



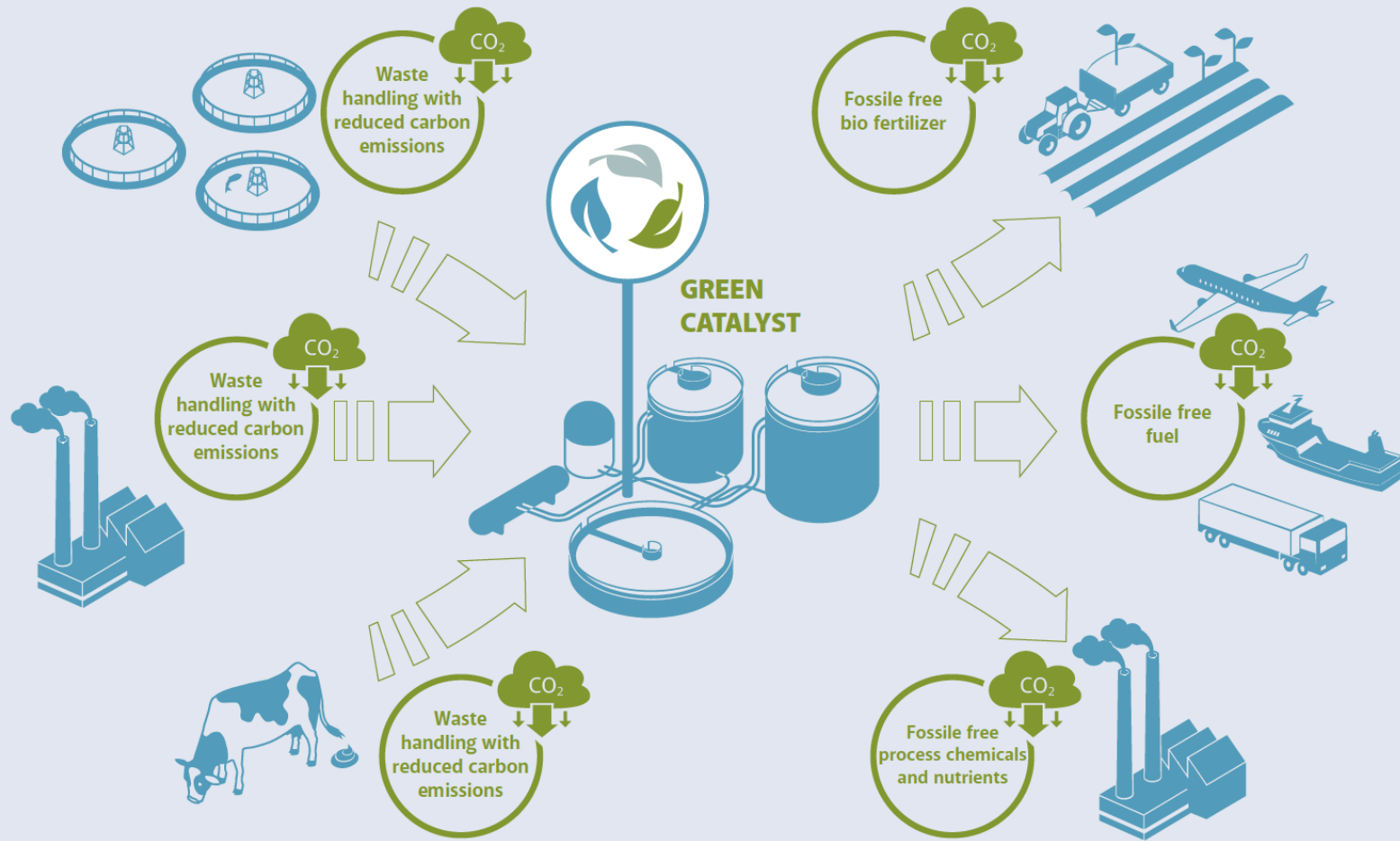


Hitra – midt i leia, og midt i smørøyet 😊

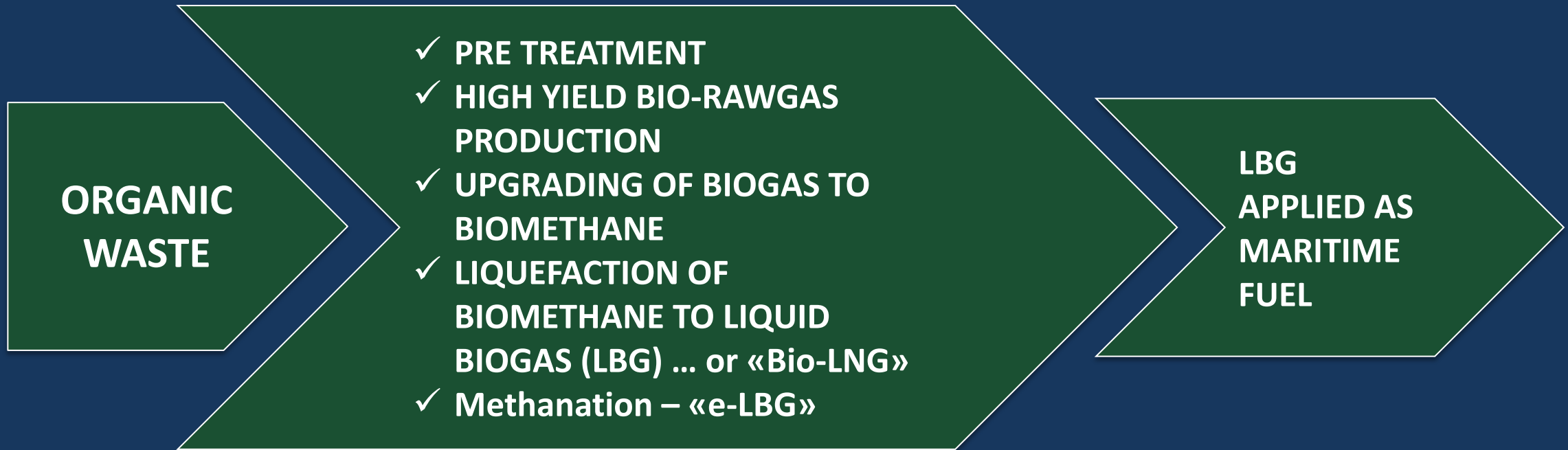
Grønn transport og sirkulærøkonomi

B I O K R A F T

Biogas – a kinderegg ☺



Value chain from waste to LBG maritime fuel





Our contribution to 3 x world records

We, and EBA, and many others, believe that the optimal utilization of organic waste is conversion to LBG fuel utilized in green trucking and green shipping



Biggest LBG contract in shipping



Longest range green heavy trucking (1780km on full tank of LBG)



