

NÆRINGSGLIVETS
NOx-fond

Norwegian NOx Fund as a driving force for LNG use

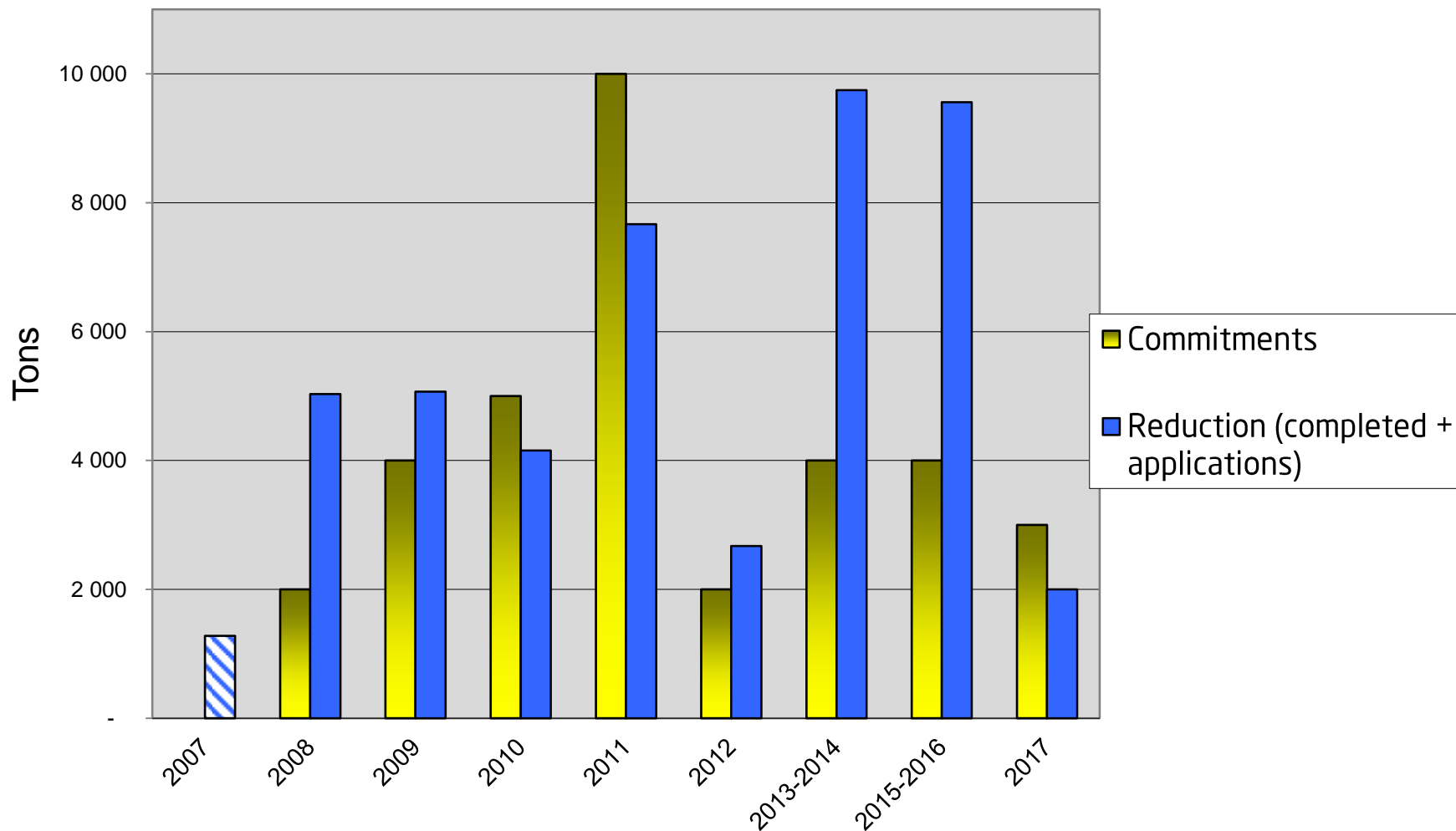
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Viking Line Seminar
16. of January 2014

