California Alternative Energy and Advanced Transportation Financing Authority (CAEATFA)

Sales and Use Tax Exclusion Program

Presented by: Melanie Holman, Program Analyst

California State Treasurer’s Office
The STE Program excludes purchases of eligible manufacturing equipment and machinery from state and local sales and use tax, a savings of 8-10%.

Authorized to award up to $100 million in STE each calendar year.

Program is currently set to sunset January 1, 2021.

Purpose of the program is to promote:

- California-based jobs
- California-based manufacturing
- Advanced manufacturing
- Reduction in greenhouse gas emissions
- Reduction in air and water pollution
- Reduction in energy consumption
Program Statutory History

SB 71 (Padilla, 2010) - Authorized CAEATFA to provide an STE on equipment and machinery used to manufacture Alternative Source products and Advanced Transportation Technologies

SB 1128 (Padilla, 2012) - Expanded eligibility to Advanced Manufacturing

AB 199 (Eggman, 2015) - Expanded eligibility to equipment utilizing or processing Recycled Feedstock
## Eligible Manufacturers

### Advanced Manufacturing
Manufacturing process must be more advanced and sustainable (greener manufacturing process)
- Aerospace
- Biopharmaceuticals
- Additive Manufacturing
- Nanotechnology

### Alternative Source Products
Sources of fuel or energy that replace fossil fuel sources and energy efficiency products
- Solar PV manufacturers
- Biofuels and Biogas
- Renewable Hydrogen

### Advanced Transportation Technologies
Commercially competitive transportation technologies that enhance the energy conservation, GHG reduction, and transportation efficiency
- Electric vehicles and drivetrains
- Hydrogen vehicles

### Recycled Feedstock
At least 50% of equipment’s use is either to process recycled feedstock that is intended to be reused in the production of another product or using recycled feedstock in the production of another product or soil amendment
- Materials recovery facilities
- Tire recyclers
- Organics/composting
Evaluation - Net Benefit to the State

Projects must provide a net benefit to the State as determined by the marginal increase in equipment purchased and ultimate production by the applicant.

Types of Benefits

- **Fiscal Benefits**: Increased corporate/income and sales tax revenue from the marginal increase in production and sales, and indirect fiscal benefits.
- **Environmental Benefits**: Estimated benefits from pollution reduction including reduced greenhouse gas emissions.
- **Other Benefits**:  
  - Area of high unemployment  
  - Number of Jobs  
  - R&D in CA  
  - Workforce partnerships

Plus:

- Applications must receive a total score of 1,000 or more points.
- Applications must receive an environmental score of at least 20 points.
Applications due on the third Friday of every month
Board meets third Tuesday of every month

Application Submission
- Application submitted 60 days prior to a monthly Board meeting.
- Application Fee of 0.05% of Qualified Property (QP).
- Two-part application process: Part A (Narrative) & Part B (Spreadsheet)

Application Evaluation
- Staff reviews application.
- Applicant responds to staff questions.
- Project evaluated based on fiscal and environmental benefits to State.
- Staff makes recommendation whether to approve application.

CAEATFA Board Review
- Board reviews staff recommendation and votes at Board meeting.
- Board resolution authorizes Executive Director to enter into a legal agreement with the applicant.

Post-Approval Process
- Enters into legal agreement with CAEATFA.
- Administrative fee of 0.4% of QP.
- Semi-annual reporting of purchases.
- Annual compliance reports.
- 3 Years to purchase equipment (standard).
- 15% of QP must be purchased within 1 year.
Fees and Savings

Sample Fees and Estimated Net Savings

- **Application Fee**: 0.05% of the Qualified Property amount identified in the Application (minimum $250, maximum $10,000)
- **Administrative Fee**: 0.4% of the Qualified Property amount approved by the Board (minimum $15,000, maximum $350,000)

<table>
<thead>
<tr>
<th>Qualified Property Amount</th>
<th>$1,200,000</th>
<th>$15,000,000</th>
<th>$230,000,000</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Application Fee</strong></td>
<td>$600</td>
<td>$7,500</td>
<td>$10,000</td>
</tr>
<tr>
<td><strong>Maximum Administrative Fee</strong></td>
<td>$15,000</td>
<td>$60,000</td>
<td>$350,000</td>
</tr>
<tr>
<td><strong>Estimated Sales and Use Tax Excluded</strong>*</td>
<td>$100,320</td>
<td>$1,254,000</td>
<td>$19,228,000</td>
</tr>
<tr>
<td><strong>Estimated Net Savings</strong></td>
<td>$84,720</td>
<td>$1,186,500</td>
<td>$18,868,000</td>
</tr>
</tbody>
</table>

*Estimated tax and savings are based on a statewide average sales tax rate of 8.36%. Actual taxes and savings may vary.
Program Impact

- As of December 31, 2017, CAEATFA has approved 167 projects.
Program Impact

- The Program’s active or completed projects were approved for a total of $5.51 billion in Qualified Property Purchases, estimated at $462.23 million in STE.