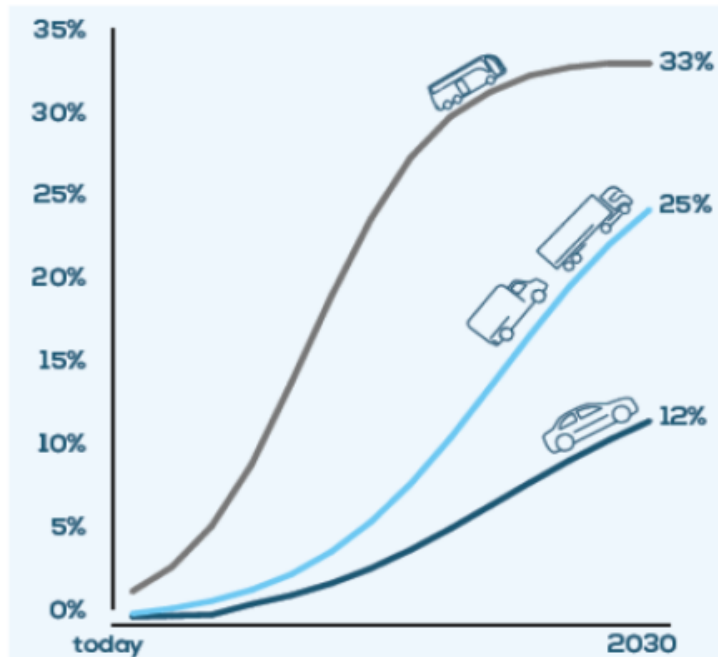
World's largest LBG factory at Skogn

Green trucking with LBG

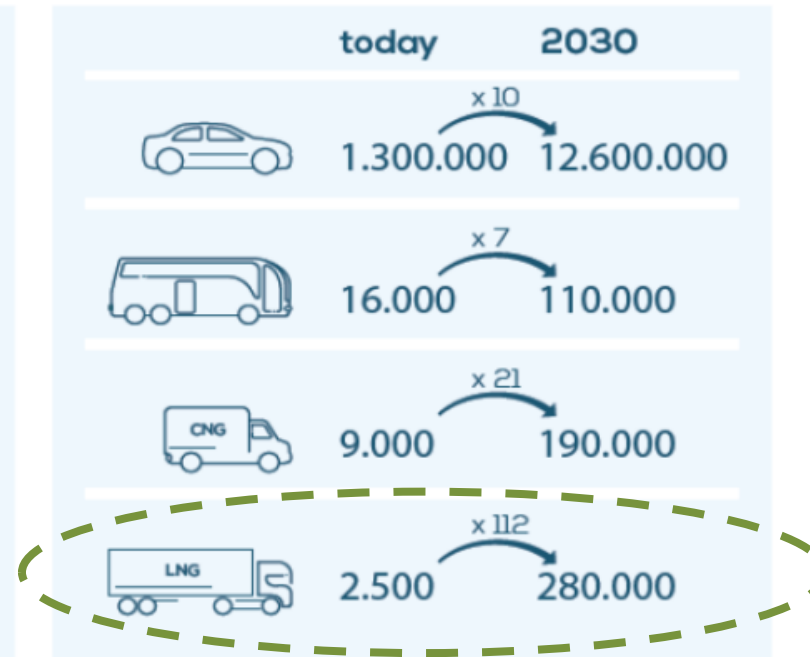


Looking to 2030: NGVs fleet development

 Market share natural gas vehicles in Europe



 Natural gas vehicles fleet development



NGVs fleet up to 13 million units in 2030

Green trucking – TINE

+ Now, Q1 2021: Grønt Landtransportprogram (modelled after GSP)

