

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

*Request to Approve Project for Sales and Use Tax Exclusion (STE)<sup>1</sup>*

**XT Green, Inc.  
Application No. 16-SM026**

**December 13, 2016**

Prepared By: *Ellen Hildebrand, Analyst*

**SUMMARY**

**Applicant** – XT Green, Inc.

**Location** – Corona, Riverside County

**Industry** – Advanced Carpet Recycling

**Project** – Construction of an advanced carpet recycling and manufacturing facility (Advanced Manufacturing)

**Value of Qualified Property** – \$8,970,500

**Estimated Sales and Use Tax Exclusion Amount<sup>2</sup>** – \$755,316

**Application Score** –

Fiscal Benefits Points:	2,993
<u>Environmental Benefits Points:</u>	<u>110</u>
<b>Net Benefits Score:</b>	<b>3,103</b>
<u>Additional Benefits Points:</u>	<u>91</u>
<b>Total Score:</b>	<b>3,194</b>

**Staff Recommendation** – Approval

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

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

**THE APPLICANT**

XT Green was founded in 2013 for the purpose of developing an alternative carpet recycling system to manufacture byproducts such as nylon and polypropylene. Carpet recycling has historically had limited success in the United States due to current technologies that produce poor quality recycled material, low yields, large amounts of waste, and air-pollution-related employee health problems. XT Green has developed a new patent-pending advanced manufacturing processing system that resolves these issues. The innovative technology was demonstrated through pilot testing in 2015, and XT Green is currently planning to bring the new system to scale in its first carpet recycling facility.

The major shareholders (10.0% or greater) of XT Green are:  
Hui Yang, 50%  
Chongyu Tian, 50%

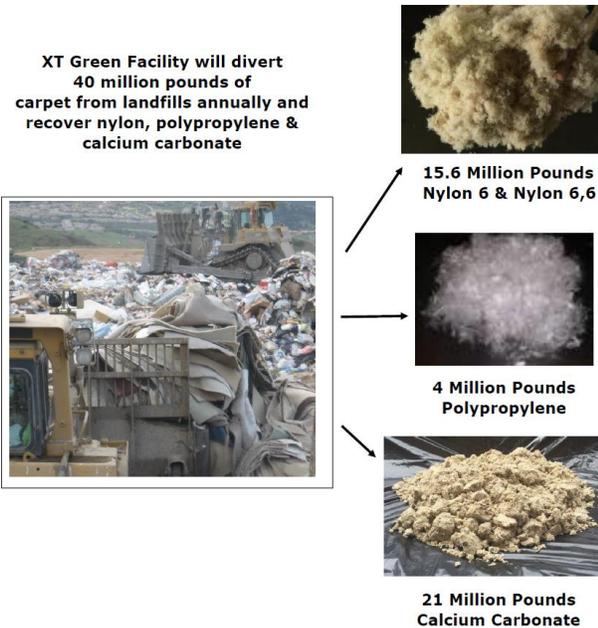
The corporate officers of XT Green are:  
Frank Lu, Chief Executive Officer  
Gail Brice, Vice President  
Chongyu Tian, Chief Financial Officer  
Hui Yang, Secretary

**THE PROJECT**

XT Green’s new advanced carpet recycling facility, EarthCare Carpet Recycling (the “Project”), will be located in a new 81,000 square foot building in Riverside County. Opening is planned for March 2017. The Applicant represents that the facility will process approximately 4 million pounds of post-consumer carpet per month and produce recycled raw materials (see Figure 1).

Currently, only 10% of the post-consumer carpet that is discarded in California is being recycled due to economic and technological limitations. XT Green overcomes these limitations through its new advanced carpet recycling technology. The new technology used by the Project will protect the health of its employees by eliminating the respirable particulate problem common to conventional carpet recycling facilities. This is achieved through a new process which size reduces rather than shreds the carpet and processes it in a wet pulper. The wet processing technology used will also allow ash to be more easily removed. Because of these advancements, the recycled material output will be a higher quality recycled material than the current industry standard.

*Figure 1: XT Green Carpet Recycling Output*



*Figure 2: Example Products Made From Recycled Raw Materials*



XT Green’s advanced manufacturing process also achieves higher yields than the industry standard, allowing more recycled raw materials to be manufactured. Conventional carpet recycling technologies achieve a 40% yield, generating 60% production waste that must be sent to landfill. XT Green’s advanced manufacturing process will achieve a 90% yield, generating only 10% production waste. The Applicant represents that this is a record high yield which allows for a higher recycled raw material yield. The recycled raw materials generated by XT Green are manufactured into pellets, which can then be used by other California manufacturers to create products (See Figure 2).

