# Article information:

Reducing truck emissions at container terminals in a low carbon economy: Proposal of a queueing-based bi-objective model for optimizing truck arrival pattern - ScienceDirect  
<http://www-sciencedirect-com-s.svpn.dlmu.edu.cn:8118/science/article/pii/S1366554513000586?via%3Dihub>

# Article summary:

1. This study proposes a methodology to optimize truck arrival patterns to reduce emissions from idling truck engines at marine container terminals.

2. A bi-objective model is developed minimizing both truck waiting times and truck arrival pattern change, estimated via a queueing network.

3. Results show that a small shift of truck arrivals can significantly reduce truck emissions, especially at the gate.

# Article rating:

May be slightly imbalanced: The article presents the information in a generally reliable way, but there are minor points of consideration that could be explored further or claims that are not fully backed by appropriate evidence. Some perspectives may also be omitted, and you are encouraged to use the research topics section to explore the topic further.

# Article analysis:

The article is generally reliable and trustworthy in its reporting of the proposed methodology for reducing emissions from idling trucks at marine container terminals. The article provides an overview of the problem, as well as a detailed description of the proposed solution and its evaluation with a case study. The authors provide evidence for their claims, such as estimations by Entec (2005) on total shipping emissions, and cite relevant sources throughout the article.

The article does not appear to be biased or one-sided in its reporting, as it presents both sides of the issue fairly and objectively. It also does not contain any promotional content or partiality towards any particular point of view or solution. Furthermore, possible risks are noted in the article, such as air pollution near seaports causing health problems for people living nearby.

The only potential issue with this article is that it does not explore counterarguments or present both sides equally when discussing solutions to reduce emissions from idling trucks at marine container terminals. For example, while the authors discuss their proposed bi-objective model for optimizing truck arrival patterns, they do not consider other potential solutions such as cold-ironing or electrification which have been implemented by some marine terminals to reduce emissions from landside operations.

# Topics for further research:

* Cold-ironing marine terminals
* Electrification of marine terminals
* Air pollution near seaports
* Health impacts of idling trucks
* Bi-objective optimization models
* Shipping emissions reduction strategies

# Report location:

<https://www.fullpicture.app/item/d625a66ed587eb7812e308bc1e796ebc>