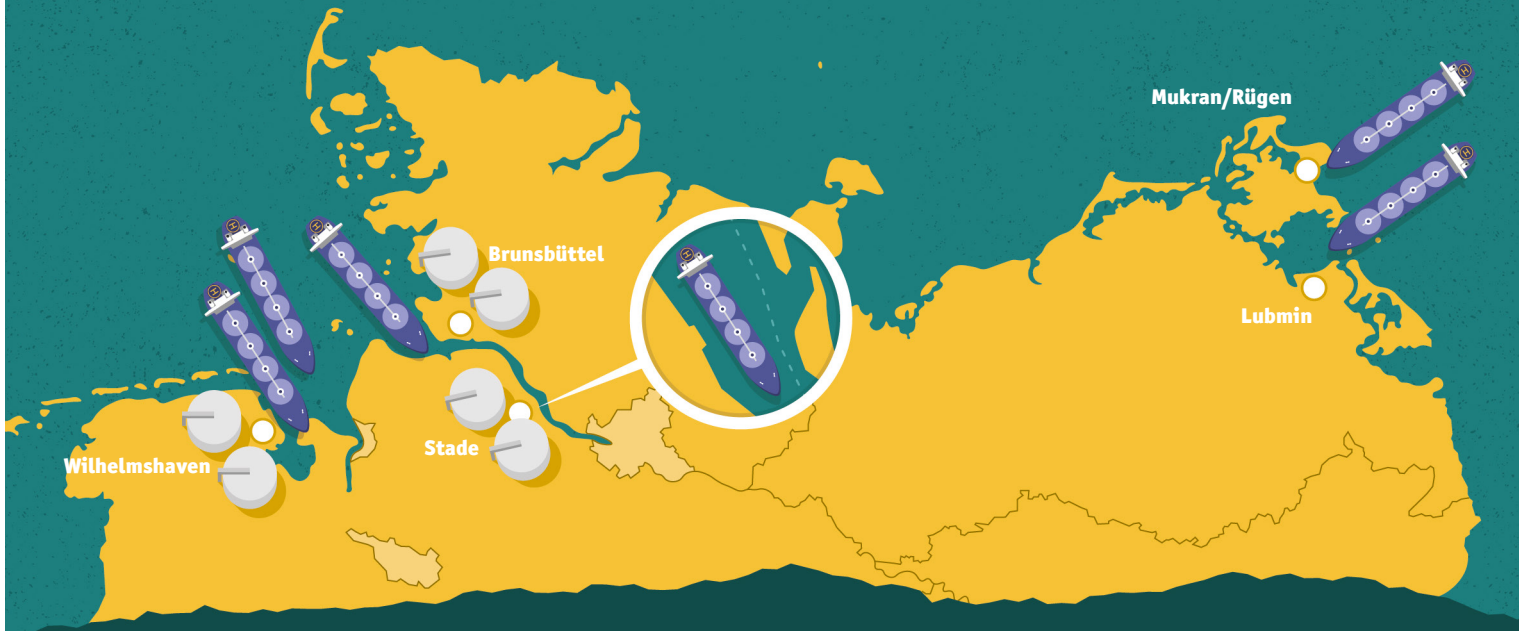




LNG

6 REASONS WHY YOU SHOULDN'T BELIEVE IN THE FAIRYTALE OF LIQUIFIED NATURAL GAS



What is LNG?

In order to transport natural gas by ship, it is cooled down to -161°C in an energy-intensive process until it becomes liquid. This liquified natural gas (LNG) is then warmed up again and returned to a gaseous state at the import terminals in order to feed it into the gas grid, a process known as regasification.

LNG Terminals in Germany – where do we stand?

As a result of the Russian war of against Ukraine and the following energy crisis, the German government has made it possible to ramp

up LNG infrastructure and imports on a large scale with the LNG Acceleration Act "LNG Beschleunigungsgesetz", which weakens important participation rights and cancels environmental impact assessments for floating terminals, known as Floating Storage and Regasification Units (FSRUs). Since then, LNG has been presented as a solution to the energy crisis.

Nine LNG terminals are currently planned in Germany. The first three FSRUs went into operation in Brunsbüttel, Lubmin and Wilhelmshaven at the end of 2022 and beginning of 2023. More are to be added in Wilhelmshaven, Stade, Brunsbüttel and Mukran (on the island of Rügen), before onshore LNG terminals in Stade, Wilhelmshaven and Brunsbüttel are scheduled to go into operation in 2026.

