



Ganz nah dran.



University of Applied Sciences

HOCHSCHULE
EMDEN • LEER

Change management als Instrument zur Dekarbonisierung

Online Konferenz - Der Faktor Mensch in GreenShipping

Leer / 21. April 2022



Prof. Kapt. Rudolf Kreutzer

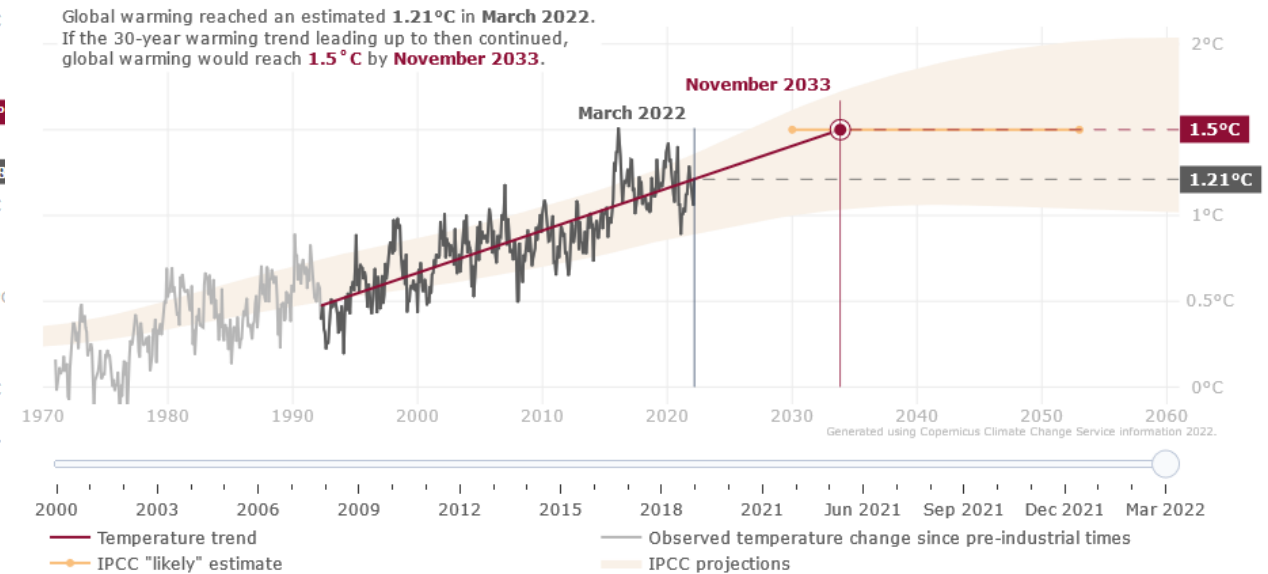
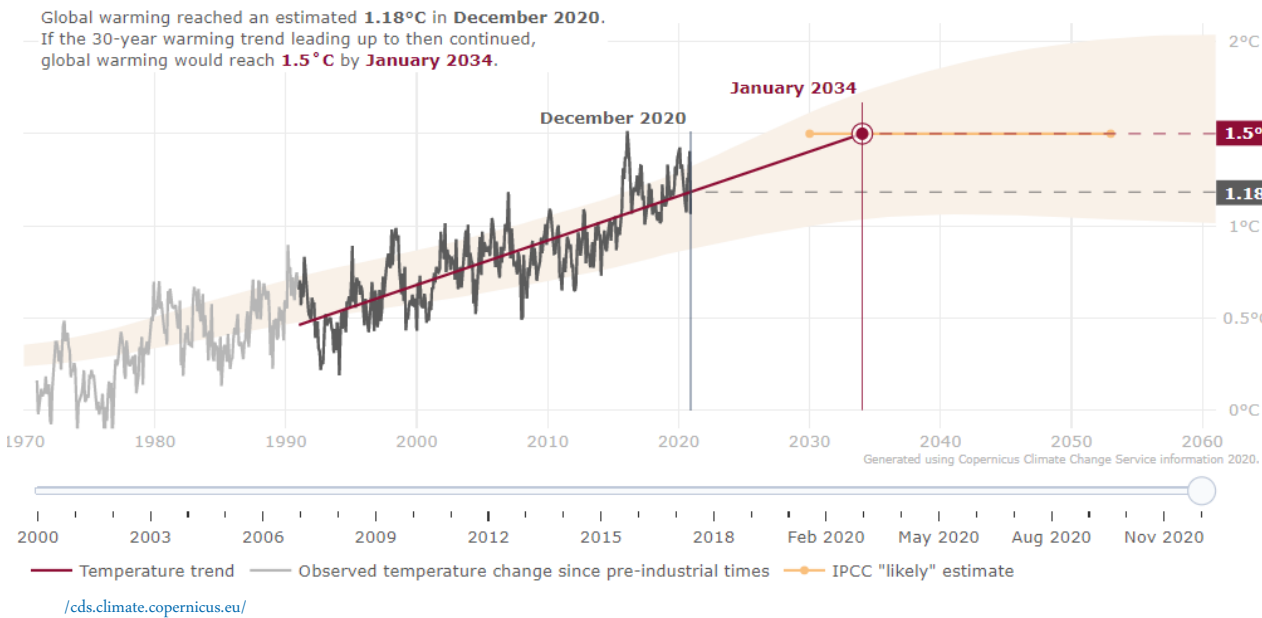
FB Seefahrt und Maritime Wissenschaften Leer

