Action Plan on Green Maritime Fuel Bunkering

Transport and Logistics Bureau
The Government of the
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International Maritime Organization (IMO) 2023 Strategy on Reduction of Greenhouse Gas Emissions from Ships

- To work towards the goal of limiting global temperature increase to <1.5 degrees Celsius as set out in the Paris Agreement

2030	↓ 20% - 30%
2040	↓ 70% - 80%
2050	Net-zero carbon emissions

- Expected to endorse a series of mid-term measures in 2025 (which will commence in 2027)

- HK is obliged to follow the goals of the IMO and keep abreast of the international trend of green shipping, in order to consolidate our positioning as an International Maritime Centre

National 14th Five-Year Plan

- Sets corresponding targets in areas such as carbon peak and carbon neutrality
- The 14th Five-Year Plan Comprehensive Work Plan for Energy Conservation and Emission Reduction sets out ten key energy conservation and emission reduction projects, including those on the maritime industry
- The 14th Five-Year Development Plan for the Maritime System further sets out a series of strategies related to carbon peak and carbon neutrality for the maritime industry

Hong Kong's Green Port Initiatives

- 2015: Became the first port in Asia to mandate the switch to low-sulphur fuel for ocean-going vessels at berth
- 2019: Worked with Mainland China to reduce emissions from vessels, including the implementation of a domestic emission control area jointly with the **People's** Government of Guangdong Province
- 2023: The Policy Address announced the development of HK into a green maritime fuel bunkering centre
- February 2024: Commenced a feasibility study on providing green maritime fuel bunkering services, and subsequently proceed to formulate this Action Plan
- November 2024: Promulgate the Action Plan on Green Maritime Fuel Bunkering

Definition of Green Maritime Fuels

- Fuels with low or even zero carbon emissions
- Produced from biomass and waste or chemically synthesised using renewable energy

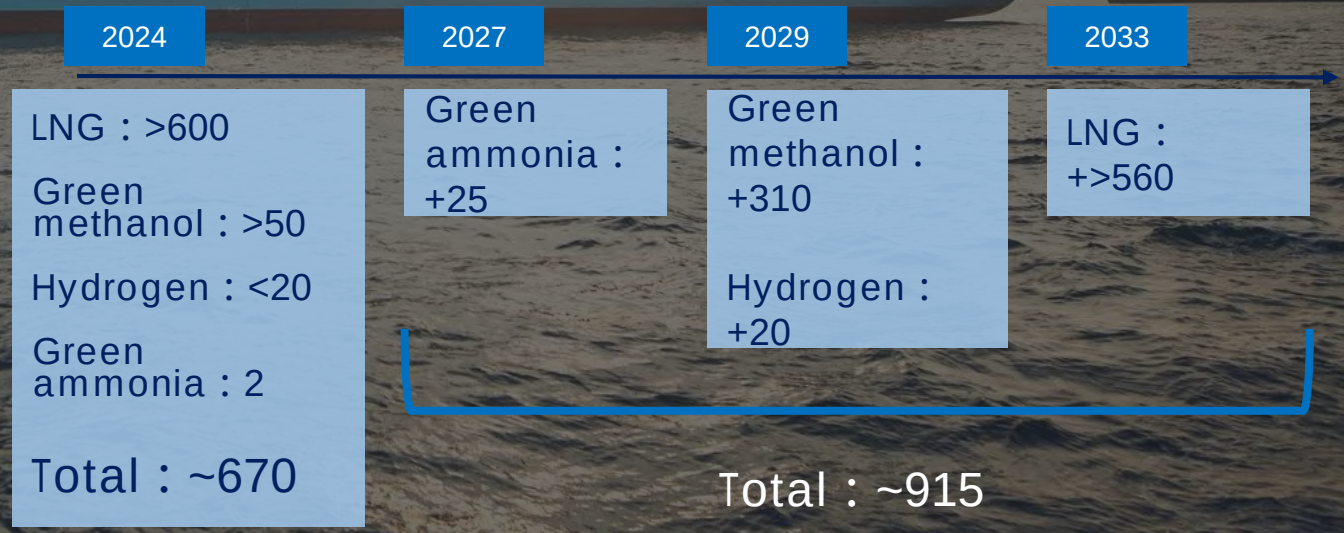
Supply and Demand of Green Maritime Fuels

