

# MOVING SUSTAINABLE SHIPPING FORWARD THE POTENTIAL OF MARKET-BASED MECHANISMS TO REDUCE CO2 EMISSIONS FROM SHIPPING



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***This paper examines the potential for market-based mechanisms (MBM) as tools for influencing actors in the shipping industry towards lowering carbon emissions.***

## **APPROACH:**

Data for this article was collected via a literature review of recently published material concerning MBM and the IMO in maritime regulation. The paper also examines four broad forms of environmental coping strategies (crisis-oriented, process-oriented, chain-oriented, and full environmental strategy) that firms may take to react to MBMs and examine both the effectiveness and likelihood of each approach.

## **MAIN FINDINGS:**

- The research indicates that the shipping industry is primarily crisis oriented. As such, staying within compliance (but not innovating) is the main ambition of shipping stakeholders.
  - The cost-inducing fee-based and cap-and-trade-based MBMs currently considered by the IMO fit well with this crisis-oriented focus.
- The crisis oriented nature of shipping stems from three primary factors:
  - The lack of visibility the shipping industry maintains in the public eye impedes consistent pressure. As the shipping industry tends to only become salient in the wake of major spills, there is little societal pressure to become more sustainable on a regular basis.
  - The authors also note there are limited environmental opportunities for the shipping industry due to the competitive and heterogeneous nature of the industry combined with its cost-sensitive nature.
  - Finally, since the shipping industry provides a logistical service and not a product in itself, and there is little public knowledge about the environmental effects of shipping, ship owners are hardly engaged in product communication. This impedes reshaping shipping regimes and the sharing of best environmental practices.
- The article advises that future MBMs implemented by the IMO ought to attempt to move ship owners from crisis-oriented to process-oriented strategies, as ship owners would then be more likely to consider CO2 reduction measures if they can avoid additional fuel costs. Crisis-oriented strategies are unlikely to lead to future environmental benefits whereas process-oriented strategies show greater future potential for CSR to move beyond compliance.
- However, the authors are sceptical that MBMs alone will be a sufficient motivation for shipping CSR to move beyond compliance. In addition, more direct and indirect market opportunities need to become available to increase the economic incentive for ship owners to actively seek environmental performance improvements. Moreover, the role and use of environmental information needs to be enhanced.