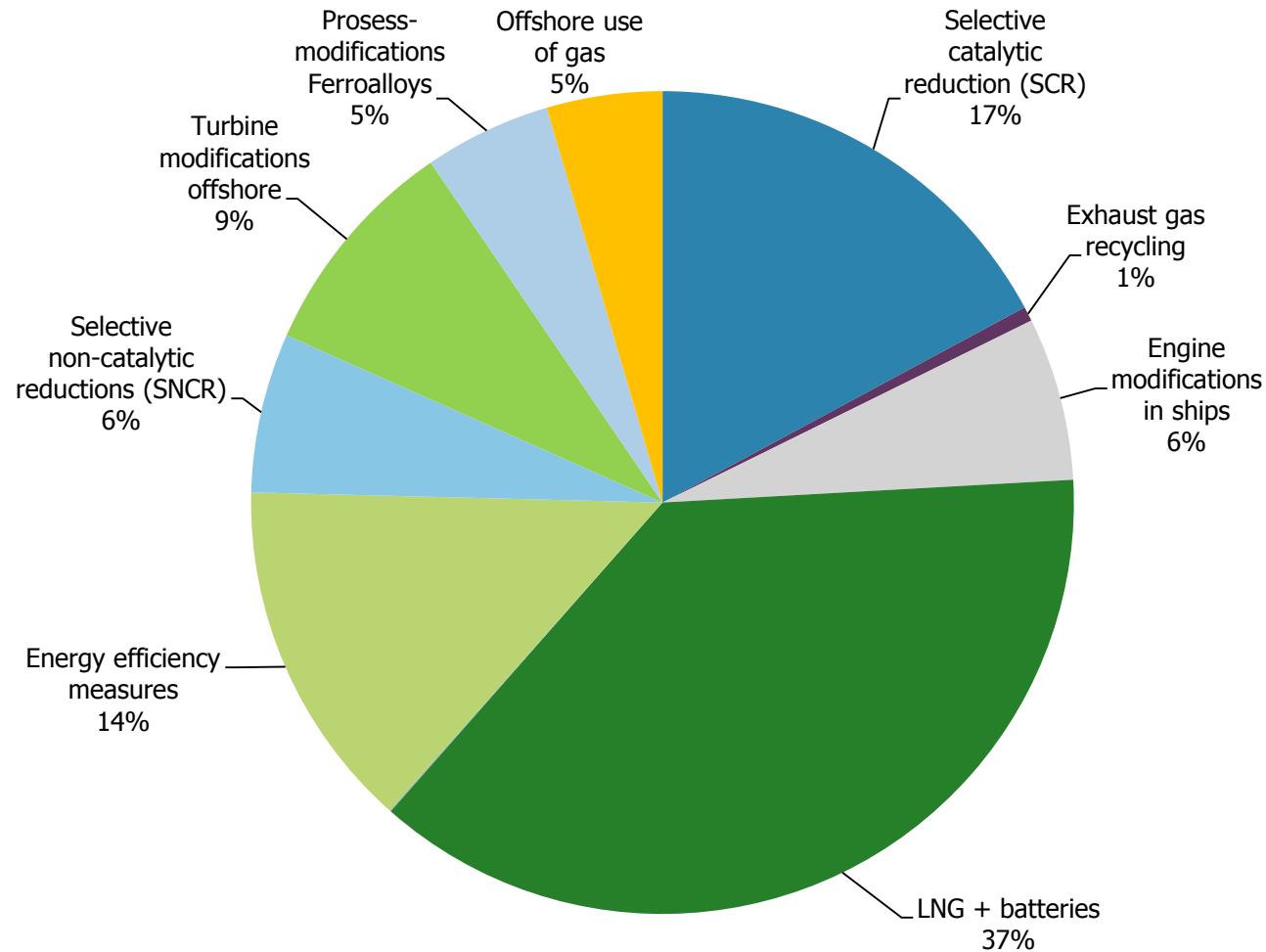
Environmental NOx Agreement 2008-2017

- Agreement between 15 Norwegian business organizations and the Ministry of the Environment
- Affiliated enterprises are entitled to exemption from the Norwegian fiscal NOx tax of 17,33 NOK/kg NOx
- They pay lower rates into the fund: Shipping pays 4 NOK/kg NOx
- 760 affiliated enterprises have joined so far
- The Fund has about **75 mill. €** each year available for support of NOx reducing measures (~ 50% to LNG-projects last 3 years)
- Administration cost of the NOx-fund is 2 to 3% of income
- Commitments: **reduce emissions by at least 34 000 tons/year**
- Total Norwegian NOx emissions in 2012 was 180 000 tons

