

Technical Paper Presentation Forum at GSC-2025

Summary of session: Green Tech Warriors: Engineering the Future of Decarbonisation (Technical Papers)

Chair , Coordinators and speakers

Session Chair	Shri Shobhit Kapoor	Lloyds register
Coordinator	Capt.V. Parthasarathy	DG Shipping
	Shri Karthik.S	IMEI
Speakers	Shri. Anil Sharma	Anglo Eastern
	Shri H. Van den Heuvel	Royal IHC Holland
	Shri Pankaj Misra	Wartsila
	Shri Bimal Haridas	MAN Energy Solution
	Dr. Suhas Vhanmane	Indian Register of Shipping
	Capt. MSN Murthy	Indian Navy

Session summary

The Panel discussed the Onboard Carbon Capture Systems (OCCS) onboard ships as a part of the larger CCUS (Carbon Capture, Utilization, Storage System).

- The paper presentation Mr H. Van den Heuvel from Royal IHC Holland discussed valuable insights into hybrid power drive systems for hopper dredgers, focusing on energy efficiency. To reduce climate change resulting from human emissions, the maritime industry must increase its operational efficiency and adopt green fuels.
- There was a presentation by Shri Pankaj Misra on Wartsila's engine options for future fuels. The paper suggested that Fuel flexibility and the ability to convert for fuels is crucial if ship operations to continue uninterrupted. The best choice is a set-up, that does not depend on the availability of a single fuel type.
- There was a paper presentation by Shri Bimal Haridas from MAN Energy Solution which pointed out that Methanol is an important addition to the carbon free fuel options giving an advantageous trade-off between energy density, combustibility and toxicity and as such, stands in the center of the MAN Energy Solutions company strategy and its ingenuity focus.
- The presentation by Dr. Suhas Vhanmane from IRS highlighted that as the shipping desires for using zero emission fuels and technologies, nuclear power emerges as a

potential pathway toward decarbonizing the shipping sector due to its several advantages including reduced frequency of refuelling and uninterrupted power supply and growing recognition of its benefits.

- The paper presented by Capt. MSN Murthy from Indian Navy gave important technical insights into Advanced hydrogen on demand system (AHODS)

