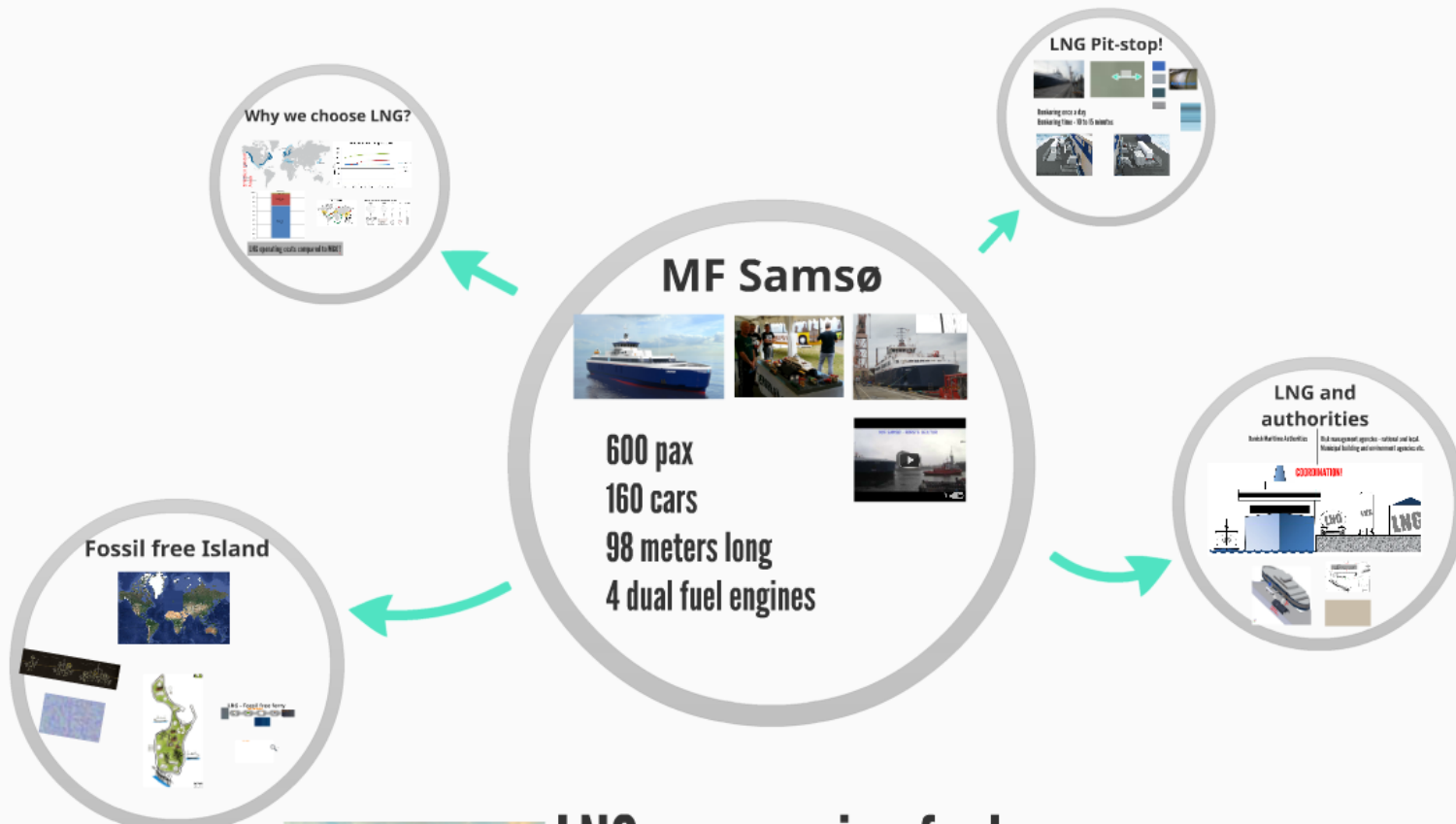


LNG as a marine fuel on the island of Samsø



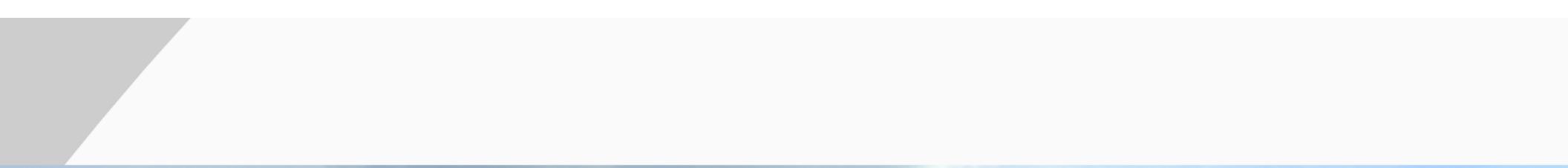
LNG as a marine fuel on the island of Samsø

MF Samsø



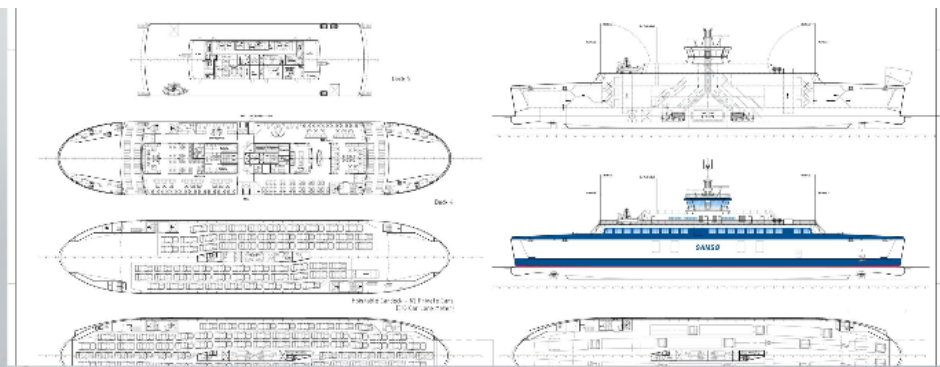
600 pax
160 cars
98 meters long
4 dual fuel engines