NOx commitments and reductions



NOx reduction from types of measures 2011-2017



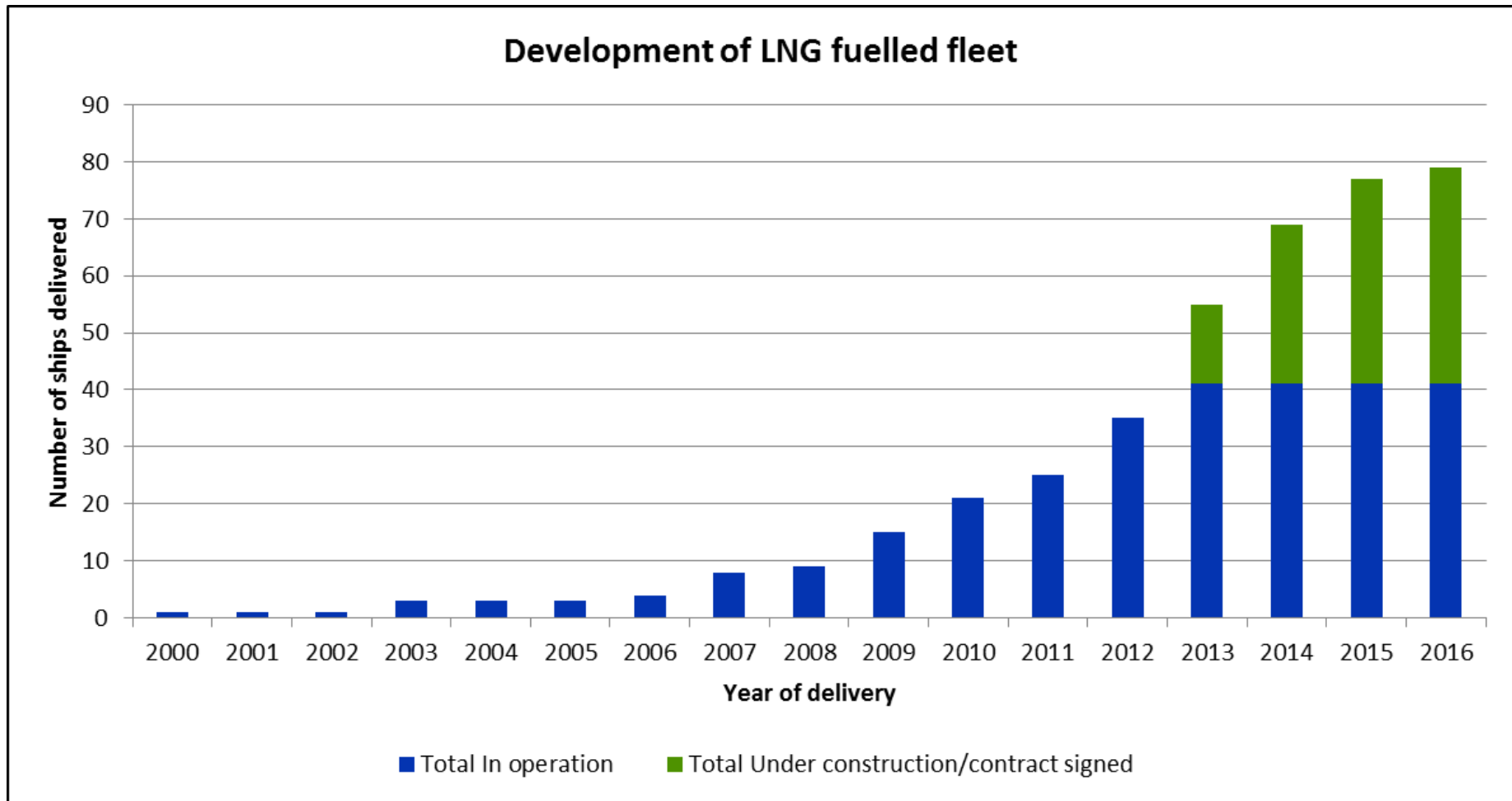
Support to LNG projects (2011-2017)

- Support cover *additional costs* of investing in LNG fuelled ship
- Up to 80% of investment cost and up to **350 NOK/kg** NOx reduced so far. Support will decrease to **200 NOK/kg** from 1.7.2014
- Support also possible for LNG distribution infrastructure for applications in 2014

LNG propulsion of ships in norway

- In 2008 only 3 ships except ferries were running on LNG
- The NOx Fund has granted support to over **60 ships**, converted to LNG or newbuilds. Applications for **30 more ships** received before 31.12.2013
- In total Norway will have nearly **100 LNG ships** in a few years time (incl. ferries on Government demand)
- LNG is used in various ship segments
 - Ferries
 - Cargo
 - Plattform Supply Vessels
 - Ro-pax
 - Tankers
 - Tugs