**ANTICIPATED COSTS OF QUALIFIED PROPERTY**

The anticipated Qualified Property purchases are listed below:

Recycled Feedstock In-Feed Section Equipment	\$ 55,000
Gross Size Reduction Equipment	590,000
Metering and Weighing Equipment	235,000
Pulping Operation Equipment	1,357,500
Pulping Wash & Dewater Equipment	210,000
Fiber Cutting Equipment	555,500
Cut Fiber Wash & Dewater Equipment	220,000
Fiber Separation Equipment	1,305,000
Polypropylene Dewater, Drying, Baler & Packaging Equipment	625,500
Nylon Drying, Baler & Packaging Equipment	452,000
Pelletizers	1,500,000
Water Treatment & Recycling Equipment	790,000
Auxiliary & Support Equipment	495,000
Installation Supplies	425,000
<b>Total</b>	<b><u>\$8,970,500</u></b>

*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**

The new XT Green carpet recycling facility in Corona is planned to open in March 2017. Procurement of long-lead-time equipment is underway. This equipment is expected to arrive in January 2017, with equipment testing expected to occur in February 2017.

## **PROJECT EVALUATION**

### **NET BENEFITS**

The total cost of the Qualified Property purchases is anticipated to be \$8,970,500. The Project received a Total Score of 3,194 points, which exceeds the required 1,000 point threshold and a total Environmental Benefits Score of 110 points, which exceeds the 20 point threshold.

- A. Fiscal Benefits (2,993 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 \$2,260,835 resulting in a Fiscal Benefits score of 2,993 points for the Project.
- B. Environmental Benefits (110 points).** The Project will result in an Environmental Benefits Score of 110 points. The Applicant received points in the following categories:

  - 1. Environmental Sustainability Plan (20 of 20 points).** The Applicant will implement an environmental sustainability for its Project that it represents will result in significantly reduced air pollution, protected employee health, minimized waste generation, and reduced energy requirements.
  - 2. Energy Consumption (30 of 30 points).** The Applicant represents that its manufacturing process will result in a 65% reduction in energy consumption relative to the industry standard manufacturing process.
  - 3. Solid Waste (30 of 30 points).** The Applicant represents that its manufacturing process will result in an 83% reduction in solid waste produced relative to the industry standard manufacturing process.
  - 4. Air Pollutants (30 of 30 points).** The Applicant represents that its manufacturing process will result in a 100% reduction in air pollutants produced relative to the industry standard manufacturing process.

C. **Additional Benefits (91 points)**. Applicants may earn additional points for their Total Score. The applicant submitted information and received 91 additional points.

1. **Permanent Jobs (45 of 75 points)**. The Applicant represents that the Project will support a total of 60 permanent jobs at its Facility. CAEATFA estimates that approximately five 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 45 points for the Project.
2. **Construction Jobs (30 of 75 points)**. The Applicant represents that the Project will support a total of 24 construction jobs at its Facility. CAEATFA estimates that approximately two 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 30 points for the Project.
3. **Unemployment (16 of 50 points)**. The Applicant's Project is located in Riverside County which has an average annual unemployment rate of 9%. This is above 110% of the statewide average annual unemployment rate which was 7.5% in 2014, the dataset used in the application. This results in an Unemployment Score of 16 points for this Project.

## **STATUS OF PERMITS/OTHER REQUIRED APPROVALS**

The Applicant represents that they have submitted or plan to submit South Coast Air Quality Management District, CalRecycle Solid Waste Management, and Sewer Discharge permit applications. XT Green represents that their staff are experienced in securing necessary permits and approvals and do not anticipate any issues.

## **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,<sup>3</sup> the Applicant has paid CAEATFA an Application Fee of \$4,485 and will pay CAEATFA an Administrative Fee of up to \$35,882.

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<sup>3</sup> California Code of Regulations Title 4, Division 13, Section 10036

**RECOMMENDATION**

Staff recommends approval of Resolution No. 16-SM026 for XT Green’s purchase of Qualified Property in an amount not to exceed \$8,970,500 anticipated to result in an approximate sales and use tax exclusion value of \$755,316.

**RESOLUTION APPROVING AND AUTHORIZING EXECUTION OF A MASTER  
REGULATORY AGREEMENT WITH XT GREEN, INC.**

December 13, 2016

WHEREAS, the California Alternative Energy and Advanced Transportation Financing Authority (the “Authority” or “CAEATFA”) has received the Application of **XT Green, Inc.** (the “Applicant”), for financial assistance in the form of a master regulatory agreement (the “Agreement”) regarding tangible personal property utilized to process Recycled Feedstock, 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 \$8,970,500 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. 16-SM026**  
**Application No. 16-SM026**

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.