

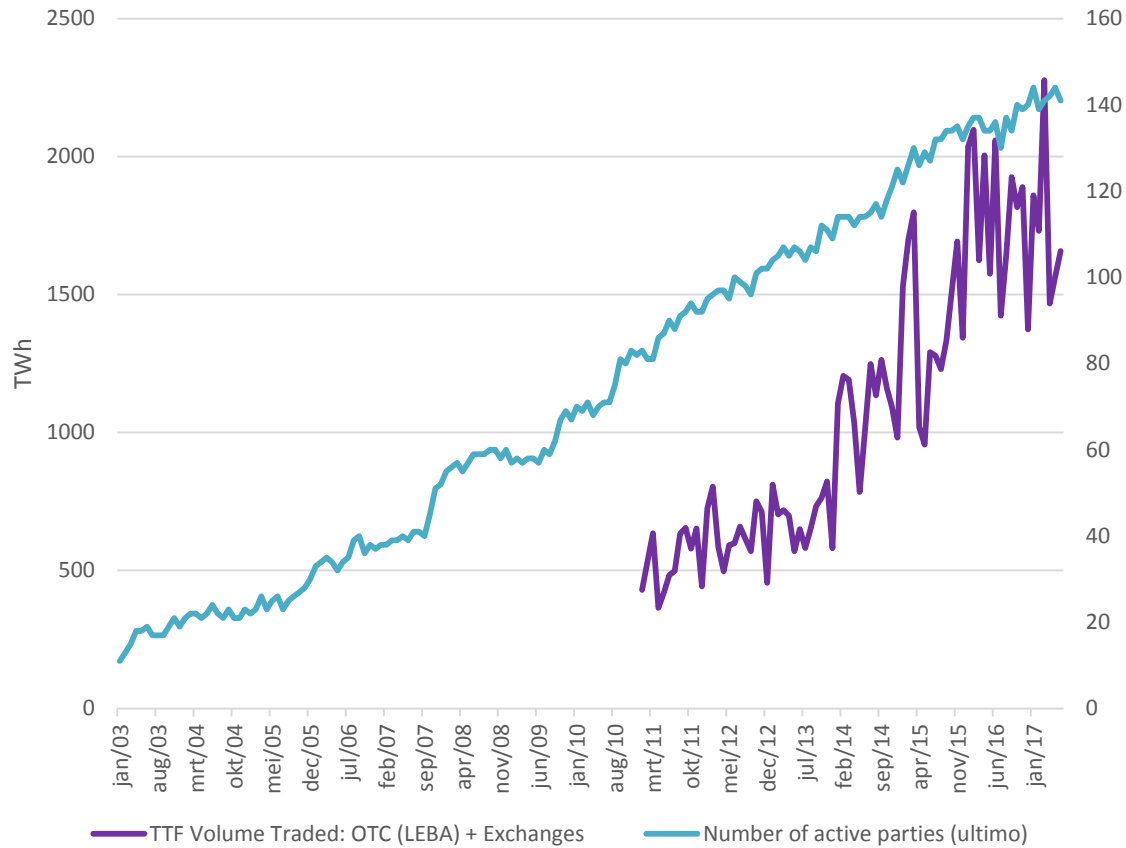


# What does it take to create a functioning gas market?

A presentation based on the Dutch experience



## TTF development



# A recipe?

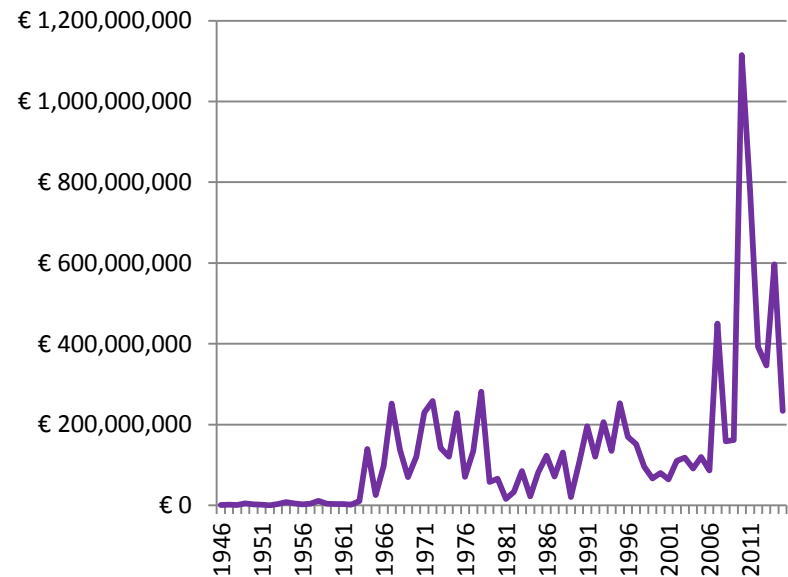
- The Dutch situation is quite different from yours, having our own gas production ...
- ... but we also had to implement measures that resulted in the success of TTF as it is today
  - Success requires change: we dealt with issues relevant for the Dutch market, they may differ from your bottlenecks

# Towards a liquid TTF: access to gas

Gas needs to be able to access trading place:

- Domestic production
- Investments in interconnection capacity
  - Points are not physically or contractually congested
  - Shippers can actually book any entry/exit point
- Current situation: declining national production and role of incumbent, but still increase in liquidity
  - Liquidity attracts liquidity

## Investments in the grid



# Towards a liquid TTF: easy to trade gas *independent of location*

To make it easy to trade gas, gas should be traded **independently of its location** in the system

- Single e/e zone & virtual hub: once the gas is in the system, it can be traded at TTF, irrespective of the particular entry or exit points used to deliver or receive the gas
  - enables trading because gas is traded independently of its physical flow or location
  - physical and non-physical traders

# Towards a liquid TTF: easy to trade gas *independent of quality*

To make it easy to trade gas, gas should be traded **independently of its quality**

- Before 2008 there was a gas market for low-cal gas and a gas market for high-cal gas in the Netherlands
- There as limited access for market players other than GasTerra to quality conversion
- From 2008 onwards: one single market for low and high calorific gas
  - Market players just buy gas
  - GTS is responsible for physical conversion, conversion cost (conversion facilities, nitrogen) are socialized
  - Made non-domestic gas competitive and increased the market size

