



**Norsk klimastiftelse**  
NORGES GRØNNE TANKESMIE



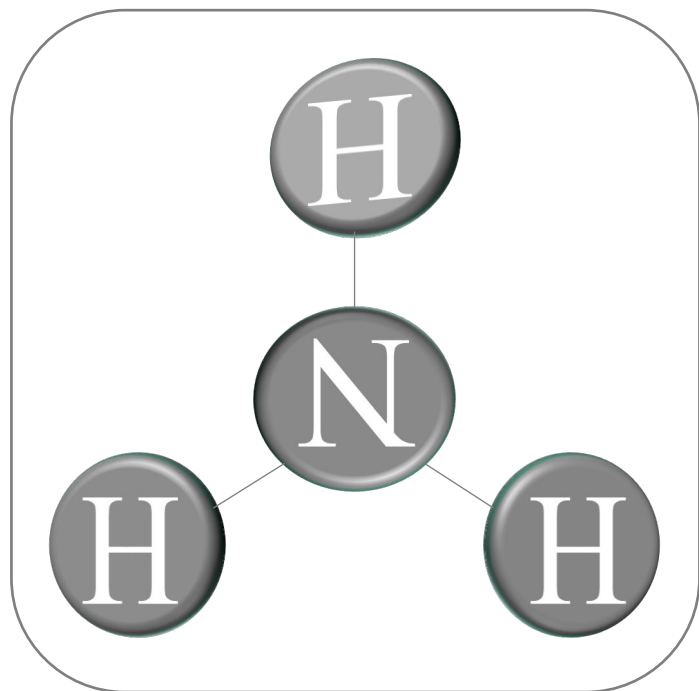
Foto: Riksarkivet



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# Grønn ammoniakk – vår neste store klimaløsning?

