(Series on 'Blue Economy' By Capt. Gajanan Karanjikar)



Capt. Gajanan Karanjikar, Blue Economy Social Activist & Multi Modal Logistics Expert

# Blue Economy and Ocean Energy .... (cont..)

We need to launch initiative which seeks to understand the power requirement of emerging coastal and maritime markets and advance technologies that could integrate marine renewable energy to relieve these power constraints and promote economic growth.



There is a great variety of wave energy technologies, depending on the way the energy is absorbed from the waves, the water depth and location. Hundreds of projects have reached the prototype phase. Technically speaking, various hydraulic or pneumatic power conversion systems are used, and in some cases, the mechanical motion induced by the wave energy is converted directly to electrical power (direct-drive). These devices can be bottommounted or floating and vary in size, orientation and distance from shore [Falcao, 2010]. The annual average power "A sailing ship is no democracy; you don't caucus a crew as to where you"ll go anymore than you Inquire when they'd like to shorten sail. - Sterling Hayden

per unit length of a wave crest in kW/m is an indicative unit of a site potential.

Ocean energy offers the potential for long-term carbon emissions reduction but is unlikely to make a significant short-term contribution before 2020 due to its nascent stage of development. In 2009, additionally installed ocean capacity was less than 10 MW worldwide, yielding a cumulative installed capacity of approximately 300 MW by the end of 2009. All ocean energy technologies, except tidal barrages, are conceptual, undergoing research and development (R&D), or are in the pre-commercial prototype and demonstration stage.

The performance of ocean energy technologies is anticipated to improve steadily over time as experience is gained and new technologies are able to access poorer quality resources. Whether these technical advances lead to sufficient associated cost reductions to enable broad-scale deployment of ocean energy is the most critical uncertainty in assessing the future role of ocean energy in mitigating climate change. Though technical potential is not anticipated to be a primary global barrier to ocean energy deployment, resource characteristics will require that local communities in the future select among multiple available ocean technologies to suit local resource conditions.



Facts in renewable energy:

• European companies hold around 23% of all ocean energy patents globally, making Europe a global leader on tidal and wave.

• Tidal energy is closer to commercialisation than wave energy, with 512.5 MW and 2.3 MW installed respectively.

• But the theoretical potential of wave is higher, with an estimated capacity of around 29,500 TWh per year, compared to 1,200 TWh for tidal. This means wave energy alone could theoretically meet all global demand for energy.

• To unlock the potential of wave energy, public intervention is needed to bring down the costs and having scale advantages.

• The main advantage of ocean energies is that they can help stabilise the electricity system, because they don't suffer the same kind of variability than solar and wind.

• The only potential downside is the environmental impact on marine flora and fauna, which needs to be further researched.

# "Every Ship that is Available is Sailing" says Hapag-Lloyd CEO

#### NEW DELHI Sagar Sandesh News Service

Container shipping giant Hapag-Lloyd CEO Rolf Habben Jansen candidly said "nobody saw this coming" as "we've seen a spending shift from services to goods", with consumer spending for household products and goods soaring during the pandemic, as funds usually targeted to travel, eating out and events has been diverted to home improvements, medical supplied and fitness equipment, among other, in turn creating one of the healthiest markets for box ships in years.



Hapag-Lloyd CEO Rolf Habben Jansen: Despite the soaring freight rates, increased profitability in 2020 was driven mainly by cost savings measures.

Backlogs at major ports globally created container shortage

The good news for the container lines – soaring spot freight rates, historically high fleet utilization, and a bright demand window for the coming year – comes with its fair share of drawbacks, causing operational disruption, too, as on the landside COVID-19 has conspired to create significant congestion and backlogs at major ports globally, which in turn has helped to create a container shortage due to slower turnaround times and imbalances. With delays in transit, scheduling reliability and predictability

has suffered too, said Habben Jansen, as there has been a 10% spike (from 26 to 29 days) in the time it takes to get containers back after the've been unloaded.

### To reposition thousands of extra container Company deployed 52 extra loaders/ ships

"Everything is sailing that can sail, because time charter rates are going through the roof," said Habben Jansen, noting that the company has deployed 52 extra loaders/ships to help reposition hundreds of thousands of extra container, while in a 'normal' year that number of ships dedicated to reposition "is a single digit."

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