- In 2016, the world came together to take action. 196 nations signed the Paris Agreement at the UNFCCC.
- It committed nearly every nation, including all major carbon-emitting countries, to keeping the global temperature rise this century to well below 2 degrees Celsius above pre-industrial levels.
- It also committed signatories to pursue efforts to limit the temperature increase even further, to 1.5 degrees Celsius.
- The agreement underpins the transformation of economies from using fossil-based fuels to alternative energy sources and technologies



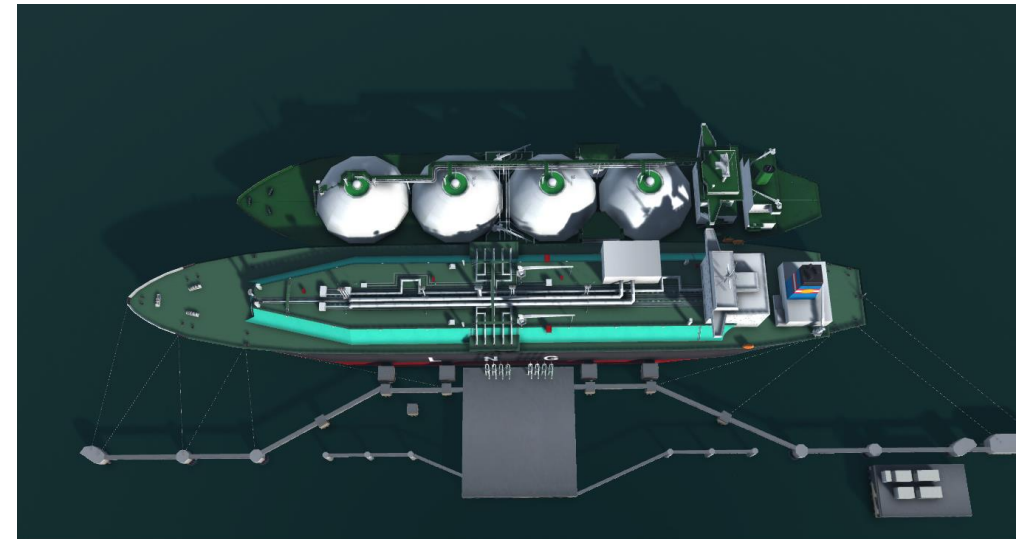
- Shipping produces about 2.9% of the world's man-made emissions of CO₂, IMO (2020). It found shipping emissions rose by 10% between 2012 and 2018.
- The IMO had already set an ambition to reduce greenhouse gas emissions from shipping by at least 50% by 2050, with a stretch target of a 100% reduction by the same deadline.
- Ships will have to reduce their output of CO₂ by 85% per nautical mile, to take account of increasing numbers of ships, and more activity over coming years. It's a tough challenge for the maritime industry.
- Zero Emission Vessels capable of deep-sea, trans-ocean travel will need to be in use by 2030 according to LR

Are we on track ?