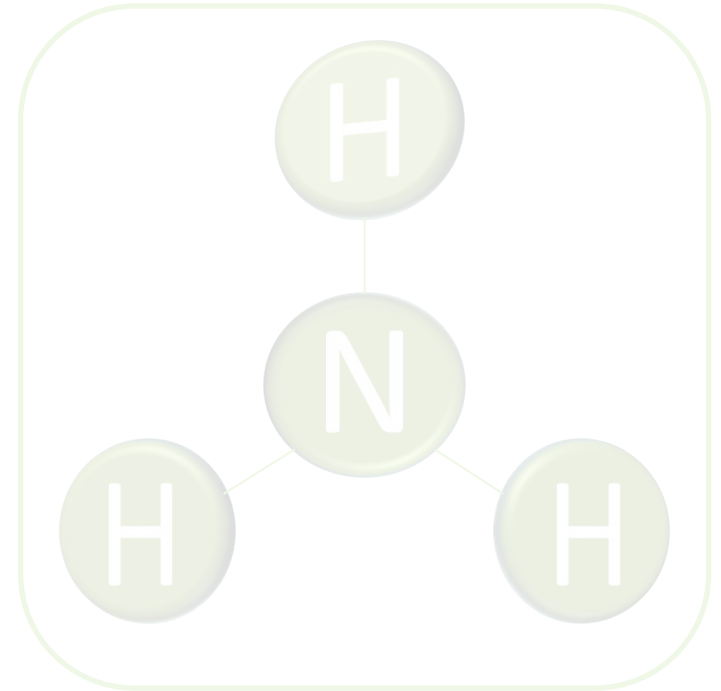
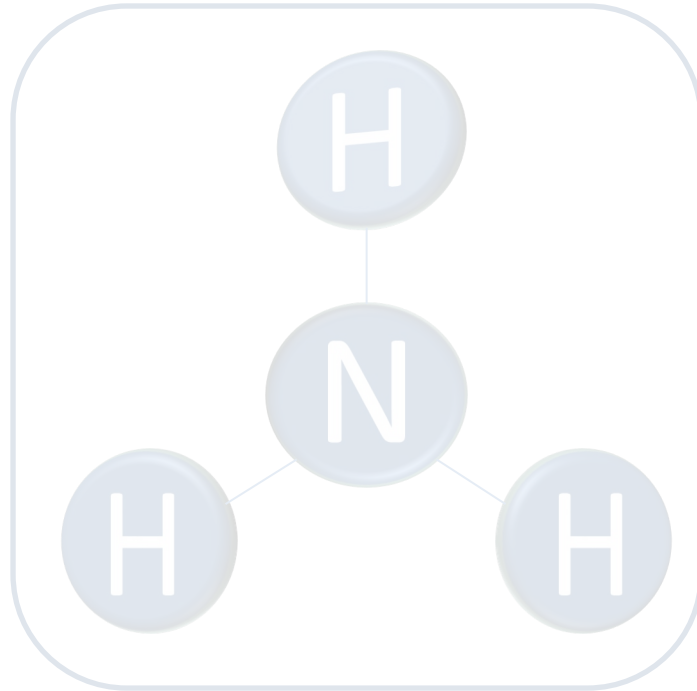
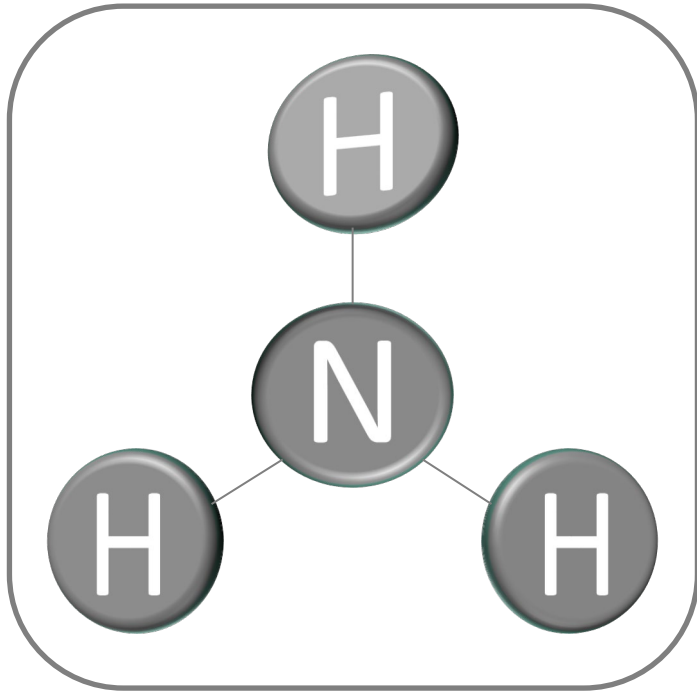