Supply

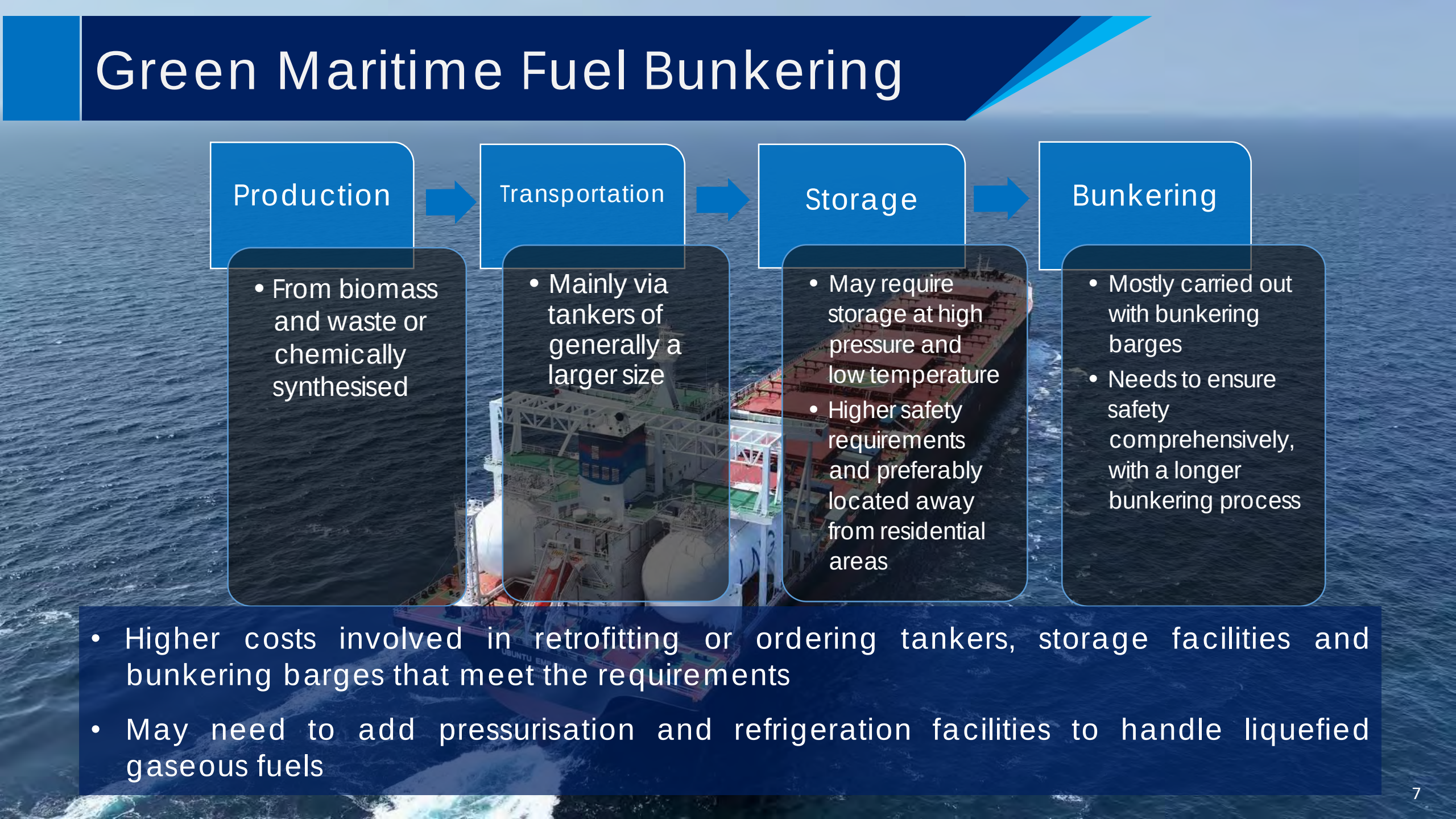
- Currently the supply of green maritime fuels is limited and unstable, with high price and an immature market
- Mainland China is a major producer of various types of green maritime fuels