SAMSQ

2014/09/26

M/F SAMSO - FØRSTE SEJLTUR



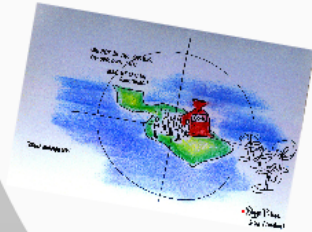
MF Samsø



600 pax
160 cars
98 meters long
4 dual fuel engines



Fossil free Island





Saksild Bugt

Nordby Bugt

Mårup Vig

Sælvig

Samsø

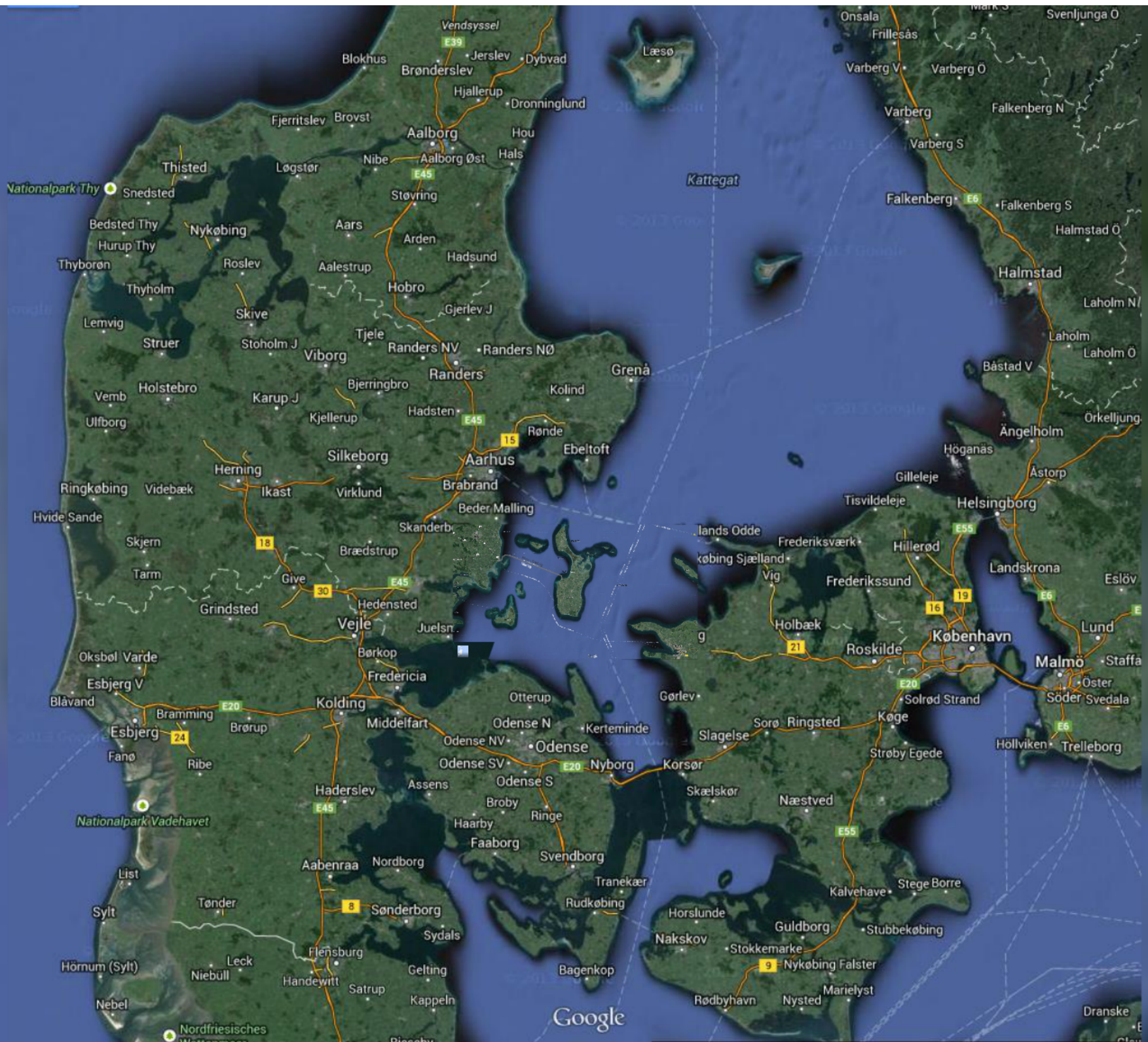
Samsø

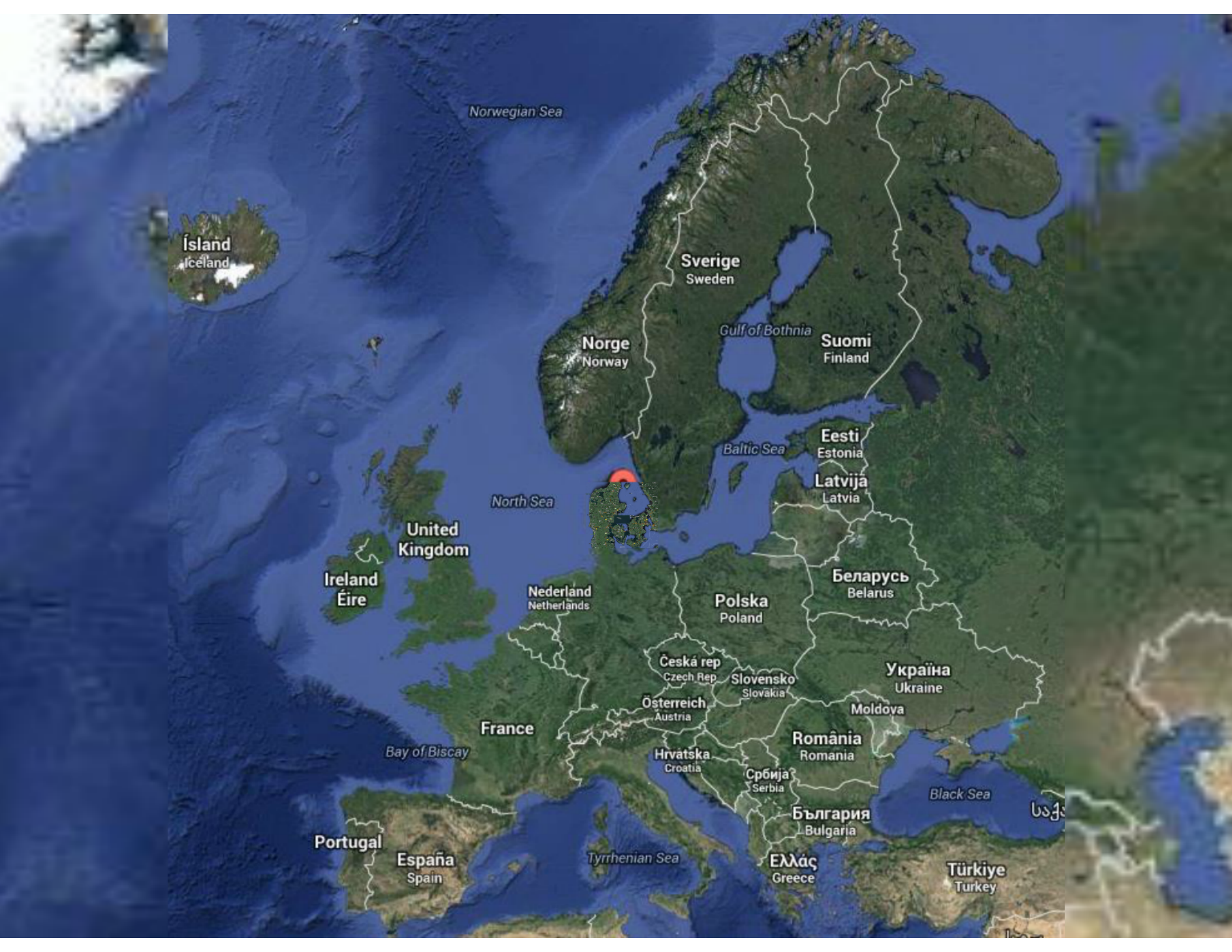
Hou - Sælvig
1 Hour trip

445

Hou - Kolby Kås / Kolby Kås - Hou

Dalsb. NO - Kiel DE
Göteborg-SE - Kiel-DE
Kiel DE



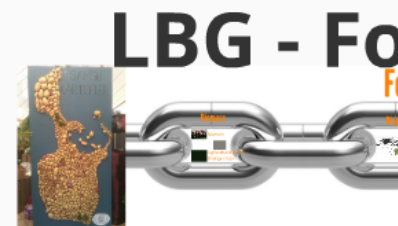




fe
back



KORT OM K
Kortet er en
Alt med en c

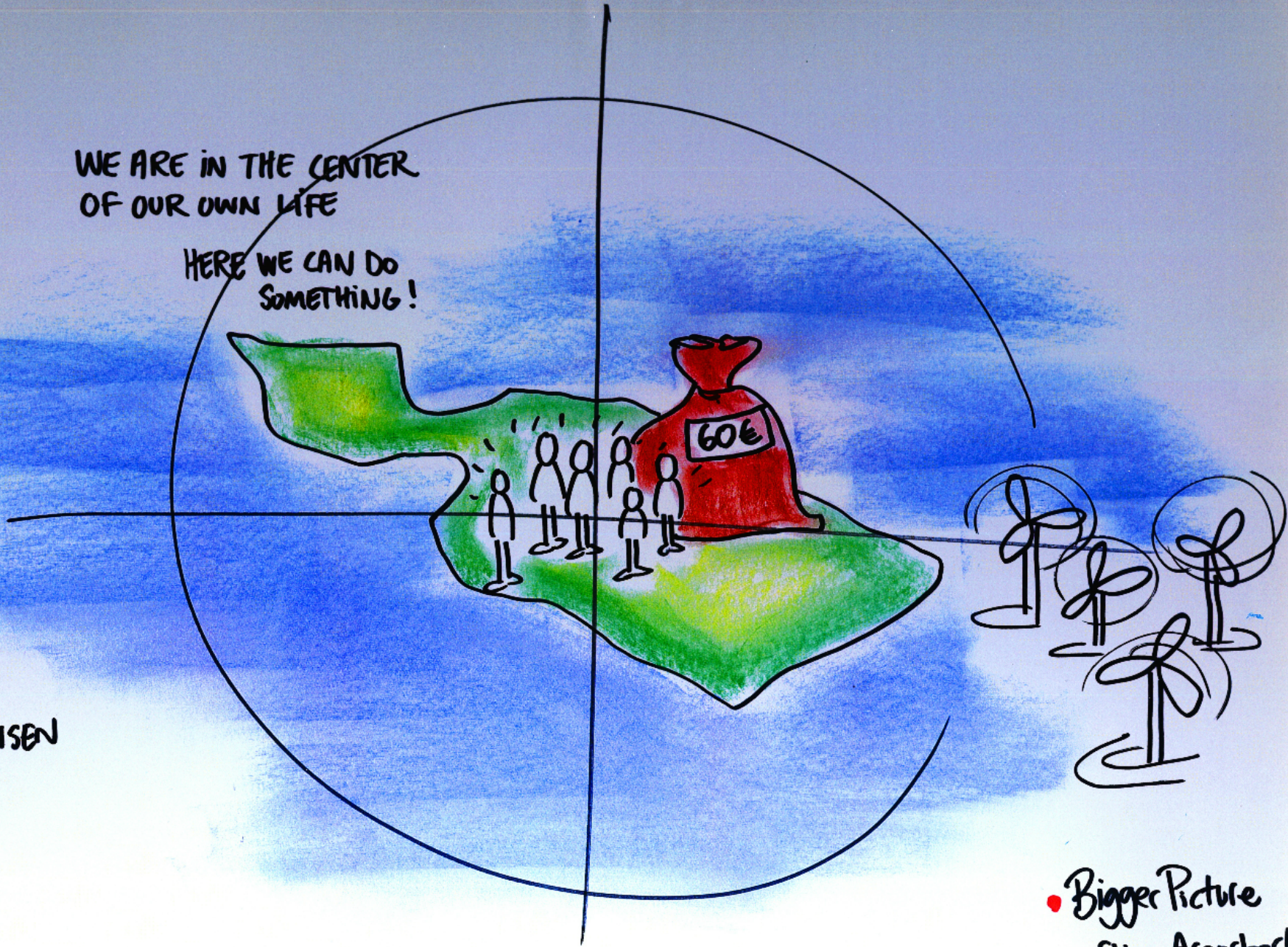




WE ARE IN THE CENTER
OF OUR OWN LIFE

WE ARE IN THE CENTER
OF OUR OWN LIFE

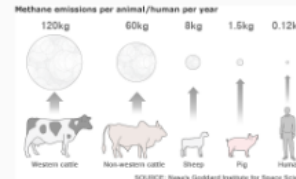
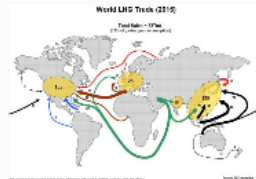
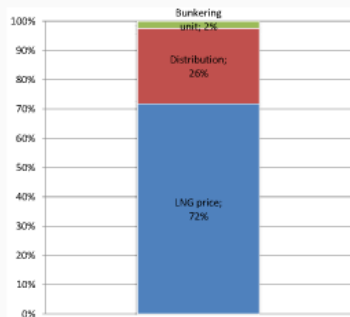
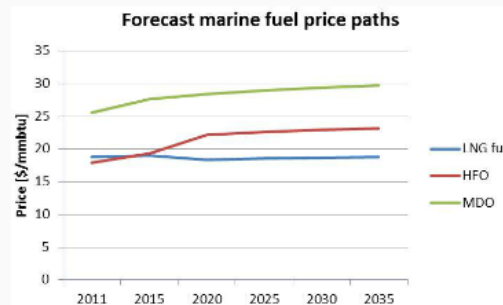
HERE WE CAN DO
SOMETHING!



SØREN HERMANSEN

• Bigger Picture
Stine Arensbach

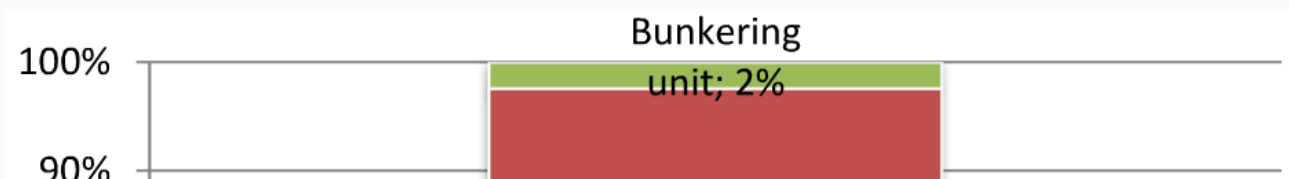
Why we choose LNG?



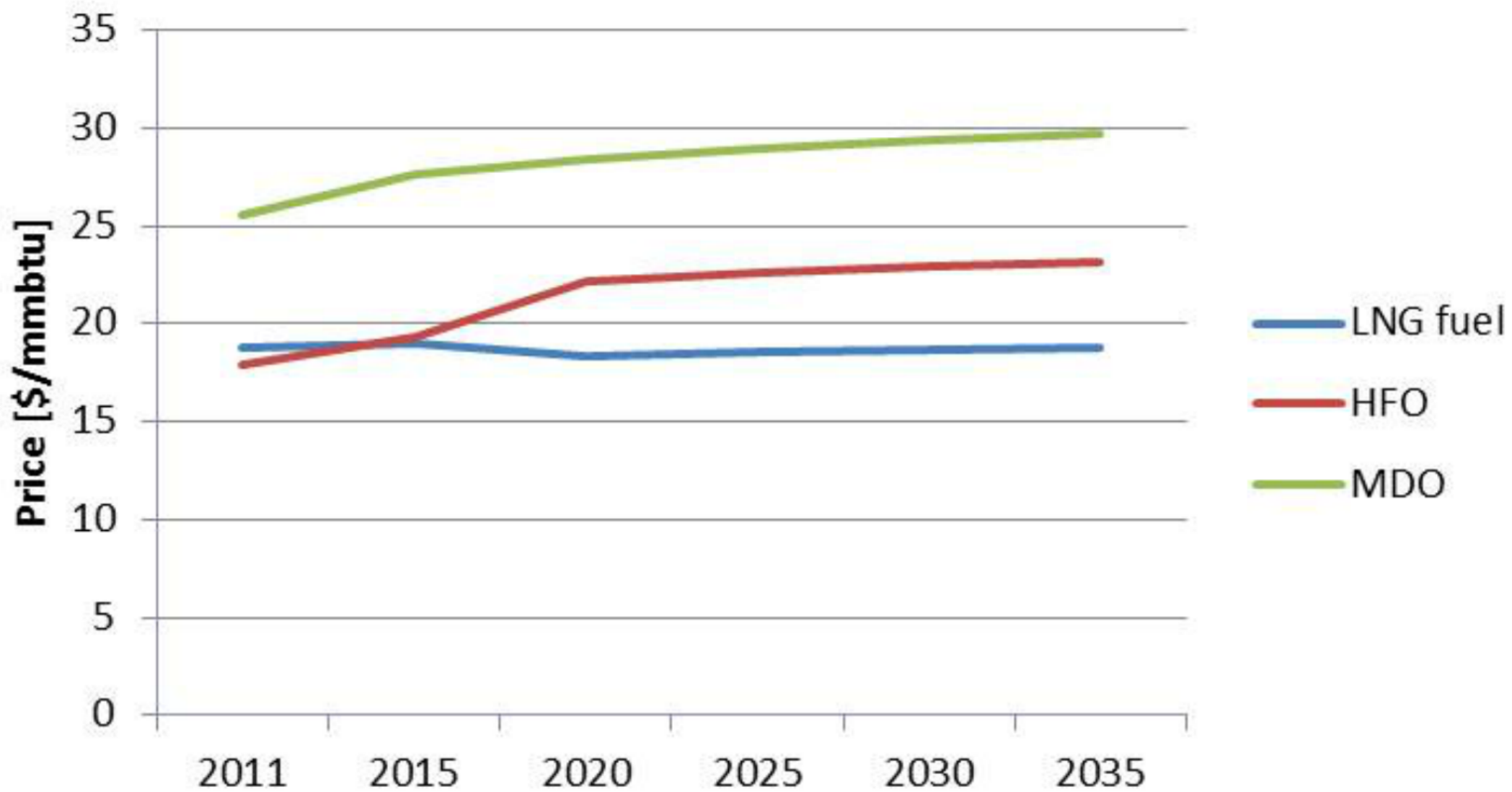
LNG operating costs compared to MGO?