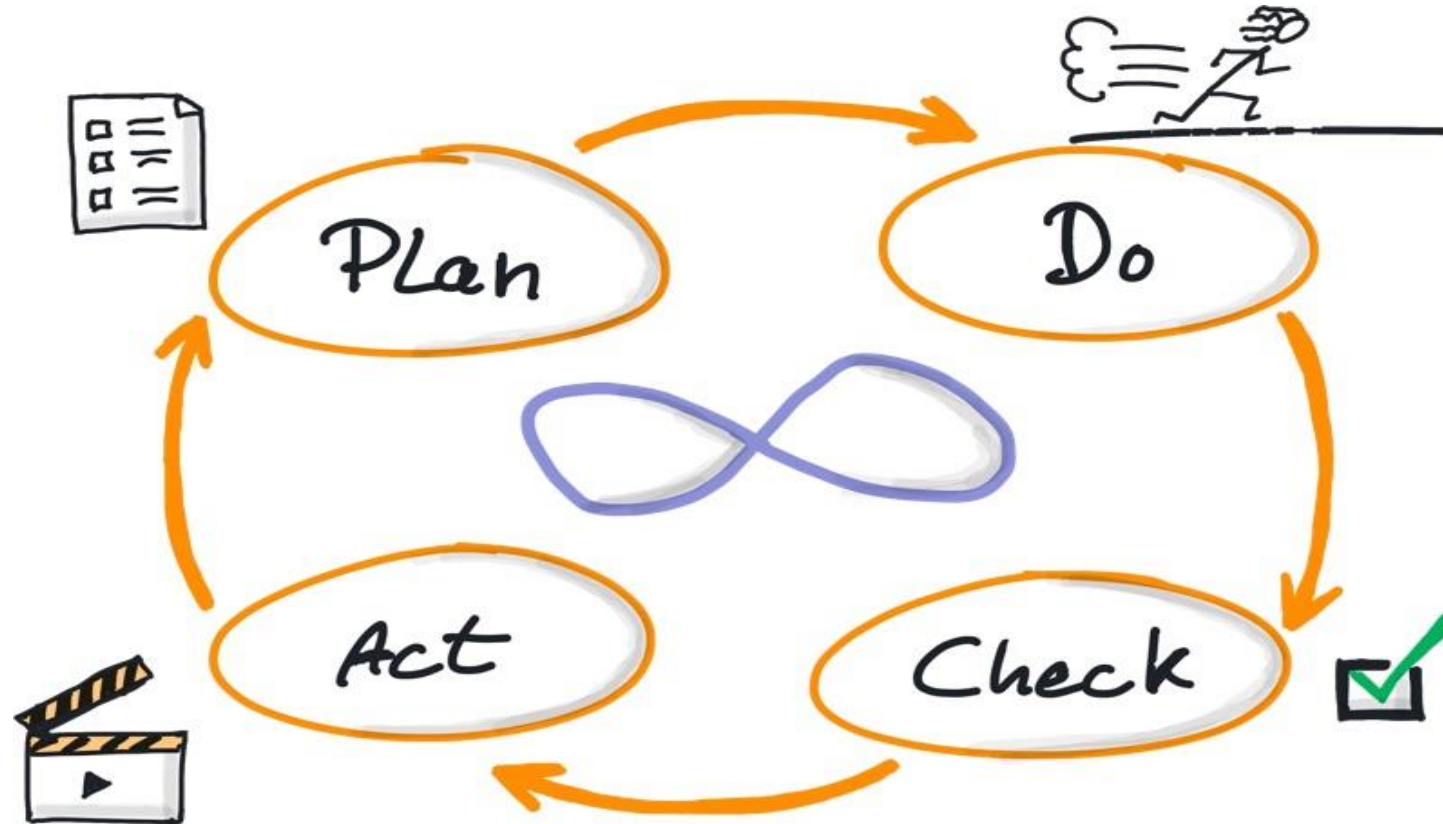
Operational challenges for the ships (IMO/EU Instruments)

- SEEMP I (IMO)
- EEOI (IMO)
- SEEMP II (IMO)
- DCS (IMO)
- MRV (EU)
- SEEMP III (IMO)



Surveys carried out by DNV showed that very few companies were able to implement more complex measures and achieve savings above a few percentages.