Demand

- Out of the 100 000 ocean-going vessels in the **world's** fleet, the number of green maritime fuel-powered vessels is currently very small (~1.4% in 2030), but the growth potential is high



Green Maritime Fuel Bunkering



Production

- From biomass and waste or chemically synthesised

Transportation

- Mainly via tankers of generally a larger size

Storage

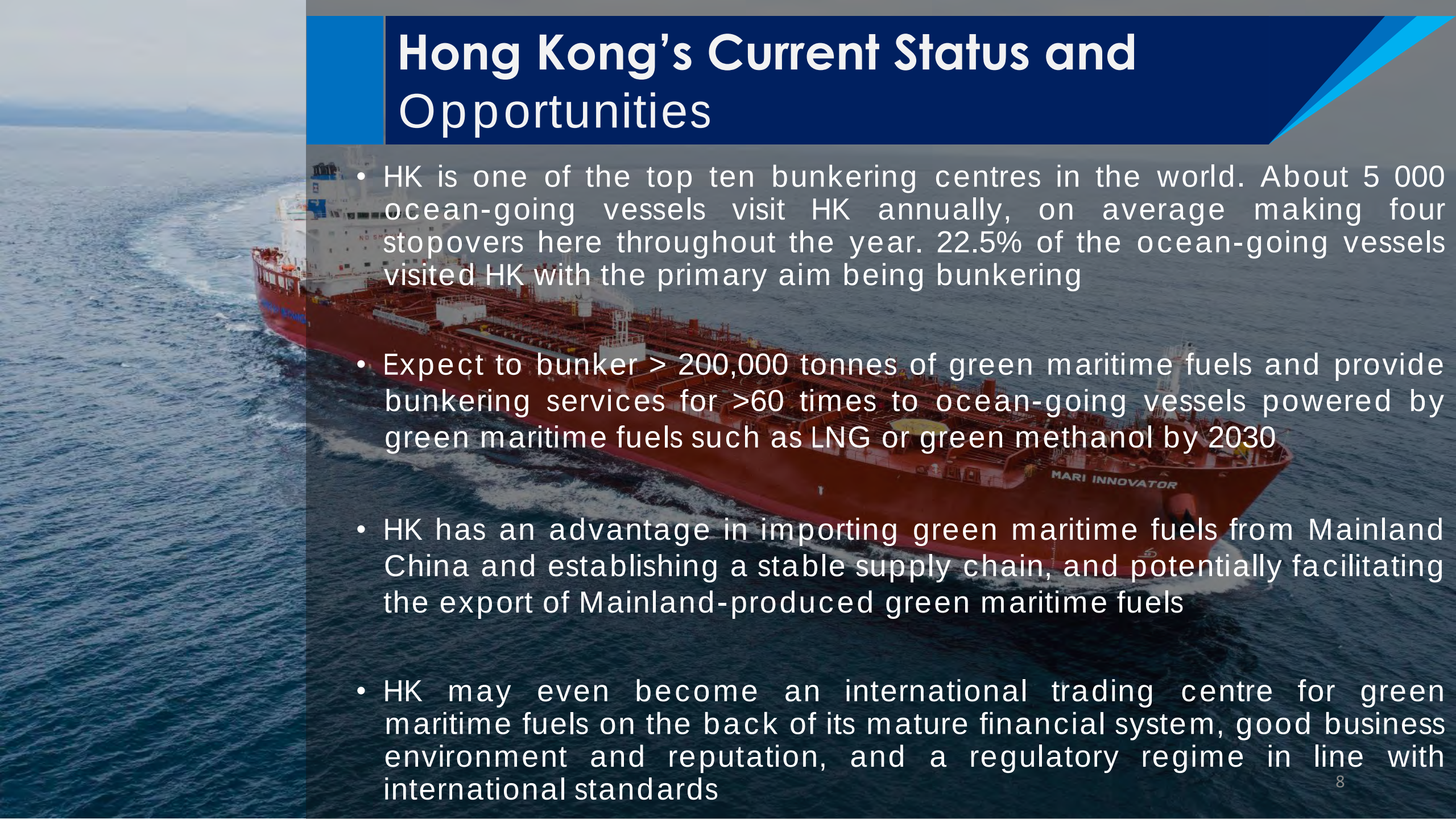
- May require storage at high pressure and low temperature
- Higher safety requirements and preferably located away from residential areas

