







GreenShipping contest "How to reduce Ship's CO₂ emissions"

 $16^{th} - 17^{th}$ of May 2018

Apply now for this design challenge and two day field trip! Use this chance to be a part in this cross border student competition, accompanied by experts from Germany and the Netherlands.

THE CHALLENGE

Although shipping is by far the most carbon efficient mode of commercial transport, greenhouse gas emissions from shipping are estimated to be about 3% of total global emissions and at the moment are predicted to increase by between 50% and 250% in 2050.

In order to make a fair contribution of shipping to the global reduction of CO_2 emissions, new and innovative technologies and logistics concepts must be developed and implemented. CO₂ capture and storage on board ships is one way of significantly reducing a ship's carbon footprint. This procedure is already in use in a land-based context. The challenge lies in the transferability of land-based CO₂ capture and storage solutions on board ships.

YOU ARE...

- a student (from the 3rd semester onwards)
- interested to learn more about green shipping and possibilities to reduce ship's emissions
- motivated to work on new and innovative ideas in small groups
- enthusiastic to spend two days with Dutch and German students and maritime experts
- inspired to win the price (500€ sponsored by Reederverein Ems-Dollart) for the best team

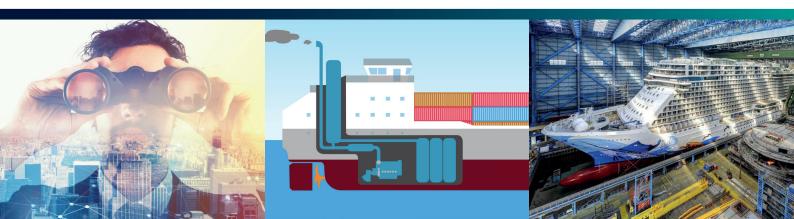












PROGRAM

16th of May:

07:00 h: Bus ride from Leeuwarden via

Groningen to Leer

10:00 h: Visit of the yard Meyer Werft

12:00 h: Lunch

14:00 h: Trip to Leer

16:00 h: Start student competition

18:00 h: Dinner 19:30 h: Lasertag

21:00 h: Overnight stay in Leer

17th of May:

08:00 h: Breakfast

09:00 h: Continue student competition

16:00 h: Return trip from Leer to

Leeuwarden via Groningen

The following objectives are to be achieved by developing a CO₂ capture and storage facility:

- Development of a compact, economically portable CO₂
- Providing high energy efficiency of the integrated CO₂ capture and storage test system capture and storage system
- Establishment of a port infrastructure and development of a suitable supply-chain for stored liquid CO₂
- Identification of possible applications for liquefied CO₂

The following challenges must be overcome in the development of a CO₂ capture and storage facility:

- Development, design and construction of a dynamic CO₂ capture and storage facility
- Evaluation and simulation of the CO₂ interceptor and storage facility on different ship types
- Use of the captured liquefied CO,
- Examination of infrastructural, financial, logistical and legal framework conditions

Are you interested?

Please apply with a motivation letter to the below mentioned supervisor until the 1st of May.

Hochschule Emden/Leer	Marcus Bentin	marcus.bentin@hs-emden-leer.de
Universität Leeuwarden (NHL)	Ernst Jan Voerman	E.Voerman@nhl.nl
Universität Duisburg	Jens Neugebauer	jens.neugebauer@uni-due.de
Hanzehogeschool Groningen	Ramon Albers	r.a.alberts@pl.hanze.nl
Rijksuniversiteit Groningen	Hylke Poorting	h.p.m.poorting@rug.nl

Participation is free of charge. Please keep the limited number of participants in mind!

For more information about the project "MariGreen" please visit www.marigreen.eu

For more informations about the MARIKO please click here http://www.unserebroschuere.de/mariko-leer/MailView/

