

Energy Efficiency Awareness

The Human Factor
Prof. J. B. Jensen



Source: <https://www.wartsila.com/marine/optimize/voyage-and-vessel-efficiency>



Learning outcome

- By the end of this session, you should be able to:
 - Express to others why energy awareness is such an important factor in optimising operations
 - Be in control of your own attitude towards the topic
 - Demonstrate basic knowledge of good communication principles
- The above criteria must be fulfilled along with criteria in Power consumption and Energy efficiency awareness lessons to:
- *Operate vessels commercially and energy efficiently, in accordance with environmental regulations.*





Content

Attitudes and perception towards energy efficiency

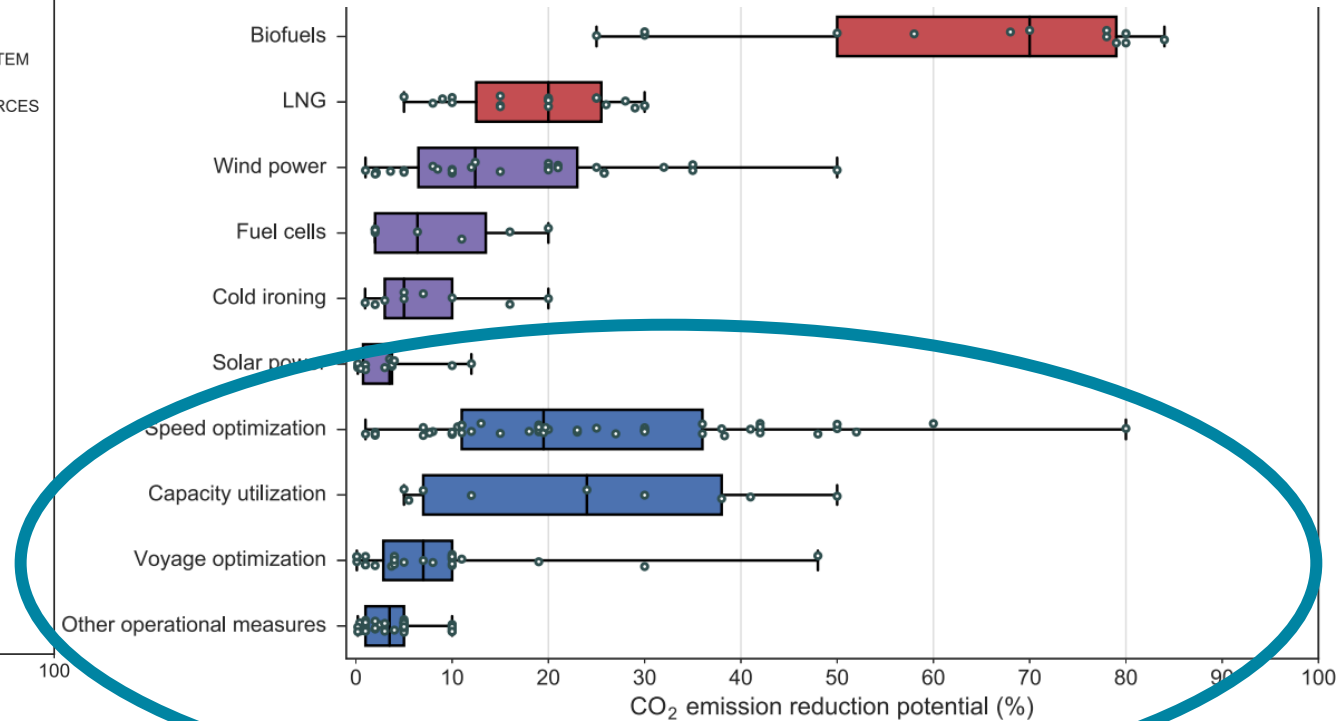
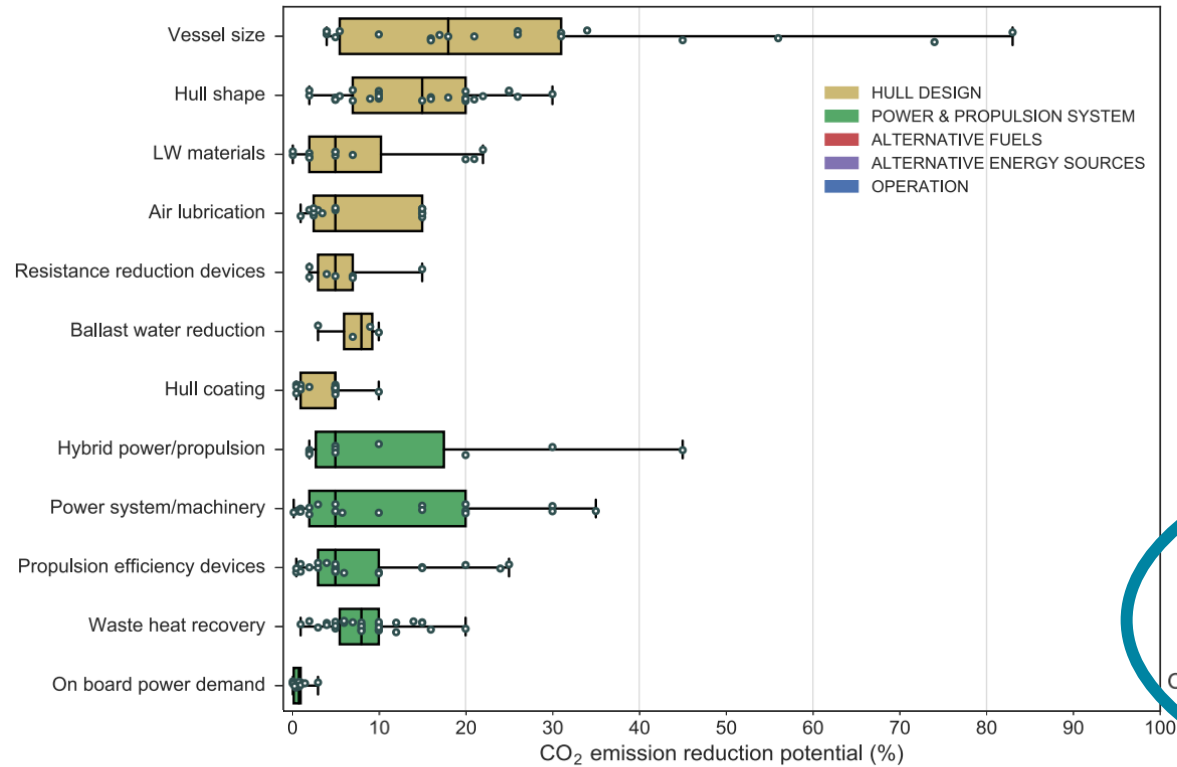
- Importance
- Current attitudes, perceptions and opinions
- Improvement considerations