Bunkering

- Mostly carried out with bunkering barges
- Needs to ensure safety comprehensively, with a longer bunkering process

- Higher costs involved in retrofitting or ordering tankers, storage facilities and bunkering barges that meet the requirements
- May need to add pressurisation and refrigeration facilities to handle liquefied gaseous fuels

Hong Kong's Current Status and Opportunities



- HK is one of the top ten bunkering centres in the world. About 5 000 ocean-going vessels visit HK annually, on average making four stopovers here throughout the year. 22.5% of the ocean-going vessels visited HK with the primary aim being bunkering

- Expect to bunker > 200,000 tonnes of green maritime fuels and provide bunkering services for >60 times to ocean-going vessels powered by green maritime fuels such as LNG or green methanol by 2030

- HK has an advantage in importing green maritime fuels from Mainland China and establishing a stable supply chain, and potentially facilitating the export of Mainland-produced green maritime fuels

- HK may even become an international trading centre for green maritime fuels on the back of its mature financial system, good business environment and reputation, and a regulatory regime in line with international standards

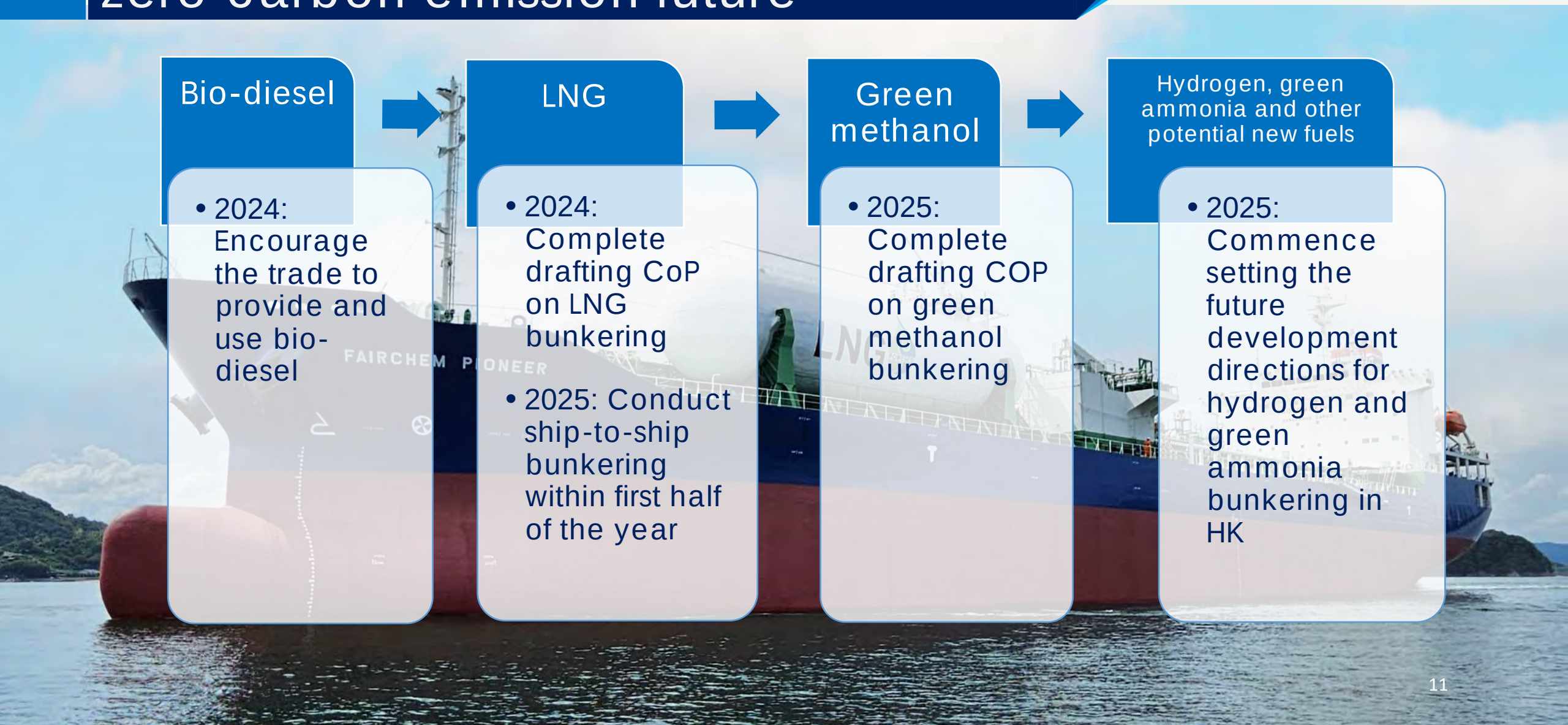
Action Targets

- IMO: To follow the emission reduction checkpoints set out by the IMO
- 2026: To reduce carbon emissions from HK-registered ships by at least 11%
- 2026: 55% of the diesel-fuelled vessels in the Government fleet to switch to using green maritime fuels
- 2030: To reduce carbon emissions from the Kwai Tsing Container Terminals by 30%
- 2030: 7% of the HK-registered ships to take up green maritime fuels

Five Strategies and Ten Actions

Strategy 1 Green Fuel	Action (1): To adopt a multi-fuel strategy for a zero carbon emission future Action (2): To catalyse the green maritime fuel supply chain and trade
