

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

Request to Approve Project for Sales and Use Tax Exclusion (STE)¹

**Efficient Drivetrains, Inc.
Application No. 15-SM006**

June 16, 2015

Prepared By: *James Shimp*

SUMMARY

Applicant – Efficient Drivetrains, Inc.

Location – Milpitas, Santa Clara County and Dixon, Solano County

Industry – Electric Vehicle Drivetrain Manufacturing

Project – Expansion of Electric Vehicle Drivetrain Manufacturing Facility

Value of Qualified Property – \$5,008,800

Estimated Sales and Use Tax Exclusion Amount² – \$421,741

Estimated Net Benefits – \$1,983,797

Application Score³ –

Fiscal Benefits Points:	2,302
<u>Environmental Benefits Points:</u>	<u>3,401</u>
Net Benefits Score:	5,704

<u>Additional Benefits Points:</u>	<u>90</u>
Total Score:	5,794

Staff Recommendation – Approval

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

² This amount is calculated based on the average statewide sales tax rate of 8.42%.

³ Point values in the staff summary may not add up correctly due to rounding in the Application worksheet.

THE APPLICANT

Efficient Drivetrains, Inc. (“EDI” or the “Applicant”) was founded in April 2006 as a Research and Development Partnership with the University of California, Davis Hybrid Electric Vehicle Center. EDI develops, manufactures, and markets a range of proprietary drivetrain products and technologies for direct application in zero emission vehicles (ZEVs), including battery electric vehicles (BEVs), zero emission electric vehicles with range extension capabilities, and plug in hybrid electric vehicles (PHEVs).

The major shareholders (10.0% or greater) of Efficient Drivetrains, Inc. are:

- Joerg Ferchau, 17%
- Andy Frank, 18%
- Stuart Kaler, 11.4%

The corporate officers of Efficient Drivetrains, Inc. are:

- Joerg Ferchau, Chief Executive Officer
- Andrew A Frank, Treasurer and Chief Financial Officer
- Laurie A Miller, Vice President and Secretary

THE PROJECT

EDI plans to expand its electric drivetrain manufacturing operations by opening a new 30,000 square foot facility in Milpitas that will manufacture drive and powertrain components for light, medium and heavy-duty alternative fuel vehicles (the “Project”). EDI’s range of products includes prototype and production drivetrains, demonstration/proof of concept vehicles, master software, clutching systems and controls, continuously variable transmission technology, battery modules, electric motors, and charging systems.

The expansion will allow the Applicant to meet demand among existing US customers, including PG&E, Siemens, Moore Fans, Duke Energy, VanDyne, Toyota, Ford, GreenKraft, Ankai, Shaanxi Automotive, and others. The facility will also allow the Applicant to accelerate manufacturing for export to committed, strategic global partners in China, Canada, India and Taiwan. According to the Applicant, the facility will be one of the largest of its type in the United States. EDI also operates its “North American Hybrid and Electric Vehicle Support Center” in Dixon, California. Both facilities are engaged in the manufacture, testing, and demonstration of electric drivetrain technology. The Qualified Property is anticipated to be located at the Milpitas facility, though some transfer between the two facilities may be possible, as they are engaged in producing the same qualified products.

ANTICIPATED COSTS OF QUALIFIED PROPERTY

The anticipated Qualified Property purchases are listed below:

MIG (Metal Inert Gas) Welder	\$	20,000
CNC(Computer Numerical Control) Mill for machining		60,000
Lathe		20,000
CMM (Coordinate Measuring Machine) Measuring Tool		15,000
Automotive Tool Sets and Equipment		196,000
High Voltage Equipment		30,000
Power Infrastructure Equipment		20,000
Machine Foundations		20,000
Safety Equipment		10,000
Dyno (Dynonometer) Cell		50,000
Equipment Shelve		40,000
Battery Storage		40,000
Hazard Material Storage		20,000
Office Equipment		40,000
Redundant Server Infrastructure		30,000
4 Wheel Drive Chassis Dyno 1000 kw		604,800
Drivetrain Dynamometer		800,000
Vehicle Lift-Light Duty		60,000
Vehicle Lift-Post Heavy Duty		180,000
Overhead Crane		80,000
Emission Test Equipment		208,000
Fork Lift		60,000
Equipment Transport (TRUCK)		342,000
Transmission Dynamometer		390,000
Battery Test Equipment		800,000
Drivetrain Installation Equipment		16,000
Movable Cranes		3,000
Compressed Air Supply Equipment		57,000
CAD (Computer Aided Design) Software		150,000
Engineering Analysis Equipment and Tools		255,000
Simulation Equipment and Tools		100,000
ERP (Enterprise Resource Planning) Software (Software)		185,000
Building Controls		7,000
Building Way-Finding Equipment		100,000
	\$	<u>5,008,800</u>

Note: The Qualified Property purchases reported in the Application and shown here in staff's report are estimated costs. At the termination of the master regulatory agreement a finalized project equipment list will be prepared detailing the value of the Project equipment acquired and detailing the actual 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, such costs may vary after closing due also to increased costs, as well as common design and equipment modifications during construction, differences in equipment due to future changes in law or regulation, or for other reasons.

TIMELINE

EDI plans to complete installation and commissioning of all equipment at the new facility by November 2016.

PROJECT EVALUATION

NET BENEFITS

The total cost of the Qualified Property purchases is anticipated to be \$5,008,800 and the total net benefits are valued at \$1,983,797 for the Project. The Project received a Total Score of 5,884 points, which exceeds the required 1,000 point threshold and a total Environmental Benefits Score of 3,401 points, which exceeds the 100 point threshold.

