

Moving Forward
Network →



INTERNATIONAL SHIPPING & OCEAN-GOING VESSELS COUNTRY PROFILE



NIGERIA



PRODUCED IN ASSOCIATION WITH

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Moving Forward Network

The **Moving Forward Network (MFN)** is a national network of over 50 member organizations that centers grassroots, frontline-community knowledge, expertise and engagement from communities across the US that bear the negative impacts of the global freight transportation system. MFN builds partnerships between these community leaders, academia, labor, big green organizations and others to protect communities from the impacts of freight. Its diverse membership facilitates an integrated and geographically dispersed advocacy strategy that incorporates organizing, communications, research, legal and technical assistance, leadership development and movement building. This strategy respects multiple forms of expertise and builds collective power.

MFN advocates for effective rulemaking on global and local levels as necessary to maximize zero-emission requirements for marine engines. Regulation and technological development that center zero emissions while prioritizing environmental justice are not just feasible; it is deadly to continue to delay action.



FOR FURTHER INFORMATION, PLEASE VISIT: [MOVINGFORWARDNETWORK.COM](https://movingforwardnetwork.com)

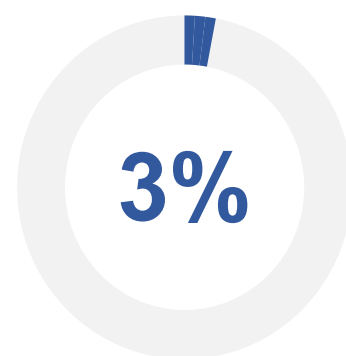
IMPACTS OF MARITIME SHIPPING

Environmental and Public Health

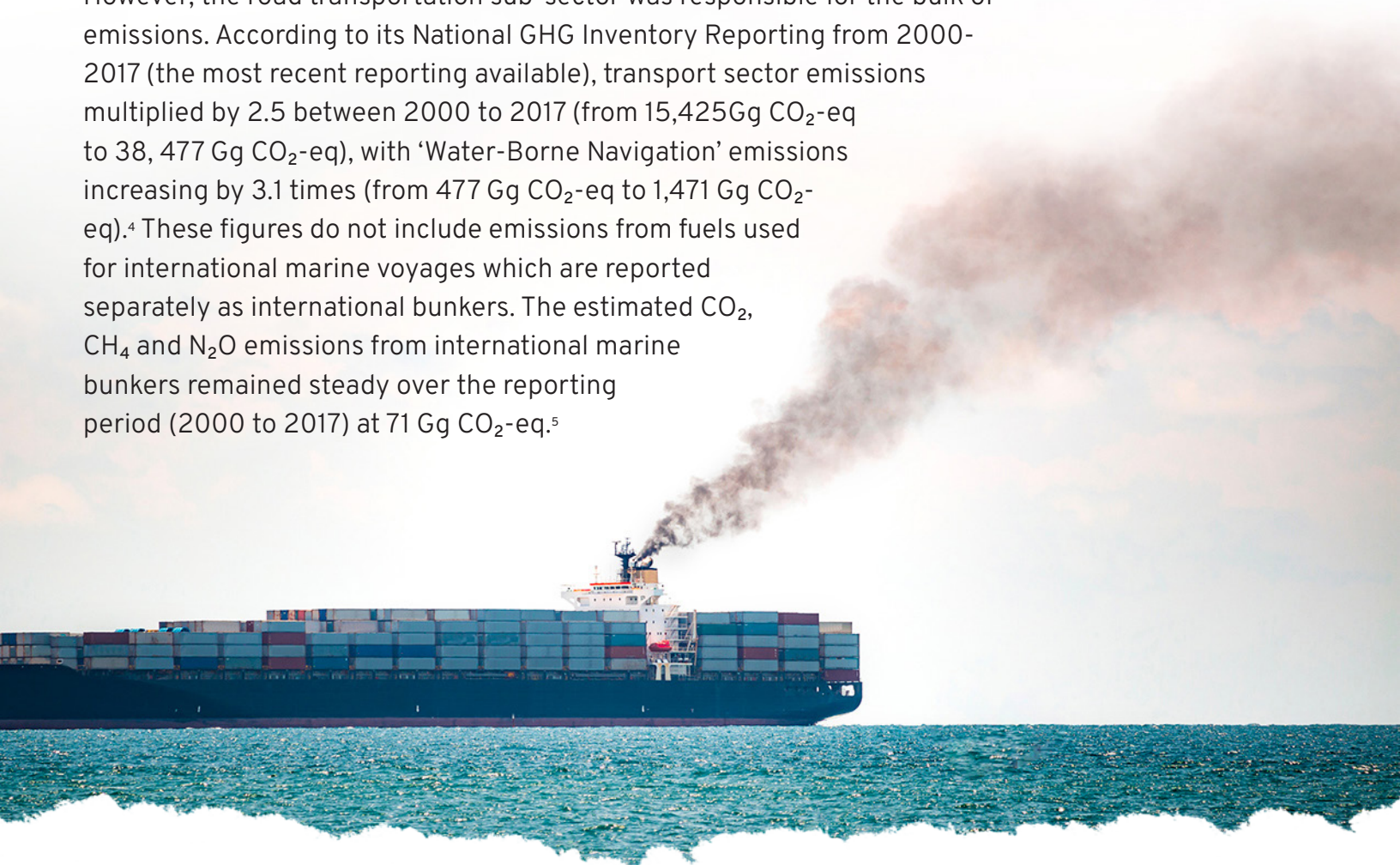
Maritime shipping is responsible for about 3% of all greenhouse gas (GHGs) emissions worldwide every year.¹ GHGs are the atmospheric gasses responsible for causing global warming and climatic change. The main emissions from shipping are CO₂, nitrogen oxide (NO_x), sulfur oxide (SO_x), methane (CH₄), black carbon (BC) and particulate matter or particles (PM), all known to be harmful to human health.² In addition, the sector contributes significantly to other environmental problems, such as the spread of invasive species, whale strikes, ocean noise pollution, and pollution discharges at sea and in delicate marine ecosystems.

