## ACHIEVING ENERGY EFFICIENT SHIP OPERATIONS UNDER THIRD PARTY MANAGEMENT: HOW DO SHIP MANAGEMENT MODELS INFLUENCE ENERGY EFFICIENCY?



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This paper aims to examine the current state of energy saving measures in ship operations as well as identify key gaps in energy efficiency practices and explain their causes.

## **APPROACH:**

Data for this study was collected via a series of semi-structured interviews with key stakeholders within several Danish and one German shipping companies. Interview questions were based on energy efficiency guidelines for operational fuel saving measures set out by the SEEMP and IMO.

## **MAIN FINDINGS:**

- This article contributes to ship management literature by introducing a new and important aspect of ship costs (fuel costs) and by demonstrating how shipping companies' outsourcing of crewing can influence costs associated with fuel consumption.
- The research in this study reveals that profitable energy saving measures are often not fully implemented in shipping, causing energy efficiency gaps. Key inhibitors for efficient energy usage in shipping include:
  - Lack of communication between decision-makers in different locations.
  - Lack of shared knowledge networks amongst shipping leaders.
  - An ongoing failure to accumulate a holistic and universal knowledge base of best practices.
  - Insufficient supervision, lack of incentives, and short term contracts with third parties limits fuel saving initiatives from developing.

