

## Asahi Tanker Orders 2 of World's 1<sup>st</sup> Zero-emission Electric-powered Tankers

TOKYO—Asahi Tanker Co., Ltd. (President: Kazunori Nakai; Headquarters: Chiyoda-ku, Tokyo) today announced that it has ordered two of the world's first zero-emission electric-powered tankers as follows.

	Shipyard	System Integrator	Delivery
1 <sup>st</sup> tanker	Koa Sangyou Co., Ltd. (Headquarters: Marugame, Kagawa, Japan)	Kawasaki Heavy Industries, Ltd.	March 2022
2 <sup>nd</sup> tanker	Imura Zosen KK (Headquarters: Komatsushima, Tokushima, Japan)		March 2023

The two tankers will adopt the “e5 tanker” design developed by e5 Lab Inc. (President: Tomoaki Ichida; Headquarters: Chiyoda-ku, Tokyo).

They will be powered completely by large-capacity lithium ion batteries and are slated to go into service as bunker vessels in Tokyo Bay.

The two tankers will achieve zero emissions of CO<sub>2</sub>, NO<sub>x</sub>, SO<sub>x</sub>, and particulates thanks to their all-electric core energy system, dramatically reducing their environmental impact. In addition, their reduced noise and vibration will create a more comfortable work environment for the crewmembers and limit noise pollution in the bay and its surroundings.

Adoption of various automated equipment and digital tools including Internet of Things (IoT) will reduce crews' onboard workload and increase the ship's operating efficiency.

The tankers will play a new role in contributing to measures for the Business Continuity Plan (BCP) and Community Life Continuity Plan (LCP) in case of disaster or emergency, by making the electricity stored in their onboard batteries — defined as “large-capacity batteries for power supply in emergency”— available to supply emergency power. Asahi Tanker and TEPCO Energy Partner, Inc. are currently working on these initiatives.

Asahi Tanker and e5 Lab will realize a sustainable ocean shipping industry through efforts to improve the work environment for crewmembers, which is an urgent issue facing the coastal shipping sector, and global environmental protection through the development and introduction of these advanced ships.

### [Electric-powered tanker Specifications]

Dimensions	LOA: 62m / Breadth: 10.3m / Draft: 4.15m
Ship classification society	Nippon Kaiji Kyokai (ClassNK)
Cargo	Fuel oil
Gross tonnage	499 tons
Speed	About 10 knots
Cargo tank capacity	1,280m <sup>3</sup>
Propulsion equipment	Azimuth thrusters: 300kw x 2 Side thrusters: 68kw x 2
Battery capacity	3,480kWh

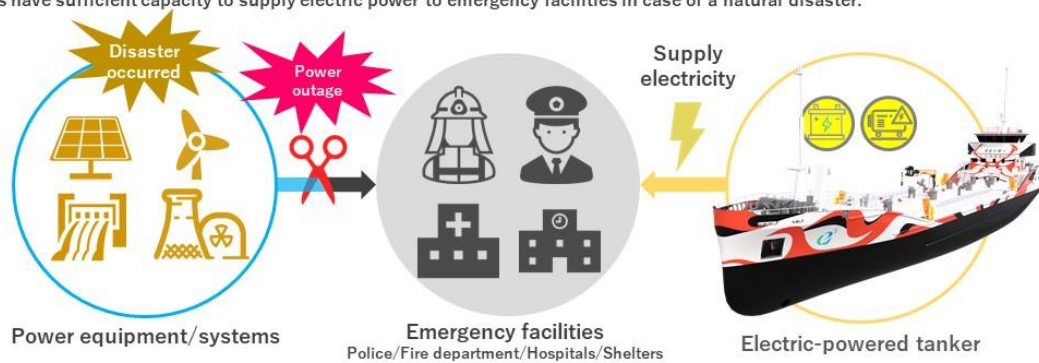


[Large-capacity batteries for power supply in emergencies] for illustrative purposes only

## Equipped with electric supply system to provide power to shore in case of a natural disaster

### Onshore electric supply “Ship To Shore (S2S)”

- Auxiliary supply of electricity in case of a power outage in the onshore power transmission system serving a significant part of the coastal area.
- Electricity can be supplied to shore from large-capacity rechargeable batteries (equivalent to about 100 electric cars).
- The ships can supply power even if land-based infrastructure such as roads and power transmission facilities are out of service.
- The ships have sufficient capacity to supply electric power to emergency facilities in case of a natural disaster.



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PROJECT

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