

**CALIFORNIA ALTERNATIVE ENERGY AND
ADVANCED TRANSPORTATION FINANCING AUTHORITY**

Board Meeting Date: Tuesday, June 17, 2025

Request to Approve Project for a Sales and Use Tax Exclusion¹

**HieFo Corporation
Application No. 25-SM028**

Prepared By: *Jeannie Yu, Program Analyst*

SUMMARY

Applicant: HieFo Corporation

Location: Alhambra, Los Angeles County

Industry: Semiconductor Manufacturing

Project: Upgrade of an Existing Indium Phosphide Photonic Device Manufacturing Facility (Advanced Manufacturing)

Project Pool: Small

Value of Qualified Property	Estimated Sales and Use Tax Exclusion (“STE”) Amount ²
\$13,500,000	\$1,144,800

Estimated Net Benefit ³	Dollar Value	Points Earned
Estimated Fiscal Benefits	\$1,424,488	1,244
Estimated Environmental Benefits	N/A	60
Additional Benefits	N/A	124
Total	\$1,424,488	1,428
Estimated Quantifiable Net Benefit	\$279,688	N/A

Competitive Criteria Score: 149

Staff Recommendation: Approval

¹ All capitalized terms not defined in this document are defined in the STE Program’s statutes and regulations.

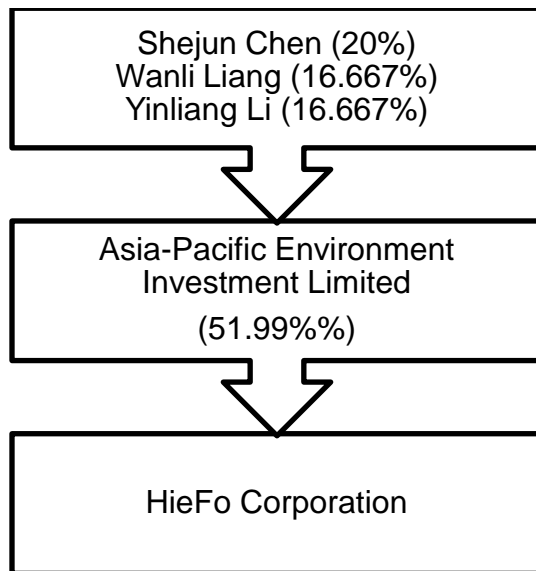
² This amount is calculated based on the average statewide sales tax rate of 8.48%.

³ Applications that earn a Total Score of at least 1,000 points and an Environmental Benefits Score of over 20 points may be recommended for approval. (California Code of Regulations Title 4, Division 13, Section 10033(c)(6).)

THE APPLICANT

HieFo Corporation (the “Applicant”) is a Delaware corporation that formed in 2023 with headquarters in Alhambra, Los Angeles County. The Applicant specializes in high-efficiency indium phosphide (“InP”) photonic devices for the optical communications and sensing industries by leveraging unique technologies and intellectual property in device design, epitaxial growth, and wafer processing. The Applicant’s product line includes high-power optical devices and chips which include: 1) Gain Chips and related modules, 2) IMDD/Coherent Light Laser Chips an related modules and 3) Photodiode Chips (Avalanche Photodiode (“APD”)/ Pin).

The ownership structure (10.0% or greater) of the Applicant is as follows:



The corporate officers of the Applicant are:

- Albert Lu, Chief Executive Officer
- Harry Moore, Chairman

THE PROJECT

HieFo Corporation requests a sales and use tax exclusion (“STE”) award to upgrade its existing semiconductor device manufacturing facility located in Alhambra (the “Project”).

According to the Applicant, it specializes in producing InP photonic devices that are sold to the optical communications and sensing industries. These devices include high-power optical devices and chips with increased reliability and efficiency (see Figure 1).