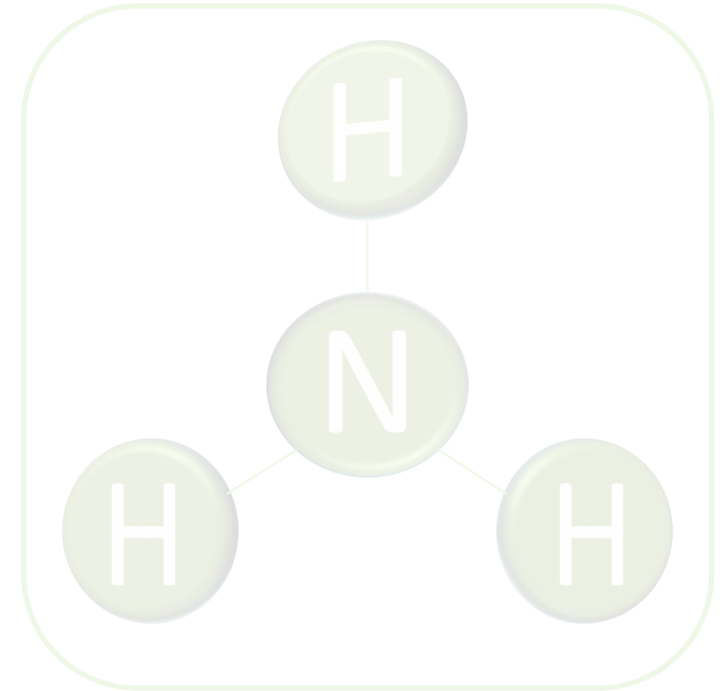
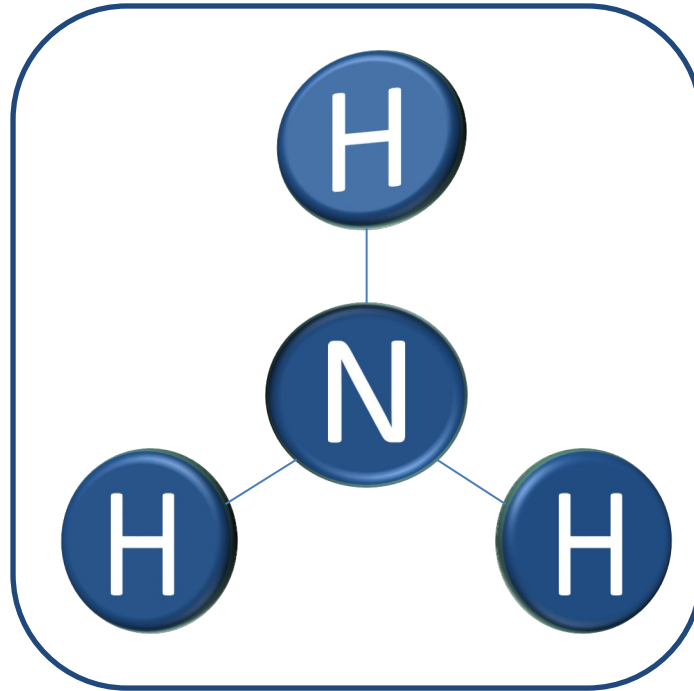
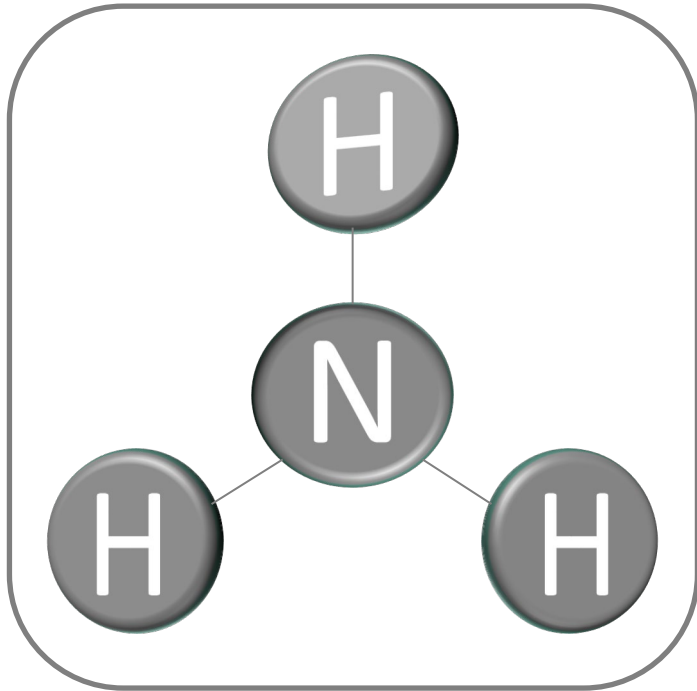
180  
millioner  
tonn ammoniakk  
(NH<sub>3</sub>)



