

THE LOGIC OF BUSINESS VS. THE LOGIC OF ENERGY MANAGEMENT PRACTICE: UNDERSTANDING THE CHOICES AND EFFECTS OF ENERGY CONSUMPTION MONITORING SYSTEMS IN SHIPPING COMPANIES



Rene Taudal Poulsen, Hannes Johnsen

Energy consumption monitoring practices in ship operations are explored. In particular, the perceived validity and reliability of data on ship energy consumption available within organizations and markets. The aim of this study is to determine whether best practices in environmentally sustainable shipping can be compatible with common business practices.

APPROACH:

This study relies on 41 confidential semi-structured interviews conducted with representatives of various Danish and German shipping companies and related industries. In preparing the interview guides, publications from leading classification societies, which contain advice for shipping companies on how to improve energy consumption monitoring practices, were consulted. When the answers received from interviewees differed from those advised by the classification societies, interviewees were confronted with this difference and asked to provide an explanation. This allowed an analysis of the factors that determine current energy consumption monitoring practices as perceived by the interviewees.

MAIN FINDINGS:

- This study finds that best practices in environmental shipping are not compatible with contemporary common business practices.
 - One regularly cited factor for this is the lack of transparency throughout the shipping industry, making it difficult to properly regulate the industry as a result of inaccuracy of information, the lack of credibility and trust in the source of information, not using information, and not maintaining information.
 - Furthermore, contemporary port business monitoring emphasize the benefits of short term and temporary approaches without providing proper incentives for long-term energy management.
- The paper highlights four key problem areas: data collection challenges, incentives for data misreporting, data analysis problems, and feedback problems. These make it difficult to implement monitoring practices that will lead to long term sustainability.
- Future researcher can play a future role by providing knowledge of how shipping companies work with environmental consumption monitoring in their organizations, and the possibilities for standardizing such practices.