

# Reflecting on Net Zero Emissions in Bangladesh Ports and Shipping Routes

## Part 1



“When all is said and done, the commander's coup d'œil, his ability to see things simply, to identify the whole business of war completely with himself, is the essence of good generalship. Only if the mind works in this comprehensive fashion can it achieve the freedom it needs to dominate events and not be dominated by them,” wrote Carl von Clausewitz at the beginning of the 19th century in his classical masterpiece "On War."

Wars, even World Wars, do not present challenges that affect Earth, like climate challenges. Therefore, as a collective effort, the government, climate experts, academia, practitioners, ports, shipping authorities, and personnel must join forces to dominate net zero emissions in Bangladesh's ports and shipping. We must not allow the scourge of climate change to dominate us as B.H. Liddell Hart said that the coup d'œil is a gift of God and cannot be acquired. However, with professional knowledge, we can perfect it and see things clearly and accurately. This is crucial in these matters where a clear eye is needed to perfect our knowledge about zero carbon emission!

Bangladesh needs proper policy formulation and technological advancement to ensure zero carbon emissions from shipping by 2050 as per the International Maritime Organization's (IMO's) "2023 Greenhouse Gas (GHG) Strategy". In this context, this author reflects on possible ways of achieving Net Zero Emissions in the Ports and Shipping sector, which is of vital national interest for the sustainable economy of a developing maritime nation like Bangladesh. With the current rate of carbon dioxide production exceeding the planet's carrying capacity, the consequences of global warming, sea level rise, polar ice melting, and biodiversity loss are becoming increasingly urgent to address this existential issue. These challenges threaten the very existence of future generations, underscoring the need for immediate and decisive action.

One of the most important concepts is Carbon Footprint to measure the effect of carbon emissions. It is the measure of the total amount of GHG produced by the activities of a person, organization, event, or product. It is typically expressed in carbon dioxide equivalent (CO<sub>2</sub>e) tonnes which include CO<sub>2</sub> as well as other GHGs like methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), and black carbon. While burning fossil fuels, transportation and industrial processes are measured as direct emissions, and production from the consumption of goods and services are considered indirect emissions.

Then comes the most imperative term relevant to the present warming of the Earth, which is "Net Zero Emission." When GHG emissions from human activities are balanced with GHG removals over a specified period, the situation is known as global net zero emission. As mentioned above, emissions released by human action are taking a

catastrophic toll on our planet, particularly Bangladesh, propelling us further into an irreversible climate crisis. The International Civil Aviation Organisation (ICAO) member states adopted a collective long-term global aspirational goal (LTAG) of net-zero carbon emissions by 2050 to limit this emission level. Although Bangladesh's contribution to global carbon emissions is negligible, only 0.56%, the concerned ministries are working on reducing carbon emissions. For example, Bangladesh has pledged to source forty per cent of its energy from clean sources by 2041 and mentioned many other initiatives in different sectors like transport, agriculture, energy, forestry, household, etc. However, ports and the shipping sector get little emphasis in terms of Net Zero Carbon Emission by 2050, although more than 90% of Bangladesh's external freight trade is seaborne and statistics show that it is one of the largest destinations of scrapped ships as the steel recycling process leads a large amount of emissions (UNCTAD).

Being the lifeline of the growing economy of Bangladesh, Chittagong Sea Port handles 92% of the country's total import and export trade, according to the Report of Chittagong Port Authority. Although Chittagong Port has decided to comply the guidelines and good practices outlined by prominent international organizations and frameworks like the European Sea Ports Organization's (ESPO), Environmental Code of Practice (1994), Eco-information (1997), Eco Ports (2002), and the ESPO Green Guide (2012), the rank of the port has dropped in terms of annual throughput to rank 67th in the world in 2022 where the position was 58th in 2019 (Lloyd's List of One Hundred Ports). Besides, Mongla and Payra ports combined to conduct 8-9 per cent of the country's imports and exports, facing the challenges of dredging and depth, rail and road links, infrastructure, and equipment. Although, presently, all three ports are upgrading to energy-efficient electricity-powered cranes and cargo handling equipment rather than burning diesel, advanced technologies and comprehensive policies need to be formulated and consecutively implemented to address the demerits of carbon emissions in the ports and shipping sector.

(To be continued)

**Writer:** Commodore Syed Misbah Uddin Ahmad, (C), NUP, ndc, afwc, psc, BN (retd),  
Director General, Bangladesh Institute of Maritime Research and Development  
(BIMRAD).Email: misbah28686@gmail.com

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