Strategy 2 Green Port	Action (3): To develop a green maritime fuel bunkering ecosystem Action (4): To simplify the approval process for green maritime fuel bunkering Action (5): To reduce carbon emissions from port operations Action (6): To holistically build a green Government fleet
Strategy 3 Green Incentives	Action (7): To subsidise green transformation of vessels Action (8): To develop green-friendly arrangements for usage of port facilities
Strategy 4 Green Collaboration	Action (9): To foster regional cooperation in relation to green maritime fuel bunkering
Strategy 5 Green Expertise	Action (10): To nurture talents in relation to green maritime fuels

(1) To adopt a multi-fuel strategy for a zero carbon emission future



Bio-diesel

- 2024: Encourage the trade to provide and use bio-diesel

LNG

- 2024: Complete drafting CoP on LNG bunkering
- 2025: Conduct ship-to-ship bunkering within first half of the year

Green methanol

- 2025: Complete drafting COP on green methanol bunkering

Hydrogen, green ammonia and other potential new fuels

- 2025: Commence setting the future development directions for hydrogen and green ammonia bunkering in HK

(2) To catalyse the green maritime fuel supply chain and trade

- 2025: Sign memoranda of understanding with stakeholders who are interested and have the capabilities to engage in the development of green maritime fuel bunkering in HK and provide a collaborative platform and other facilitation measures
- Establish an effective supply chain and trading channel to ensure the stable supply of high quality green maritime fuels and the organic development of a relevant trading market

- 2025: Establish the Green Maritime Fuel Bunkering Incentive Scheme to encourage pioneer enterprises to start green maritime fuel bunkering businesses in HK