79 confirmed LNG fuelled ships world wide, of which 56 in Norway and 2 in Baltic Sea



Updated 24.07.2013
Excluding LNG carriers and inland waterway vessels

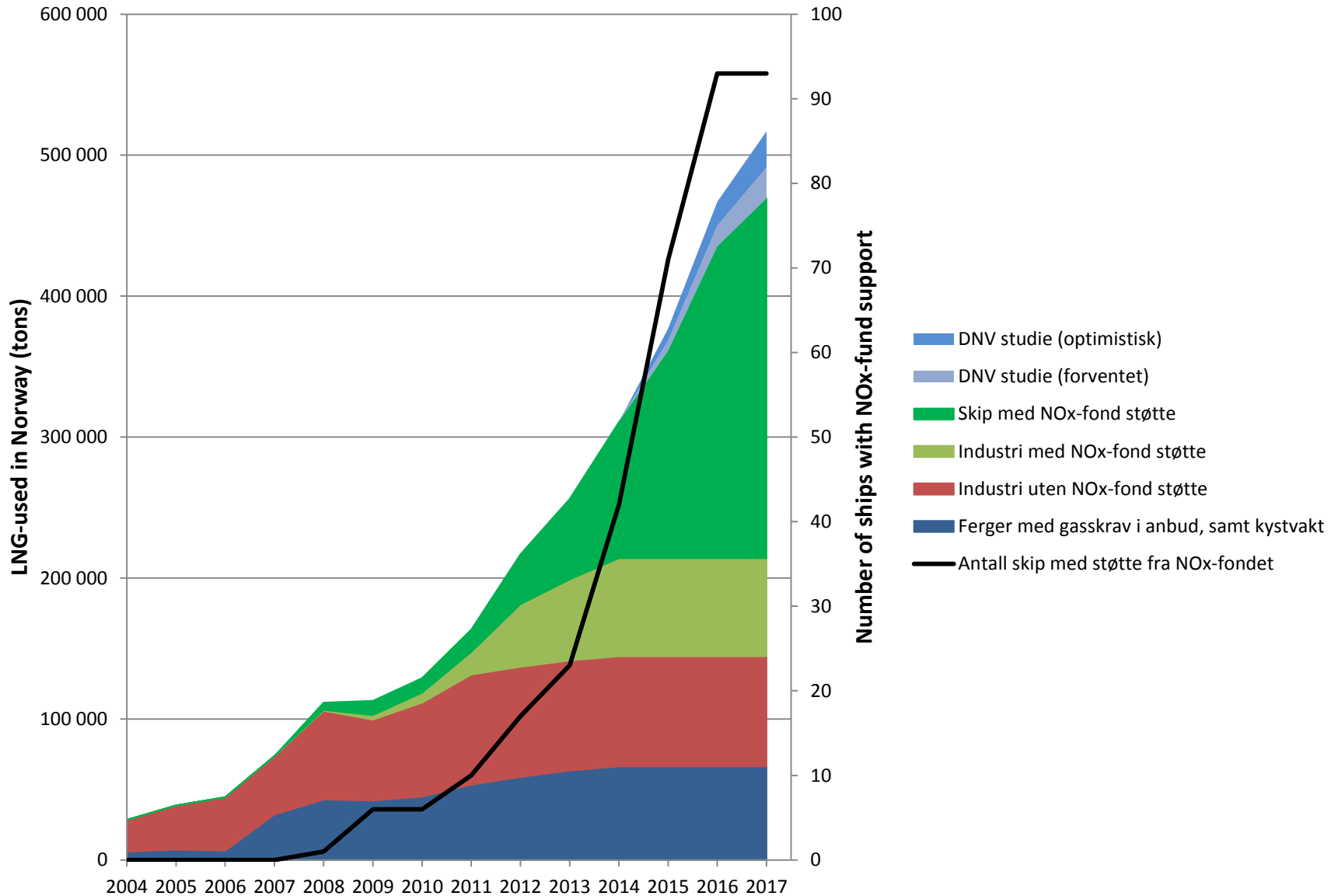
Development of LNG market in Norway

- In 2008 only 3 % of maritime fuel used in Norway was LNG
- By 2016 1/4 or up to **1/3** of maritime fuel used in Norway may be LNG