- A. **Fiscal Benefits (2,302 points)**. The net present value of the total fiscal benefits over the lifetime of the Qualified Property is derived from the Applicant's sales taxes, personal income taxes paid by the firm's employees, firm taxes on profits, property taxes and other indirect fiscal benefits of the Applicant which amounts to \$970,990 resulting in a Fiscal Benefits score of 2,302 points for the Project.
- B. **Environmental Benefits (3,401 points)**. The Project will result in \$1,434,548 of total pollution benefits over the life of the Facility resulting in an Environmental Benefits Score of 3,401 points for the Project. These benefits derive from the manufacturing of electric vehicles since these vehicles deliver a net reduction in energy consumption and CO2 emissions relative to a comparable gasoline powered vehicle.
- C. **Additional Benefits (90 points)**. Applicants may earn additional points for their Total Score. The applicant submitted information and received 180 additional points.
 1. **Permanent Jobs (55 of 75 points)**. The Applicant's Project will support a total of 49 permanent jobs at its Facility. CAEATFA estimates that approximately three of these jobs will be attributable to a marginal increase in jobs created due to the approved STE resulting in a Permanent Jobs Score of 55 points for the Project.
 2. **Construction Jobs (20 of 75 points)**. The Applicant's Project will support a total of eight construction jobs at its Facility. CAEATFA estimates that approximately one of these jobs will be attributable to a marginal increase in jobs created due to the approved STE resulting in a Construction Jobs Score of 20 points for the Project.

3. **Non-CA Environmental Benefits (15 of 40 points)**. The Applicant's total value of out-of-state non-greenhouse gas pollution benefits are valued at \$12,851 resulting in a Non-CA Environmental Benefits Score of 15 points for the Project.

STATUS OF PERMITS/OTHER REQUIRED APPROVALS

EDI has all required permits for the project.

LEGAL QUESTIONNAIRE

Staff reviewed the Applicant's responses to the questions contained in the Legal Status portion of the Application. The responses did not disclose any information that raises questions concerning the financial viability or legal integrity of this Applicant.

CAEATFA FEES

In accordance with CAEATFA Regulations, the Applicant has paid CAEATFA an Application Fee of \$2,504.40 and will pay CAEATFA an Administrative Fee up to \$20,035.20.⁴

RECOMMENDATION

Staff recommends approval of Resolution No. 15-SM006 for Efficient Drivetrains, Inc.'s purchase of Qualified Property in an amount not to exceed \$5,008,800 anticipated to result in an approximate sales and use tax exclusion value of \$421,741.

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

**RESOLUTION APPROVING AND AUTHORIZING EXECUTION OF A MASTER
REGULATORY AGREEMENT WITH EFFICIENT DRIVETRAINS, INC.**

June 16, 2015

WHEREAS, the California Alternative Energy and Advanced Transportation Financing Authority (the “Authority” or “CAEATFA”) has received the Application of **Efficient Drivetrains, Inc.** (the “Applicant”), for financial assistance in the form of a master regulatory agreement (the “Agreement”) regarding tangible personal property utilized in an Advanced Manufacturing process or for the design, manufacture, production or assembly of Advanced Transportation Technologies or Alternative Source products, components, or systems (“Qualified Property”) as more particularly described in the staff summary and in the Applicant’s Application to the Authority (collectively, the “Project”); and

WHEREAS, the Applicant has requested the Authority to enter into the Agreement to acquire Project equipment with an estimated cost not to exceed \$5,008,800 over a period of three years; and

WHEREAS, the Applicant believes 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 Qualified Property pursuant to California Revenue and Taxation Code Section 6010.8; and

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

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

Section 1. The Project constitutes a “project” within the meaning of Public Resources Code Section 26003(a)(8)(B).

Section 2. The requested master 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, Deputy 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 Executive Director shall deem appropriate, provided that the amount of the Qualified Property to be purchased may not be increased above the amount approved by the Authority.

Agenda Item – 4.A.3
Resolution No. 15-SM006
Application No. 15-SM006

Section 5. The proposed form of the Agreement between the Applicant and the Authority, as filed with the Authority prior to this meeting, is hereby approved. The Authorized Signatories are hereby authorized and directed, for and on behalf and in the name of the Authority, to execute, acknowledge and deliver to the Applicant the Agreement in substantially the form filed with or approved by the Authority, with such insertions, deletions or changes therein as the Authorized Signatory executing the same may require or approve, and with particular information inserted therein in substantial conformance with the staff summary and in the Applicant's Application to the Authority, such approval to be conclusively evidenced by the execution and delivery thereof. The Authority understands and agrees that pursuant to the terms of the Agreement, the obligations of the Applicant may, under some circumstances, 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 in order to consummate the Agreement and otherwise effectuate the purposes of this Resolution.

Section 7. The Applicant shall assure CAEATFA that all Qualified Property listed in the semi-annual reports pursuant to the Agreement shall be installed, maintained and operated in compliance with all applicable local, state and federal laws.

Section 8. The Agreement shall only apply to Qualified Property that the Applicant certifies will be installed, maintained and operated at facilities within the State of California.

Section 9. The adoption by the Authority of this Resolution for the Applicant shall not be referred to in any application before any governmental agency as evidence of the feasibility, practicality or suitability of the Project or 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, as defined in CAEATFA Regulations Section 10035(a), is not executed within thirty (30) days of the date of this Resolution. The Executive Director may extend the thirty days if necessary.