If many actors in the sector are not able to implement even the simpler, economically rational cost-effective measures, how should they be able to deal with more complex measures under an uncertain future climate policy regime?



[/https://synapsenstau.de/pdca-zyklus/](https://synapsenstau.de/pdca-zyklus/)

The most important aspect of saving fuel and energy on board a vessel, is the crew.

You can put any hardware on board, but if you don't have the crew on your side then it will have limited effects

Peter Knudsen, managing director Blueflow Energy Management told VPO Global.



[/https://vpoglobal.com/](https://vpoglobal.com/)

*“Organisations don’t change –
people within organisations change”*



Everything flows, nothing stands still.

Everything gives way and nothing stays fixed.

All is in flux, nothing stays still.

The only thing constant is change.

Heraclitus of Ephesus (535 – 475 BC) was a Greek philosopher, known for his doctrine of change being central to the universe



[/https://en.wikiquote.org/wiki/Heraclitus/](https://en.wikiquote.org/wiki/Heraclitus/)

Once the coronavirus crisis comes to an end, how long do you believe that you will need in order to return to normal operations?

“Recovery will be a matter of days Shipping is the management of change. Shipping companies manage situations which change daily or hourly! It will not take long for shipping companies themselves to recover from Covid-19. This will be a matter of days”

[/https://www.economia.gr/](https://www.economia.gr/)



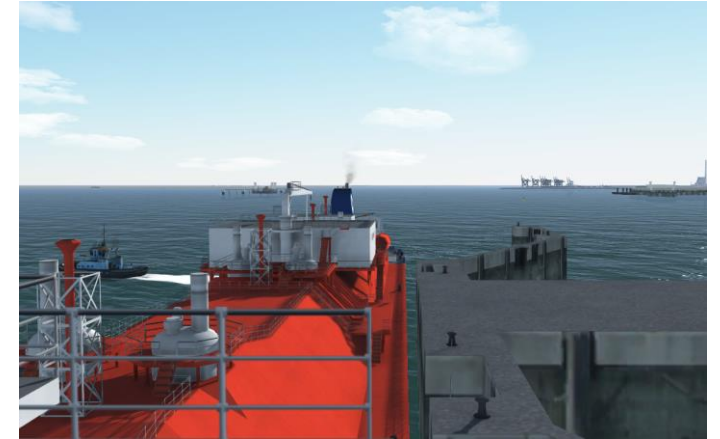
Is this Change management ?

“... you could define change management as the proactive identification and management of modifications to your project.”



- The primary goal of change management is to successfully implement new processes, products and business strategies while minimizing negative outcomes
- Change management is the systematic approach and application of knowledge, tools and resources to deal with change.
- Effective change management goes beyond project management and technical tasks undertaken to enact organizational changes and involves leading the "people side" of major change within an organization.

- TMSA Element 7 defines the basis for a coherent system for managing both temporary and permanent changes.
- Establish procedures for evaluating and managing changes to operations, procedures, ships' equipment or personnel to ensure that safety and environmental standards are not compromised.
- Changes to equipment, personnel, operating conditions or procedures, or the introduction of third-party contractors or a new vessel can increase the risk of an incident.