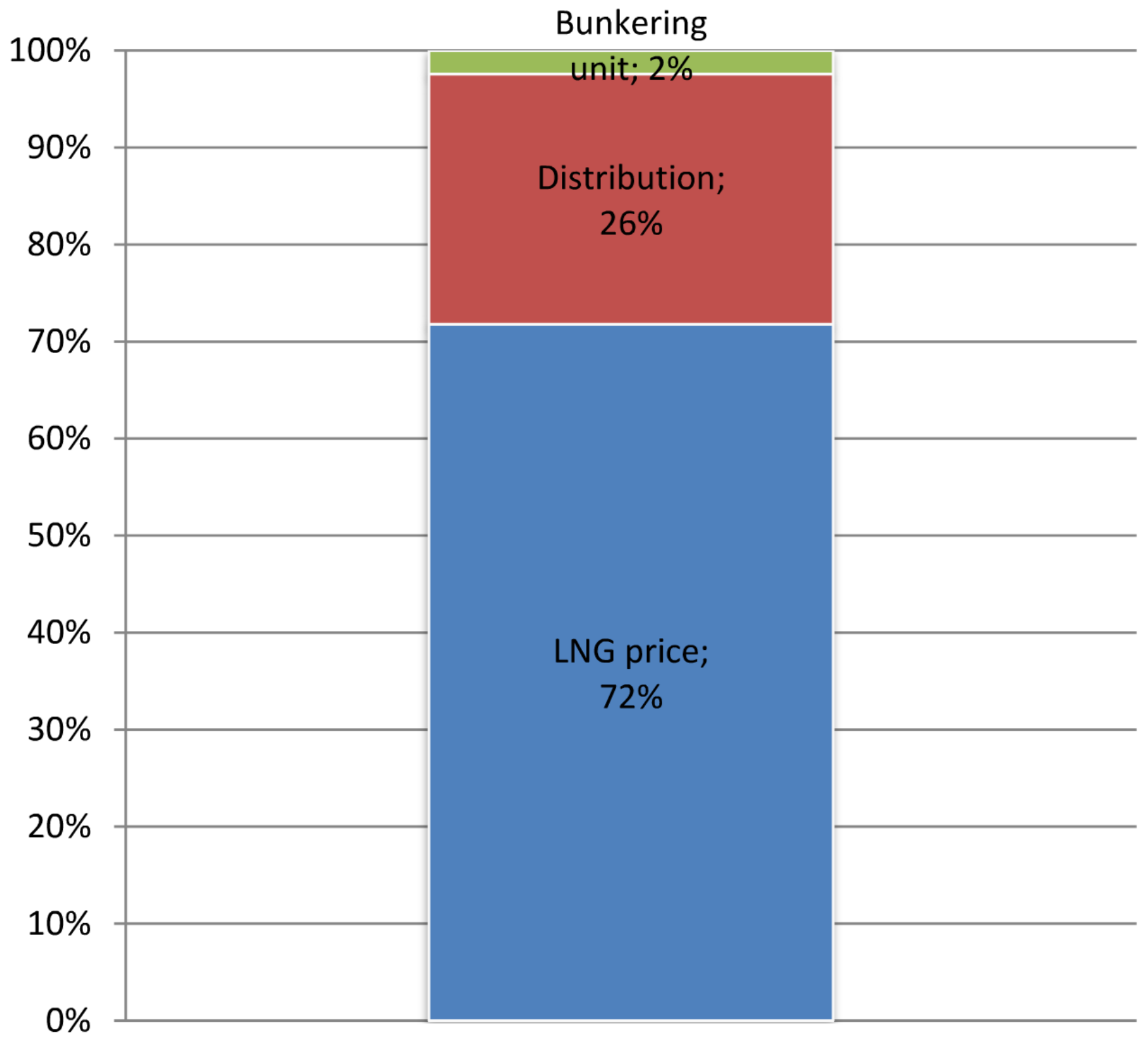


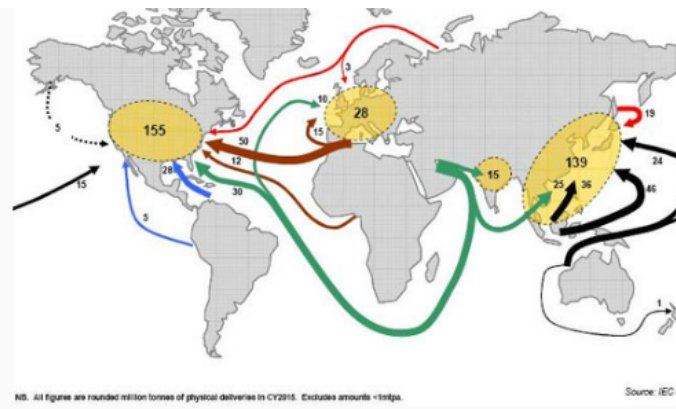
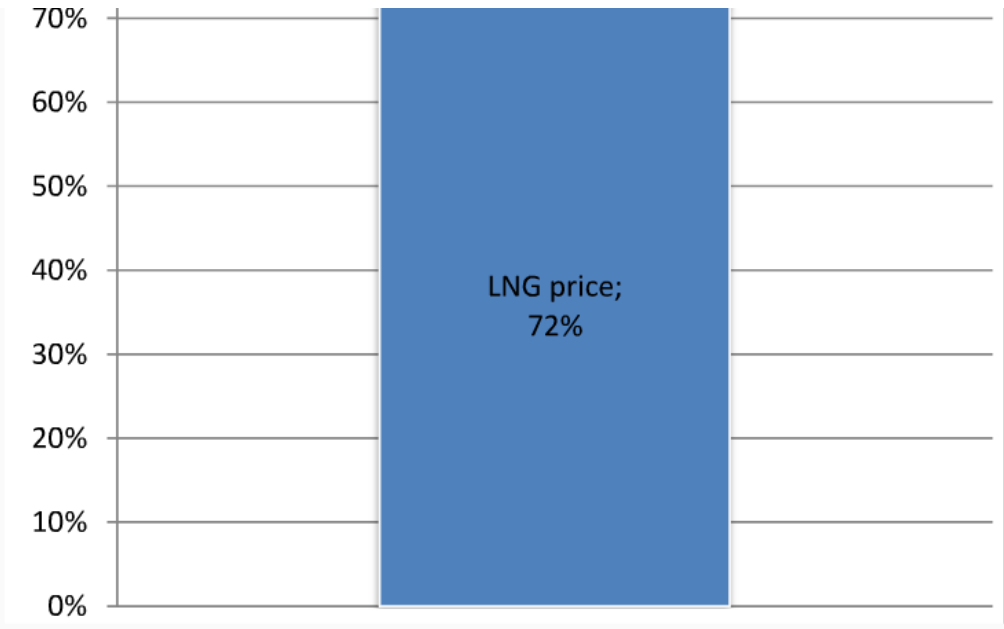
Emission Control Areas



Forecast marine fuel price paths





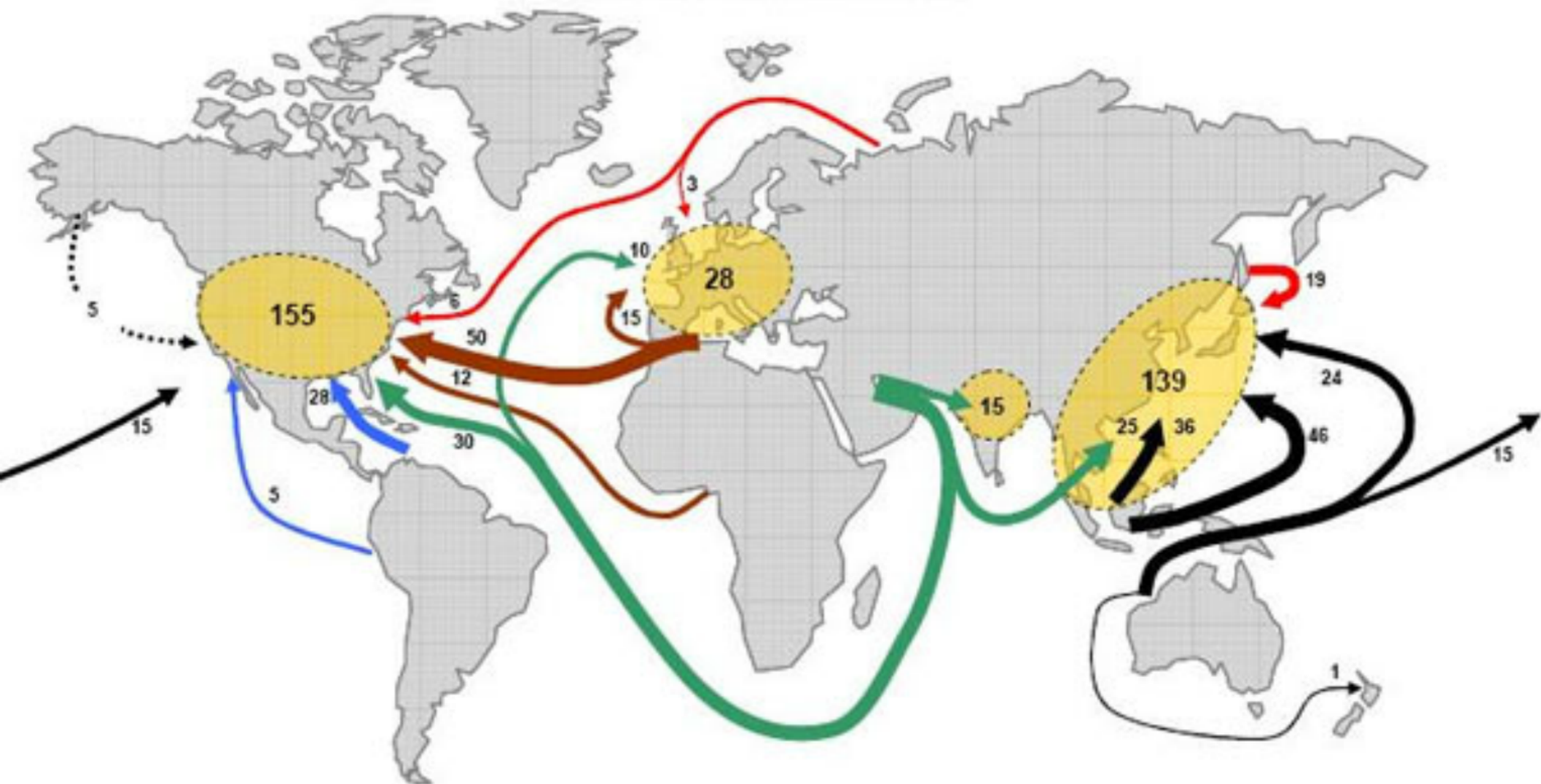


LNG operating costs compared to MGO?