According to the Nigerian Government's National Climate Change Policy for 2021-2030, the transportation sector is a major source of GHG emissions due to its dependence on fossil fuels and poorly regulated private sector operators.³ However, the road transportation sub-sector was responsible for the bulk of emissions. According to its National GHG Inventory Reporting from 2000-2017 (the most recent reporting available), transport sector emissions multiplied by 2.5 between 2000 to 2017 (from 15,425Gg CO₂-eq to 38,477 Gg CO₂-eq), with 'Water-Borne Navigation' emissions increasing by 3.1 times (from 477 Gg CO₂-eq to 1,471 Gg CO₂-eq).⁴ These figures do not include emissions from fuels used for international marine voyages which are reported separately as international bunkers. The estimated CO₂, CH₄ and N₂O emissions from international marine bunkers remained steady over the reporting period (2000 to 2017) at 71 Gg CO₂-eq.⁵

APPROXIMATELY



**OF WORLDWIDE
GREENHOUSE GAS
EMISSIONS ARE DUE TO
MARITIME SHIPPING**



As global maritime emissions continue to soar, air pollution does not stop at national borders. Transboundary flows of pollutants occur locally and regionally, and even globally.⁶ For example, within the region, Liberia consistently places among the flag state fleets emitting the most CO₂ per year (although the country of the flag is not necessarily connected to the location of emissions).⁷ According to the United Nations Conference on Trade and Development's (UNCTAD) 2023 Review of Maritime Transport, Liberia-flagged vessels are responsible for the highest volume of carbon dioxide emissions from ships, when purely measured by main flags of registration.⁸

There is a substantial amount of evidence on the wide range of health effects of air pollution. This includes respiratory, cardiovascular, and metabolic diseases, stroke, lung cancer, impaired fertility outcomes, preterm birth, reduced birth weight and premature mortality.⁹ According to the State of Global Air, total air pollution (not specific to shipping) was attributable to 198,000 deaths in Nigeria in 2019 alone.¹⁰ Additionally, according to 2019 figures, residents face high exposure to PM 2.5, with an estimated 98% of the population exposed to a PM 2.5 concentration above the World Health Organization's least stringent target.¹¹ Health effects attributable to PM include heart attacks, strokes, asthma, cancer, exacerbation of obesity and diabetes, and it contributes to cognitive challenges, including Alzheimer's, dementia, and mental health disorders.¹²

