

國際海運溫室氣體排放減量之市場機制

——以排放權交易為中心

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摘要

在國際氣候變遷管制體系之下，市場機制（現又多半被稱為「碳定價措施」）逐漸成為一項主流的政策工具，此也影響了許多國家的內國氣候變遷立法，多半傾向使用市場機制類的管制工具。但依據《京都議定書》第二條第二項的規定，對於來自國際航空以及國際海運之溫室氣體排放，應分別透過國際民用航空器組織以及國際海事組織進行管制，不受到《京都議定書》的規範，故上述提及在國際氣候變遷管制體系下運用相當廣泛的市場機制，並不適用於來自國際航空以及國際海運的溫室氣體排放管制。來自國際航空與國際海運的溫室氣體排放，分別占全球排放約 3%，但其成長的速度都相當快，國際民用航空器組織以及國際海事組織是否遵循國際氣候變遷管制體系的發展，運用市場機制作為主要的管制工具？國際民用航空組織於 2010 年提出「2020 年碳中和成長」的目標後，於 2016 年通過適用於國際航空之溫室氣體排放管制的「國際航空碳抵銷與減量機制」，並已正式於 2021 年進入試驗期，換言之，國際航空業運用市場機制作為減排政策工具之一的趨勢很明顯；另一方面，國際海事組織於 2018 年通過了「來自船舶之溫室氣體減量之初步策略」，市場機制被列於預計在 2023 年至 2030 年能實施的中期措施之一，顯示國際海事組織短期內似乎沒有實施市場機制的規劃。但，一些會員國以及國際海運之利害關係人陸續提出應針對國際海運之溫室氣體排放實施市場機制，且歐盟已規劃於 2023 年將國際海運納入其排放權交易機制，此是否將加速國際海事組織引進市場機制作為管制國際海運排放的政策工具之一，受到各界的關注。故，本文將以國際海運為研究對象，分析市場機制適用於國際海運之溫室氣體排放管制上的相關議題。

關鍵字：國際海運之溫室氣體排放、國際海事組織、市場導向機制、歐盟排放權交易機制、國際運輸燃料

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Abstract

Market-based measures (“carbon pricing measures”) have become a mainstream policy tool under the international climate change regime. Many national climate change legislations have followed suit. Article 2.2 of the Kyoto Protocol stipulates that the limitation or reduction of greenhouse gases from aviation and marine bunker fuels should be undertaken, respectively, by the International Civil Aviation Organization and the International Maritime Organization. This means that market-based mechanisms under the international climate change regime are not applicable to regulate GHGs emissions from international aviation and international marine transport/shipping. Greenhouse gases emissions from international aviation and maritime activities, respectively, account for 3% of the global greenhouse gases emissions. However, emissions from bunker fuels have kept arising. Is market-based mechanism being implemented in these two sectors? ICAO endorsed the goal of “carbon neutral growth from 2020” in 2010, and adopted the “Carbon Offsetting and Reduction Scheme for International Aviation” in 2016. It is, thus, apparent that ICAO has implemented market-based measures as one of its policy tools for emissions reduction. On the other hand, the IMO adopted the “Initial IMO Strategy on reduction of GHG emissions from ships” in 2018 and market-based measures are amongst a basket of the mid-term policy measures that will only be considered from 2023 onward. It seems that market-based measures won’t be implemented to reduce emissions from international shipping. Nevertheless, some IMO members and maritime stakeholders are calling for the adoption of market-based measures for international shipping. Furthermore, international shipping will be included under the EU Emissions Trading Scheme from 2023. These subsequent developments might speed up adoption of market-based measure by the IMO. This article will focus on the market-based measures for international shipping, including but not limited to their possible design features.

Keywords: greenhouse gases emissions from international shipping, International Maritime Organization, market-based measures, EU Emissions Trading Scheme, bunker fuels