(3) To develop a green maritime fuel bunkering ecosystem

Production

- Mainland China is a major production base for multiple green maritime fuels
- HK, with strong support of the Motherland, has an advantage in importing green maritime fuels from Mainland China and establishing a stable supply chain

Storage

- Use the offshore LNG terminal to provide LNG for bunkering purpose
- 2025: Invite the industry to submit expressions of interest in developing methanol storage facilities on a port back-up site in Tsing Yi South
- Provide administrative assistance to companies retrofitting existing oil storage tanks or developing new storage facilities

Anchorages and sheltered spaces for bunkering barges

- Rezone the anchorages in the Central Waters and the area south of Lamma Island to facilitate the anchorage of green maritime fuel bunkering barges
- 2026: Complete the relevant legislative exercise

Regulatory framework

- Enacted the Shipping Legislation (Use of Fuels and Miscellaneous Amendments) Ordinance 2024
- 2024: Draft CoP on LNG bunkering
- 2025: Draft CoP on green methanol bunkering

(4) To simplify the approval process for green maritime fuel bunkering

- 2024: Marine Department to set up a dedicated team to provide one-stop services for companies interested in setting up green shipping-related businesses in HK
- Increase the efficiency and transparency of approval procedures in relation to green maritime fuel bunkering and hence facilitate the development of bunkering business

(5) To reduce emissions from port operations

- Support port operators in reducing carbon emissions from port operations to prepare HK for participation in green shipping corridors
- Reduce carbon emissions of the Kwai Tsing Container Terminals by 30% within 2030 and achieve carbon neutrality by 2050

(6) To holistically build a green Government fleet

- 2024: Marine Department to set up an inter-departmental working group to explore the technological developments with relevant departments regularly
- 2026: Explore amending procurement policy to drive the use of bio-diesel by suitable Government vessels and replace them with green maritime fuel-powered ones when decommissioned
- 2027: Marine Department to order the first batch of green methanol-powered vessels and launch the pilot scheme for Government fleet to start using green methanol-powered vessels

(7) To subsidise green transformation of vessels

- EEB has already set up the New Energy Transport Fund that subsidises trials of green innovations, including new energy ships
- 2025: Announce details of reducing the port dues and registration fees for green maritime fuel-powered vessels
- Explore exempting imported green methanol for bunkering purpose from tax
- As a type of commodity trade, the trade of green maritime fuels will benefit from relevant measures in the 2024 Policy Address

(8) To develop green-friendly arrangements for usage of port facilities

- 2025: Come up with and announce the arrangement for priority usage of Hong Kong port facilities by green maritime fuel-powered vessels
- Marine Department to step up promotion on and encourage usage of green maritime fuels and **HK's** green-friendly port arrangements to companies of HK-registered ships