Globally, 'shipping-sourced emissions' were projected to account for around 265,000 premature deaths in 2020 (accounting for ~0.5% of global mortality).¹³ Populations closest to ports and high traffic shipping routes are burdened with highest air pollution concentrations and thus the most significant health burdens. However, as most research on health impacts of global shipping is concentrated in the European geographic region and on European populations,¹⁴ the majority of the world's population is inadequately represented in current analysis. The researchers did not find any data in the relationship between shipping emissions in Nigeria and health impacts.



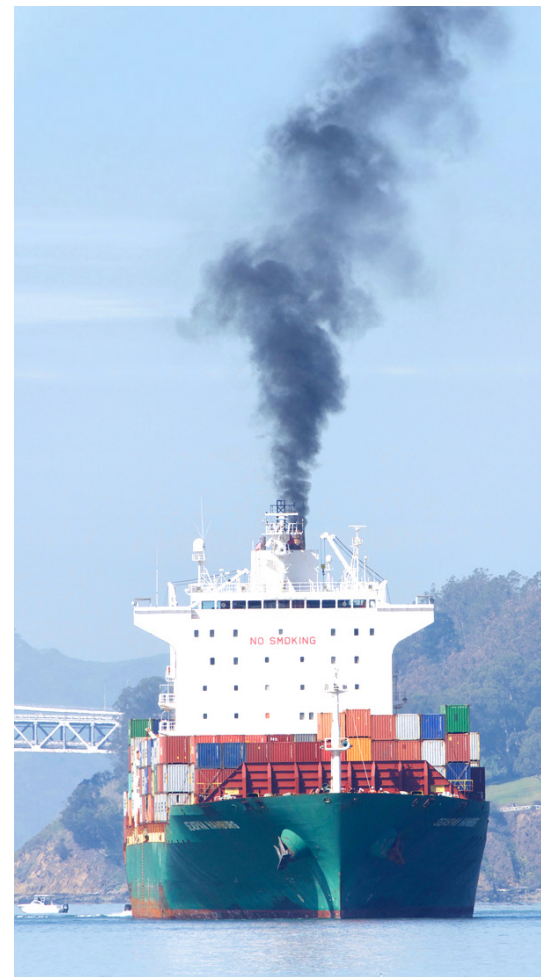
WHAT IS THE INTERNATIONAL MARITIME ORGANIZATION AND WHY DOES IT MATTER?

The International Maritime Organization (IMO) is the United Nations specialized agency with responsibility for the safety and security of shipping and the prevention of marine and atmospheric pollution by ships.¹⁵ The IMO sets global standards for international shipping through the creation of universally applicable laws, regulations and policy programmes.



**NAVIGATING
THE FUTURE:
SAFETY FIRST!**

Representatives from member countries come together in various committees, subcommittees and working groups in order to make decisions at the IMO.¹⁶ There are currently 175 countries that are members of the IMO.¹⁷ This makes the IMO a key forum through which countries can ensure that the shipping industry takes meaningful action on climate change and other matters that have serious consequences for environmental justice communities worldwide.





Port Harcourt

RELEVANCE OF MARITIME SHIPPING TO NIGERIA

Trade and Transport

Nigeria has a 870 km coastline and 3000 km of inland waterways, providing ample opportunity for maritime transport and trade and inland waterway transport. Six of Nigeria's major seaports include: Lagos Port (also referred to as Premiere Port (Apapa Quays)); Tincan Island, Delta Port Complex, Rivers Port, Onne, and Calabar Port. Further information on each is available at the Nigerian Port Authority website. Nigeria's largest export category is fuel (accounting for 22% of Nigeria's international merchandise export trade in 2022) including crude petroleum and petroleum gas.¹⁸ However, the costs of shipping oil and gas from Nigeria soared in 2023¹⁹ and many large companies (including Exxon Mobil, Eni, Equinor and Shell) have/are selling their assets in the Nigerian market.²⁰