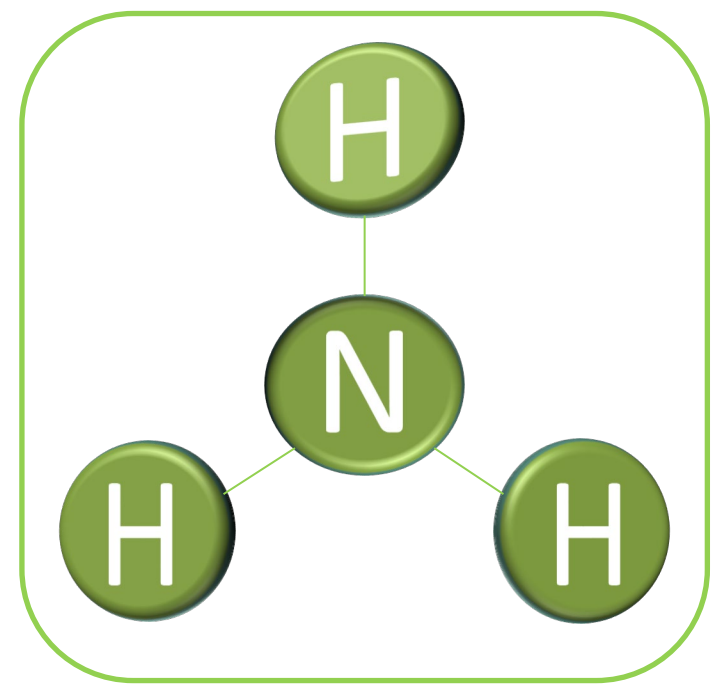
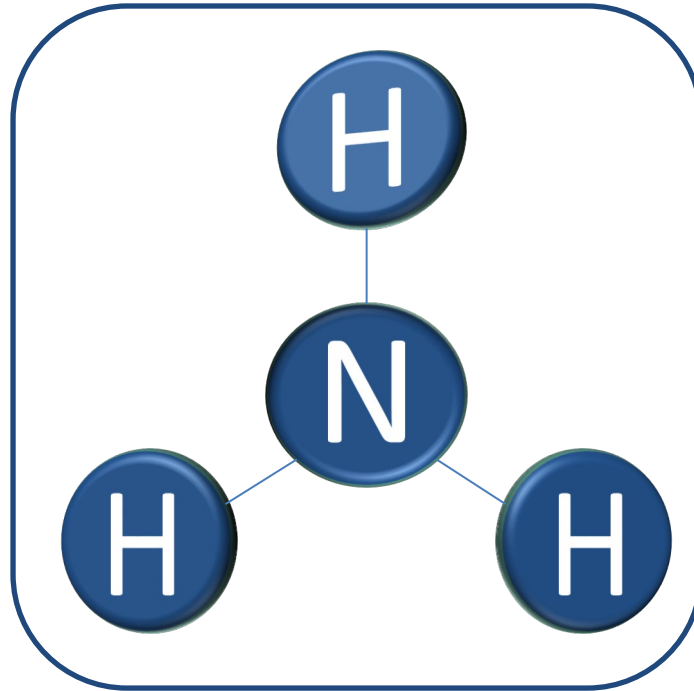
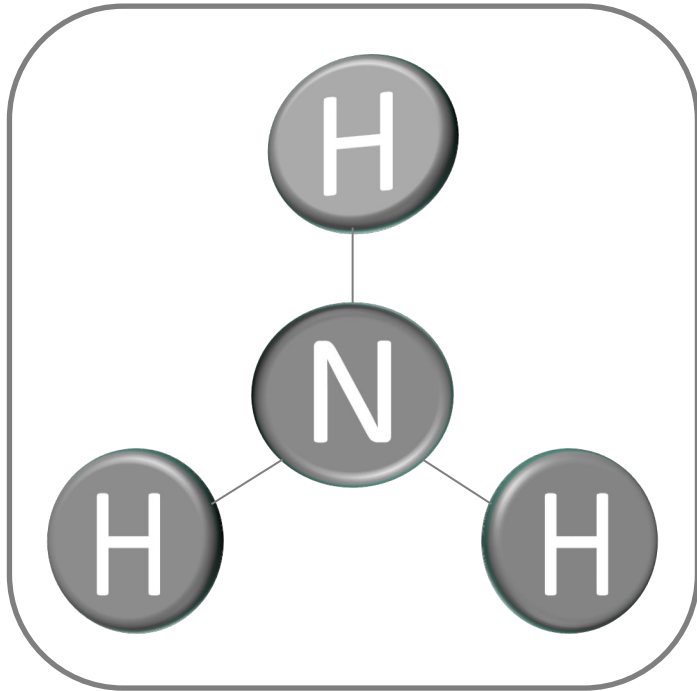
# Grå, blå og grønn ammoniakk (NH<sub>3</sub>)

