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Greening of ports in Africa and Indian Ocean Island States

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SWIOFISH 2

Executive statement

Promoting the development of ports and maritime industry by the African and Indian Ocean States (AIOS) is one of the objectives pursued by the African policy makers. Indeed, the port sector and maritime transport have always been at the centre of the debates of political and economic decision-makers of the AIOS. With the challenges of the African Continental Free Trade Area Agreement (AfCFTA), the gravity of climate change, the Russia-Ukraine conflict, the post-Covid-19, nd energy crisis, AIOS policy makers have embarked on the search for more innovative solutions to encourage the development and implementation of environmental standards in the maritime industry and ports sector.

Background

According to UNCTAD's study on maritime transport (2021), with the entry into force of the AfCFTA, intra-African trade can be boosted by about 33% and reduce the continent's trade deficit by 51%. Similarly, the United Nations Economic Commission for Africa (UNECA) indicates that ship cargo would increase from 58 million to 132 million tons with the implementation of the AfCFTA. Nevertheless, the challenges within African ports remain major in terms of efficiency, infrastructure, economic & environmental policies.

Ports are considered as the main places of intersection between land and sea and are strategic infrastructure for African economies. Moreover, the multimodality of activities in ports is inevitably accompanied by negative externalities on air, water, land and the regions or countries concerned, and constitutes a significant source of pollution. In this respect, ports can be positioned as real "decarbonization hubs", to support the energy transition and thus contribute to the improvement of the environmental conditions of our Member States.

As sources of interconnection between local communities and the environment, ports can truly be considered as decarbonation hubs. Compared to other sub-sectors, maritime transport accounts for about 3% of global carbon emissions, or about 1 billion tons of CO2 (IEA, 2020). Despite its low CO2 emissions, this sector remains an important lever for achieving climate change targets (IMO 2020, World Bank 2020). On the other hand, Africa is responsible for only 4% of the world's total greenhouse gas emissions but is still subject to much greater shocks than other continents (OECD, 2021). Therefore, the idea of becoming a 'Green Port' or reducing greenhouse gas emissions from ships between 2030 and 2050 in line with the objectives of the Paris agreement is more than urgent as indicated by the International Maritime Organization whose revised strategy has been recently adopted in July 2023. There is no doubt that ports in Africa and around the world are under pressure today and even more so since the outbreak of the Covid-19 pandemic (ICS, 2020, HPAI, 2020, World Bank, 2020).

Context and rationale

Global warming is a foremost challenge on earth and maritime transport plays a critical role in Greenhouse Gas (GHG) emissions. Ports and terminals are essential nodes in the maritime transport network. Nevertheless, ports are a frontier for pollution with various anthropogenic inputs owing to their large consumption of fossil fuel and their being unavoidable sources of concentrated maritime transport emissions.

Although it has been argued that port emissions form a small portion of shipping emissions, ports as an industry account for approximately 3% of the total GHG emissions worldwide. Nonetheless, local air pollutants remain the main concern of port authorities. Ports' role in climate change mitigation, through reduction of GHG and particularly carbon emissions, has received significant attention because of increasing pressure to improve environmental credibility. Pressure on ports is driven by many factors. One factor is national regulation of air quality and climate change mitigation, which pertains to port authorities, operators, tenants, and inland transportation. A second factor is regional regulation focused on mitigation and monitoring of maritime and ports emissions and the necessity of transboundary policies to help the entire region fight against these critical issues.

While port mitigation of climate change is justified, GHG emission reduction and energy efficiency improvements are one of the pillars to achieve green and sustainable ports. Various sustainability and green port studies have stressed this fact, e.g., ports sustainability studies. Moreover, ports not only apply strategies to decrease GHG emissions on the portside, but also implement measures to reduce the emissions of shipping.

As shipping emissions are expected to increase (IMO, 2018b), the International Maritime Organization (IMO) has adopted an Initial Strategy to reduce GHG emissions from international shipping (IMO, 2018c). The strategy sent a strong signal to ports to facilitate reduction of shipping GHG emissions at the ship port interface. Further, to fulfil the strategy, the IMO adopted a resolution to encourage cooperation between ports and shipping "Invitation to member states to encourage voluntary cooperation between the port and shipping sectors to contribute to reducing GHG emissions from ships" (IMO, 2019)

Conclusion and way forward

In summary, to meet the new demand for improving environmental air quality and to fulfil the commitment of CO2 emissions peaking by 2030 and achieving carbon neutrality by 2060, it is necessary to strengthen the pollution and carbon reduction requirements of water transport. Promoting the development of green ports must become a significant initiative to promote high-quality development in the AIOS. At present, the development of green technology in ports is getting momentum, albeit slowly, while the 3 integration and development of required infrastructure and services is still in its initial stages. The application of hydrogen or other clean energy in ports faces problems such as unclear directions, technical standards, and implementation paths.

However, currently there are no guiding principles or policy framework for implementing initiatives/interventions carried out towards becoming a Green Port. It is within this context that the COI is proposing to establish the Greening of Ports as a central theme for discussion - this initiative aims to bring together port authorities, maritime administrations, technical and financial partners to examine the situation of ports and maritime transport in the African and Indian Ocean Island States, and to study the possibilities for these ports to incorporate green and smart solutions into their business models to reduce carbon emissions and decrease the environmental impact of ports on the local and international environment. This will be eventually a subject of a detailed Study on the Development of Green Ports that will address the lacuna in African and Indian Ocean Island States Ports and has also the objective also to assist the COI in setting up a forum for discussion.

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References/Further information

Accueil | Commission de l'océan Indien (commissionoceanindien.org)

SWIOFISH2 | INDIAN OCEAN COMMISSION

Blue Tower - 5th Floor | Rue de l'Institut, Ebène, Mauritius
Tel: (+230) 402 61 00 | E-Mail: secretariat@coi-ioc.org