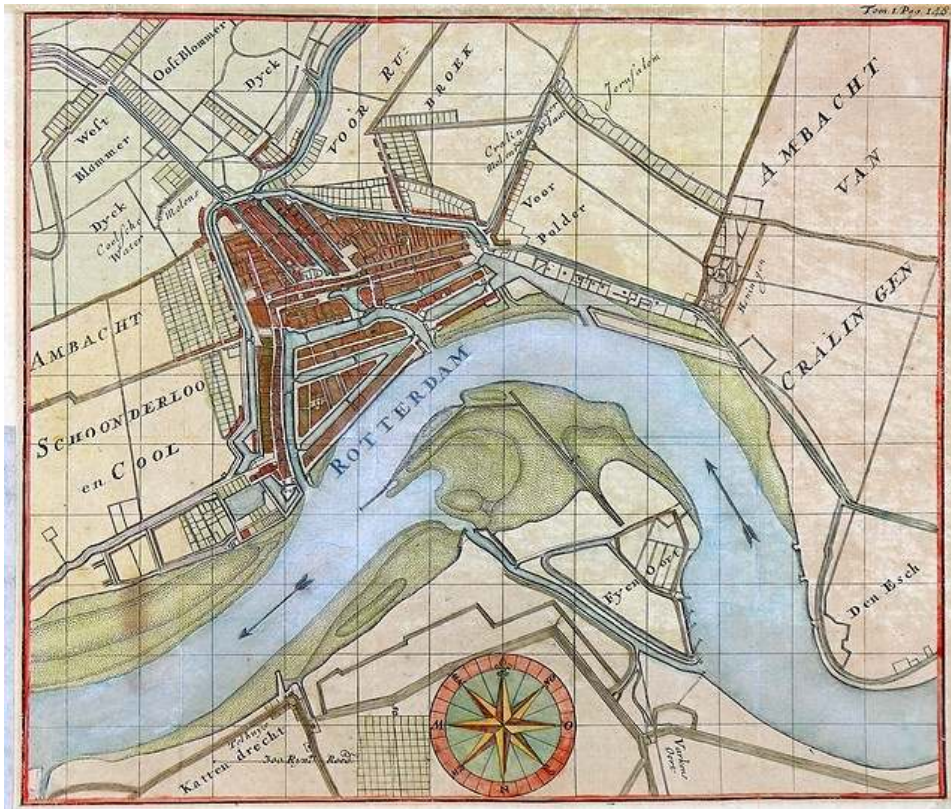


# LNG: A business view



# Welcome to Rotterdam



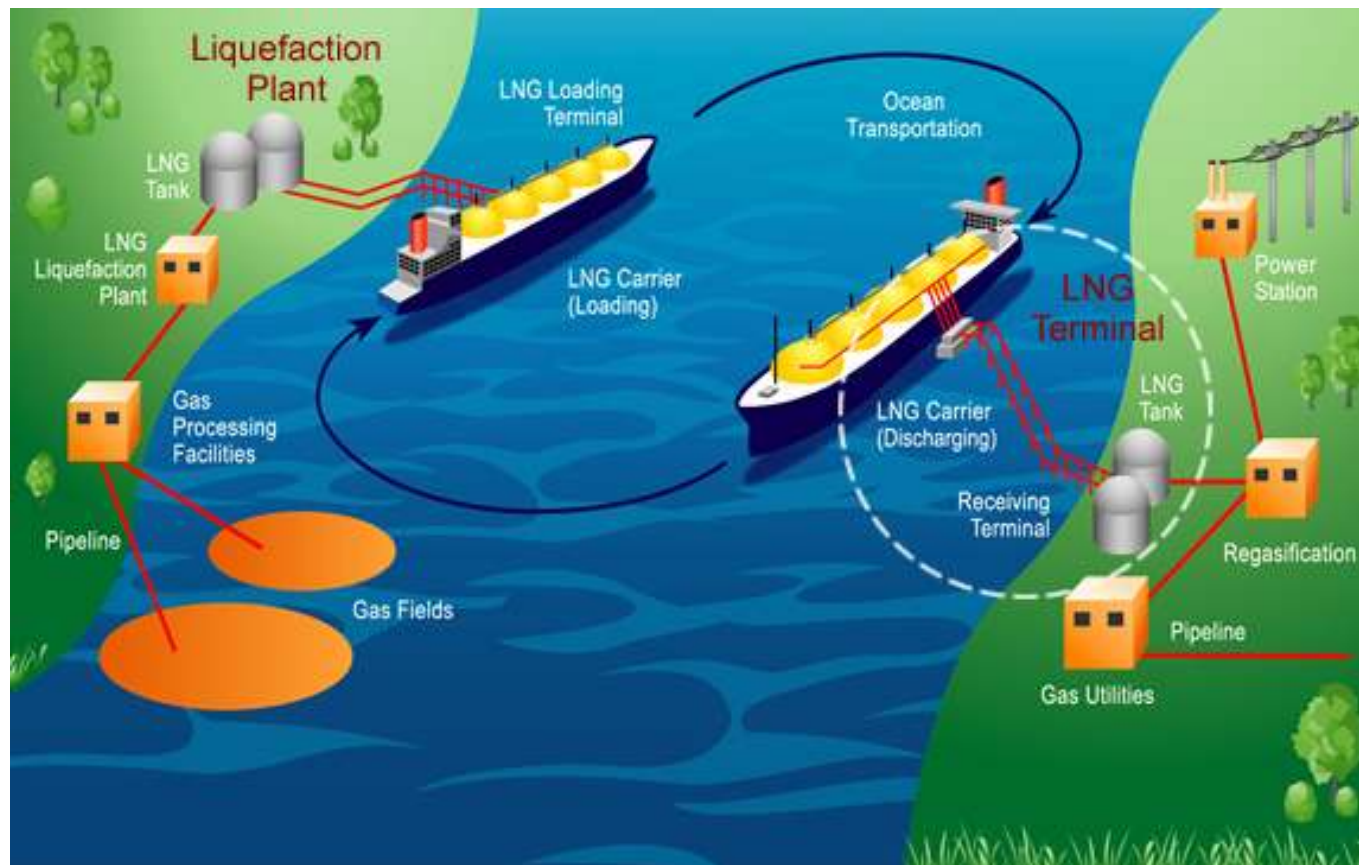
# What is LNG?