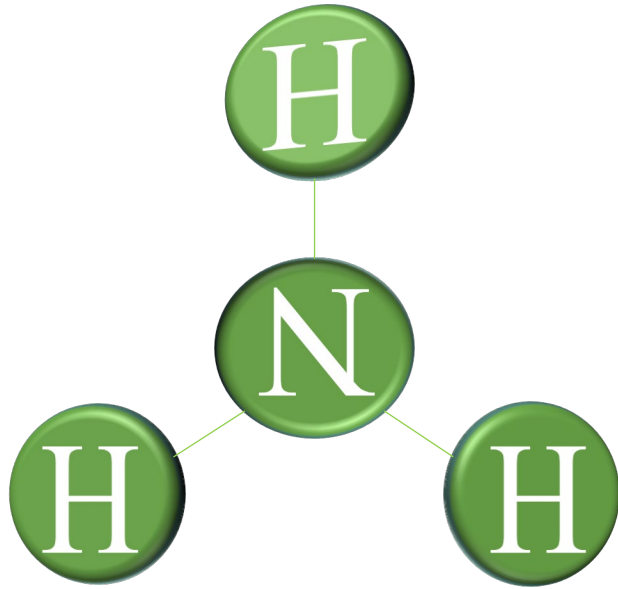


# Grå, blå og grønn ammoniakk (NH<sub>3</sub>)



# Grå, blå og grønn ammoniakk (NH<sub>3</sub>)



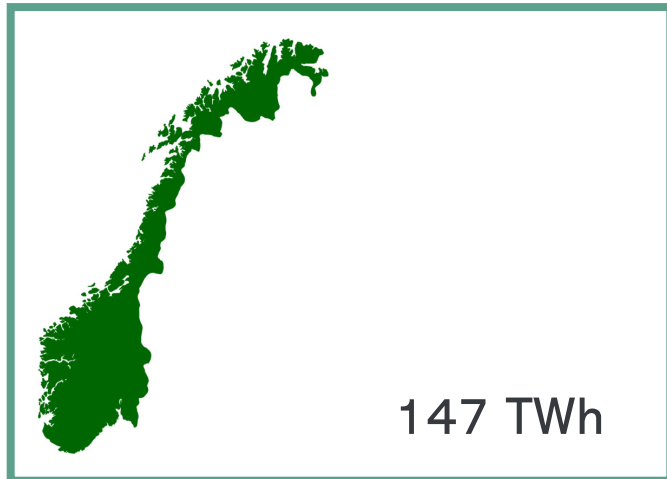