Figure 1: High Performance Chip Devices

The Applicant will be utilizing technologies in epitaxy, wafer processing, device design, and assembly. According to the Applicant, it relies heavily on micro and nanoelectronics technologies to produce gain chips and semiconductor lasers. For instance, during the epitaxial growth process, the Applicant utilizes an advanced additive manufacturing technique, such as the Metal-Organic Chemical Vapor Deposition (“MOCVD”), to create thin layers of semiconductor materials. The Applicant states a critical aspect of the Project will involve upgrading and enhancing the MOCVD environment. The current MOCVD system has an oxygen content that could pose challenges in producing aluminum-based materials crucial for high-power applications. By upgrading to a system that maintains a lower oxygen level, this will enable the Applicant to efficiently mass produce wave laser chips with higher power outputs ranging from 100 milliwatts to 200 milliwatts, without compromising reliability. The upgraded MOCVD system will also support the development of advanced laser applications by enabling precise control over elemental composition during the growth process. This is essential for producing lasers with enhanced performance characteristics, such as improved efficiency and reduced threshold currents.

Anticipated Costs of Qualified Property

Anticipated Qualified Property Purchases	Cost
Manufacturing Equipment, Machinery & Related Property	\$4,500,000
Metrology, Testing and QC Equipment & Related Property	\$1,500,000
Lab Devices & Scientific Instruments	\$1,000,000
Research & Development, Design, Engineering Property	\$2,500,000
Buildout/Construction, Upgrades & Improvements to Real Property	\$2,500,000
Logistics, Storage Systems & Related Property	\$1,000,000
IT & Computer Property	\$500,000
Total	\$13,500,000

Note: The Qualified Property purchases reported in the Application and shown here in the staff report are estimated costs. In accordance with the Regulatory Agreement, a finalized Project equipment list will be prepared detailing the value of the Project equipment actually acquired, and the estimated tax benefit realized pursuant to Revenue and Tax Code Section 6010.8. Variance from the costs shown in the Application and in this report may occur prior to the closing due to increased costs of certain components of the Project over original estimates, and other reasons. In addition, those costs may vary after closing due to increased costs, common design and equipment modifications during construction, differences in equipment due to future changes in statute or regulation, or for other reasons.

Timeline

According to the Applicant, it plans on purchasing additional design and manufacturing equipment to support the next generation of InP photonic devices and related equipment. The Applicant plans to enhance and expand its manufacturing facilities through 2028, which will involve further renovations to its expanding product manufacturing line and the development of additional research and development space for its engineers.

Status of Permits/Other Required Approvals

According to the Applicant, it has acquired all the necessary permits with the South Coast Air Quality Management District to operate the current production facility. However, additional permits will be required for equipment installation once the Applicant starts the procurement process.

COMPETITIVE CRITERIA SCORE

The Applicant received 149 Competitive Criteria points as follows:

1. **Environmental Benefits (0 of 100 points)**. The Application does not have a Recycled Resource Extraction Project or Project that produces an Advanced Transportation Technology or an Alternative Source product, component, or system. Therefore, no points are awarded.
2. **Unemployment (4 of 50 points)**. The Applicant's Project is located in Los Angeles County, which has an average annual unemployment rate of 5.5%.⁴ When compared to the statewide average annual unemployment rate of 5.3%, the Project location earned the Applicant four points.
3. **Job Creation (55 of 75 points)**. The Applicant anticipates the Project will support a total of 102 production-related jobs at its Facility. CAEATFA estimates that approximately 7.73 of these jobs will be attributable to a marginal increase in jobs created due to the STE. Based on the amount of STE per estimated number of jobs created, the Applicant earned 55 points.
4. **California Headquarters (15 of 15 points)**. The Applicant maintains its corporate headquarters in Alhambra, California, 15 points are awarded.
5. **Natural Disaster Relief (0 of 50 points)**. The Project is not to rebuild or relocate the Applicant's Facility due to a fire, flood, storm, or earthquake identified in a state of emergency proclaimed by the Governor within two years of the time of application, and, therefore, zero points are awarded.
6. **Eligibility for Manufacturing and Research and Development Equipment Exemption (0 of 50 points)**. The Applicant is eligible to use one or more of the

⁴ Unemployment rates are based on data available in October 2024.

exemptions established pursuant to Section 6377.1 of the Revenue and Taxation Code, and, therefore, zero points are awarded.

