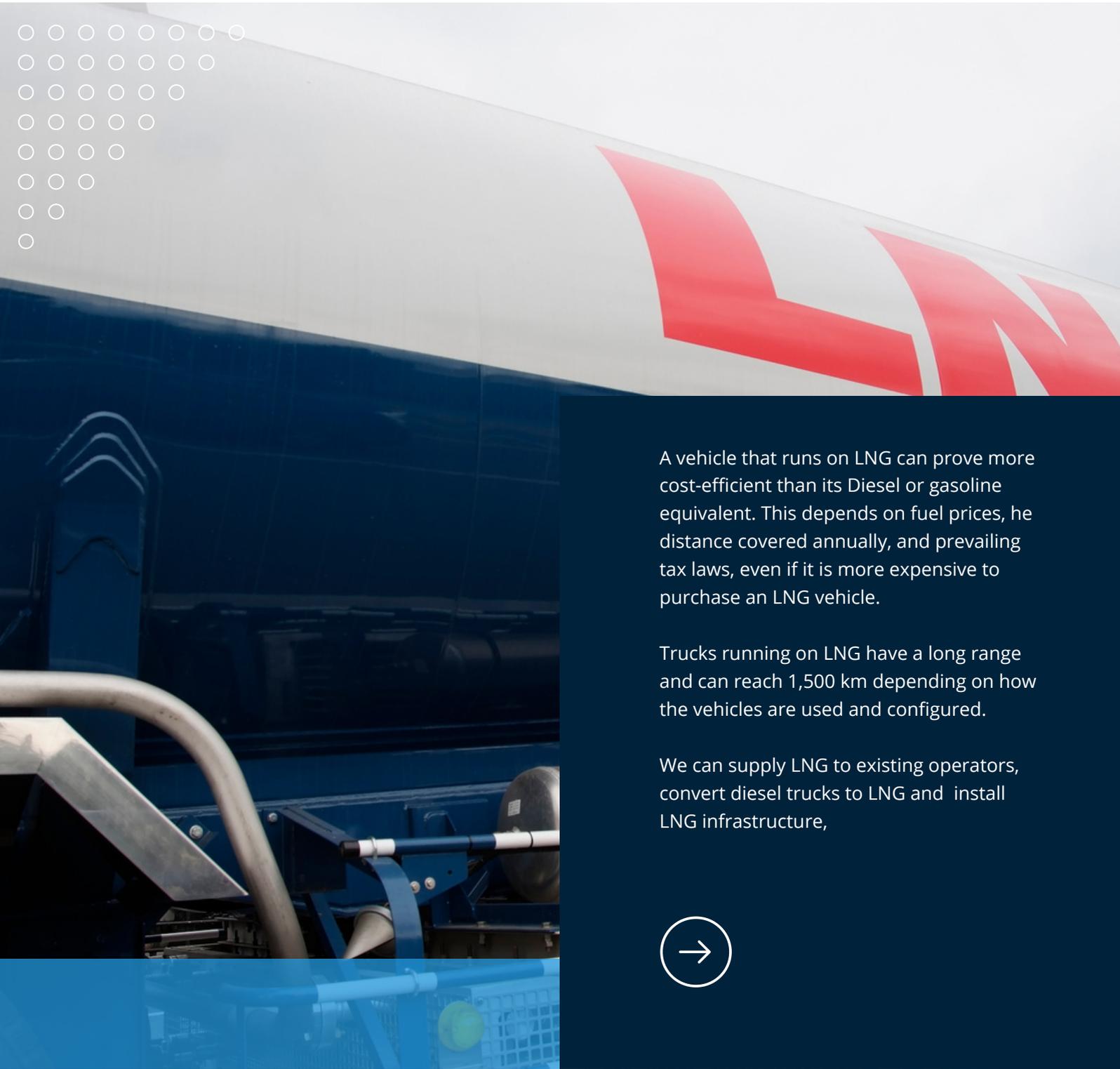
1.6%

Demand growth
for gas globally



LNG in

Transport



A vehicle that runs on LNG can prove more cost-efficient than its Diesel or gasoline equivalent. This depends on fuel prices, the distance covered annually, and prevailing tax laws, even if it is more expensive to purchase an LNG vehicle.

Trucks running on LNG have a long range and can reach 1,500 km depending on how the vehicles are used and configured.

We can supply LNG to existing operators, convert diesel trucks to LNG and install LNG infrastructure,



LNG for

Bunkering



The adoption of Liquefied Natural Gas (LNG) as a marine fuel is becoming increasingly popular. The International Association of Ports and Harbors (IAPH) advocates that the safe use of LNG as a marine fuel contributes to reduce the impact of ports and shipping industry on air quality. We can support LNG infrastructure for bunkering.

Truck-to-Ship

Truck-to-Ship (TTS) transfer is the most frequent type of bunkering. Typically, a truck loaded with LNG is connected to the ship via a flexible hose. This is a good option for small-sized vessels looking to minimize their investments.

Ship-to-Ship

Ship-to-ship (STS) sea bunkering can take place along the quayside, at anchor or at sea and is the preferred method for bunkering at sea. It may require additional permits, as LNG bunker vessels are considered to be carrying dangerous cargo.

Shore to Ship

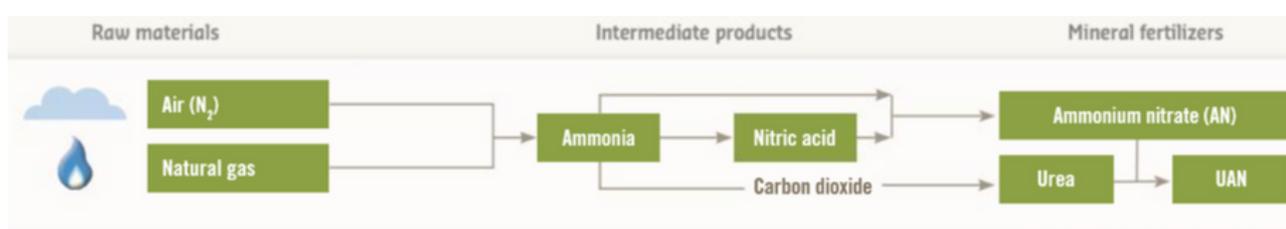
In this case, LNG is bunkered from an inland tank, station, or terminal that uses pipelines. It involves the use of loading arms that allow for larger hoses and increased efficiency.



Gas based industries

Fertiliser

Process of fertiliser production from gas



Natural Gas in Fertilizers

For nitrogen-based fertilizers, the largest product group, the process starts by mixing nitrogen from the air with hydrogen from natural gas at high temperature and pressure to create ammonia. Approximately 60% of the natural gas is used as raw material, with the remainder employed to power the synthesis process.

As the demand for fertilisers increase we can help producers of nitrogen based fertilisers secure their access to reliable, competitive feedstock from natural gas, through flexible and bespoke SPAs.



Contact

Let's Get Work Together

Please get in touch learn more how our LNG solutions can benefit your company.



Novgera

 +44 207 692 1871

 energy@novgeracom

 www.novgera.com