**2014 EU tender for MF Samsø
12 % less in favor for LNG!**

World LNG Trade (2015)

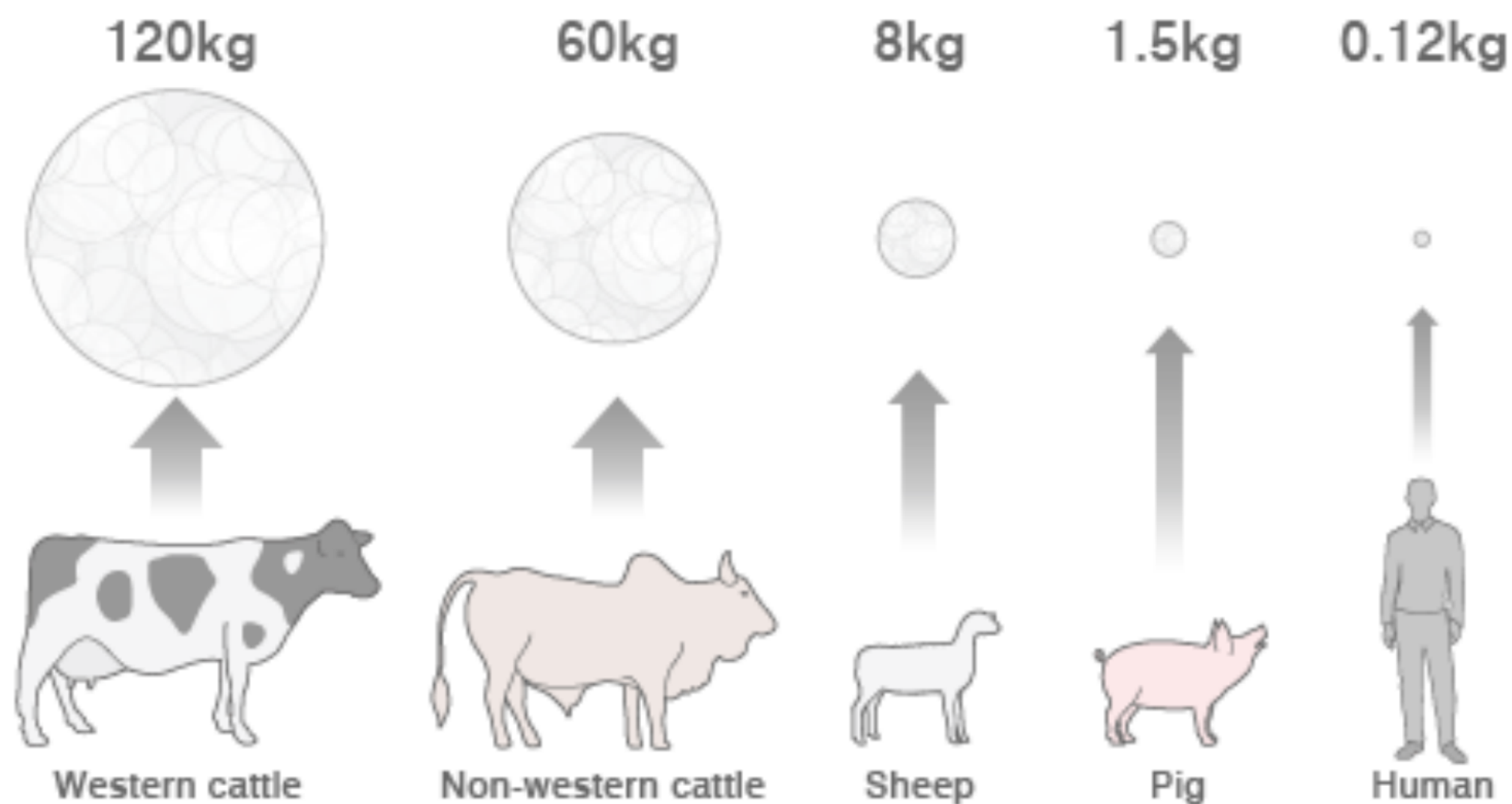
Total Sales = 337mt
(13% of global gas consumption)



NB. All figures are rounded million tonnes of physical deliveries in CY2015. Excludes amounts <1mtpa.

Source: IEC modeling

Methane emissions per animal/human per year



SOURCE: Nasa's Goddard Institute for Space Science

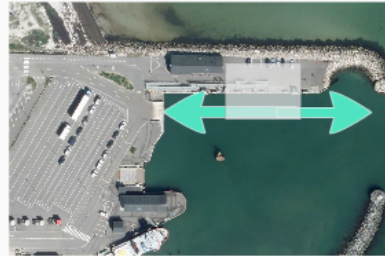
MF Samsø



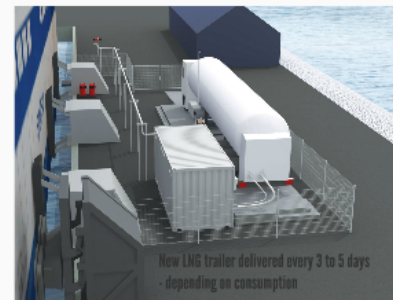
600 pax
160 cars
98 meters long
4 dual fuel engines



LNG Pit-stop!



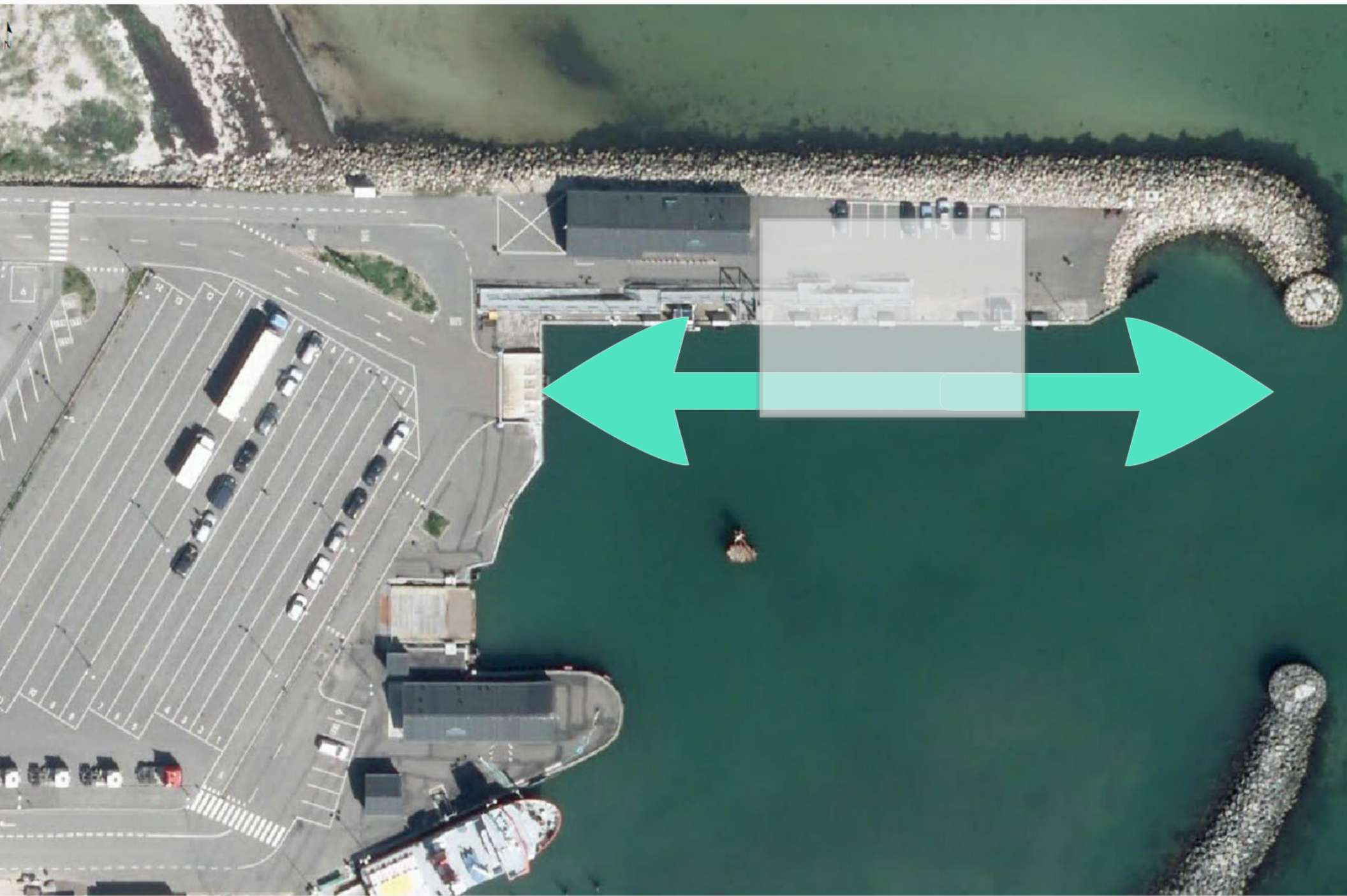
Bunkering once a day
Bunkering time - 10 to 15 minutes

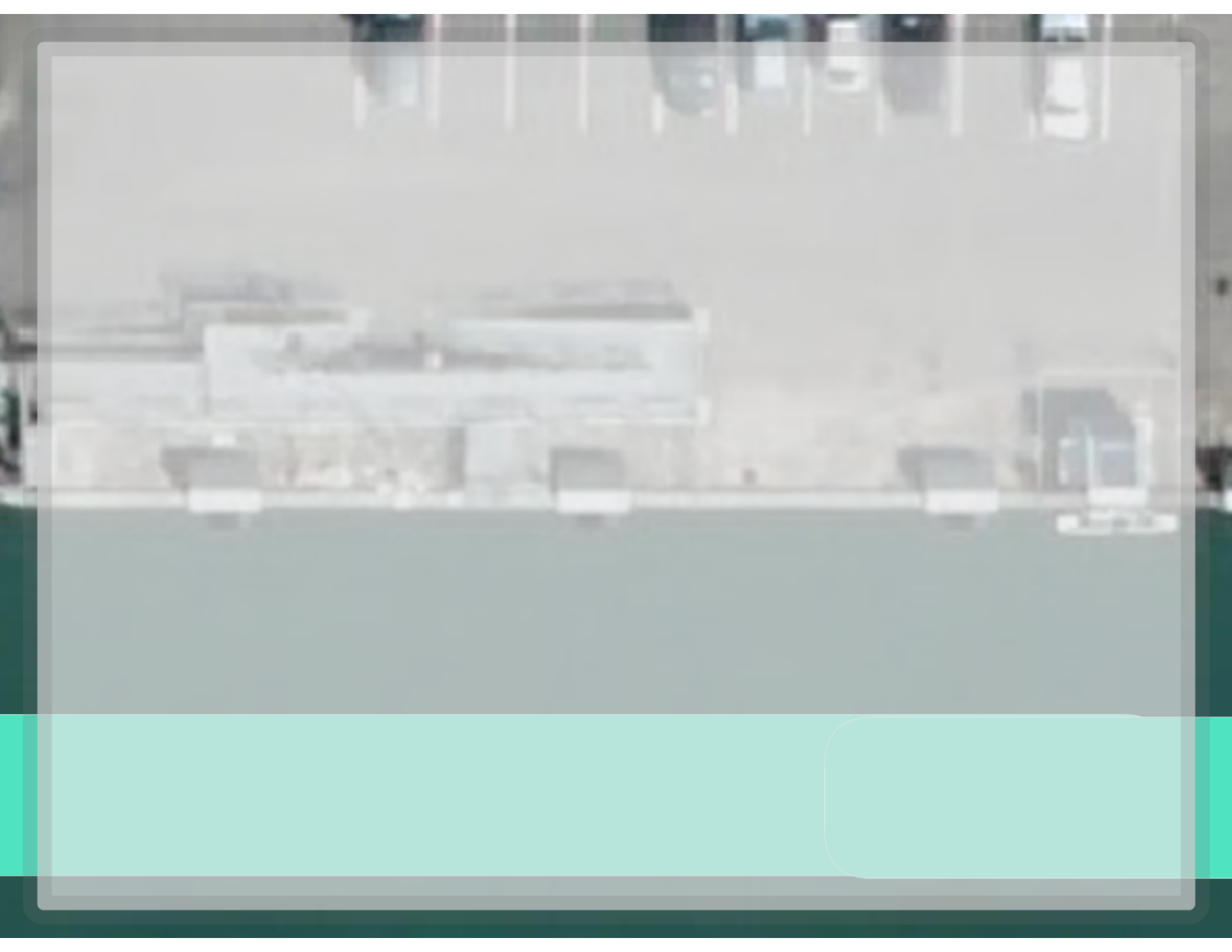




SAMSØ
SÆLVIG

2014/10/08







2014/10/07



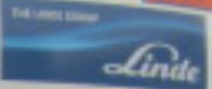
2014/10/08



LINU 201330 (4)



77
1977



MAX. GROSS 38.000 kg
76.368 lb
TARE WEIGHT 8.320 kg
18.342 lb
CAPACITY 19.680 L

TEL. ALARMSTADT
12 843 93 1010

PK5 91P

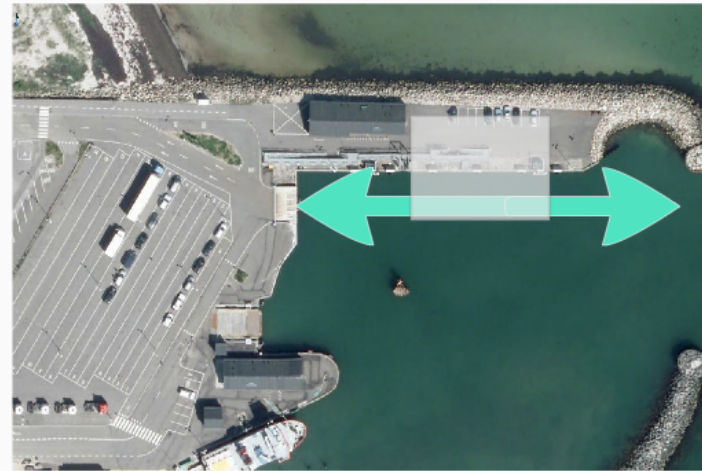
2014/10/07



A large, white, cylindrical LNG tank is the central focus of the image. It is situated on a ship's deck, with various pipes and mechanical components visible in the background. A bright light source, possibly a work light, is positioned in the upper left corner, casting a strong glow on the tank and the surrounding area. The tank's surface is smooth and reflective, showing some minor imperfections and a slight shadow from the lighting. The overall scene is industrial and technical.