# Towards a liquid TTF: easy to trade gas *at one location*

- To make it easy to trade gas, gas should be traded at **one location**
- 1 April 2011, new legislation came into force that created a better market design
  - No longer delivery at connection point but at TTF
  - Market parties and network operator should manage their own position
    - use market (TTF) for balancing their position
    - increases liquidity for short term products

# Towards a liquid TTF: measures to increase competition

After serious discussions by (ACM predecessor) NMa and GasTerra in 2011, GasTerra took measures to increase competition in the gas wholesale market.

## GasTerra:

- increased its within-day and day-ahead product offerings at the TTF
- started to offer year products with a flexible component
- introduced a new product for seasonal flexibility better known as *virtual gas storage*



# Towards a liquid TTF: affordable tariffs

- Gas delivered at TTF includes access to the system (entry), but the exit tariff still needs to be paid to deliver gas to Dutch domestic customers or to export it to other countries
- Affordable transport tariffs based on an estimation of efficient cost incl. a reasonable return
  - Compared cost and output of European gas TSOs to determine efficiency (cost benchmark)
  - Reasonable return based on comparable companies in a competitive market
  - 2017 decision: over next 5 years annual revenues will gradually fall by a total amount of € 200 million

# Towards a liquid TTF: good regulation

- Quality, reliability and predictability of the regulation and regulator are important
- From Moody's press release on Gasunie (22 May 2017):

*The affirmation of Gasunie's A2/P-1 ratings reflects the low business risk profile of its regulated gas transmission network operations. These generate around 80-85% of the group's reported operating result and are governed by **well-defined and relatively stable regulatory regimes in the Netherlands and Germany***