10-12 kWh/ kg  
ammoniakk





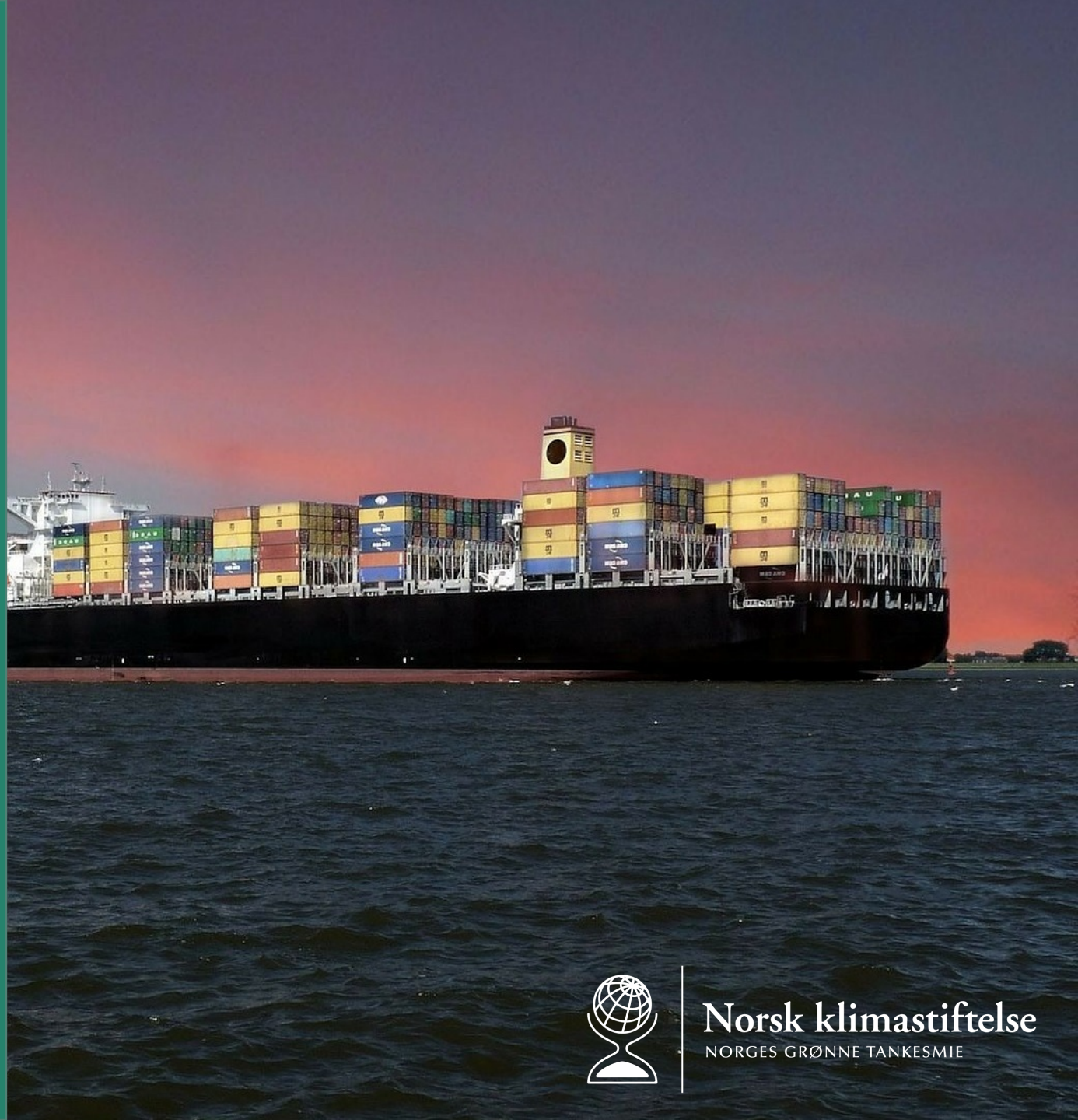
180 millioner tonn grønn ammoniakk krever minst  
1800 TWh fornybar strøm



