# LNG Terminal in Lithuania

## Security of Gas Supply

LNG TERMINAL


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Gas Naturally Event, Brussels

# Content



# 1. Security of Gas Supply

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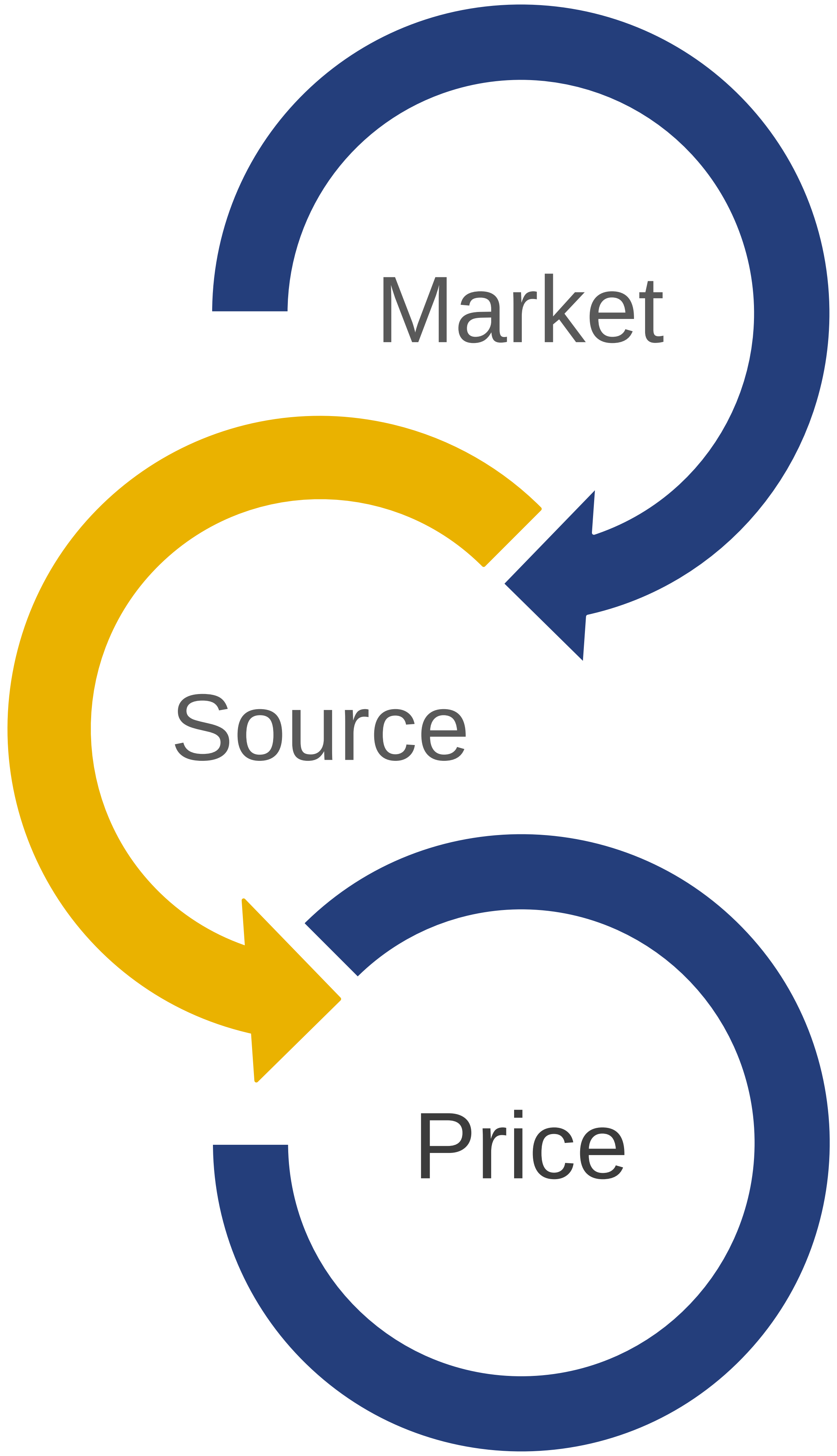
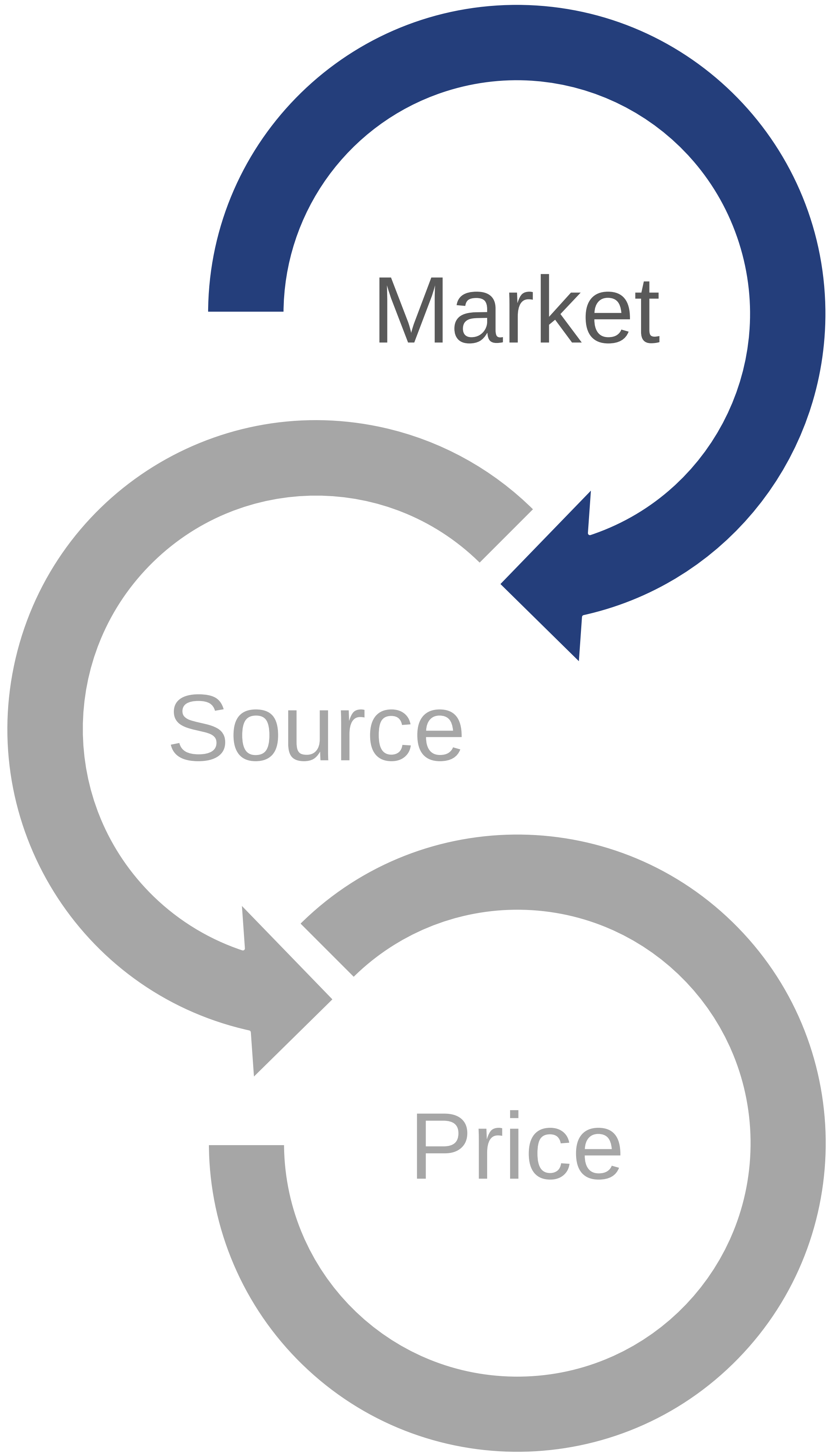
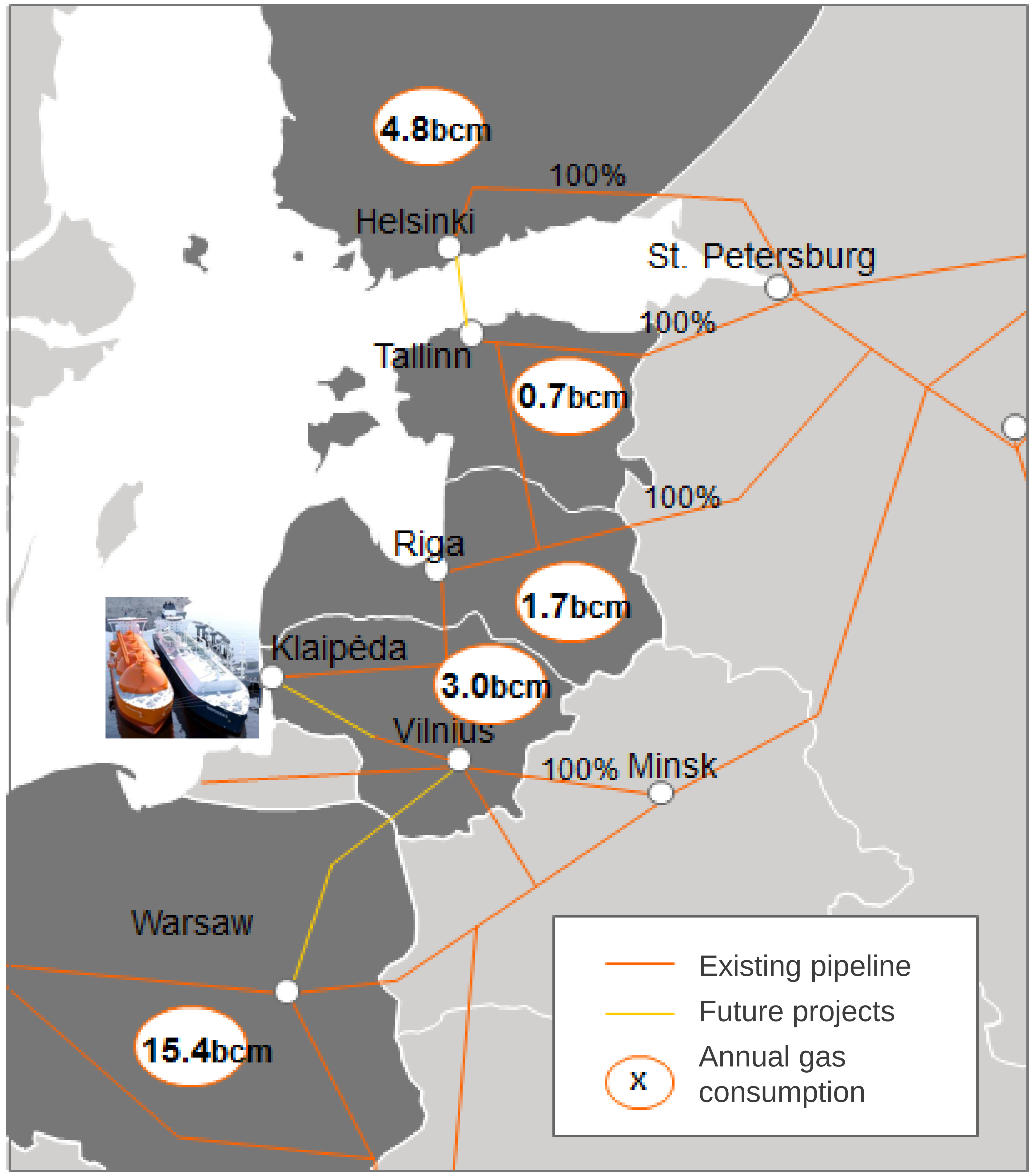