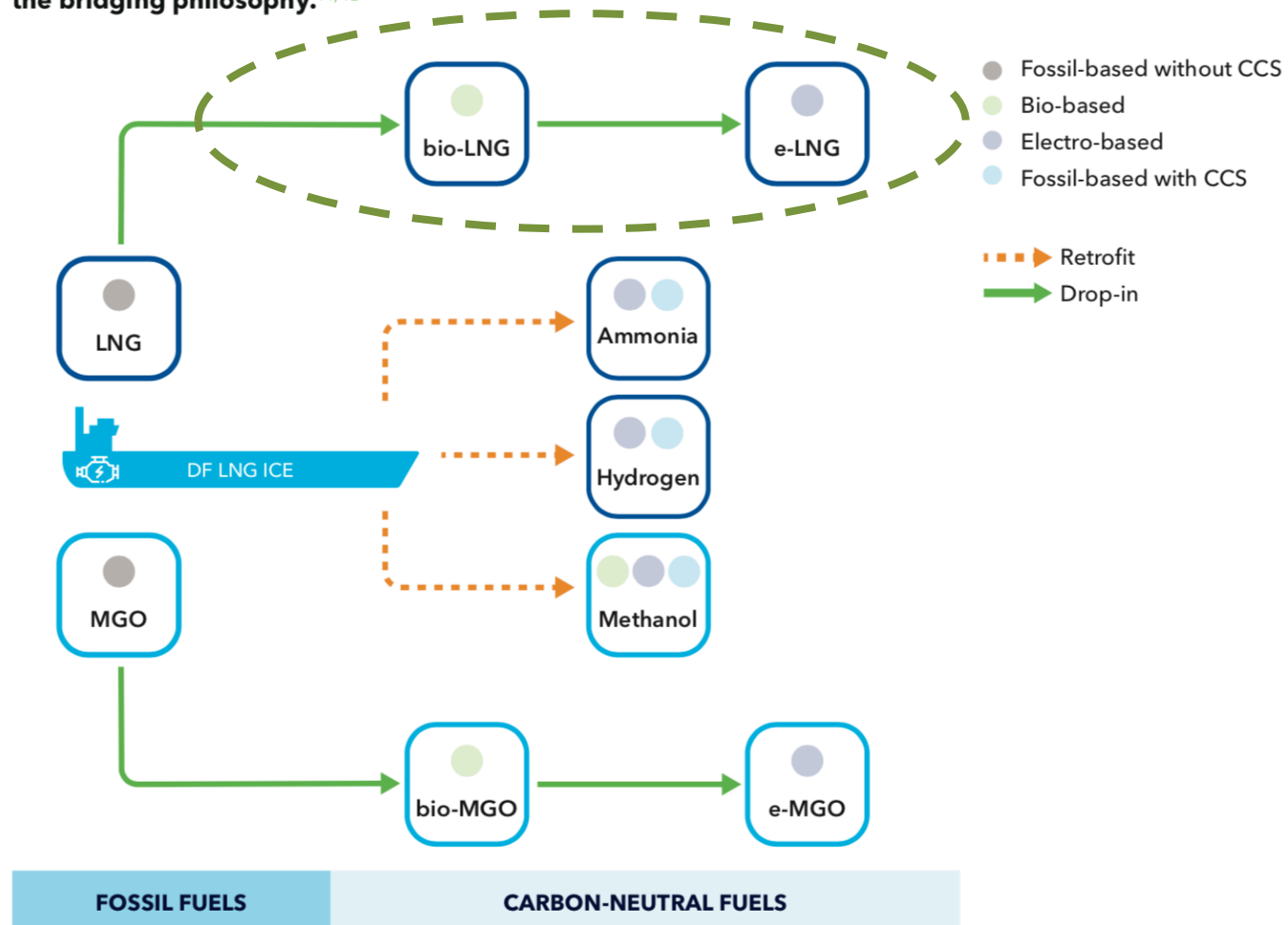


TINE's cowpower trucks are heavy duty long-range solutions, running on liquid biogas fuel.

Green shipping fuel pathways



A vessel with dual-fuel engine capable of burning LNG and MGO illustrates fuel flexibility, building on the bridging philosophy.^{11,12}



MGO, marine gas oil; LNG, liquefied natural gas

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Green shipping – Hurtigruten and Maersk

+ Now: Green Shipping Programme (GSP)