3rd ENERGY EFFICIENCY IN SHIPPING 2017
16th May 2017, Holiday Inn- London Kensington, London, UK

Key Speakers

- ✓ Anne-Marie Warren, Consultant, Ecorefect
- ✓ Joern Springer, Senior Director, Fleet Support Center, Hapag-Lloyd
- ✓ Noeraj Sateen, Chartering Manager VLCC and Supramax, AET
- ✓ Capt. Ram Kumar Gautam, Marine Operations Manager, Epic Gas (UK) Limited
- ✓ Annette Bryssinck, Head of Supramax Operations, Euronav NV
- ✓ Paul Woodall, Director Environment & Sustainability, DFDS AS
- ✓ Om Prakash, Operations Manager, d'Amico
- ✓ Stefanos Kiosprotzoglou, Ship Operator, V Ships Greece Ltd
- ✓ Chris Millman, Vice President Corporate Marine Technology, Carnival
- ✓ Nick Lambert, Maritime Domain Expert, Satellite Applications Catapult
- ✓ Anna Ziou, Policy Manager, UK Chamber of Shipping
- ✓ Dr. Tristan Smith, Lecturer in Energy and Transport, UCL
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<http://www.reconnect.net/events/maritime-events/3rd-energy-efficiency-in-shipping-2017/>



MTCC ASIA
Maritime Technology Cooperation Centre

GMN | The Global MTCC Network
A global network for energy efficient shipping

International Conference on Ship Energy Efficiency 2019

22-26 April 2019
Shanghai, China



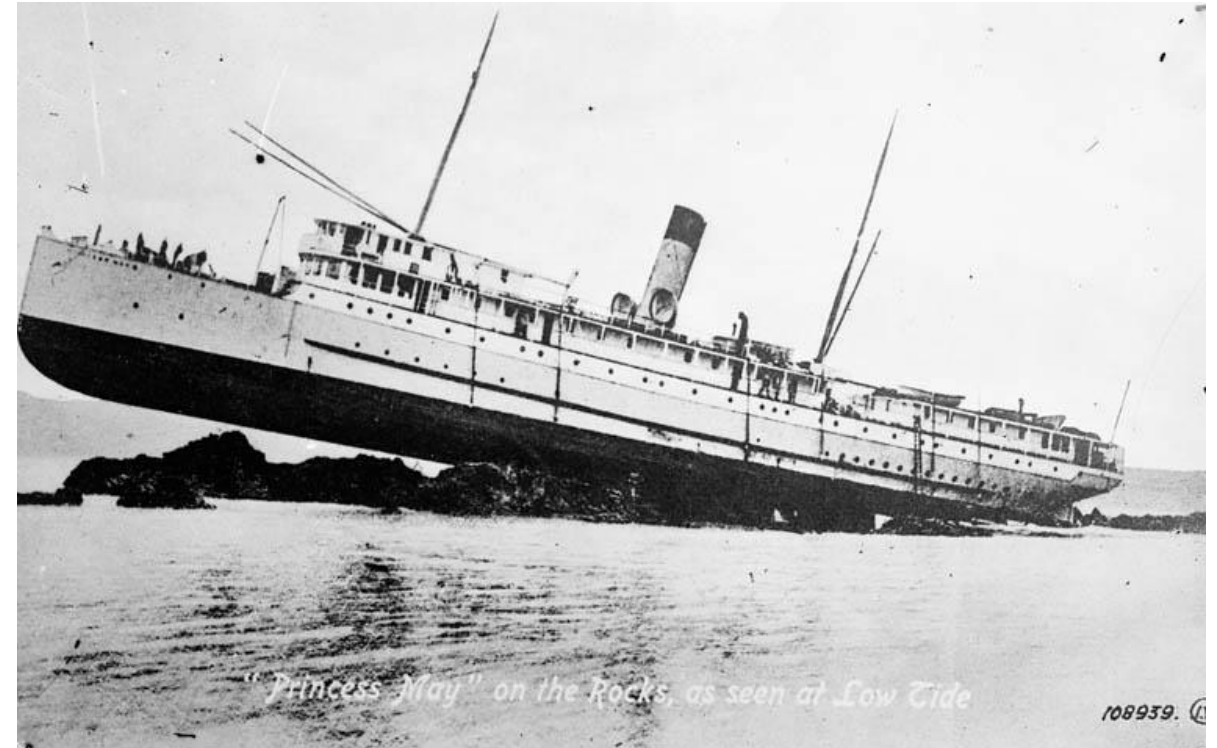
Is this Change management ?