THREE main challenges

# 1. Security of Gas Supply



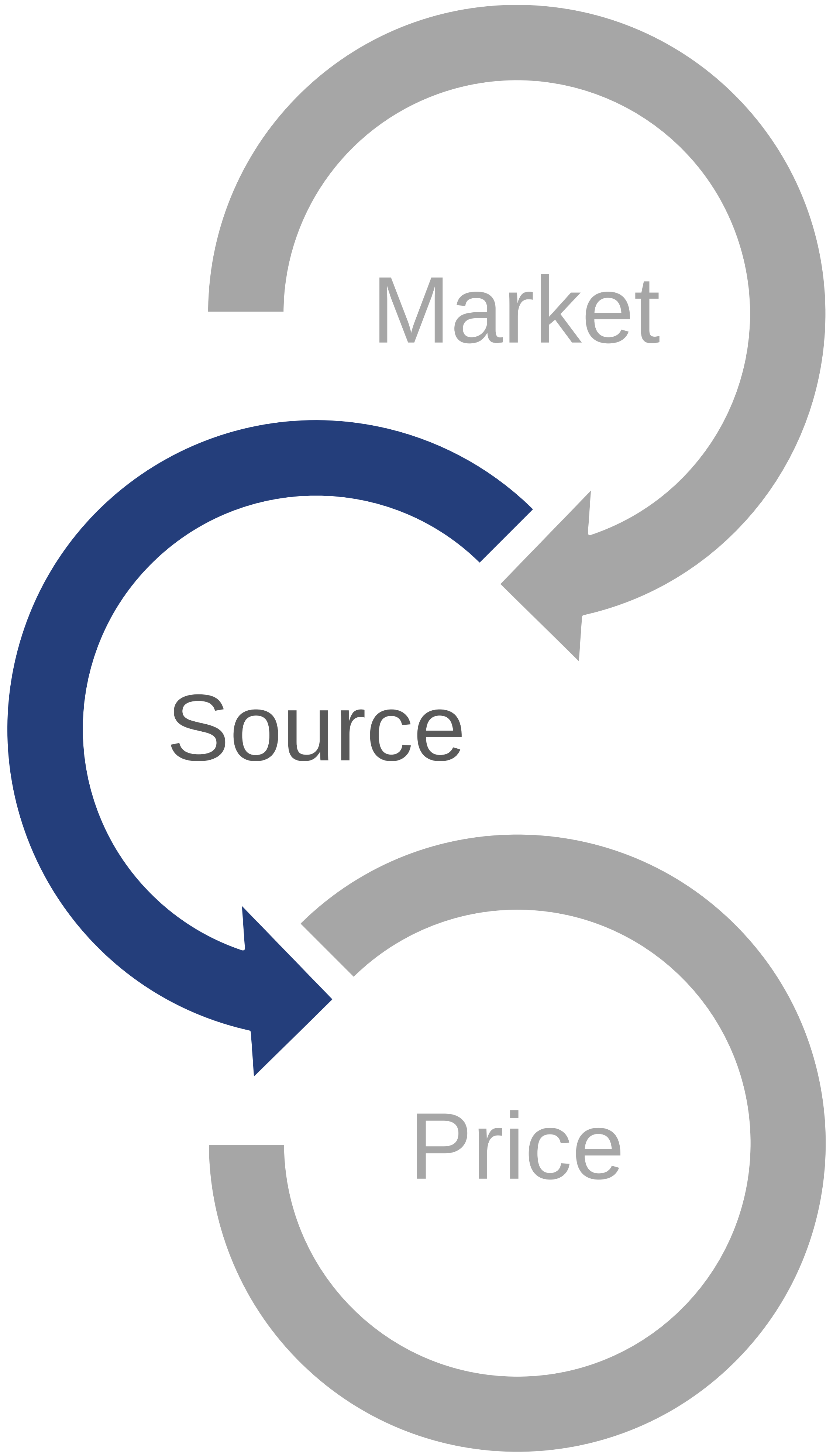



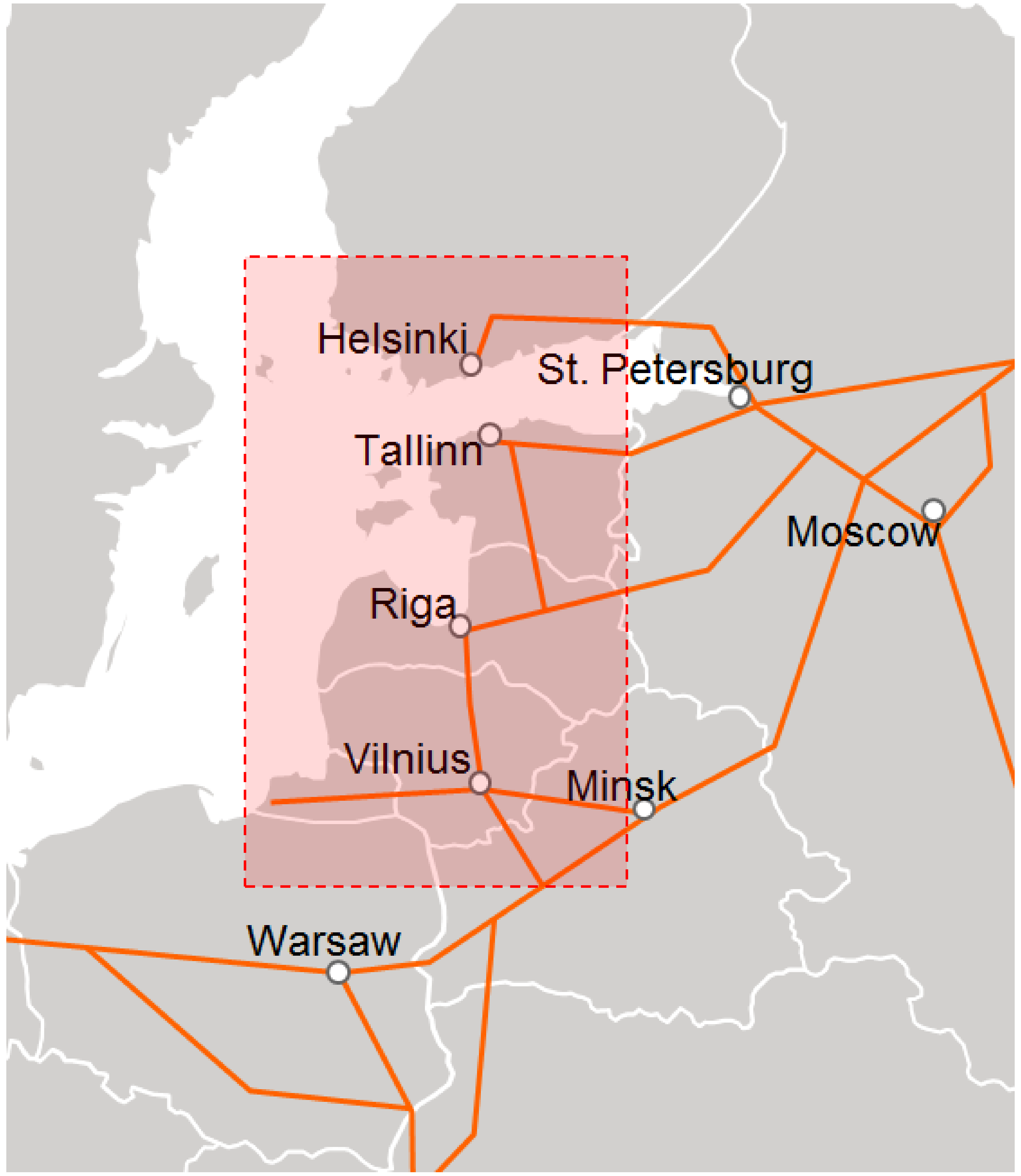

- Currently there is no gas market between the Baltic states and Finland
- The interlinks between countries are weak
- There are major infrastructure projects to enhance the situation