Maersk identifies alcohol, biogas and ammonia as pathways to decarbonisation



Sam Chambers · October 25, 2019

1 comment 121 likes 2 minutes read

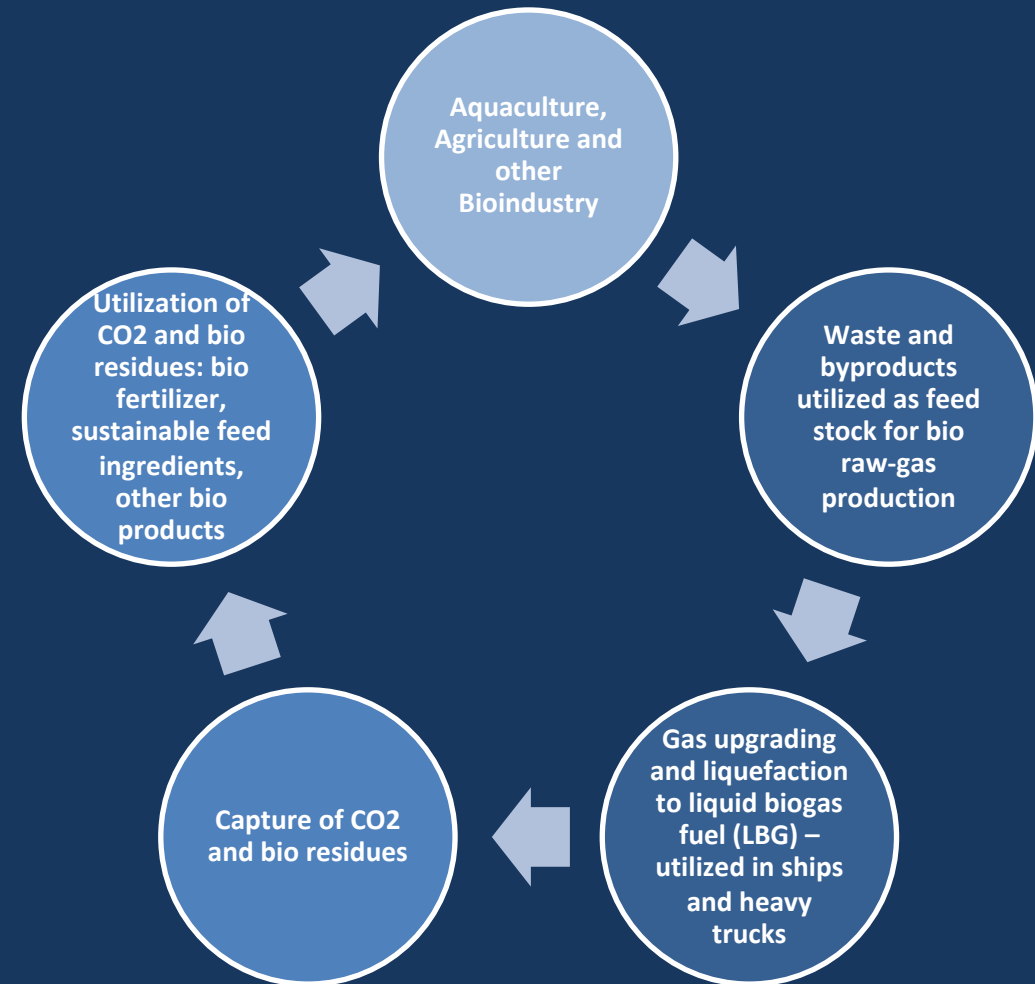


Biokraft – circular bioeconomy innovation power



Innovation R&D efforts, productification:

- *Digitalization*
- *Bio fertilizer*
- *e-LBG*
- *Sustainable feed ingredients*
- *”GREEN”, ”SUSTAINABLE” (the new taxonomy will change things)*



Biokraft Bio Fertilizer



- More renewable food production with application of bio fertilizer
- First season (2019):
 - ✓ Good agronomy
 - ✓ Good economy
- Biokraft works to further refine this important product, as well as develop other bio products



