

**DATE: OCTOBER 28, 2025**

**FROM: ENVIRONMENTAL MANAGEMENT**

**SUBJECT: RESOLUTION NO. \_\_\_\_\_ - APPROVAL OF A TECHNOLOGY  
ADVANCEMENT PROGRAM AGREEMENT WITH HARBOR BREEZE  
CORP. TO FUND THE DEMONSTRATION OF A HYBRID ZERO  
EMISSION CAPABLE VESSEL AND A COST SHARE AGREEMENT  
WITH THE PORT OF LONG BEACH**

**SUMMARY:**

Staff requests approval of a proposed Technology Advancement Program (TAP) Agreement between the City of Los Angeles Harbor Department (Harbor Department) and Harbor Breeze Corp. (Harbor Breeze) to fund a TAP project which demonstrates an advanced integrated emissions reduction system and charging infrastructure for a hybrid vessel (Project). The total cost of the proposed Project is \$8,920,240. TAP funding in the amount of \$3,500,000 has been requested to support the development and installation of enhanced vessel technology and shore side charging infrastructure within the Port of Los Angeles West Harbor Development. Staff also requests approval of a Cost Share Agreement with the Port of Long Beach (POLB) to share the cost of the proposed Project. The total requested TAP funding amount is \$3,500,000. The Harbor Department is financially responsible for \$3,500,000 under this Board action, of which \$1,050,000 will be reimbursed by POLB through the Cost Share Agreement.

**RECOMMENDATION:**

It is recommended that the Board of Harbor Commissioners (Board):

1. Find that the Director of Environmental Management has determined that the proposed action is administratively and categorically exempt from the requirements of the California Environmental Quality Act (CEQA) under Article II Section 2(f) and Article III Class 6(2) of the Los Angeles City CEQA Guidelines;
2. Approve the Technology Advancement Program Agreement with Harbor Breeze Corp. for a term of three years and a total not-to-exceed amount of \$3,500,000;
3. Approve the Cost Share Agreement with the Port of Long Beach for the reimbursement of \$1,050,000 from the Port of Long Beach to the City of Los Angeles Harbor Department;
4. Authorize the Executive Director to execute and Board Secretary to attest to said agreement for and on behalf of the Board; and
5. Adopt Resolution No. \_\_\_\_\_.

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**DISCUSSION:**

Background/Context – The San Pedro Bay Ports Clean Air Action Plan (CAAP) was adopted on November 20, 2006 during a joint meeting between the Los Angeles and Long Beach Boards of Harbor Commissioners. The CAAP was subsequently updated in 2010 and 2017. A significant initiative of the CAAP is the TAP, which provides grants to help accelerate the availability of new strategies into the port market that will ultimately result in significant reductions of Diesel Particulate Matter (DPM), Oxides of Nitrogen (NOx), Oxides of Sulfur (SOx), and other pollutants.

The TAP is a joint Ports initiative that provides grant funding on a cost share basis. The TAP Advisory committee (AC), comprised of the United States Environmental Protection Agency, California Air Resources Board (CARB), the California Energy Commission, and the South Coast Air Quality Management District, along with the Harbor Department and POLB, meets regularly to review and recommend projects for funding, such as the Harbor Breeze hybrid vessel project.

Project Description – The Harbor Department received a CARB Advanced Technology Demonstration grant for Harbor Breeze to design, build, and demonstrate two hybrid Zero-Emission and Advanced Technology (ZEAT) vessels, which was approved by the Board on January 16, 2025. Harbor Breeze applied for TAP funding to upgrade one of the vessels to demonstrate technology that was not available at the time of the grant award including:

- Original Equipment Manufacturer (OEM) components on the propulsion engines to further reduce particulate matter emissions;
- A 588 kWh battery energy storage system, adding capability to charge the battery with the main engines;
- Added engine operational mode for contingent diesel particulate filter (DPF) regeneration for enhanced safety;
- Reduction gear machinery upgrades to allow new generator-only mode changes, enabling high RPM operation at low speed to improve engine efficiency and promote DPF regeneration; and
- Added electric heaters to the engines, eliminating the need for low power idling to maintain operating temperatures.

