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Editorial: Opportunities and challenges of EU ETS to the global marine industry

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Editorial on the Research Topic

Opportunities and challenges of EU ETS to the global marine industry

After months of negotiation, the European Parliament, the European Commission and the European Council reached a basic consensus on November 30, 2022 on the inclusion of maritime industries in the Europe Union Emissions Trading System (EU ETS), and formed a preliminary agreement on specific aspects such as voyage emissions coverage, applicable ship tonnage and use of funds. In the process of promoting the integration of the maritime industry into the EU ETS, there are inevitably some problems and challenges. This Research Topic unites 5 paper from Chinese scholars that discuss the influences of EU ETS on marine industry.

The opening salvo is from [Jiang et al.](#), who analyzed the transportation methods and the flow direction of a port and proposed a carbon emission calculation method based on multiple emission factors. Their work constructs a transportation utility function in the logit model to discuss the impacts of subsidy policies on transportation and calculate the effects of the subsidies on carbon reduction.

The following research concentrates on China, a significant role in marine industry. [Tu et al.](#), utilize the China Containerized Freight Index (CCFI) as an objective reaction of the Chinese shipping market and an important index for the effect of China's shipping industry in the world. However, only if shipping companies' capabilities are considered, will different models be predicted perfectly CCFI.

Continuing the point on EU, the carbon emission quota allocation for marine industry is discussed by [Hu et al.](#), based on the rights of all participates that should be considered in the allocation of carbon emission quotas. Through the historical method and the baseline method, the efficiency of carbon emission quotas in shipping industry is evaluated.

In a similar vein, [Wang et al.](#), mainly investigate the carbon emission characteristics of the port collection and distribution system, and incorporate carbon emission factor into the accessibility measurement of the port collection and distribution system. Through the example of Douala port, they find the accessibility of each logistics node shows different degrees of decline after adding the carbon emission factor.

Finally, [Wang et al.](#), propose practical recommendations for the global marine market practitioners to avoid the potential risks of disputes by reflecting on the existing practices regarding climate change-related investor-state dispute resolution. From the outcome, the

potential risks for disputes regarding the new EU directive in the global marine industry may be effectively reduced.

In conclusions, this Research Topic illustrates the opportunities and challenges of EU ETS on the global marine industry. It illustrates the importance of integrating theory, technology, and diverse methods to ensure sustainable development of the maritime industry. Hence, these contributions collectively address the opportunity and challenge of the EU ETS for the global maritime industry, and provide guidance for policymakers and the industry.

Author contributions

LX: Writing – original draft. MZ: Writing – review & editing. GX: Writing – original draft, Writing – review & editing.

Conflict of interest

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