**Projects for diversification**

1. Baltic Interconnection
2. Interconnection Lithuania-Poland
3. Gas Storage Capacities
4. LNG terminal in Klaipėda

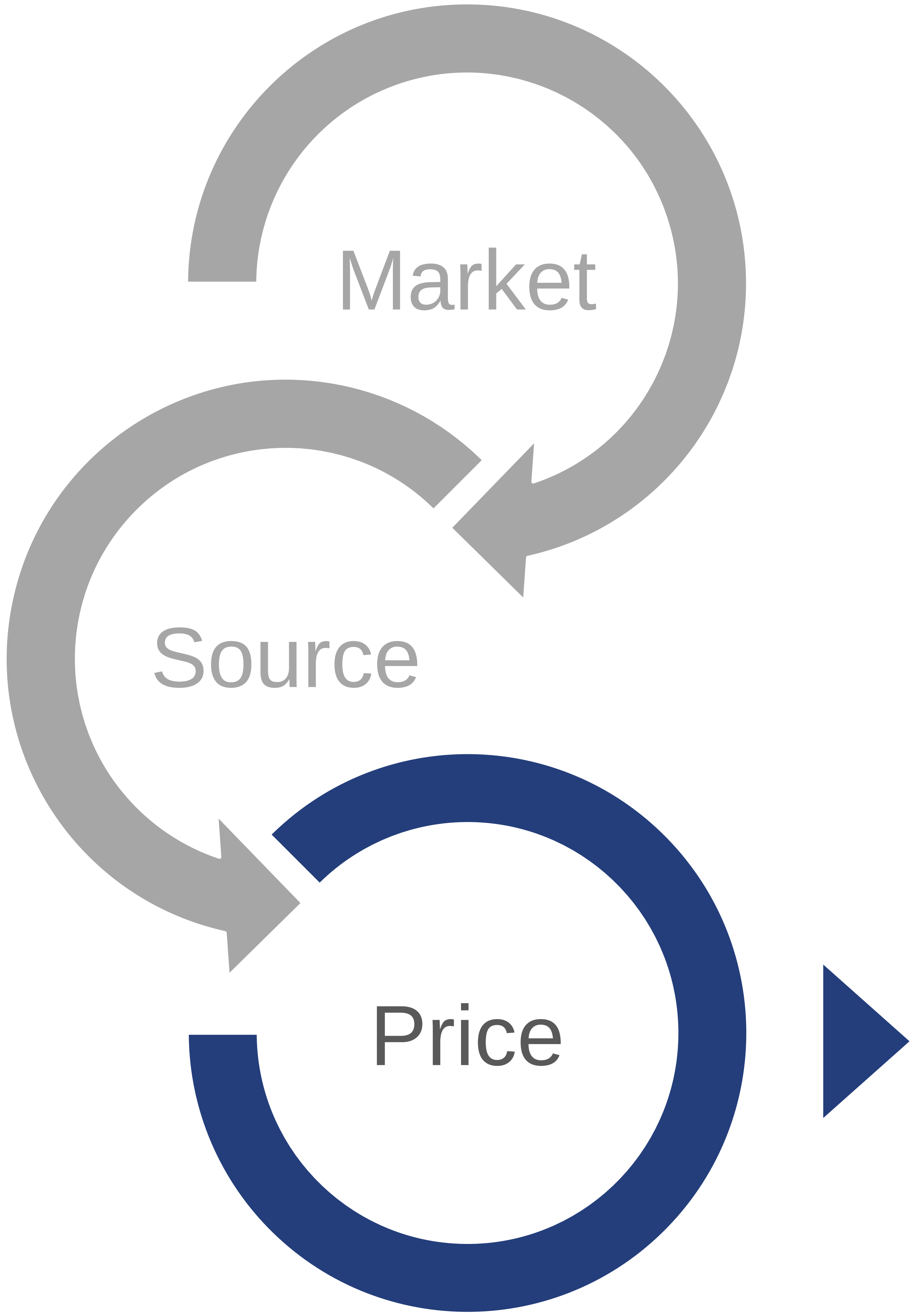
# 1. Security of Gas Supply



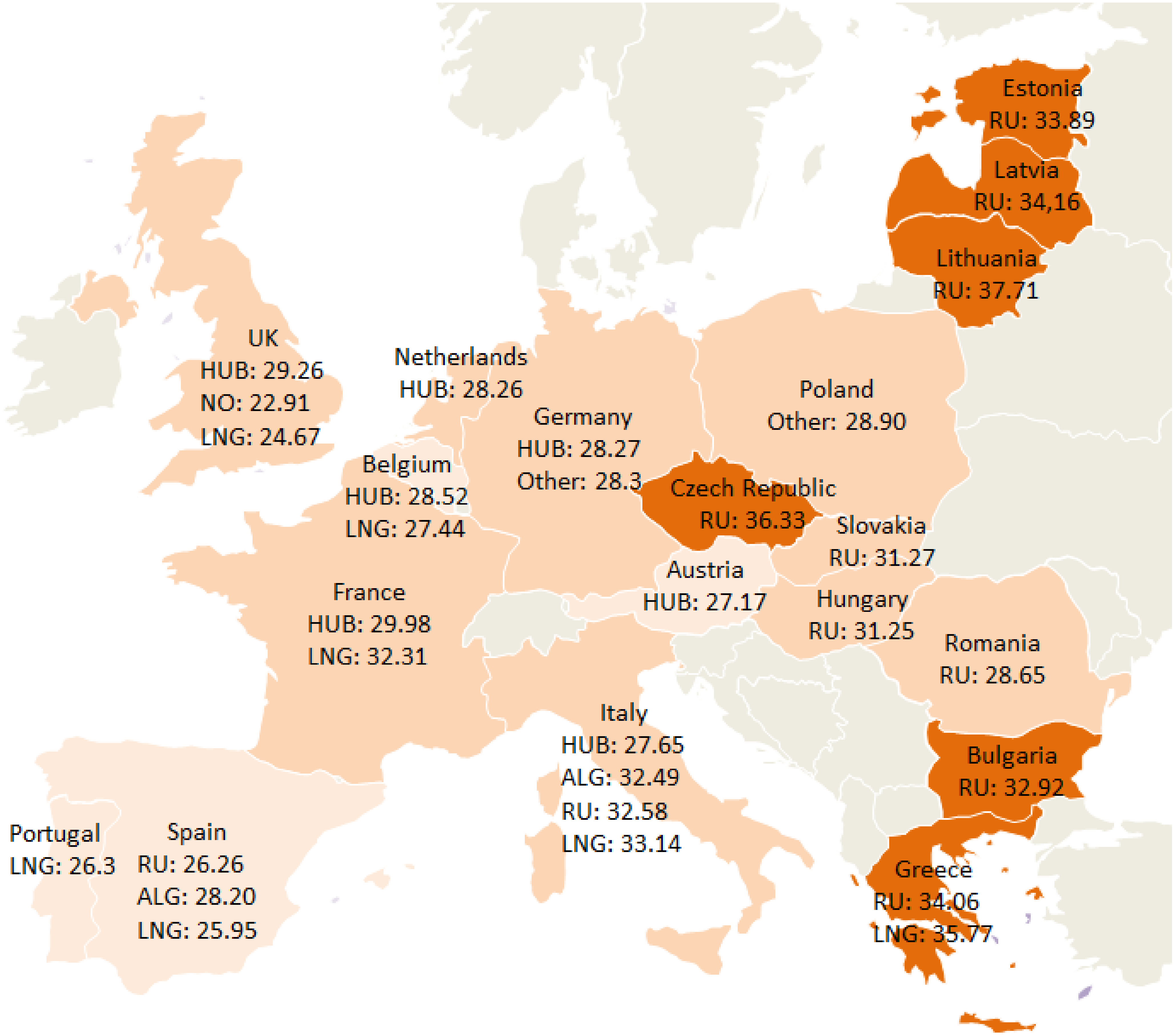




- Currently only one source of gas – extreme dependency on a single supplier
- Low energy security level on the regional scale
- One of the last "Energy Islands" in Europe

# 1. Security of Gas Supply




## Comparison of EU wholesale gas prices




Price in €/MWh, July 2013

*Source: European Commission*

## TOP 5

| Rank | Country |
|---|---|
| 1. | Lithuania |
