



June 2025

FACT SHEET

Heavy Duty Harm: Latin America

How emissions from Volvo, Daimler, and Traton trucks pollute Latin America's air

Introduction

Our recent study revealed how nitrogen oxide (NO_x) emissions from some of the largest truck manufacturers affect global air quality, public health, and the economy ([Kelly et al., 2025](#)). In this brief, we present the impacts across Latin America, a region where efforts to regulate and improve ambient air quality have largely been inadequate ([Riojas-Rodríguez et al., 2016](#)).

Results

Air pollution from trucks particularly damages the respiratory system. We found that NO_x emissions from Volvo, Daimler, and Traton sold over the last decade (2014–2023) will lead to 12,200, 11,200, and 37,000 asthma-related emergency room visits between 2014 and 2040, respectively (Figure 1).

Asthma emergency room visits by manufacturer in Latin America by trucks sold in 2014–2023

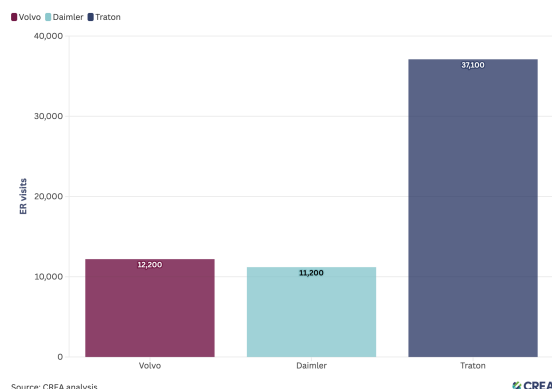


Figure 1. Impacts of NO_x emissions from Volvo, Daimler, and Traton trucks sold over the last decade (2014–2023) on asthma emergency room visits from 2014–2040 in Latin America

Between 2014 and 2040, we estimate that NO_x emissions from Volvo, Daimler, and Traton trucks sold over the last decade (2014–2023) will lead to 236, 239, and 821 deaths, respectively (Figure 2).

Deaths by manufacturer in Latin America of heavy-duty trucks sold in 2014–2023

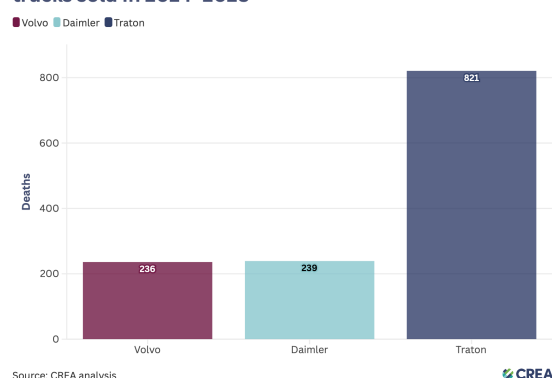


Figure 2. Impacts of NO_x emissions from Volvo, Daimler, and Traton trucks sold over the last decade (2014–2023) on deaths from 2014–2040 in Latin America

Based on the health outcomes associated with air pollution from trucks, such as work absences, deaths, and asthma, we calculate the corresponding economic cost to society. To achieve this, we use valuations of health costs from the academic literature, scaled to spatial and temporal changes in GDP.

We estimate that Volvo, Daimler, and Traton trucks sold over the last decade (2014–2023) will lead to air pollution health costs totalling USD 1.9, 2.0, and 6.6 billion, respectively.

Economic costs by health impacts by manufacturer in Latin America by trucks sold in 2014–2023

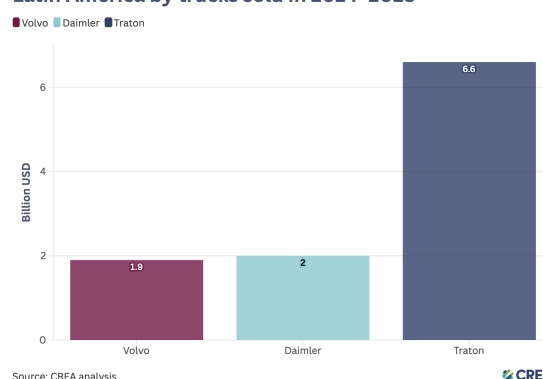


Figure 3. Economic costs caused by emissions from Volvo, Daimler, and Traton trucks sold over the last decade (2014–2023) from 2014–2040 in Latin America

Methodology

The analysis covers trucks sold over the space of the last decade (2014–2023), using reported sales data rather than forecasted future sales. Since trucks have long operational lifespans, their emissions persist well beyond the year of sale. This study accounts for those emissions over each vehicle's lifetime,

which typically ranges from 14 to 18 years.

Emissions estimates are based on annual sales data (e.g. Figure 4) and regulatory limits, and are used to model contributions to atmospheric pollutants, including NO_x, PM_{2.5} and O₃. These pollution levels are then linked to a range of health impacts and their associated economic costs.

Cumulative heavy-weight truck sales in Latin America by brand (2012–2023).

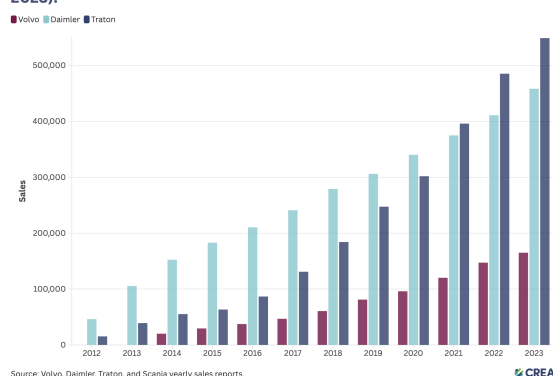


Figure 4. Cumulative heavy-weight truck sales in Latin America by brand (2012–2023).

About CREA

The Centre for Research on Energy and Clean Air (CREA) is an independent research organisation focused on revealing the trends, causes, and health impacts, as well as the solutions to air pollution. CREA uses scientific data, research, and evidence to support the efforts of governments, companies, and campaigning organisations worldwide in their efforts to move towards clean energy and clean air, believing that effective research and communication are the keys to successful policies, investment decisions, and advocacy efforts. CREA was founded in Helsinki and has staff in several Asian and European countries.

This fact sheet uses data from the [Heavy Duty Harm](#) health impact assessment (HIA) published by the Centre for Research on Energy and Clean Air (CREA).

Find more information here: energyandcleanair.org.

References

Kelly et al. (2025) Heavy-duty harm <https://energyandcleanair.org/publication/heavy-duty-harm/>

Riojas-Rodríguez et al. (2016), Air pollution management and control in Latin America and the Caribbean: implications for climate change <https://pubmed.ncbi.nlm.nih.gov/27991972/>