Wilhelmshaven

FSRU Höegh Esperanza, Uniper
• Capacity: 7,5 bcm/year
• In operation since December 2022 until 2032

FSRU Excelsior, TES/Engie
• Capacity: 4,5 bcm/year
• Planned for 2024 until at least 2026

Onshore Terminal, TES
• Capacity: up to 20 bcm/year
• Planned for 2026 until 2043

Additional Infrastructure:
harbour development and Pipeline Infrastructure

Brunsbüttel

FSRU Höegh Gannet, Elbehafen LNG GmbH & DET
• Capacity: 3,7 - 7,5 bcm/year
• In operation since December 2022 until at least 2027

Onshore Terminal, German LNG Terminal GmbH
• Capacity: 10 bcm/year
• Planned for 2027 until 2043

Additional infrastructure:
harbour development and Pipeline Infrastructure

Stade

FSRU Transgas Force, Hanseatic Energy Hub
• Capacity: 7,5 bcm/year
• Planned for 2024 until at least 2026

Onshore Terminal Hanseatic, Energy Hub
• Capacity: 12 bcm/year
• Planned for 2027 until 2043

Additional infrastructure:
harbour development and Pipeline Infrastructure

Lubmin

FSRU Neptune, Deutsche ReGas
• Capacity: 5 bcm/year
• In operation since January 2023
• To be moved to Rügen in 2024

Rügen

FSRU Transgas Power, Deutsche Regas
• Capacity: 5-7,5 bcm/year
• Planned for 2024 until 2043

FSRU Neptune, Deutsche Regas
• Capacity: 5-7,5 bcm/year
• Planned for 2024 until 2043

Additional infrastructure:
harbour development and Pipeline Infrastructure

6 reasons why you shouldn't believe in the fairytale of LNG

Reason 1:

LNG is no climate-friendly technology!

There are significant methane emissions along the supply chain (around 3-3.5 %). Liquefaction, transport and regasification require large quantities of energy, which make LNG inefficient. The vast majority of LNG imported in Germany is fracked gas, which has a CO₂ footprint worse than coal. Furthermore, the natural gas demand of Germany (and Europe) is an incentive for new exploitation projects, e.g. in the US or Senegal even though the International Energy Agency (IEA) has made it clear, that no further fossil projects should be developed, if the 1,5°C climate target is to remain within reach. The construction of import terminals is associated with immense and often irreversible environmental destruction.

LNG has a serious climate impact and causes environmental pollution at export and import locations

Reason 2:

LNG is not needed to guarantee energy security!

The German LNG plans are based on highly unlikely scenarios. There has been no gas shortage. On the contrary: natural gas storage facilities were and are filled to above-average levels. For 2030, the natural gas demand is about 74,1 bcm according to the German government's data. If all LNG projects are implemented as planned, Germany would have an overcapacity of at least 50 bcm in 2030.

Today's LNG plans will lead to massive overcapacities

Reason 3:

LNG leads to a fossil Lock-In!

The construction of onshore LNG terminals means building fixed infrastructure and dredging harbours which means long-term changes in the operating infrastructure and environment. The FSRUs already in operation have so far only made a marginal contribution to the supply of LNG in Germany. Nevertheless, their charter contracts are fixed for several years. There are no short-term contracts.

The ramp up of LNG infrastructure leads to a lock-in into decades of fossil dependencies

Reason 4:

LNG terminals are not ready for hydrogen!

Until now, there is no evidence, that terminals can be used for hydro-

gen or its derivatives. Particularly for FSRUs, the conversion is almost impossible and the conversion process for onshore terminals is not certain. Moreover, the permits for LNG infrastructure include no specific requirements regarding the possibility of a conversion to hydrogen. Instead, the supply contracts for LNG are signed for several years which means a long-term dedication to the operation with LNG and not with hydrogen or its derivatives.

Extensive conversion work is necessary to reach H₂-readiness. LNG terminals are primarily fossil infrastructure

Reason 5:

LNG ramp up leads to health issues and human rights violations!

LNG imports from the USA (specifically Texas, Louisiana) induced by Germany (and Europe) lead to considerable environmental pollution and thus jeopardise the health of the population at the export locations. Poor, indigenous and people of colour are particularly affected by this. As fracking technology, which is harmful to the climate, the environment and people, is used in the USA, people are confronted with health risks such as asthma and an increased issues of cancer.



The decision in favour of LNG in Germany has a global impact: Elsewhere in the world, the environment and people are suffering from the German (and European) hunger for energy

Reason 6:

LNG causes massive environmental destruction!

Some of the operating FSRUs use chlorine biocide. Permanent chlorination is a major threat to marine life as well as to local fisheries. As the licence for FSRUs does not stipulate any meaningful and adequate monitoring, the massive environmental damage cannot be adequately tracked. The construction of infrastructure puts a strain on particularly sensitive areas and in many cases destroys them. This is enabled through the LNG Acceleration Act, which allows floating LNG Terminal to be built without an environmental assessment. The deepening of shipping channels and the laying of pipelines are particularly problematic. These construction works pose a massive threat to a wide variety of animal and plant species. In addition to these irreversible effects on the environment, the LNG terminals cause considerable noise and pollutant emissions, which have a negative impact on the quality of life of local residents and the environment.

The environmental damage is massive and its long-term effects on the affected ecosystems are unforeseeable

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