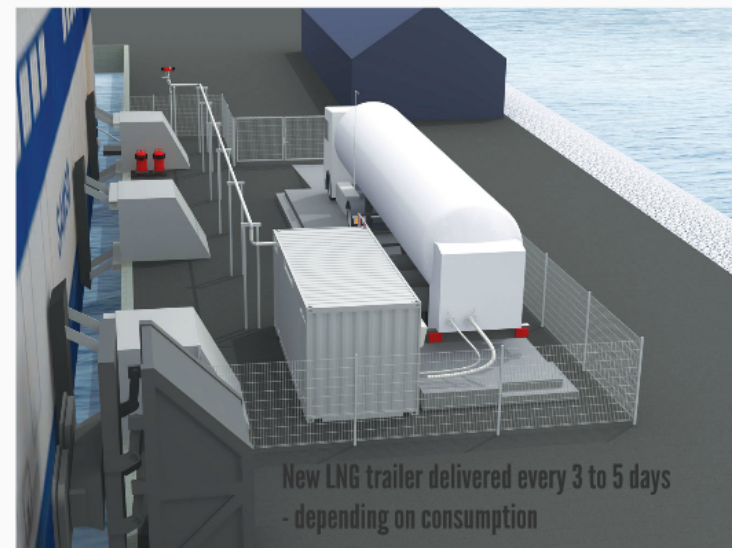
40m³ LNG tank on board

2014/10/07



Bunkering once a day

Bunkering time - 10 to 15 minutes



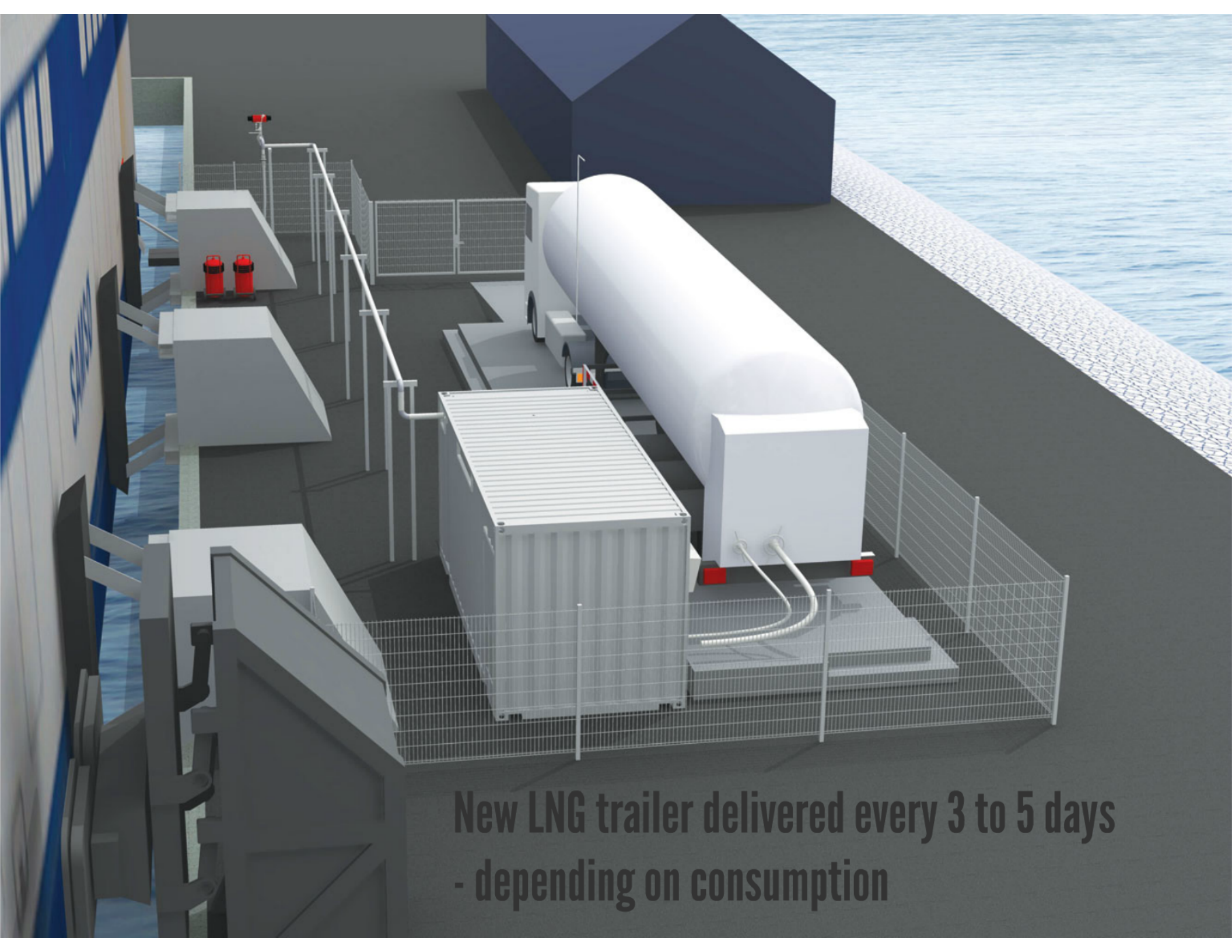


FULLY AUTOMATIC AND FLEXIBLE LNG BUNKERING FACILITY

- Fast bunkering (pit stop)
- One man, one operation panel > full overview of ship and port operations
- 100% emission free system
- First of its kind
- Standard KC products > quick delivery time
- Plug & play solution



Daily consumption app. 10 m³



**New LNG trailer delivered every 3 to 5 days
- depending on consumption**

MF Samsø



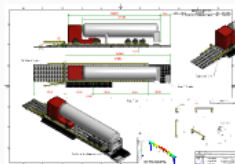
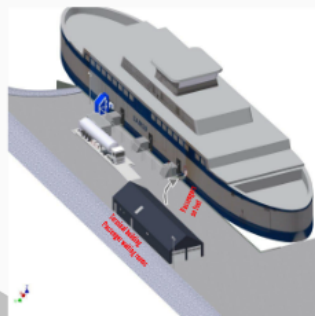
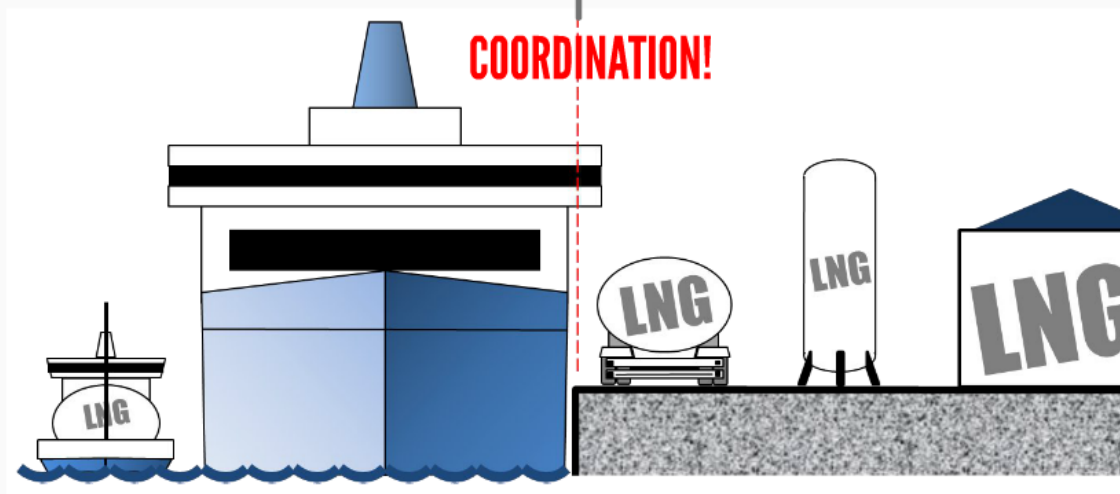
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98 meters long
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LNG and authorities

Danish Maritime Authorities

Risk management agencies - national and local.
Municipal building and environment agencies etc.