| 2. | Czech Republic |
| 3. | Greece |
| 4. | Latvia |
| 5. | Estonia |

# 2. The LNG terminal in Lithuania

## Impact

**Third party access** will spur competition

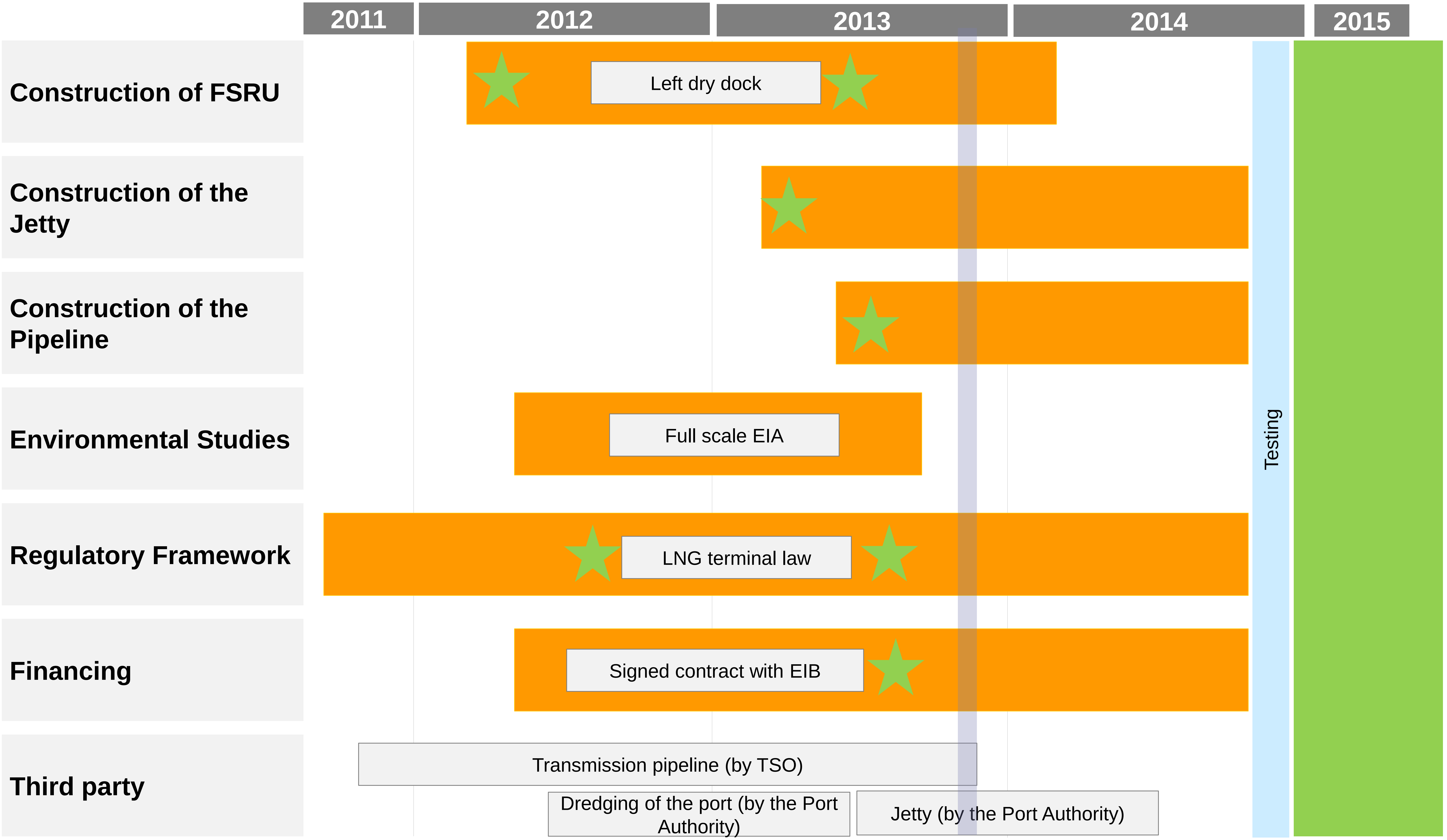
The terminal will help to **diversify** energy sources

Ensures **security** of energy supply

Import prices will reflect the **global** market price level

# 2. The LNG terminal in Lithuania

## Project timeline



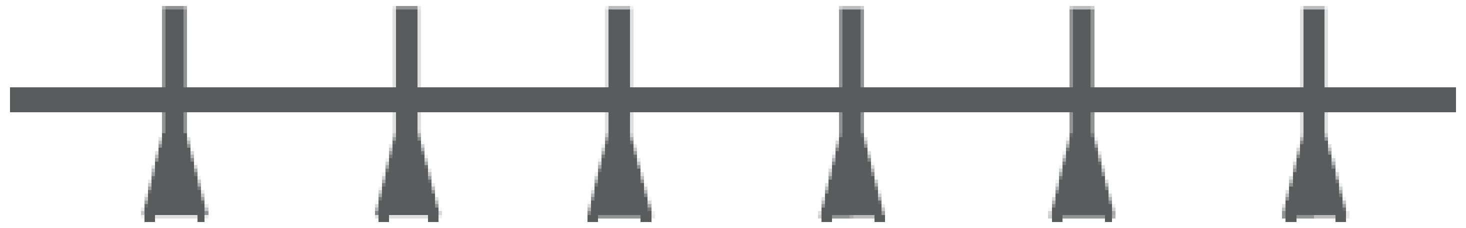

- LNG terminal is scheduled to start operations by December 2014
- Project implementation timeframe – less than 3 years
- LNG terminal will be open for capacity booking and gas trading