Communication

- Internally on a vessel
- Externally between vessel and office



Importance – The Human Factor

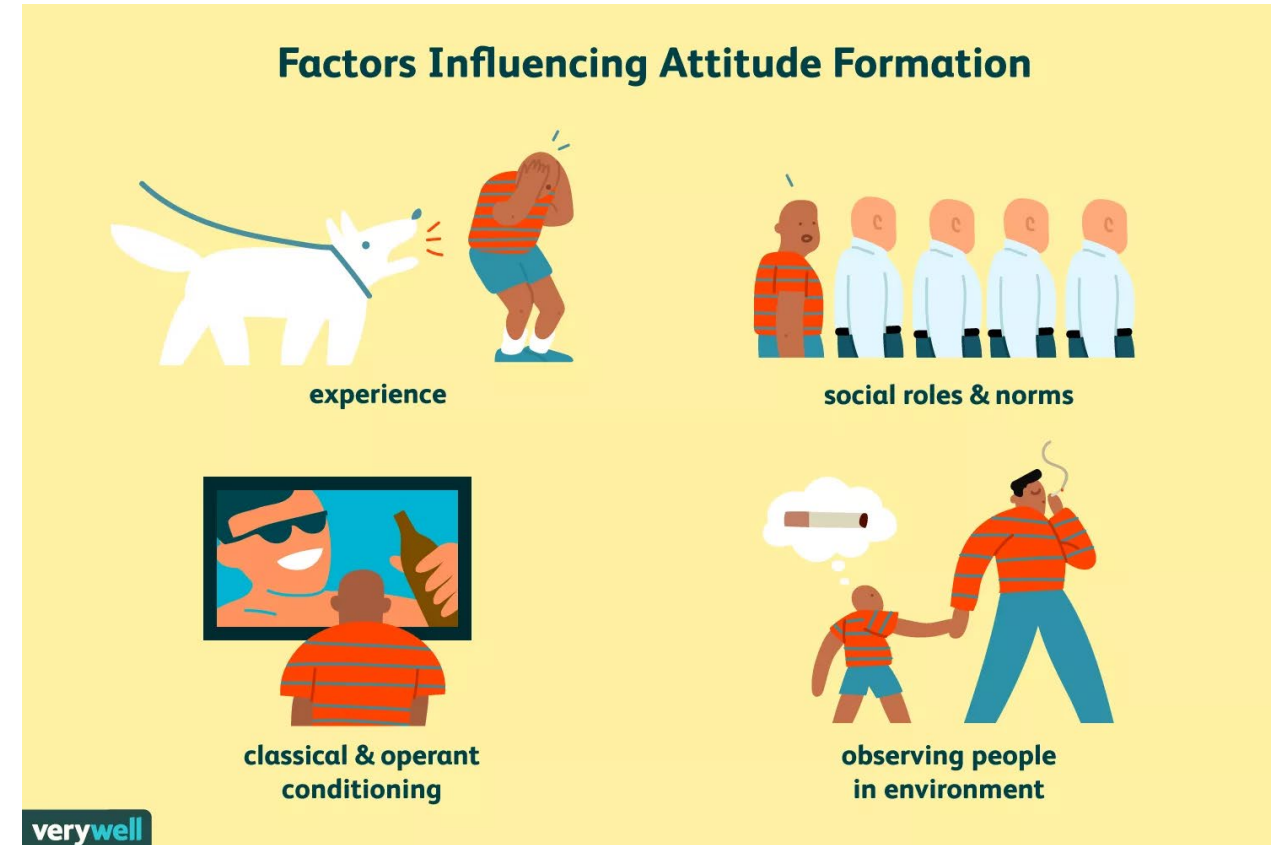


Bouman, Lindstad, Rialland, & Strømman. (2017). State-of-the-art technologies, measures, and potential for reducing GHG emissions from shipping – A review.



Attitudes towards “The Green Agenda”

