



Ministry of Economic Affairs



Policies to stimulate R&D on LNG related technologies



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The Netherlands



LNG important for the Netherlands

As GAS Country:

- Largest producer of natural gas in EU
- Mayor exporter of gas
- Largest gas trading hub on the EU continent



As GATEWAY to Europe with

- Very large transport sector (ships and trucks)
- Two of the largest ports

For Dutch energy innovation policy:
LNG as transport fuel: focus on innovation



Metrology and LNG

LNG offers new challenges at:

Technical level: need for reliable measuring standards/methods

- top level: government
- applied level: industry and market

Regulatory level: need metrology to protect consumers and fair trade

- set accuracy classes
- define measuring equipment and methods

Both sides need a high level measurement standard



EMRP project: Metrology on LNG

ONE of the goals: primary small scale flow standard on LNG,
flow rate 25 m³/h

11 countries

13 participants (NMIs, universities, industry)

End result:

Primary LNG flow standard validated

Congratulations on end result.

Next step: mid scale flow standard?





Major Dutch LNG initiatives

Two major initiatives:

1. Small scale LNG innovation program
(joint initiative government/industry)
Funding of applied science and development
Topics : - risk management,
 - safety
 - emission performance
 - infrastructure & metrology
2. Establishment of national LNG platform
 - Green deal on LNG
 - Integrated Safety Program



Green deal policy

National policy to promote green growth

Partners: government (local and national), business and research

Green deal on LNG

Potential reduction on CO₂: 1 million ton per year

Potential reduction in particulate matter: 600 ton per year

- Goal for 2015 : 50 – 50 – 500
(50 barges, 50 sea going vessels, 500 trucks)
- Goal for 2020: 15% diesel consumption replaced by LNG
- Goal for 2025: 2.5 million ton of LNG used in transport sector

Extra stimulus: no increase in excise duty for the next 5 years.



EU support for LNG

Some examples:

- Measures to ensure an LNG network in Europe (every 400 km of Trans European Core Network a fuel station)
- TEN-T: (setting up LNG bunkering facilities for ships)
- LNG master plan for Rhine- Main- Danube
- Horizon 2020: place for LNG projects

16 October 2013:

Rotterdam received confirmation of a 34 million grant for bunkering facilities





Economic impact study

PWC study on economic impact usage LNG as transport fuel:
Between now and 2030 use of LNG is expected to bring:

- extra economic growth of 2.7 billion euro's
- 8.000 man years

+

In combination with lower emissions levels

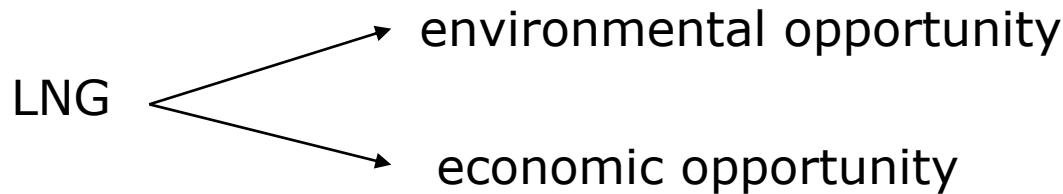
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No wonder why Dutch government/industry wants to invest in LNG

<http://www.rijksoverheid.nl/documenten-en-publicaties/rapporten/2013/09/02/the-economic-impact-of-small-scale-lng.html>



LNG future in Europe



Today LNG in Europe is facing competition but
On the mid and long term LNG will continue to be
an important part of our fuel mix !!!

Crucial to work together
to establish a solid LNG infrastructure
with the necessary measuring standards.





Thank you for your attention !