

Speed limits on cargo ships could reduce their pollutants by more than half

24 October 2012

Putting a speed limit on cargo ships as they sail near ports and coastlines could cut their emission of air pollutants by up to 70 percent, reducing the impact of marine shipping on Earth's climate and human health, scientists have found. Their evaluation of the impact of vessel speed reduction policies, such as those proposed by the California Air Resources board, appears in ACS' journal *Environmental Science & Technology*.

David R. Cocker III and colleagues explain that [marine shipping](#) is the most efficient form of transporting goods, with more than 100,000 ships carrying 90 percent of the world's cargo. However, engines on these vessels burn low-grade oil that produce large amounts of air pollution. Because fuel consumption and smokestack emissions increase exponentially with speed, the authors explored how speed limits could reduce pollution.

They found that slowing container ships to about 14 miles per hour (mph) reduced emissions of carbon dioxide by about 60 percent and nitrogen oxides by 55 percent compared to emissions at traditional cruising speeds of 25-29 mph. Soot emissions fell by almost 70 percent. The authors suggest that imposing these speed limits on vessels near ports and coastlines could significantly reduce their pollution and protect the health of people living in those areas.

More information: *Environmental Science & Technology* [doi: 10.1021/es302371f](https://doi.org/10.1021/es302371f)

Provided by American Chemical Society

APA citation: Speed limits on cargo ships could reduce their pollutants by more than half (2012, October 24) retrieved 29 November 2020 from <https://phys.org/news/2012-10-limits-cargo-ships-pollutants.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.