# 2. The LNG terminal in Lithuania

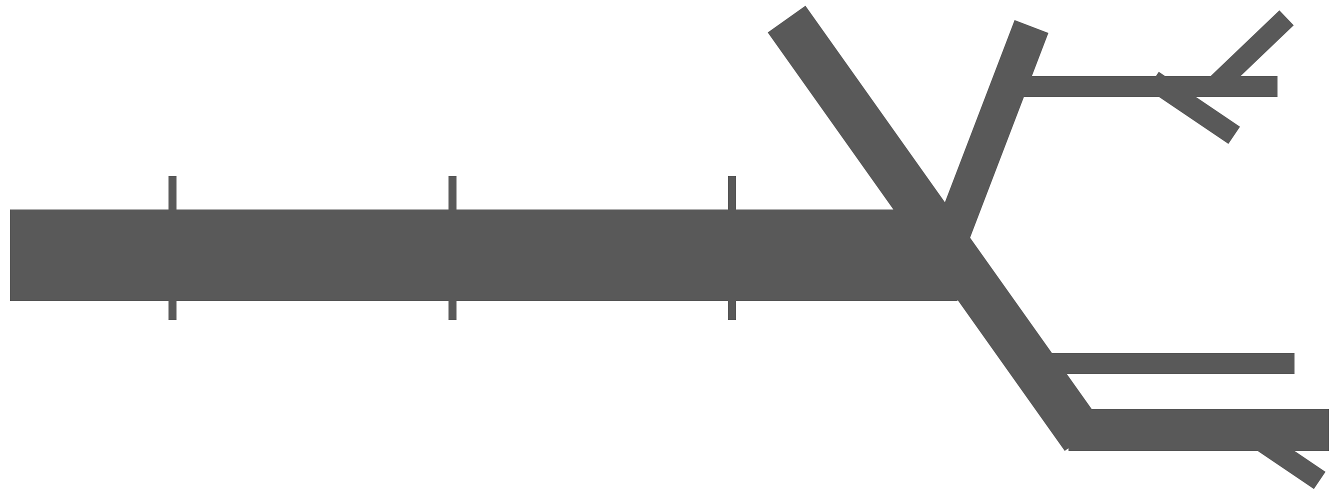
## Project Ingredients

**1.** Floating Storage and Regasification Unit (FSRU)

**2.** 450 m long jetty



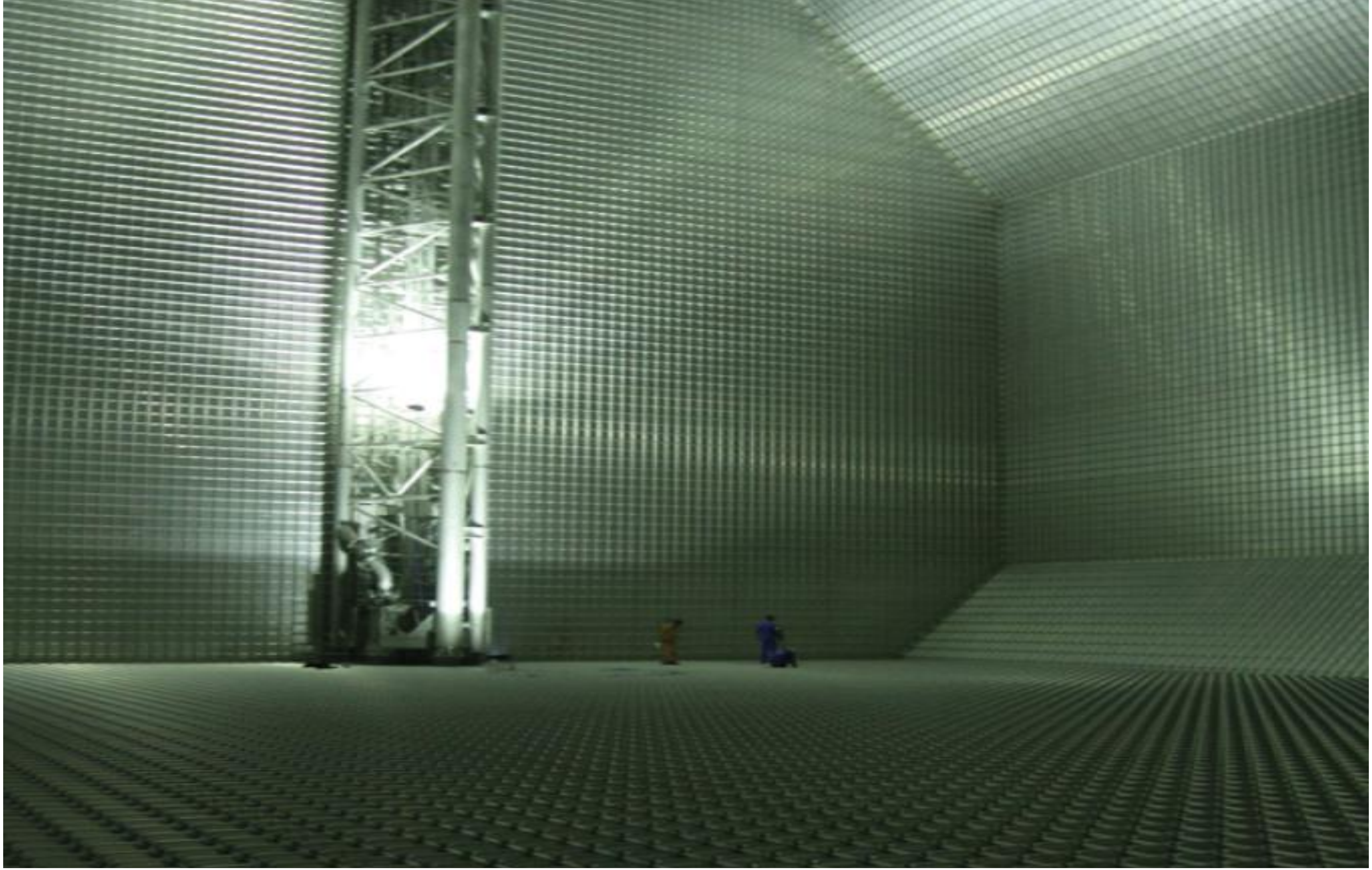
**3.** 18 km long connection to the gas transmission operator (Amber Grid)




The Baltic Sea
Pig’s Back island
Jetty and FSRU
The connecting gas pipeline


Launch of the FSRU “Independence” in Hyundai Heavy Industries dock in South Korea, 3rd of May, 2013


The regasification unit, mounted on the FSRU, tested and certified by the end of June, 2013



LNG tanks of the FSRU are currently under construction

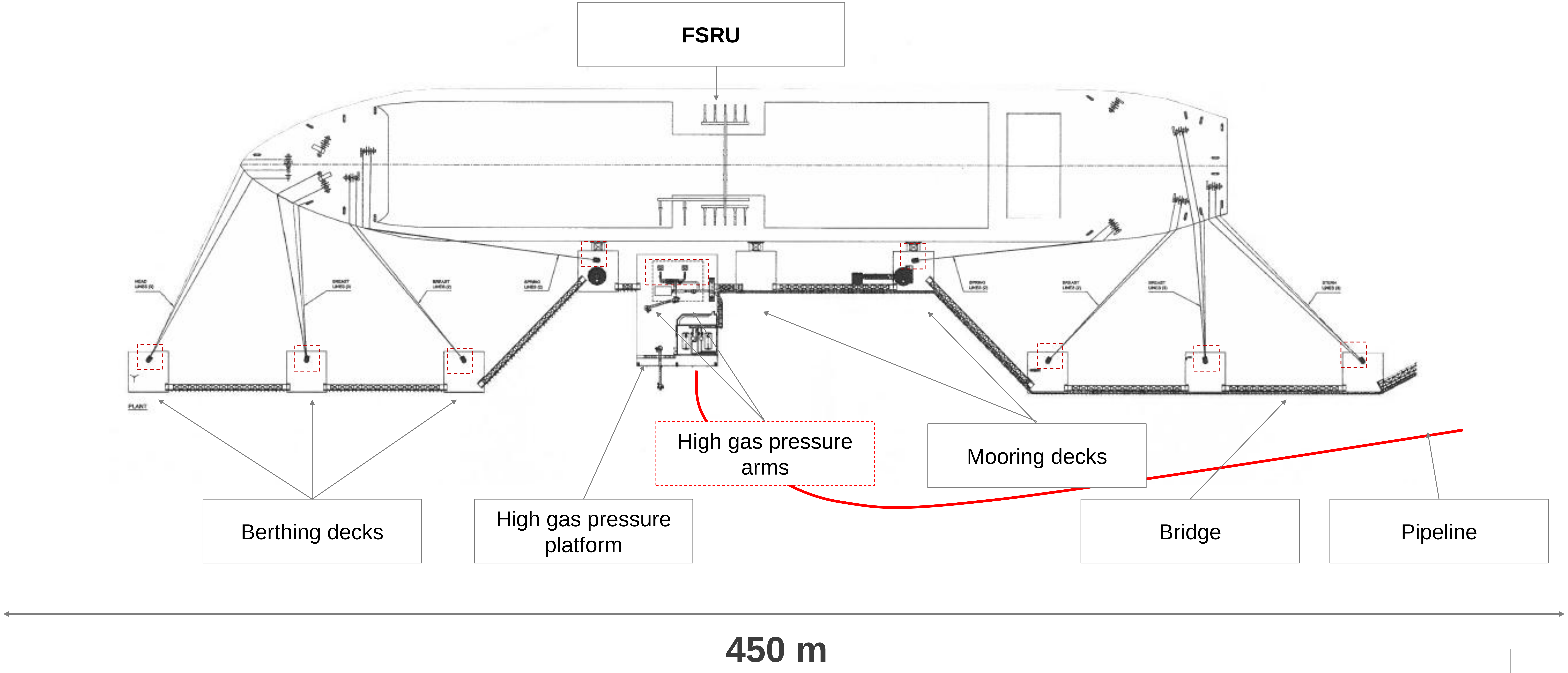
# 2. The LNG terminal in Lithuania

## FSRU


| Tech specs | |
|---|---|
| Location | Southern part of Klaipėda sea port |
| Supplier | Höegh LNG |
| Storage capacity | 170 000 $m^3$ |
| Annual capacity | Up to 4 bcm of regasified NG |