- According to DNV Energy Culture is the **shared mindset** that creates and sustains an environment that leads to continual improvement of the organization's energy performance.
- It comprises people, systems, structure, skills and strategy



/gehacon.de/

70% of Change Attempts Fail

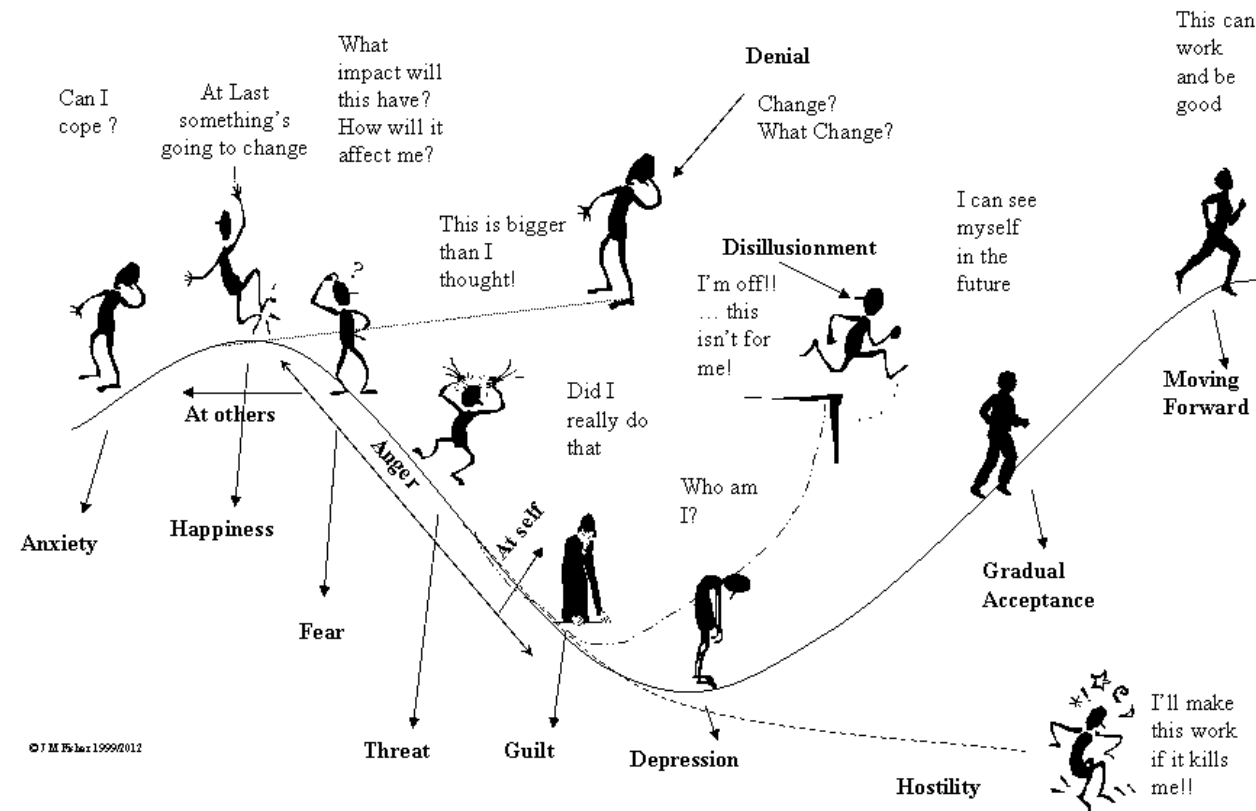


- The reason why The reasons why change programs fail is not
 - insufficient budget (23%)
 - insufficient time (17%).
- instead, participants ranked
 - poor communication (62%),
 - insufficient leadership and support (54%),
 - organizational politics (50%),
 - lack of understanding of the purpose of the change (50%),
 - lack of user buy-in (42%) and
 - lack of collaboration (40%)

These are all human problems !