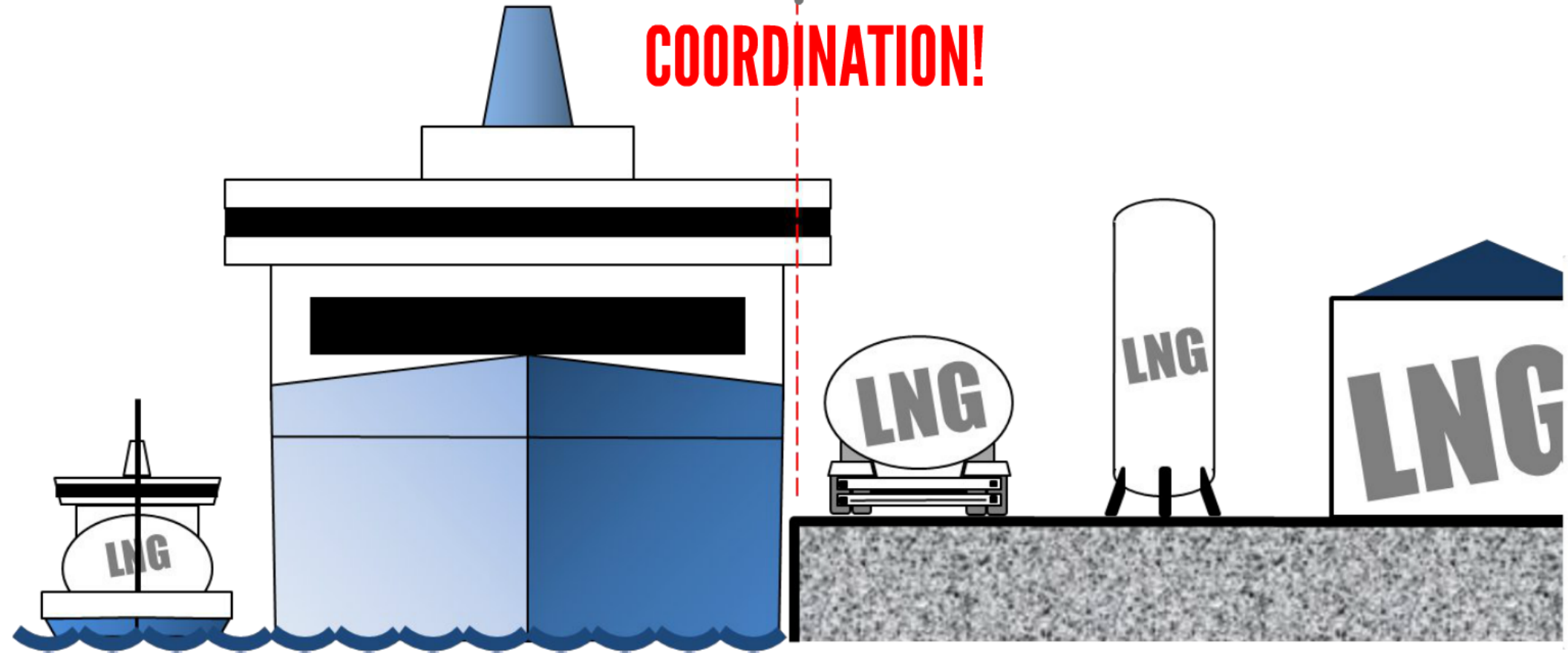


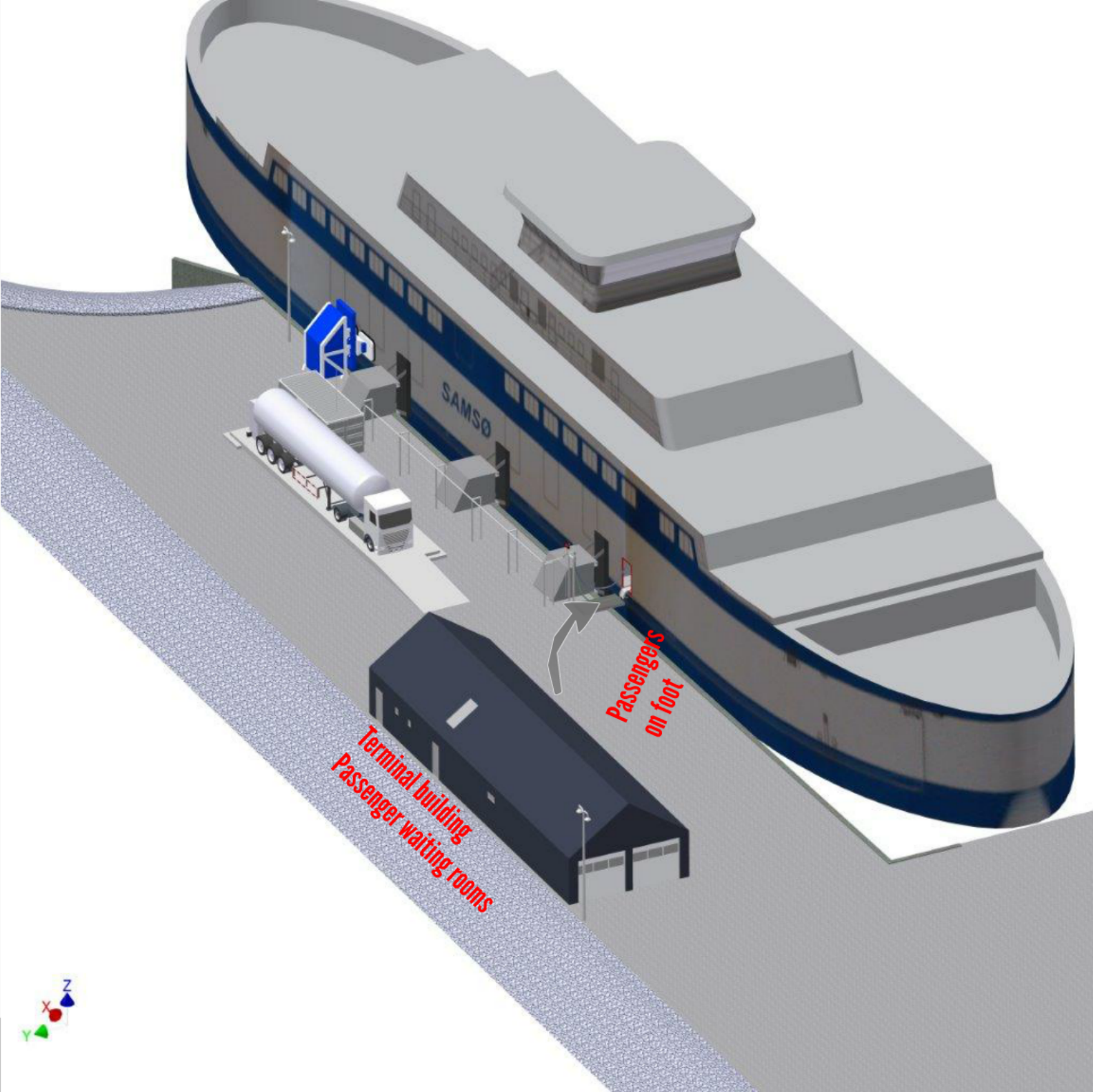
authorities

Danish Maritime Authorities

Risk management agencies - national and local.
Municipal building and environment agencies etc

COORDINATION!



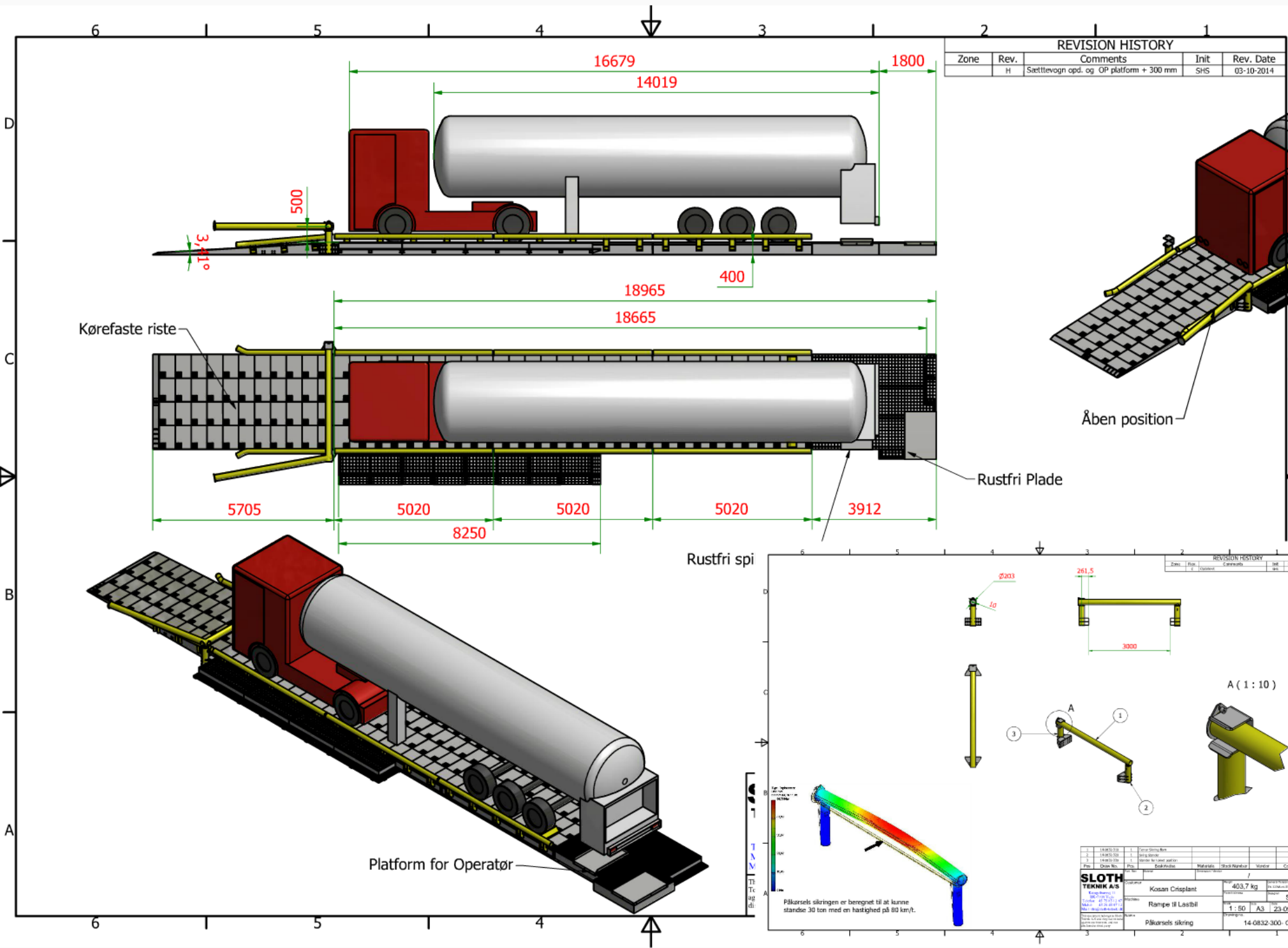


Passengers on foot

Terminal building
Passenger waiting rooms







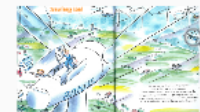
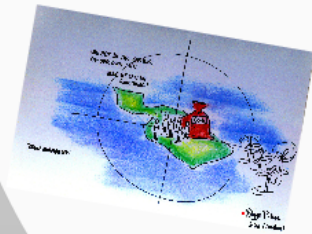
MF Samsø



600 pax
160 cars
98 meters long
4 dual fuel engines



Fossil free Island



LBG - Fossil free ferry

Fossil free transport



Biomass

- Manure
- Agricultural waste
- Energy crops

Biogas



LBG production

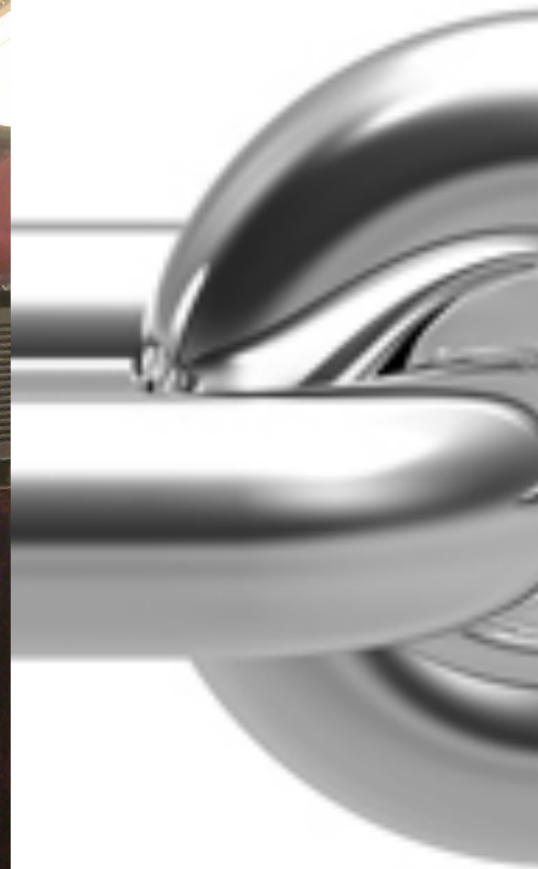
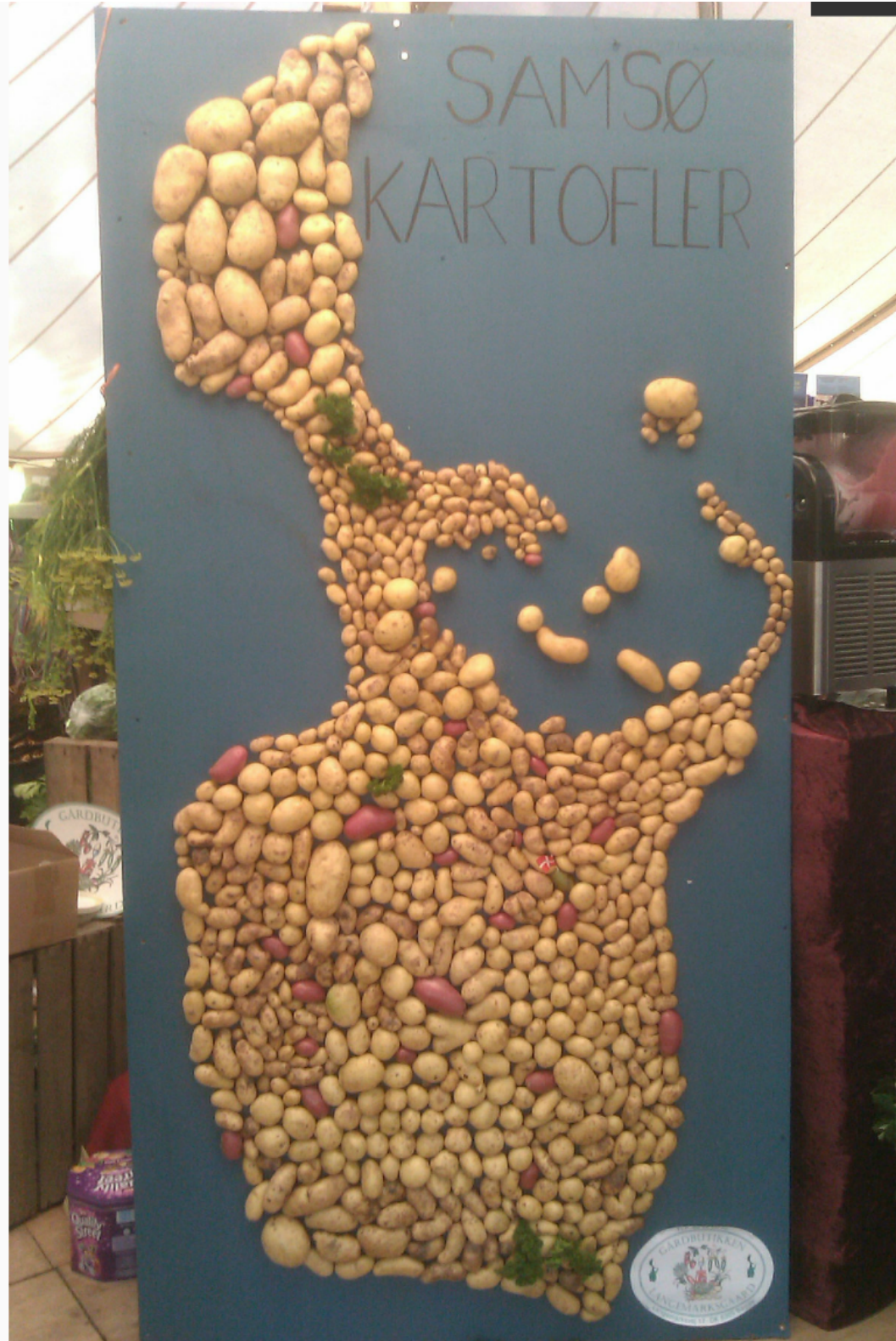


