



Navigating decarbonisation: contrasting academic and industry perspectives

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Setup of the study

- Academic perspective on shipping: insights from the field of sustainability transition studies
- Industry perspective on shipping: insights from futures and strategy reports
- Aim is to compare the views from these two strands to identify how compatible they are (ideally they would be – in that case one could be positive about the possibilities of successful transition)

Decarbonization goal

- IMO targets for carbon neutrality for 2050 (reduction of at least 20% - striving for 30% - in 2030 and at least 70% - striving for 80% - in 2040, both in comparison to 2008 levels)
- 2030 targets might be met with energy efficiency measures (+ speed reduction, etc.), but on longer term there are challenges
- Attention of the study particularly on timeframe after 2030

Material and method

- Academic: studies about transition of the shipping field
- Industry: about 30 reports futures/strategy published after 2023
- Analysis method: qualitative content analysis
- Futures reports are a medium for communicating and advocating views and visions about the future
- They are shaping how the future is approached within the field and among those connected to the field
- In the time of uncertainty, role of such reports in coordinating expectations is increased

View from sustainability transition studies

- With transitions of the past in shipping (e.g. coal to oil in fuels, from piece goods to containers in cargo transport) the change has been motivated by an improvement in performance or efficiency
- With decarbonisation the situation is different – no clear economic incentive for making the transition
- Transitions tend to take a long time – e.g. just getting the pieces together that enabled the use of LNG took about 20 years

View from sustainability transition studies

- Due to high capital costs to enter the sector, the role of niche actors transforming the field is limited
- Maritime transport is strongly embedded, e.g. difficult to change by regime outsiders
- Role of regime incumbents is key in making the transition
- Landscape pressure not enough to get the sustainability transition going (no global regulation frame or wide customer demand)

View from industry future/strategy reports

- The transition is viewed possible
- Confidence based on how shipping industry in the past has had a good track record in adopting new technologies
- A lot of examples of activities, e.g. pilot projects on green corridors, new fuels, etc.
- This is all good, but the futures view is somewhat shallow...

Some critical notions from reading futures reports

Connected to worldview

- Development perceived mostly as “business-as-usual”
- Assumption of continued and stable growth of marine traffic
- Not much thought given on what zero-carbon world 2050 might look like and what its implications on marine traffic might be

Some critical notions from reading futures reports

Connected to shipping sector

- On short term LNG is the most popular way of decarbonizing the sector (on longer term new fuels)
- Little attention placed on the competition for the resources for new fuels from other sectors (e.g. chemical industry, aviation)
- Transition takes place on the condition that the prices of new fuels will be close to current fuel costs
- Agency appears to be somewhat outsourced (“energy sector will solve this for us”)

How the futures views of the industry could be enriched

- Relaxing the assumption of steady, continued growth
- Rethinking the future of maritime transport (production chains, transport volume, speed, etc.)
- Being more vocal about the need for flexibility and diversity with regards to technology: from "one solution fits all" to more tailored fuel and propulsion solutions
- Paying closer attention to future needs of the customers (who increasingly require greener transportation services)

Thank you for your
attention!



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