<https://www.forbes.com/sites/sallypercy/2019/03/13/why-do-change-programs-fail/>

The Process of Transition



[/culcmichae17.wordpress.com/2014/03/27/managing-resistance-to-organizational-change/](http://culcmichae17.wordpress.com/2014/03/27/managing-resistance-to-organizational-change/)

Common Change management models are:

- Lewin's Change Management Model
- McKinsey 7-S Model
- Nudge Theory
- The ADKAR Change Management Model
- Kübler-Ross Change Curve
- Bridges' Transition Model
- Satir Change Model
- Kotter's 8-Step Theory



Kotter's Eights Steps to Change:

1. Create a sense of Urgency
2. Build a Guiding Coalition
3. Form a Strategic Vision and Initiatives
4. Enlist a Volunteer Army
5. Enable Action by Removing Barriers
6. Generate Short-Term Wins
7. Sustain Acceleration
8. Institute Change

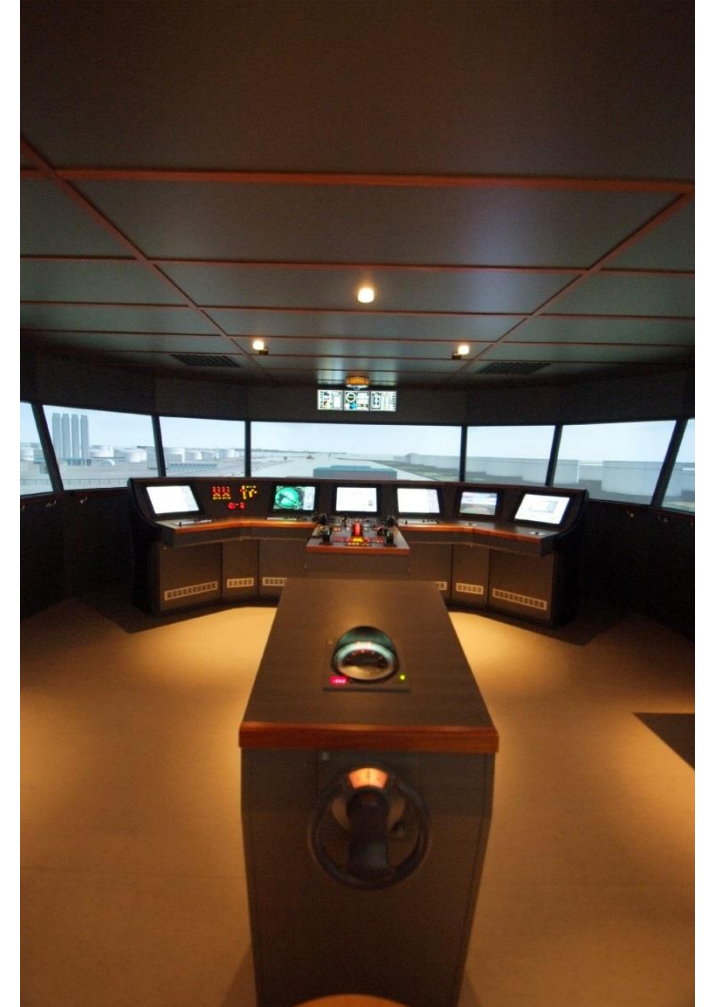


Bernhard Schulte Shipmanagement - Every single seafarer can contribute to greener shipping

- During a research project 60 Masters and Chief Engineers on 28 vessels under full management of BSMD take part in the trial on a voluntary basis.
- During this time, each participating crew member received individualised targets via the Signol app which are calculated based on the seafarer's prior performance.
- Every week, the participating seafarers received updates on their personal milestones and achievements via the app and email. Through a combination of fair targets and positive feedback, Signol gently nudged individual Masters and Chief Engineers to implement fuel-saving practices.

<https://vpoglobal.com/>

- We have several projects at our Department in Leer to include Change management in the study plan
 - PhD B. Woltron, The Human Element Development of a Talent Program in Nautical Science
 - Atria Learning and Development GmbH, Human Element in Shipping Simulation (HEISS) regarding Ship command



The power to save the planet is inside us all