Tincan Island

At a regional level, Africa accounts for around 7% of world maritime trade (exported) by volume and unloaded 4.6% of this trade (imported) - as identified in UNCTAD's 2020 Review of Maritime Transport. This share is relatively small when compared to other regions (e.g. developing Asian and American regions). West Africa participates in around 29% of Africa's maritime trade, according to 2019 data.²¹ The African Continental Free Trade Area (AfCFTA) Agreement is expected to increase intra-African freight by 28% and demand for maritime freight by 62%. A significant increase in traffic flows is expected across all transport modes throughout Africa in the coming years. According to UNCTAD, enormous investment in transport equipment and infrastructure will be required, including 100 more vessels, if the AfCFTA is fully implemented.²²

Ship Ownership

Nigeria is notable as the largest ship-owning country in Africa. In terms of the world fleet, it was placed at number 33 globally, with 291 vessels totaling 7.94 million dead weight tons, according to UNCTAD's 2023 Review of Maritime Transport. In terms of vessel value, Nigerian-owned vessels placed 30th with a 0.56% share of the world fleet value, again according to UNCTAD.²³



Apapa Wharf, Lagos Island



Lagos



Lagos

Importance of Mitigating International Shipping's Contribution to Climate Change

Nigeria is already experiencing serious impacts from climate change. Periods of extreme heat affect the country's population, with millions of people lacking access to air conditioning or electricity.²⁴ Changes in precipitation levels continue to endanger Nigeria's agriculture sector. In 2022, Nigeria faced heavy floods, killing over 800 people, displacing over 1 million people and destroying agricultural land and property. According to Carbon Brief, these floods were made 80 times more likely by anthropogenic climate change.²⁵ Sea level rise increases risk of flooding and erosion for coastal communities and may require costly changes to other ports and coastal roads and railways, changes in lake and river levels will similarly impact inland infrastructure.²⁶

Estimates indicate that if GHG emissions from ocean-going vessels are not more stringently regulated on a global scale, international shipping may be responsible for 10–13% of global emissions in the coming decades.²⁷ Using available international processes, including negotiations on GHG emissions reductions at the IMO, to abate the industry's climate impact is thus very relevant to Nigeria.

Potential Additional Financing for Adaptation and Mitigation of Climate Change Impacts

Various measures that will help international shipping reduce its climate impact are currently being discussed at the IMO. This includes economic measures, such as a levy on GHG emissions from ships, that could also be used to generate finance for adaptation and mitigation in countries most impacted by climate change. The revenues raised from such a measure could be significant: According to the World Bank, between \$1 trillion to \$3.7 trillion could be raised by 2050.²⁹ Recently (September 2023), several African countries have signaled support for the levy and revenue distribution mechanism when various Heads of State and Government from the African Union signed the Nairobi Declaration at the African Climate Summit. The Declaration included a call for a ‘global carbon taxation regime including a carbon tax on fossil fuel trade, maritime transport [...]’.³⁰

All measures, and in particular their impacts on countries around the world, are currently being assessed. This research will provide the basis for ongoing discussions of the Intersessional Working Group on GHG emissions and the Marine Environmental Protection Committee. The levy and its revenues, alongside a technical measure, could be of use to Nigeria and other countries for investment in climate adaptation and mitigation.

NIGERIA’S PARTICIPATION AT THE IMO



Nigeria joined the IMO in 1962. It has ratified many Conventions and Protocols which have been created under the auspices of the IMO - an overview of ratifications per country is available on the IMO’s website.²⁸

LOCAL GROUPS & OPPORTUNITIES FOR PUBLIC PARTICIPATION

The following groups or organizations do or may be interested in getting involved with the work of the IMO or MFN.

The Climate and Clean Air Coalition (of which Nigeria is a State Partner)

Ports Environmental Network Africa

The Economic Community of West African States (ECOWAS)

ENDNOTES

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