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The impact of International Trade on Maritime Ecosystems: Evidence from the California Emission Control Area and the Kelp Forests

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Abstract: This article analyses how an emission policy for vessels (named California's Ocean-Going Vessel Fuel Rule) was implemented in 2009 in California impacts trade and marine biodiversity. By studying the decrease in emission levels anticipated by the policy, we measure not only the consequences for port activities but also for one of the most important marine ecosystems of the California Coast: the Kelp forests. Using the Difference in Difference (DiD) approach at the Californian ports level, we find that this policy has led to a significant decrease in trade volume during this period. Therefore, we find a positive and significant effect of shipping policy on kelp canopy and biomass growth by controlling the specific climatic and environmental characteristics of California coastal areas.

Keywords: international trade, shipping, marine biodiversity, emission control area **Conference Title:** ICIT 2024: International Conference on International Trade

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