## LNG

- Liquid Gas (main component is methane – CH<sub>4</sub>)
- Temperature: -162 degrees Celsius
- The volume of LNG is around one six-hundredth of its volume in gas
- Flammable 5-15% concentration
- Stored and transported at atmospheric pressure as a boiling liquid
- LNG is an odorless, non-toxic and colourless liquid
- 1 m<sup>3</sup> of LNG contains approx. 7 MWh of energy



# LNG supply chain



## LNG statistics

- 2016: LNG 264 million ton
- 96 Liquefaction trains in 19 exporting countries
- 130 LNG terminals in 39 importing countries

Source: picture Online @ [www.pttng.com](http://www.pttng.com); statistics GIIGNL annual report 2017

# Gate terminal and Partners



Gate terminal started operations in 2011 after 4 years of development and construction.

## Vopak

- Storage know-how
- Maritime know-how
- Relations with Port of Rotterdam

## Gasunie

- Gas know-how
- Dutch Gas Roundabout
- Relations with authorities.



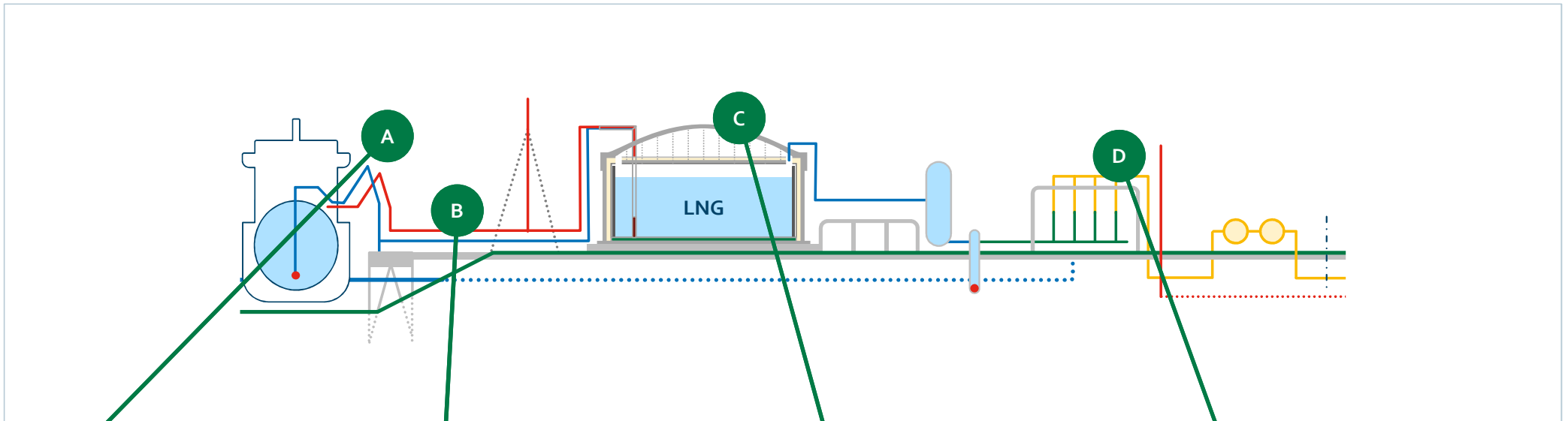
# Gate terminal

**1 = Jetty's for large ships**

**2 = Process area and small scale loading**



# Key components Gate terminal



# Small scale loading for transport fuel





# Gas Analysis at Gate terminal



# Thank you.



Coral Methane (7,500 m<sup>3</sup>) and Arctic Princess (147,000 m<sup>3</sup>): Both equally (well) treated