In addition, the hybrid ZEAT vessel has the capability to operate on full zero-emission mode in-harbor with electric auxiliary engines. To support the demonstration for in-harbor operations, the requested TAP funding includes shoreside infrastructure at the West Harbor Development to charge the vessel, as needed.

These project components were not included in the CARB grant project; however, CARB will allow this TAP project to be used as match share funding for the CARB grant, since it enhances the original project. Successful completion of this project will validate safe integrated emissions reduction systems with Tier 4 marine engines, to advance

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commercialization of near zero harbor craft technology and support shore-side opportunity charging for harbor craft.

Harbor Breeze has assembled a team of partners to implement the Project including OEM All American Marine to construct the vessel; ABB Marine & Ports to integrate after-treatment systems; and ADEPT Group, Inc. to conduct technical project management activities. The proposed TAP agreement (Transmittal 1) identifies key Project milestones including system approvals, fuel system training, and commissioning; demonstration in use; operational testing; and final report. This project was evaluated by the TAP AC and is recommended for funding.

Cost Share Agreement with POLB – In June 2007, the Harbor Department and POLB executed the CAAP Master Cost Sharing Agreement No. 2546 to establish an arrangement for sharing costs of all agreed upon CAAP expenditures. In accordance with the provisions of the Master Cost Sharing Agreement No. 2546, a supplemental Cost Share Agreement between the Harbor Department and POLB is being submitted for approval (Transmittal 2). This Cost Share Agreement identifies the Harbor Department as the contracting port and is financially responsible for \$3,500,000, of which \$1,050,000 will be reimbursed by POLB. Typically, the Ports have shared equally in funding each TAP project awarded, however, in this case POLB is using a portion of its TAP funds for a different project at POLB. Given that staff believes the technology and infrastructure to be demonstrated by Harbor Breeze will be of significant value to the Department’s green energy goals, staff recommends funding the \$700,000 “equal-share” difference for this project. The Harbor Department’s total funding for this project will be \$2,450,000.

**ENVIRONMENTAL ASSESSMENT:**

The proposed actions are the approval of the TAP Agreement with Harbor Breeze and the Cost Share Agreement with POLB for the Project, which are an administrative activity involving basic data collection, field testing, and research of City Departments which do not result in serious or major disturbances to an environmental resource. Therefore, the Director of Environmental Management has determined that the proposed action is administratively and categorically exempt from the requirements of CEQA in accordance with Article II Section 2(f) and Article III Class 6(2) of the Los Angeles City CEQA Guidelines.

**FINANCIAL IMPACT:**

The proposed action is to approve a TAP Agreement for funding the Harbor Breeze Zero-Emission-Capable hybrid vessel Project. Approval of the proposed three-year agreement authorizes a total amount, not-to-exceed \$3,500,000. POLB will reimburse the Harbor Department \$1,050,000 of this amount. It is anticipated that funds will be expended as follows:

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<b>Fiscal Year</b>	<b>Amount</b>
2025/26	\$1,166,000
2026/27	<u>\$2,334,000</u>
<b>TOTAL</b>	<b>\$3,500,000</b>

Fiscal Year 2025/26 funding is available within Account 562010 (Customer Environmental Subsidies and Incentives), Division 42010 (Environmental Management). Funding needed in future fiscal year will be requested through the annual budget adoption process.

The Harbor Department's financial obligations for future fiscal years are contingent upon Board appropriation of funds. If any subsequent fiscal year funds are not appropriated by the Board for the work required by the agreement, the agreement would be terminated. However, such termination shall not relieve the parties of liability for any obligations previously incurred.

**CITY ATTORNEY:**

The Office of the City Attorney has reviewed and approved the proposed agreements as to form and legality.

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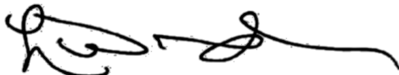
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**TRANSMITTALS:**

1. Agreement with Harbor Breeze Corp.
2. Cost Share Agreement with the Port of Long Beach

FIS Approval: JS  
CA Approval: SO



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Director of Environmental Management

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