# 2. The LNG terminal in Lithuania

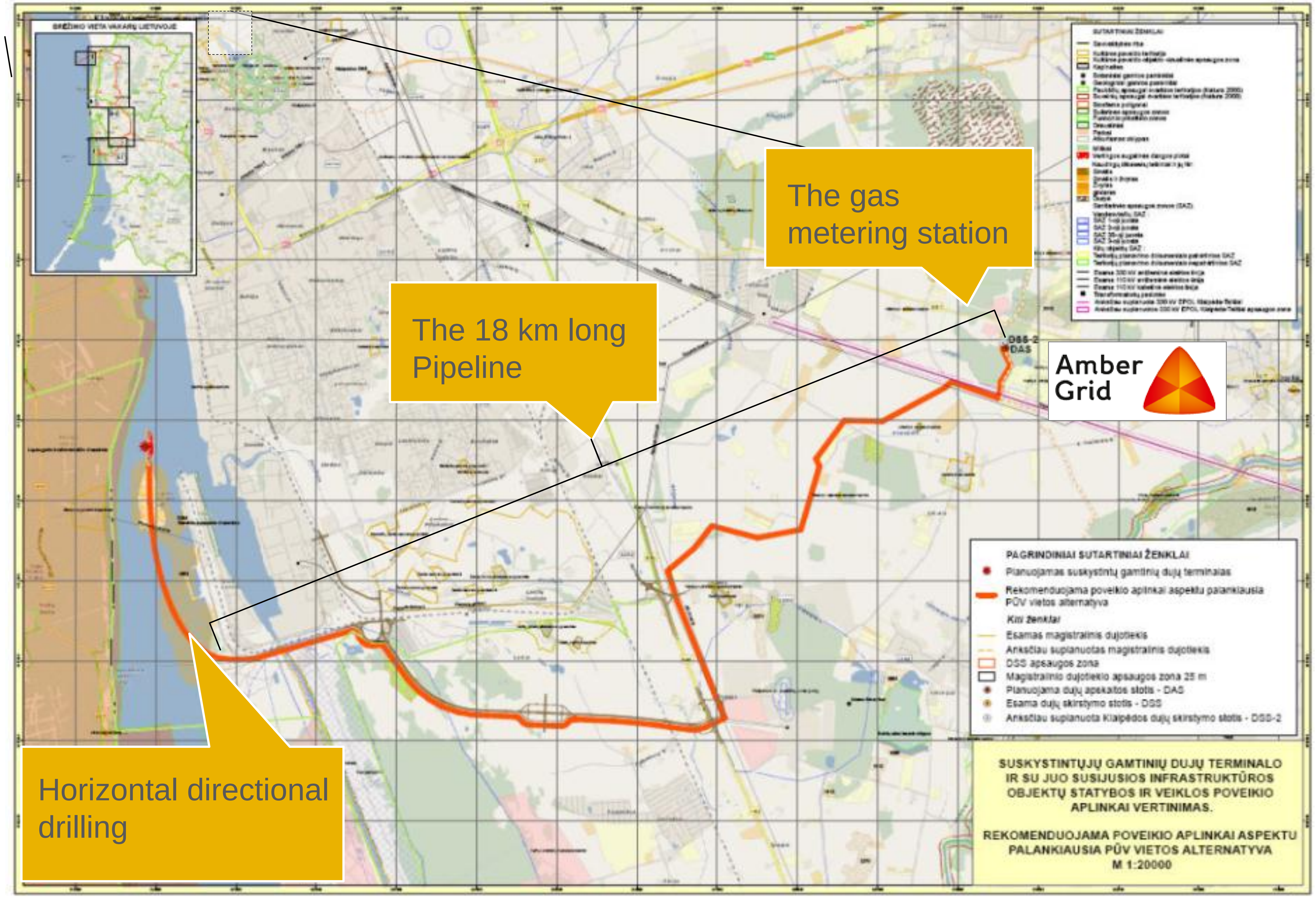
## The Jetty




FSRU Independence
LNG Carrier
The Jetty
High gas pressure platform
Service platform
Pipeline
Pig's Back island

# 2. The LNG terminal in Lithuania

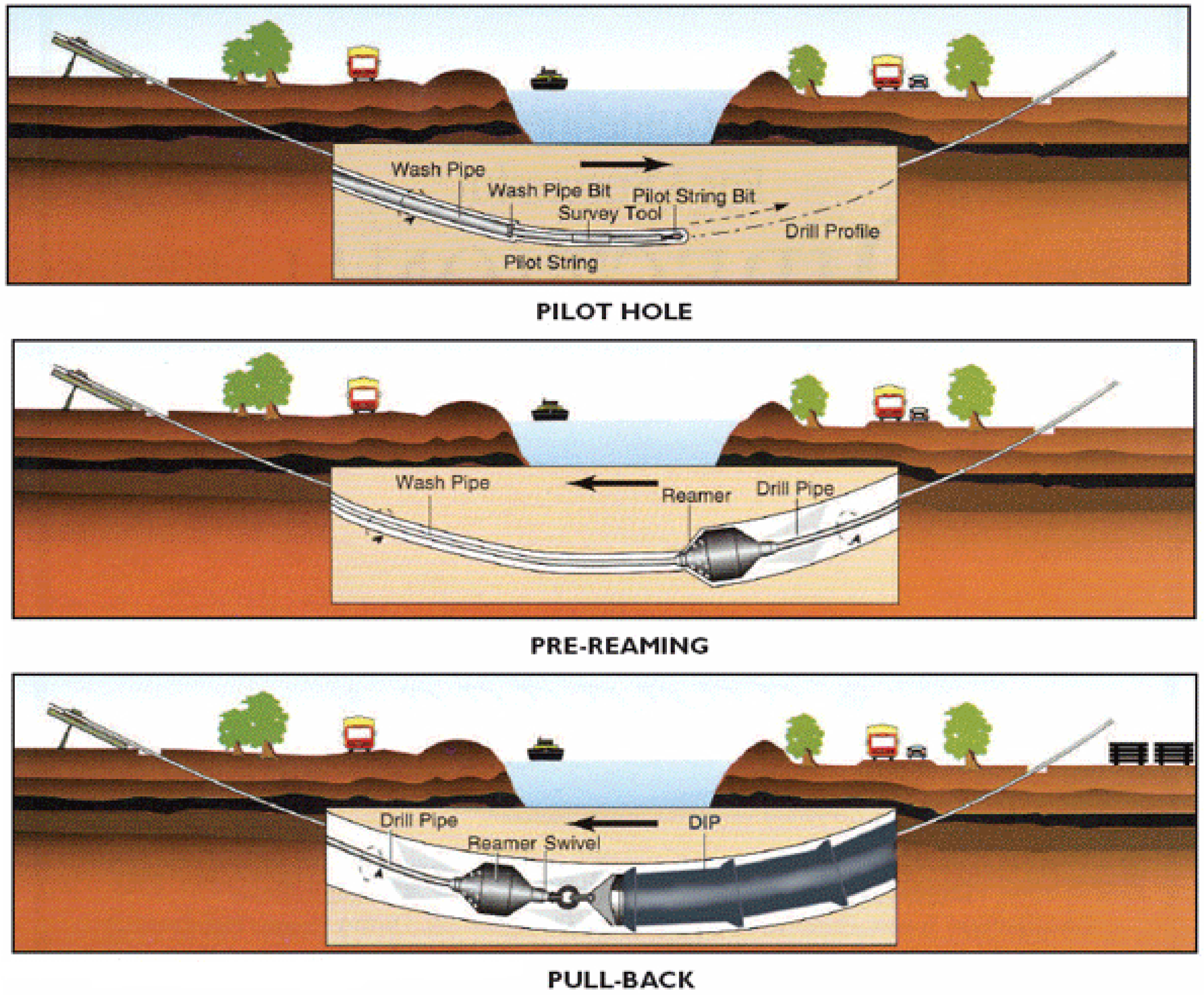
## The Pipeline




CS-433E
CAT

# 2. The LNG terminal in Lithuania

## The Pipeline




!