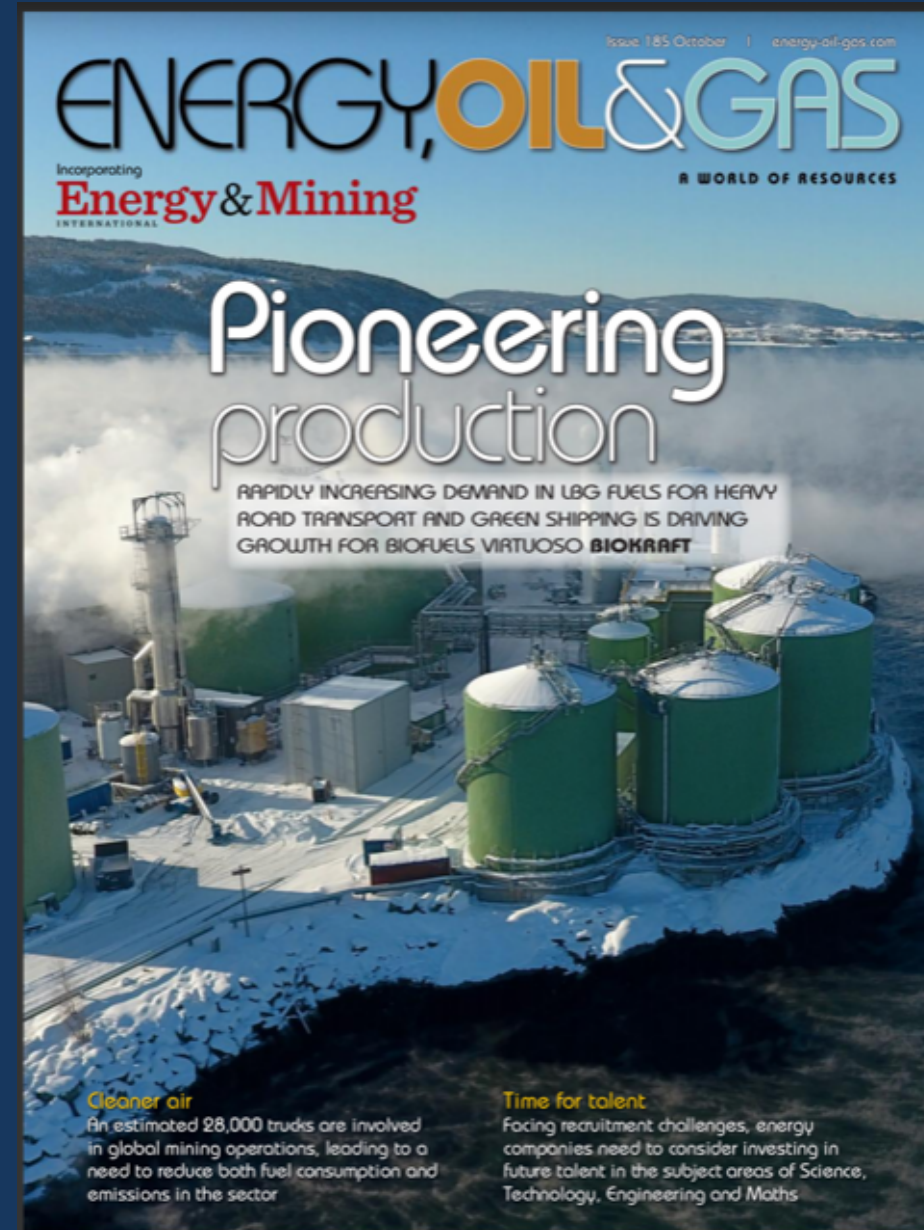


Potential to 2030 and beyond

European Biogas Association
(EBA):

- The biomethane potential in Europe by 2050: 1170 TWh
- Main uses: heavy transport and maritime transport

Biokraft on the cover
of Energy, Oil & Gas in
October 2020



Growth

+ Skogn II, 2021 – 2022

+ Skogn III, 2022 – 2023

+ Other locations

= expanding portfolio of LBG
production capacity



Hitra



Spesifikke drivere som gjør biogass interessant på Hitra:

- Beliggenhet og nærhet til oppdrettslokaliteter, slakteri og logistikknutepunkt:
 - ✓ Tilgang til biprodukt fra oppdrettsnæringen
 - ✓ LBG til brønnbåter, fiskebåter og andre fartøy
- Jøstenøya godt egnet som energiknutepunkt for både sjø- og veitungstransport
- Behov for nytt fergesamband (Hitra – Aure), aktualisert på grunn av beredskap og sikkerhet som følge av behov for rehabilitering av Hitra-tunellen
- LNG + LBG seiler fram som en foretrukken klimavennlig løsning i nybygde lastebåter og cruiseskip
- Næringsvennlig kystkommune 😊