Distribution



LNG from
LBG from

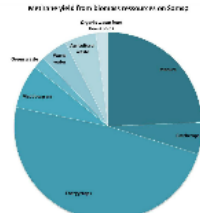
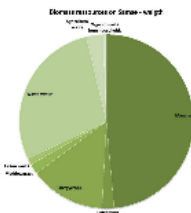




Biomass

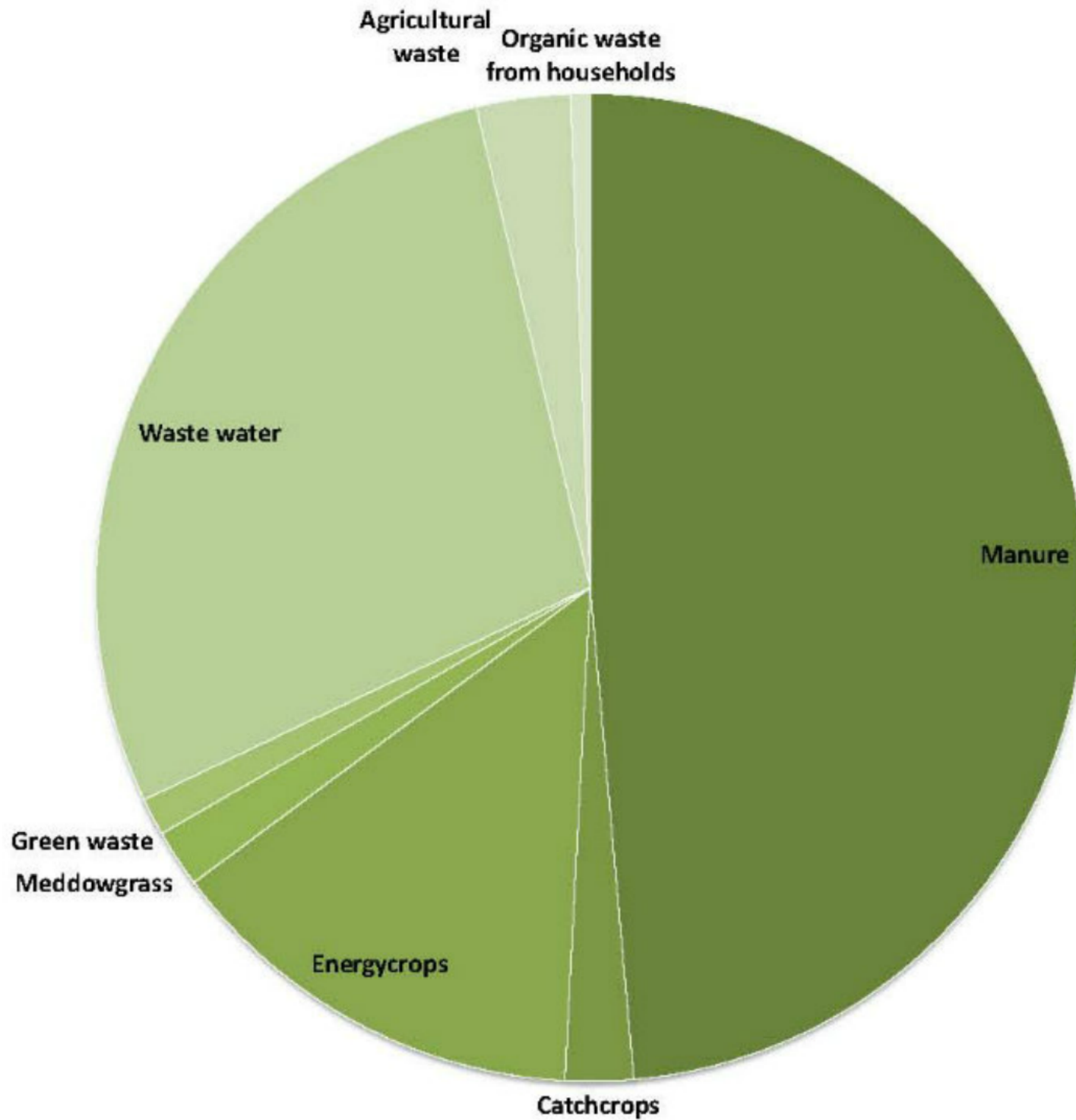


Manure

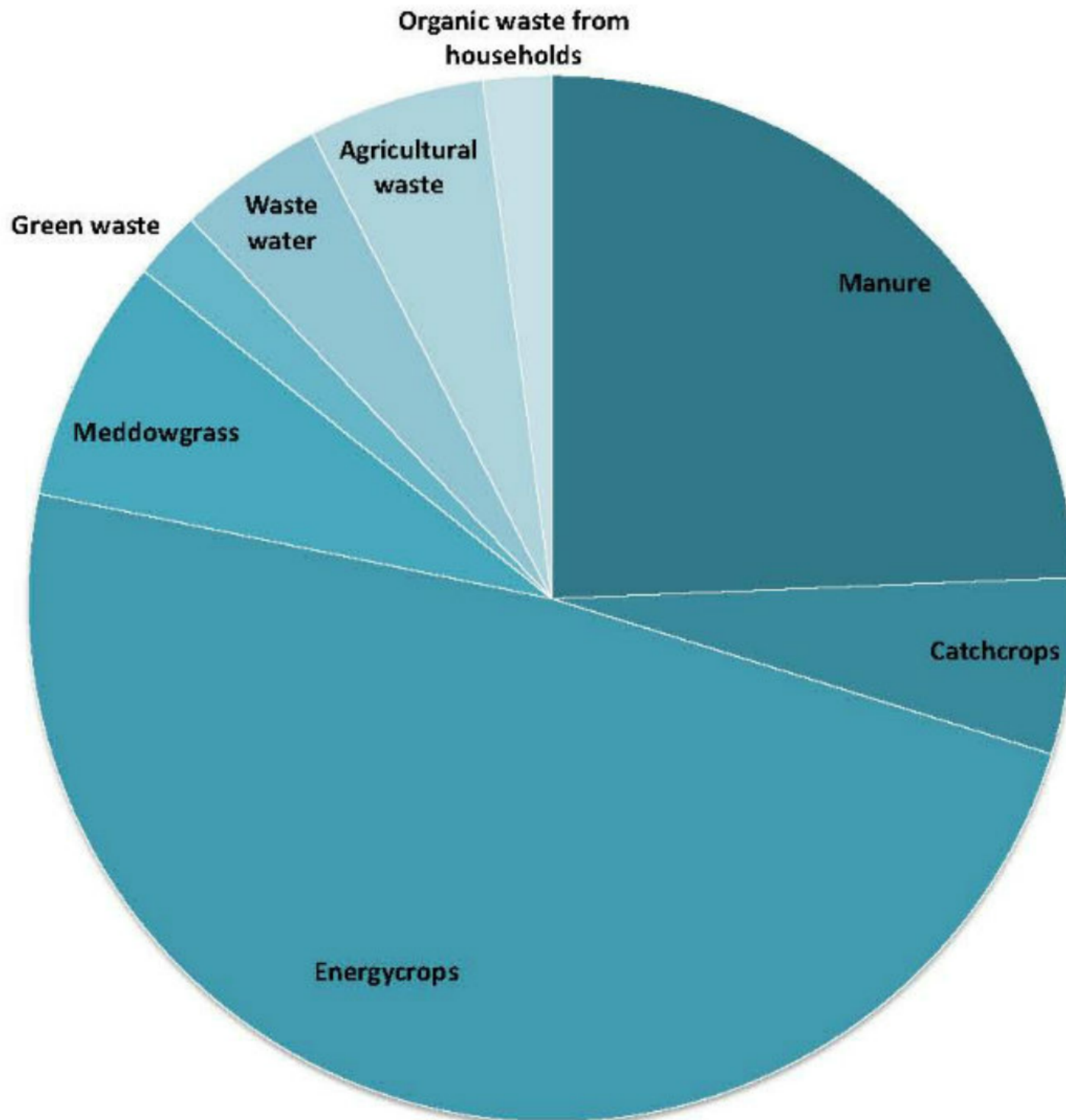


Agricultural waste
Energy crops

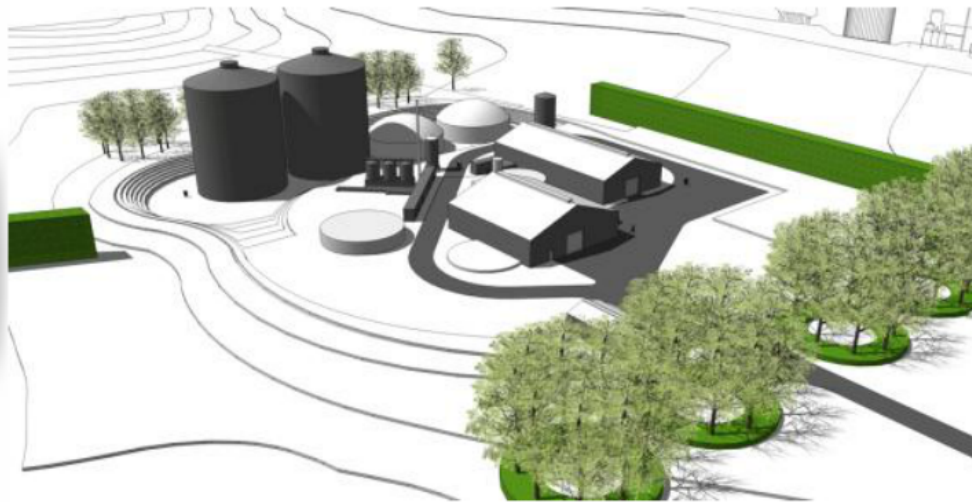
Biomass resources on Samsø - weight



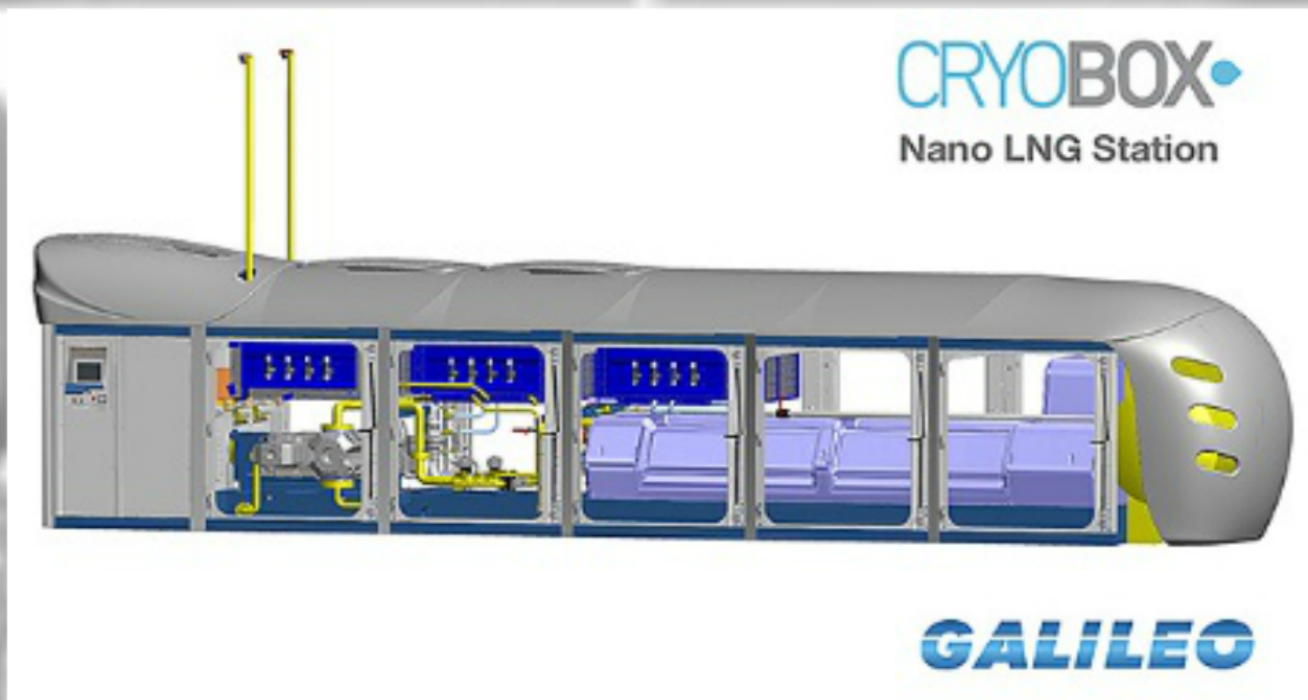
Methane yield from biomass resources on Samsø



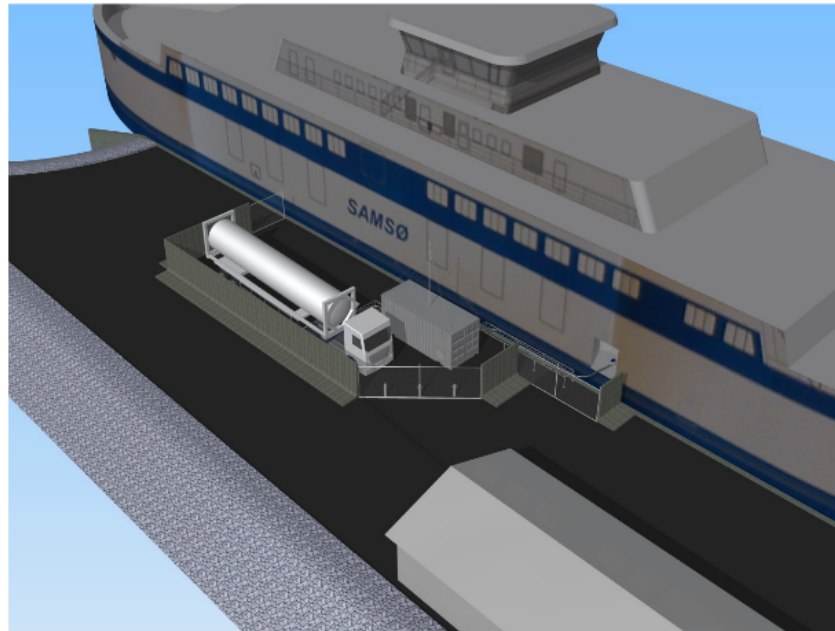
Biogas



LBG production



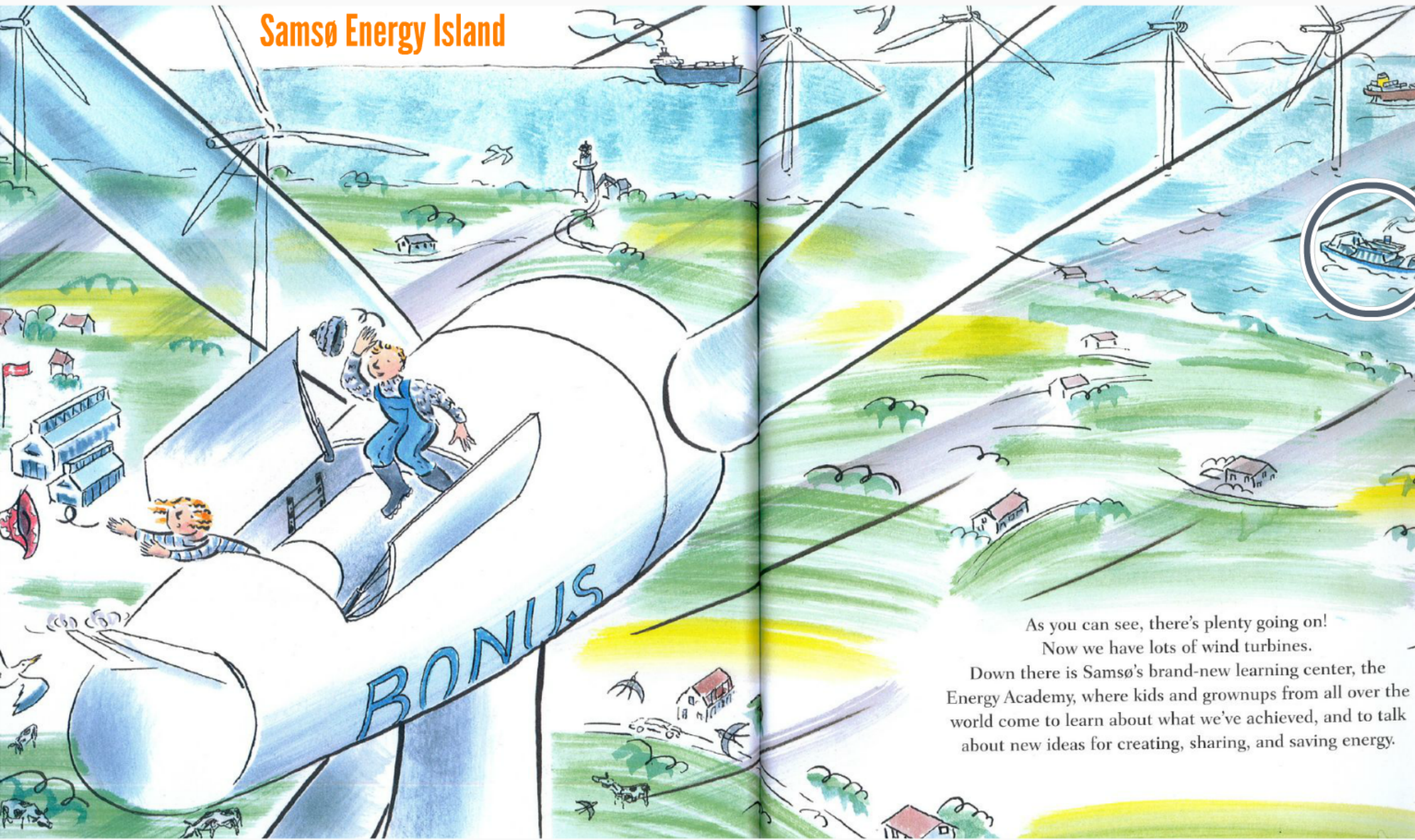