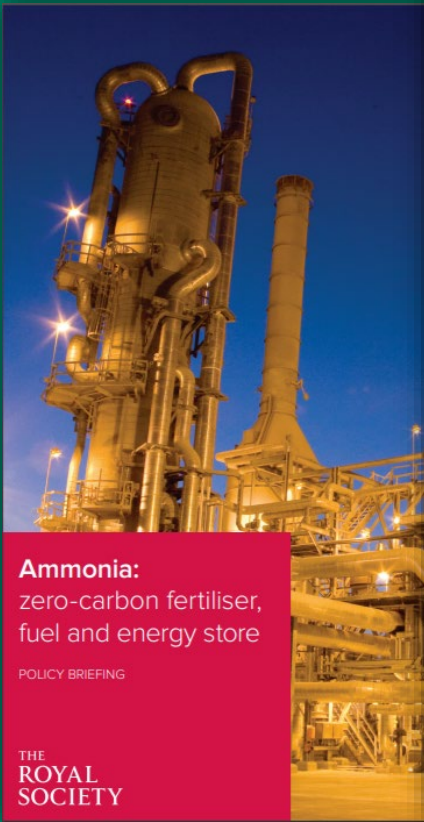
Norge x 10, pluss litt til

$\frac{1}{4}$  av all fornybar strøm i  
verden  
(6700 TWh i 2018)

Kan grønn  
ammoniakk  
erstatte fossilt  
drivstoff i skip?



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**Ammonia:**  
zero-carbon fertiliser,  
fuel and energy store

POLICY BRIEFING

THE ROYAL SOCIETY

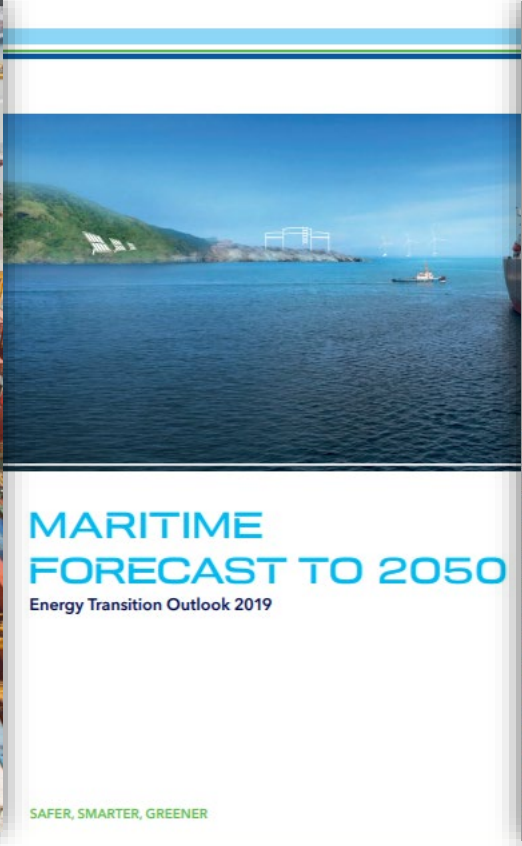


**MISSION POSSIBLE**

REACHING NET-ZERO CARBON EMISSIONS FROM HARDER-TO-ABATE SECTORS BY MID-CENTURY

ENERGY TRANSITIONS COMMISSION

SECTORAL FOCUS  
**SHIPPING**



**MARITIME FORECAST TO 2050**

Energy Transition Outlook 2019

SAFER, SMARTER, GREENER



**Techno-economic assessment of zero-carbon fuels.**

March 2020

Lloyd's Register | UMAS



**Forecasting the Alternative Marine Fuel**

Ammonia

KOREAN REGISTER R&D Division

KR



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# Hvorfor ammoniakk?

- **ENERGITETTHET**

Ammoniakk har høyere energitetthet enn andre karbonfrie alternativer

- **INFRASTRUKTUR**

Ammoniakk er enkelt å lagre og transportere

- **KLIMA**

Ammoniakk kan produseres uten CO<sub>2</sub>-utslipp



# Viking Energy på grønn ammoniakk fra 2024



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**Kirsten Ånestad Øystese**  
Prosjektleder

E: [kirsten.oystese@klimastiftelsen.no](mailto:kirsten.oystese@klimastiftelsen.no)

M: +47 951 24 740

T: @kirstenoystese



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