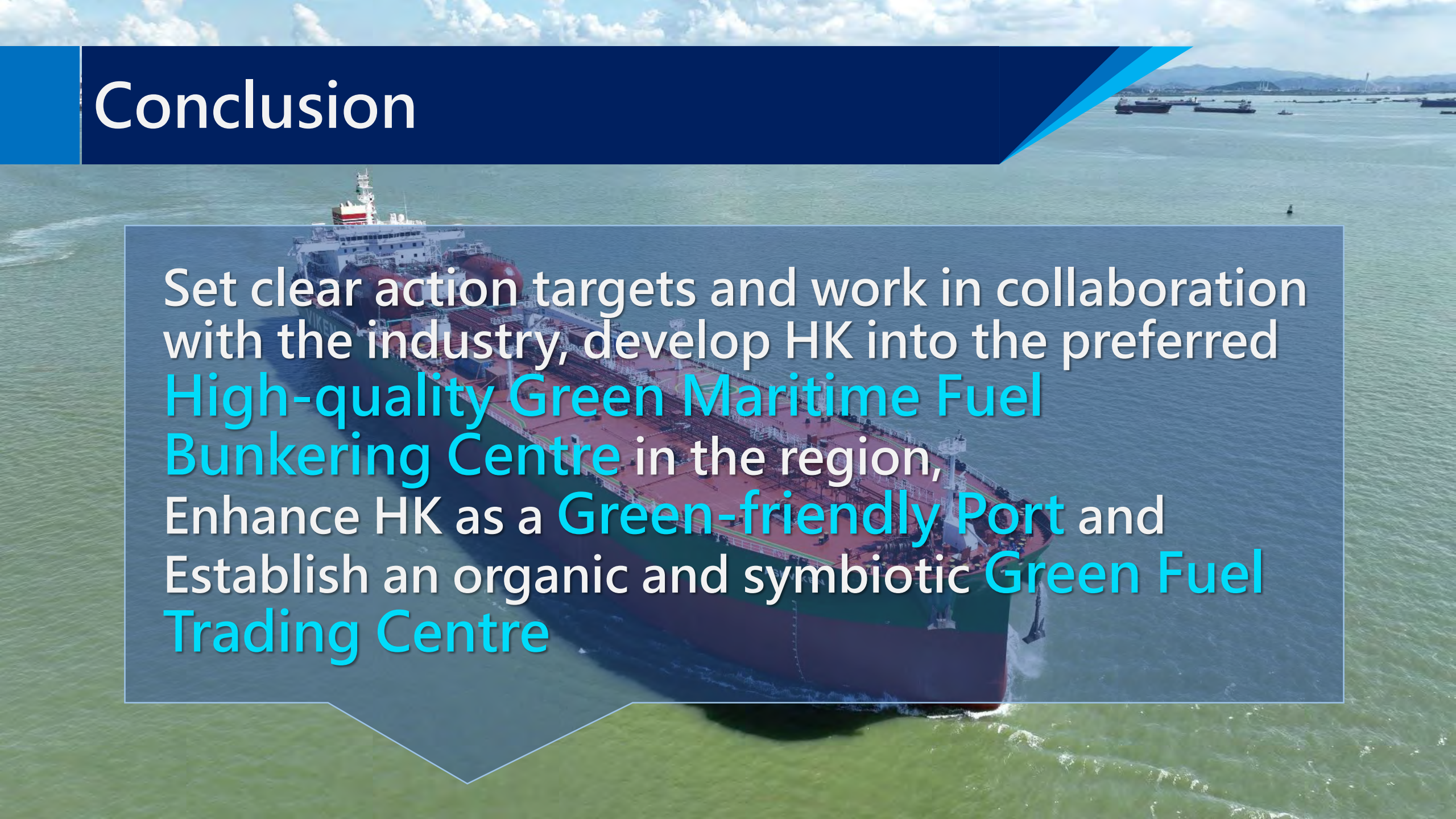
(9) To foster regional cooperation in relation to green maritime fuel bunkering

- Collaborate within GBA and with other provinces in Mainland China
- Drive the conclusion of cooperation agreement between industry organisations in Mainland China and Hong Kong over fuel supply, transport and distribution, bunkering operation, technical exchange and manpower training
- 2026: Identify at least one suitable port for developing a green shipping corridor with Hong Kong and kick-start the relevant discussion
- Actively consider joining green shipping corridors between other ports

(10) To nurture talents in relation to green maritime fuels

- 2025: Expand the Maritime and Aviation Training Fund to cover green maritime fuel-related courses offered in Mainland China and beyond
- 2026: Launch new subsidy schemes to provide more suitable training and exchange opportunities to practitioners and train 50 talents in relation to green maritime fuels
- Continue to provide facilitation for relevant talents to come to HK through different schemes

Conclusion



Set clear action targets and work in collaboration with the industry, develop HK into the preferred **High-quality Green Maritime Fuel Bunkering Centre** in the region,
Enhance HK as a **Green-friendly Port** and
Establish an organic and symbiotic **Green Fuel Trading Centre**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Thank you