Distribution



LNG from december 2014
LBG from december 2016!?



Samsø Energy Island



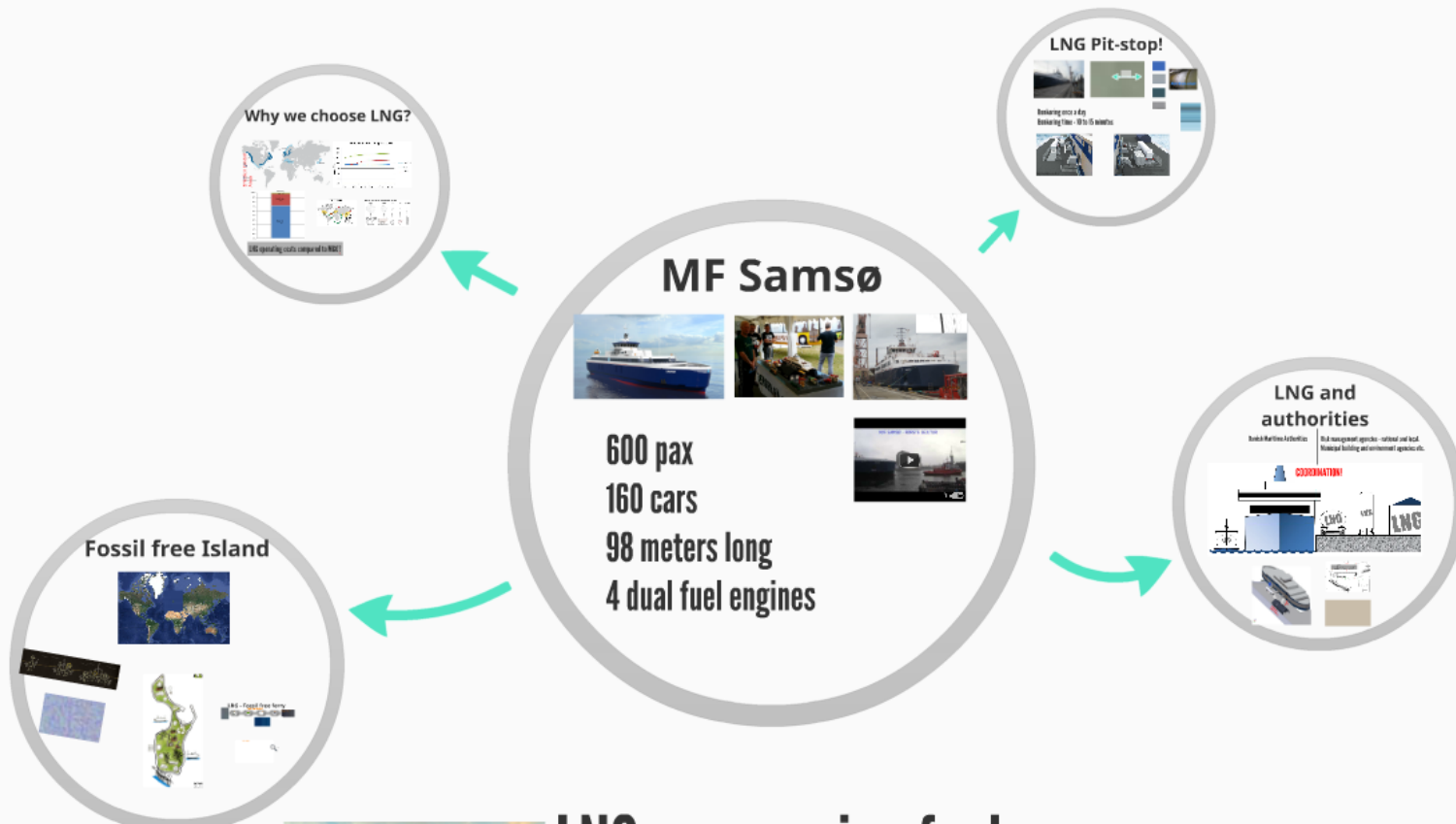
As you can see, there's plenty going on!

Now we have lots of wind turbines.

Down there is Samsø's brand-new learning center, the Energy Academy, where kids and grownups from all over the world come to learn about what we've achieved, and to talk about new ideas for creating, sharing, and saving energy.



Next step towards
fossil free fuel soci



LNG as a marine fuel on the island of Samsø