



Australian Government
Australian Maritime Safety Authority

Shipping Consultative Forum



Agenda item X

ELECTRIC VESSEL SAFETY ISSUES

PURPOSE

1. To raise the safety issues related to electric vessels, including hybrid electric vessels, and the necessary responses for this emerging sector.

BACKGROUND

2. There was global concern arising from the battery electric vehicle fire on the car carrier Fremantle Highway in 2023 and advisories issued to industry including by AMSA in Marine Notice 2023/07 – see [2023/07 - Guidance for the safe carriage of battery powered vehicles on ships | Australian Maritime Safety Authority](#)
3. Electric vessels and hybrid electric vessels are an emerging sector within the maritime industry and represent one part of the industry drive to decarbonisation. Some examples include: Port of Auckland has a hybrid electric tugboat in operation; Incat is building the largest electric catamaran ferry in the world; CSL has a contract to build a hybrid electric bulk vessel to replace the Accolade II; and the NSW Government has announced intention to deploy electric ferries on Sydney harbour.
4. There are serious potential hazards associated with electric vessels especially associated with thermal runaway and consequent fires
5. AMSA and Industry should consider how best to respond to dangerous incidents on electric and hybrid electric vessels
6. AMSA and Industry should give consideration to the training and qualifications necessary for personnel operating electric and hybrid electric vessels
7. Norway has a substantial number of electric vessels in operation already. The Norway Maritime Authority has issued Guidelines on requirements for training in chemical energy storage (maritime battery systems) on board Norwegian ships [Norwegian Maritime Directorate](#)
8. The NMA has also issued a Guideline for electrical energy storage systems (maritime EES systems) onboard Norwegian ships of less than 24 meters in length (L). [Norwegian Maritime Directorate](#)

9. The tripartite Norwegian safety body for maritime and energy has also published a recommendation for the Handling of Lithium-ion batteries [SfSREcommendation 050E](#)

RECOMMENDATIONS

It is recommended that AMSA consider issuing guidelines to industry on requirements for training for personnel on battery electric and hybrid electric vessels

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Attachments: See hyperlinks above