**Quick-sand**

**Large stones**

**Mines**

**Construction junk**

# 3. The Business Model

## Full Ownership Unbundling

### LNG Terminal Infrastructure

KLAIPĖDOS NAFTA
AKCINĖ BENDROVĖ

| Key financials (2012, mln, EUR) | |
|---|---|
| Revenue | 40,2 |
| EBITDA | 20,2 |
| EBITDA margin | 50% |
| Assets | 129 |

### Gas Trading

Lietuvos energija

| Key financials (2012, mln, EUR) | |
|---|---|
| Revenue | 811 |
| EBITDA | 157 |
| EBITDA margin | 19,4% |
| Assets | 2.984 |

# 3. The Business Model

LNG TERMINAL

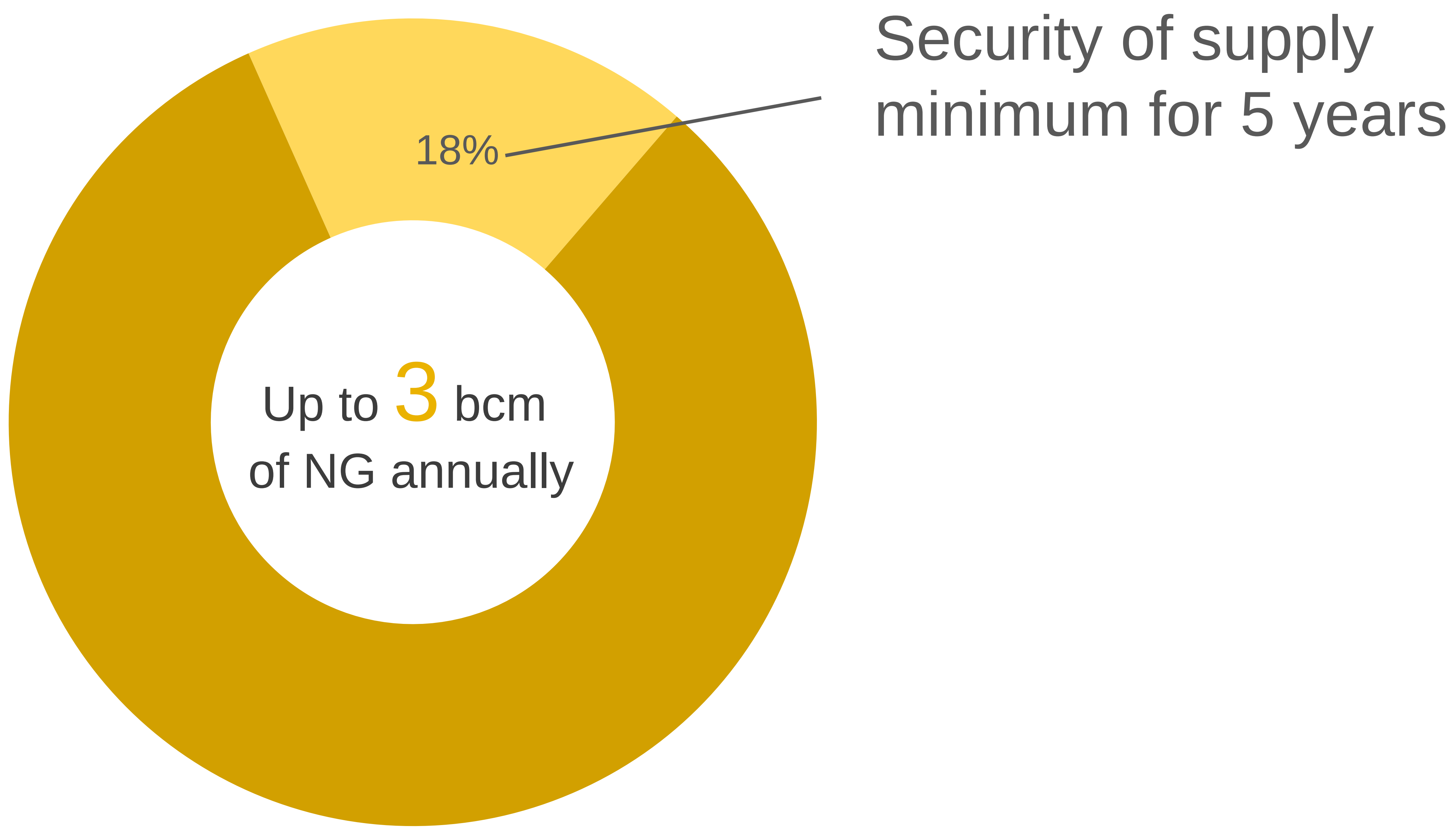
SGD TERMINALAS

## LNG Terminal Infrastructure

Sells regasification capacity to companies

## Gas Trading

### Gas trading volume capacity



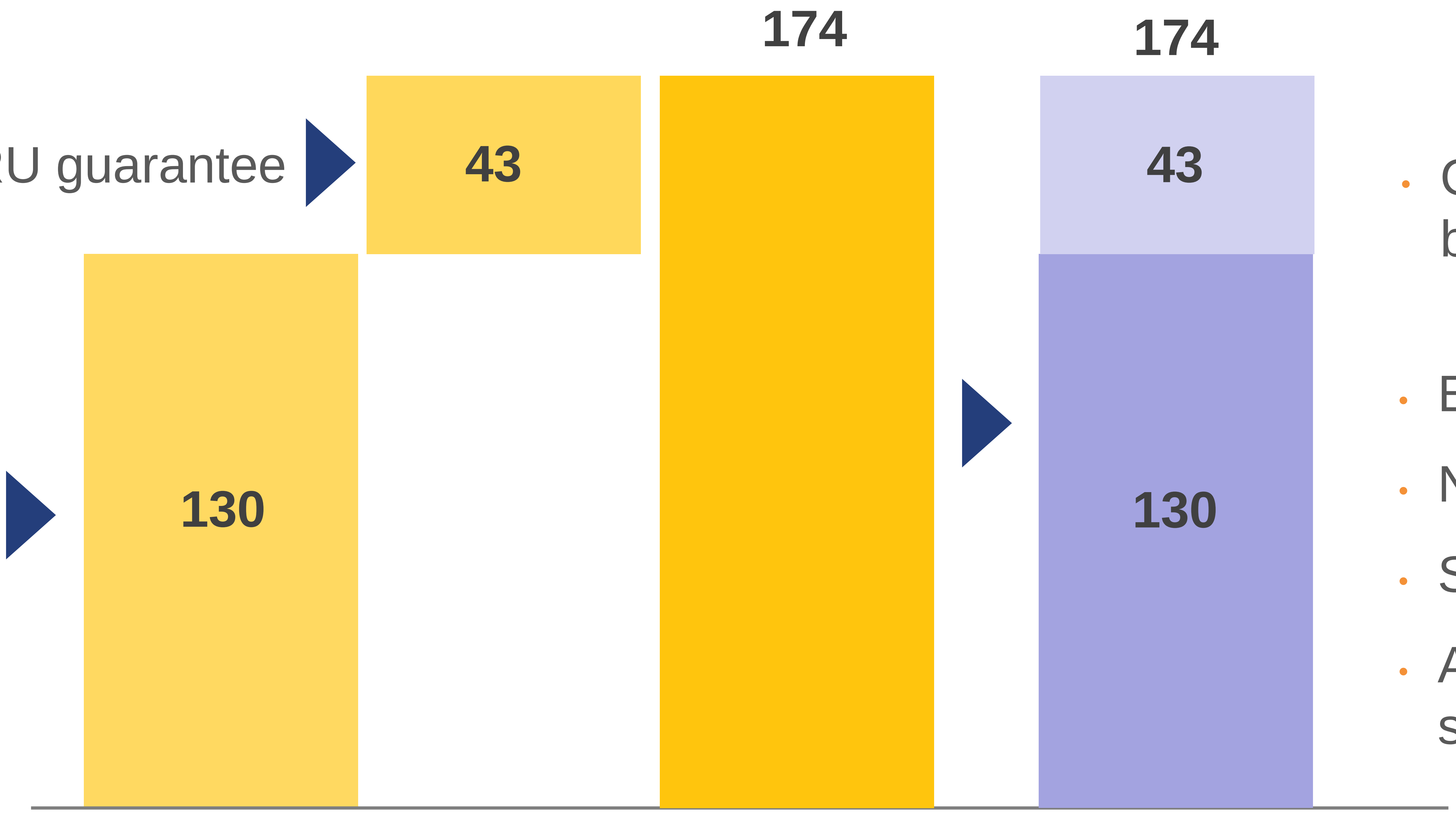

Capacities of LNG Terminal will be open for suppliers to fill demand in:

- Domestic Lithuanian and Baltic markets (+Finland, it is planned that the Baltic Connector pipeline will be completed by 2015)
- Small scale activities

# 4. Financing of LNG Terminal Infrastructure

**Financing sources,**
mln. EUR

- Infrastructure (jetty, pipeline)
- Project management
- FSRU guarantee




- Guarantee from a commercial bank
- EIB loan
- NIB, commercial banks
- SC “Klaipėdos nafta“ funds
- Additional security supplement

European Investment Bank
87 MEUR

For the initial period part of FSRU costs are socialized through gas transmission tariff.