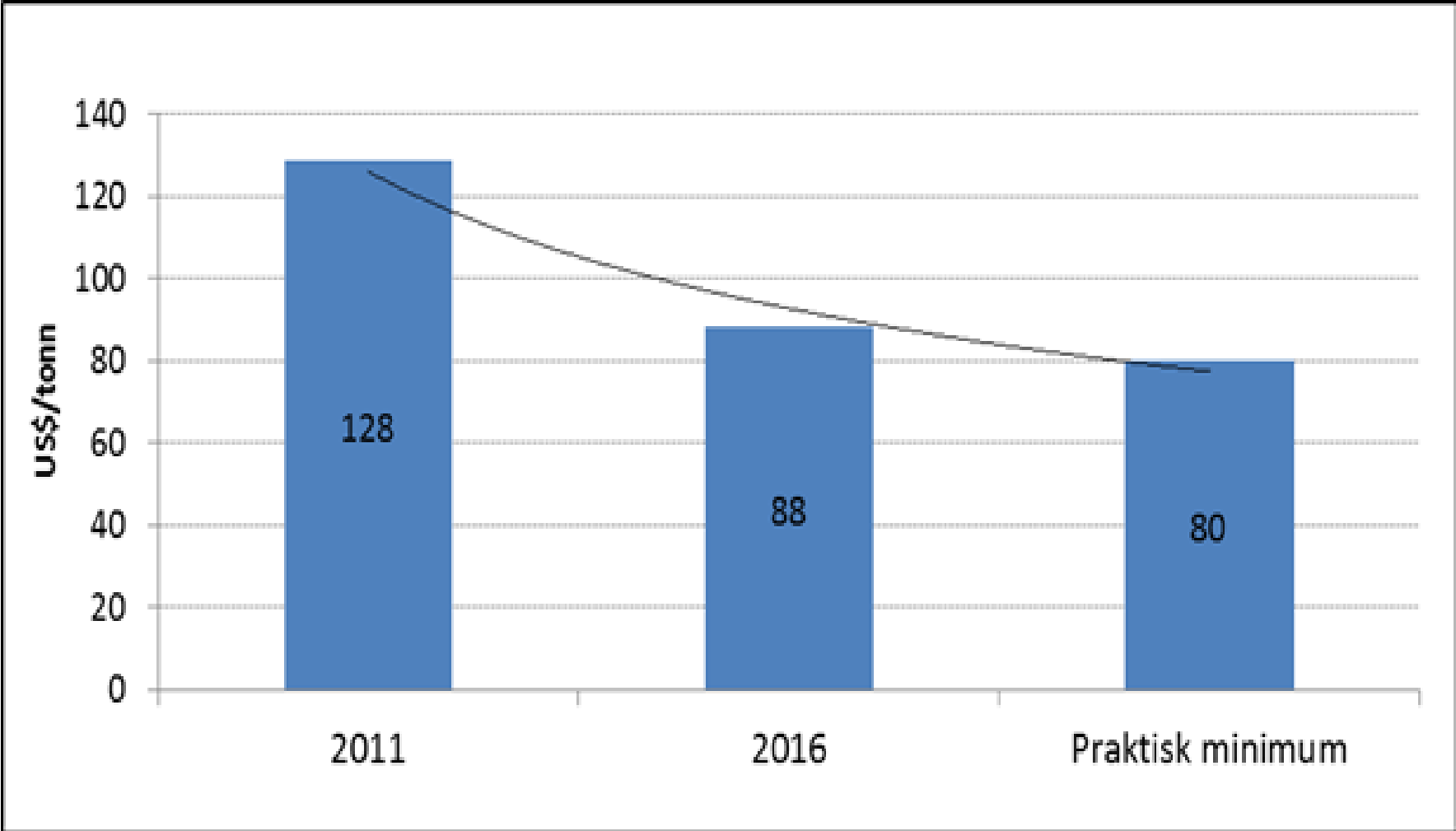
The NOx Fund works to improve the functioning of the LNG market in Norway together with our members

- From 10. of April 2014 the Norwegian LNG market is supposed to be regulated according to the EU gas directive: to open up to competition with Third Party Access to LNG infrastructure.
- Rules and regulation yet to be finished from the Norwegian Government

Norway: LNG-used 2004-2013, forecast to 2017



Costs of distribution of LNG in Norway



Source: DNV 2013

EU want more NOx-funds

- "...the Commission services will explore ways to encourage a bottom-up approach in encouraging the industry and public sector to set-up and manage a fund – similar to the **Norwegian NOx Fund approach** – by charging operators for emissions and then using the available funds for abatement technology, research etc"

"Pollutant emission reduction from maritime transport and the sustainable waterborne transport toolbox"

Commission Staff Working Paper 16.9.2011



Thank you!

For more information, please go to:

www.nho.no/nox or

www.nho.no/nox/english