7. **Emerging Strategic Industry (75 of 75 points)**. The Project's industry, semiconductor devices, is in an Emerging Strategic Industry, as defined by CAEATFA, 75 points are awarded.

PROJECT EVALUATION

Project Benefits

The Project received a Total Score of 1,428 points, which exceeds the required 1,000-point threshold, and includes an Environmental Benefits Score of 60 points, exceeding the 20-point threshold.

1. **Fiscal Benefits (1,244 points)**. The net present value of the total fiscal benefits over the lifetime of the Qualified Property is derived from the Applicant's sales and use taxes, personal income taxes paid by the firm's employees, firm taxes on profits, property taxes, and other indirect fiscal benefits of the Applicant. The total fiscal benefits amount to \$1,424,488, resulting in a Fiscal Benefits score of 1,244.
2. **Environmental Benefits (60 points)**. The Project earned an Environmental Benefits Score of 60. The Applicant received points in the following categories:
 - A. **Energy Consumption (30 of 30 points)**. The Applicant anticipates the Project will result in a 55% reduction in energy consumption compared to the industry standard manufacturing process through the installation of LED lighting.
 - B. **Hazardous Waste (30 of 30 points)**. The Applicant anticipates the Project will result in a 30% reduction in the hazardous waste produced relative to the Applicant's previous manufacturing process. The Applicant is shifting its etching process from wet etching to dry etching, which will significantly decrease the reliance on HydroBromine and bromine in its manufacturing operations.
3. **Additional Benefits (124 points)**. Applicants may earn "Additional Benefits" points in the categories listed below. The Applicant received 124 Additional Benefits points.
 - A. **Production Jobs (55 of 75 points)**. The Applicant anticipates the Project will support a total of 102 production-related jobs at its Facility. CAEATFA estimates that approximately 7.73 of these jobs will be attributable to a marginal increase in jobs created due to the STE. Based on the amount of STE per estimated number of jobs created, the Applicant earned 55 points.
 - B. **Construction Jobs (0 of 75 points)**. The Applicant anticipates the Project will support a total of eight construction jobs at its Facility. CAEATFA estimates that approximately 0.57 of these jobs will be attributable to a marginal increase in jobs

created due to the STE. Based on the amount of STE per estimated number of jobs created, the Applicant earned zero points.

- C. Unemployment (4 of 50 points).** The Applicant's Project is located in Los Angeles County, which has an average annual unemployment rate of 5.5%. When compared to the statewide average annual unemployment rate of 5.3%, the Project location earned the Applicant four points.
- D. Benefits and Fringe Benefits (25 of 25 points).** The Applicant states it provides medical, health, dental & vision, bonuses, retirement contributions and paid leave to its employees, earning the Applicant 25 points.
- E. Emerging Strategic Industry (40 of 40 points).** The Project's industry, semiconductor devices, is in an Emerging Strategic Industry, as defined by CAEATFA, 40 points are awarded.

LEGAL STATUS QUESTIONNAIRE

The Applicant had nothing to report on the Legal Status Questionnaire.

CAEATFA FEES

In accordance with STE Program regulations,⁵ the Applicant paid CAEATFA an Application Fee of \$6,750 and will pay CAEATFA an Administrative Fee of up to \$54,000 should the Applicant be approved for an award.

RECOMMENDATION

Staff recommends the approval of Resolution No. 25-SM028-01 for HieFo Corporation's purchase of qualifying tangible personal property in an amount not to exceed \$13,500,000, anticipated to result in an approximate STE value of \$1,144,800. The initial term of the Regulatory Agreement will be for a period of three years, until June 17, 2028, and the remainder shall be for a period of six years, until June 17, 2031, for providing annual compliance reports.