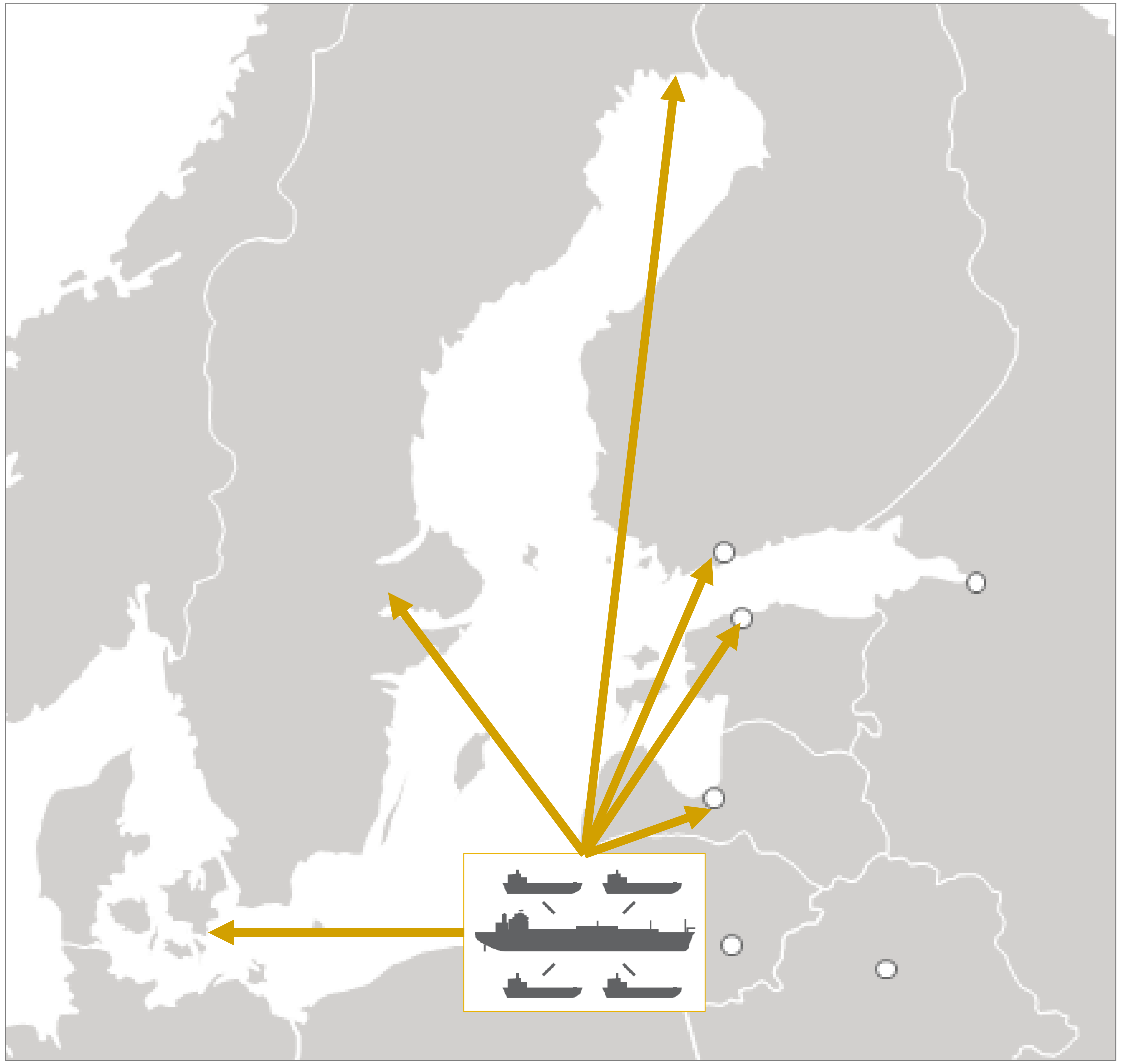
# 5. Small Scale LNG

## LNG Feeder Vessel

## The LNG terminal will offer business opportunities:

- LNG trading
- LNG storage
- Infrastructure for small-scale LNG activities

# 5. Small Scale LNG

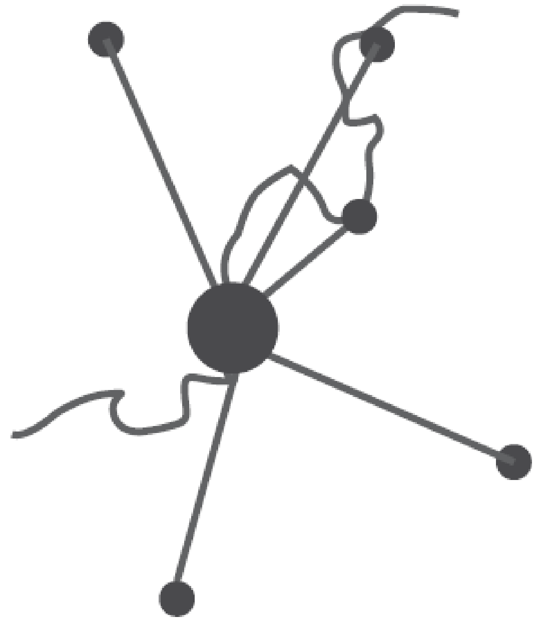


**The LNG terminal will create opportunities to small scale LNG activities**

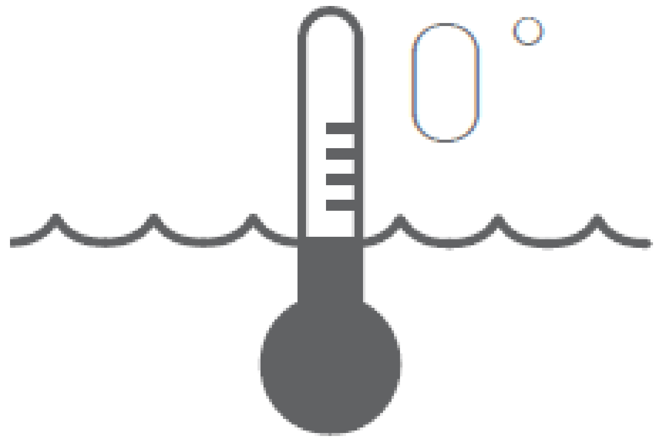
- Transsshipment to small-scale vessels
- LNG bunkering
- Auto-tankers and railway tanker-cars

# 6. Closing Remarks

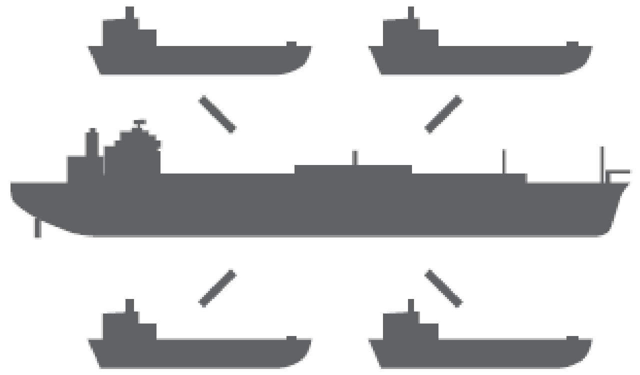
The first full scale terminal in the Baltics and Nordic countries operational from the end of the next year



Operational all-year round at an ice-free port




Infrastructure for small-scale LNG activities



Third party access will ensure competition on national and, possibly, on regional level

More than 40 years of safe and efficient oil terminal operational experience

40 years

# Thank you for your attention.

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