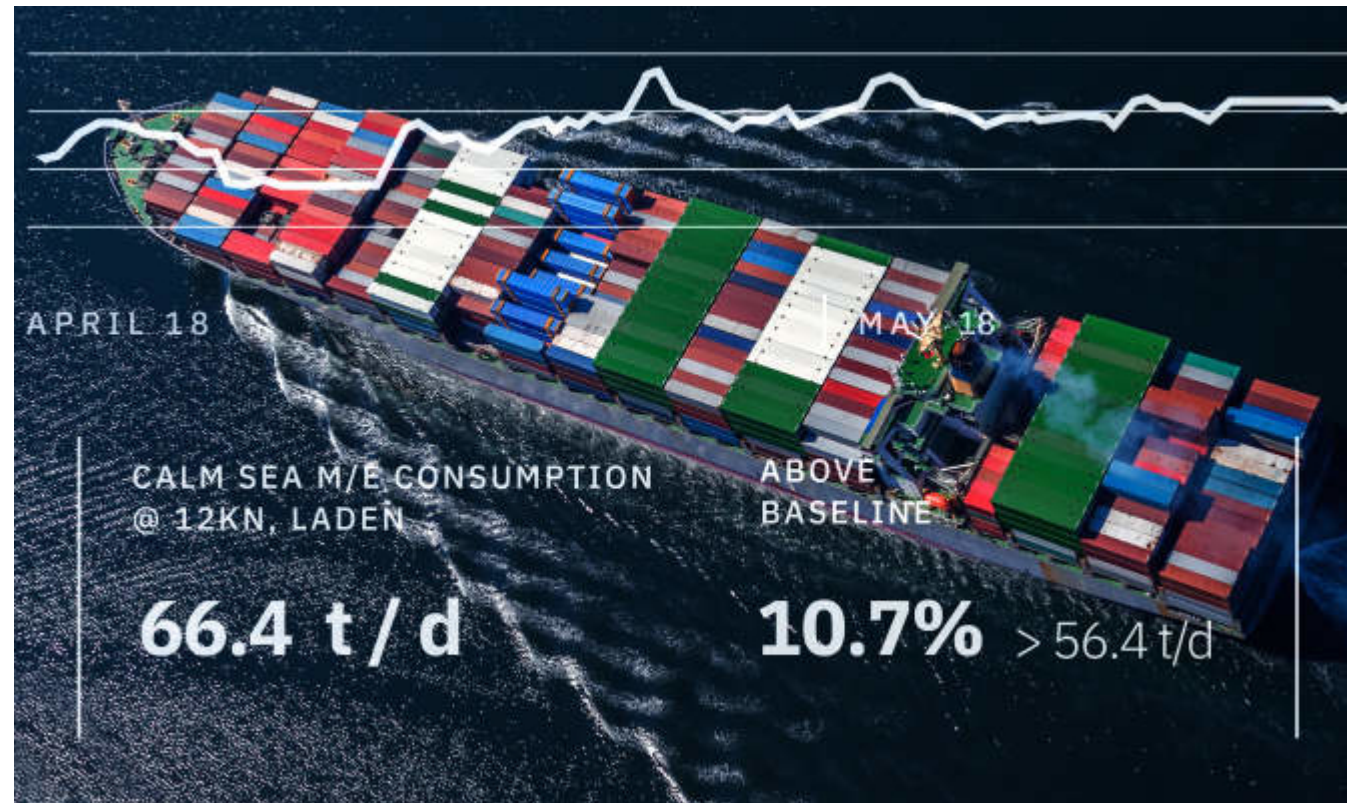
- What attitudes exist on vessels?
- What attitudes exist in the office?
- What attitudes do you have?





Improvement and Ideas

- Most Dangerous Phrase: *We've Always Done It That Way*
- Systematic improvements
 - SEEMP
 - EEOI
- Performance data



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Communication internally

Context: Energy Efficiency

- Bridge, Deck and Engine have to be able to communicate well.
 - It is important to know not only what to do, but also why
 - Understanding what work others do can help to improve efficiency.
 - In doing your own work remembering not to put hindrances for colleagues can help improve efficiency.
- All of the above can be achieved by good communication.
- Trust must be built and maintained



Communication Externally (same points)

Context: Energy Efficiency

- Office and Vessels have to be able to communicate well.
 - It is important to know not only what to do, but also why
 - Understanding what work others do can help to improve efficiency.
 - In doing your own work remembering not to put hindrances for colleagues can help improve efficiency.
- All of the above can be achieved by good communication.
- Trust must be built and maintained



Exercise – Group Discussion

- Who onboard has the greatest impact in relation to energy efficiency and performance, and why?
- Pay special attention to how you communicate. Both in the small discussion group and later in class.



Thank you