⁵ California Code of Regulations Title 4, Division 13, Section 10036

**RESOLUTION APPROVING AND AUTHORIZING EXECUTION OF A
REGULATORY AGREEMENT WITH HIEFO CORPORATION**

June 17, 2025

WHEREAS, the California Alternative Energy and Advanced Transportation Financing Authority (the “Authority”) has received the Application of **HieFo Corporation** (the “Applicant”) for financial assistance under the Sales and Use Tax Exclusion Program, as established in Public Resources Code Section 26011.8; and

WHEREAS, the Applicant qualifies as a Participating Party under Public Resources Code Section 26011.8 and Revenue and Taxation Code Section 6010.8; and

WHEREAS, the Applicant’s qualifying tangible personal property meets the requirements of a Project under Public Resources Code Section 26011.8 and Revenue and Taxation Code Section 6010.8 (the “Project”); and

WHEREAS, after the Authority approves an Application, the Authority enters into a Regulatory Agreement, as described in Authority Regulations Section 10035(a), with the Applicant for the Project; and

WHEREAS, the Applicant has stated the Project has an estimated cost not to exceed \$13,500,000 over a period of three (3) years; and

WHEREAS, the Applicant asserts that this form of financial assistance will enable it to avail itself of the benefits of an exclusion from sales and use taxes relative to the Project pursuant to Revenue and Taxation Code Section 6010.8; and

WHEREAS, the approval of the terms of the Regulatory Agreement and authority for the Executive Director or Chair of the Authority to execute the necessary documents to effectuate the Regulatory Agreement is now sought;

NOW, THEREFORE, BE IT RESOLVED by the California Alternative Energy and Advanced Transportation Financing Authority, as follows:

Section 1. The Regulatory Agreement includes a Project within the meaning of Public Resources Code Section 26003(a)(8)(B).

Section 2. The Regulatory Agreement constitutes financial assistance within the meaning of Public Resources Code Section 26003(a)(6).

Section 3. The Applicant is a participating party within the meaning of Public Resources Code Section 26003(a)(7).

Section 4. The Executive Director or Chair of the Authority (the “Authorized Signatories”) are hereby authorized for and on behalf of the Authority to approve any changes to the Project as the Authorized Signatories deem appropriate, provided that

the amount of the qualifying tangible personal property to be purchased for the Project may not be increased above the amount approved by the Authority.

Section 5. The proposed form of the Regulatory Agreement between the Applicant and the Authority, as filed with the Authority prior to this public meeting, is hereby approved. For, on behalf and in the name of the Authority, the Authorized Signatories are hereby authorized and directed to execute, acknowledge, and deliver to the Applicant the Regulatory Agreement in substantially the form filed with or approved by the Authority.

The Regulatory Agreement may contain insertions, deletions or changes as the Authorized Signatories executing the Regulatory Agreement may require or approve, including particular information inserted in substantial conformance with the staff summary and in the Application to the Authority. The approval of the Regulatory Agreement will be conclusively evidenced by the execution and delivery of the final Regulatory Agreement.

The Authority understands and agrees that, pursuant to the terms of the Regulatory Agreement, the obligations of the Applicant, under some circumstances, may be carried out or assumed by a successor or assignee entity, or by an affiliate of the Applicant.

Section 6. Each of the Authorized Signatories, acting alone, is hereby authorized and directed to do any and all ministerial acts, including, without limitation, the execution and delivery of any and all documents and certificates they may deem necessary or advisable to consummate the Regulatory Agreement and otherwise effectuate the purposes of this Resolution.

Section 7. The Applicant shall ensure that all of the qualifying tangible personal property acquired as part of the Project that is listed in the semi-annual reports provided to the Authority pursuant to the Regulatory Agreement will be installed, maintained and operated in compliance with all applicable local, state and federal laws.

Section 8. The Regulatory Agreement shall only apply to qualifying tangible personal property acquired as part of the Project that the Applicant certifies will be installed, maintained and operated at facilities physically located within the State of California.

Section 9. Neither the adoption by the Authority of this Resolution for the Applicant nor the Regulatory Agreement may be referred to in any application before any governmental agency as evidence of the feasibility, practicality or suitability of the Project and may not be referred to in any application for any required permission or authority to acquire, construct or operate the Project.

Section 10. This Resolution is effective immediately and will remain in full force and effect unless the Regulatory Agreement is not executed within thirty (30) days of

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the date of this Resolution. The Executive Director may extend the thirty (30) days if necessary.