

manufacturers do not much appear to have taken any significant action in ensuring that vehicles are loaded clean, which would solve the problem.

Talking of biosecurity, back in June 2022, the Biosecurity Amendment (Biofouling Management) Regulations 2021, entered into force. These regulations are consistent with IMO 2011 Guidelines. The Department of Agriculture introduced phased approach to implementation with enforcement due later this year. Operators of all vessels subject to biosecurity control will be required to provide information on how biofouling has been managed prior to arriving in Australian territorial seas. Vessel operators will receive less intervention for biofouling if they implement an effective biofouling management plan; clean all biofouling within 30 days prior to arriving in Australia; implement an alternative biofouling management method pre-approved by the Department. Shipping Australia has continuously engaged with public service officials throughout the implementation phase.

Decarbonisation of shipping continues to be a major topic, especially as the IMO at MEPC 80 in July 2023 set a target of shipping net zero by 2050(ish). We are in a transitional period but, while there are many things that ships can do to cut their fuel usage (e.g. polish hulls and keep them clean of fouling; more efficient

propellers and the like), it looks like the voyage plan to green shipping will have to focus on less carbon intensive fuels.

For many years, that looked like Liquefied Natural Gas (LNG), but now, with many industry developments, it now appears to be methanol. This is a form of alcohol with one carbon atom that can be made with electrical energy generated by non-fossil fuels and from renewable feedstocks. Carbon can be sourced from waste, such as agricultural waste, which means that combustion of methanol simply returns the carbon to the atmosphere from whence it came.

Nonetheless there are still LNG-powered vessels that exist and LNG-powered vessels that continue to be ordered and, in some cases, retrofitted (although these tend to be vessels that were built with retrofit in mind). That said, there have been several times in which more methanol-powered vessels were ordered than LNG-powered vessels. It would seem that methanol is the front-runner.

However, this alternative fuel sector is a sector with sudden changes in fortune and the future is both unknown and unknowable.

Ammonia is a potential candidate although many shipping executives express grave concerns about its toxicity and that ammonia combustion releases large amounts of nitrous oxides – which

is in itself a harmful greenhouse gas and which depletes ozone. As of right now, no ships exist that are powered by ammonia although two have now appeared on the order book!

I turn now to the Carbon Intensity Indicator. As members may recall, earlier this year, the CII became globally effective. Very simply put, the IMO has set a carbon-intensity benchmark for all ships to meet. Every couple of years that benchmark reduces. Ships are required to meet that benchmark but, currently, in the soft-implementation phase, there are few sanctions on vessels that do not actually meet the CII target other than informing Class and then taking steps to ensure that the vessel becomes compliant. That, surely, is a policy that will change in time. The Australian Maritime Safety Authority has said that there is currently no policy requiring the detention of ships that are not compliant and there are no plans to detain vessels for breach of CII.

I am now pleased to turn to a much happier item. On behalf of all members, and the secretariat of Shipping Australia, I am delighted to welcome Mehrangiz Shahbakhsh, a doctoral-level researcher at the Australian Maritime College, to Shipping Australia! She joins the secretariat as a Shipping Analyst & Liaison Officer, and I wish her every success in her career with Shipping Australia. ▲

