## PORT OPERATIONS COMMITTEE

## Use of Alternative Fuels in Hong Kong

#### Purpose

This paper seeks members' views on the amendment to the Merchant Shipping (Local Vessels) Ordinance (Cap. 548), the Dangerous Goods (Shipping) Regulation 2012 (Cap. 295F), the Shipping and Port Control Regulations (Cap. 313A), the Merchant Shipping (Local Vessels)(General) Regulations (Cap. 548F) and the Merchant Shipping (Local Vessels)(Safety and Survey) Regulation (Cap. 548G) with a view to facilitating the use of alternative fuels or providing alternative fuel bunkering services by local vessels in Hong Kong.

## Background

2. The Chief Executive announced in the 2023 Policy Address that the Government will develop a green maritime fuel bunkering centre to provide green bunkering for both local and ocean-going vessels. In the Action Plan on Maritime and Port Development Strategy announced by the Transport and Logistics Bureau in December 2023, developing Hong Kong as a green shipping hub towards the goal of zero-carbon emission was also set out as a strategy.

3. To achieve the goals of de-carbonization, the existing fuel used by ships, i.e. petroleum fuel, will need to be replaced by environmental friendly fuels with less and ultimately zero carbon emission (alternative fuels). These alternative fuels include LNG, hydrogen, ammonia, methanol, ethanol, etc. Alternative fuels are different from the existing marine petroleum fuel in various aspects, such as physical and chemical natures, the way of carrying, storage and combustion, risks in handling, hazards to the environment when discharged from ships.

4. As the existing marine legislation regulating ship fuels has been made based on traditional marine petroleum fuel, there is a need to refine the existing legislation to facilitate the use of alternative fuels in Hong Kong waters.

### **Proposed Legislation Amendments**

5. Under the proposal, if the existing law allows alternative fuels to be used, no

legislative amendments would be necessary. Also, although marine petroleum fuel will be phased out gradually, it is believed that such fuel may still be used during the next 20 years. So, the existing regime in relation to marine petroleum fuels will remain intact. Meanwhile, new provisions will be added or existing provisions be amended, so as to facilitate the use of alternative fuels. The amendments mainly cover the following three areas:

#### (a) Deleting Tonnage Restriction for Bunkering vessels

Due to increasing size of cargo ships visiting Hong Kong, and the fact that alternative fuels have a lower energy density than marine petroleum fuel, it is expected that alternative fuel bunker vessels will be bigger than their petroleum fuel counterparts. Hence, it is necessary to remove the tonnage limitations under existing legislation.

#### (b) Allowing the use of low flashpoint fuel by vessels

The existing legislation prohibits the use of fuel with flash point less than  $60^{\circ}$ C. As most of the alternative fuels have a flash point of less than  $60^{\circ}$ C, we need to impose a new requirement with reference or equivalent to the International Code of Safety for Ships Using Gases or Other Low-flashpoint Fuels (IGF Code) to facilitate the use of alternative fuels by local vessels.

# (c) Empowering the Secretary of Transport and Logistics to make regulations for fuels used by local vessels

As the international regulations in relation to alternative fuels are still being developed, it is proposed to empower the Secretary for Transport and Logistics to make regulations in respect of fuels used by local vessels.

#### Consultation

6. Members' comments are invited on the subject of this paper.

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