- Estimated Benefits of these projects:

<table>
<thead>
<tr>
<th>Benefit Type</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fiscal Benefits</td>
<td>$763.68 Million</td>
</tr>
<tr>
<td>Environmental Benefits</td>
<td>$100.03 Million</td>
</tr>
<tr>
<td>Quantifiable Net Benefit</td>
<td>$214.96 Million</td>
</tr>
<tr>
<td>Total Jobs Retained or Created</td>
<td>33,921</td>
</tr>
<tr>
<td>Total Jobs Attributable to STE</td>
<td>1,879</td>
</tr>
</tbody>
</table>
CAEATFA Manufacturing Sales and Use Tax Exclusion Program

Melanie Holman, Program Analyst
mholman@sto.ca.gov
(916) 651-5103

Or

Xee Moua, Program Analyst
xmoua@sto.ca.gov
(916) 653-3303

For more information:

- Website: http://www.treasurer.ca.gov/caeatfa/ste/index.asp
Talking about two programs today:

1. Sales Tax Exclusion Program for Manufacturers
2. Energy Efficiency Financing Pilot Programs
   - Residential, small business, affordable multi-family, large commercial and municipal buildings
California Alternative Energy and Advanced Transportation Financing Authority (CAEATFA)

Sales and Use Tax Exclusion Program

Presented by: Melanie Holman, Program Analyst

California State Treasurer’s Office
The STE Program excludes purchases of eligible manufacturing equipment and machinery from state and local sales and use tax, a savings of 8-10%.

Authorized to award up to $100 million in STE each calendar year.

Program is currently set to sunset January 1, 2021.

Purpose of the program is to promote:

- California-based jobs
- California-based manufacturing
- Advanced manufacturing
- Reduction in greenhouse gas emissions
- Reduction in air and water pollution
- Reduction in energy consumption
Program Statutory History

SB 71 (Padilla, 2010) - Authorized CAEATFA to provide an STE on equipment and machinery used to manufacture Alternative Source products and Advanced Transportation Technologies

SB 1128 (Padilla, 2012) - Expanded eligibility to Advanced Manufacturing

AB 199 (Eggman, 2015) - Expanded eligibility to equipment utilizing or processing Recycled Feedstock
## Eligible Manufacturers

<table>
<thead>
<tr>
<th>Advanced Manufacturing</th>
<th>Aerospace</th>
<th>Biopharmaceuticals</th>
<th>Additive Manufacturing</th>
<th>Nanotechnology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing process must be more advanced and sustainable (greener manufacturing process)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Alternative Source Products</th>
<th>Solar PV manufacturers</th>
<th>Biofuels and Biogas</th>
<th>Renewable Hydrogen</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sources of fuel or energy that replace fossil fuel sources and energy efficiency products</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Advanced Transportation Technologies</th>
<th>Electric vehicles and drivetrains</th>
<th>Hydrogen vehicles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercially competitive transportation technologies that enhance the energy conservation, GHG reduction, and transportation efficiency</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Recycled Feedstock</th>
<th>Materials recovery facilities</th>
<th>Tire recyclers</th>
<th>Organics/composting</th>
</tr>
</thead>
<tbody>
<tr>
<td>At least 50% of equipment’s use is either to process recycled feedstock that is intended to be reused in the production of another product or using recycled feedstock in the production of another product or soil amendment</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Notes:
- **Advanced Manufacturing**
  - Aerospace
  - Biopharmaceuticals
  - Additive Manufacturing
  - Nanotechnology

- **Alternative Source Products**
  - Solar PV manufacturers
  - Biofuels and Biogas
  - Renewable Hydrogen

- **Advanced Transportation Technologies**
  - Electric vehicles and drivetrains
  - Hydrogen vehicles

- **Recycled Feedstock**
  - Materials recovery facilities
  - Tire recyclers
  - Organics/composting
Evaluation - Net Benefit to the State

Projects must provide a net benefit to the State as determined by the marginal increase in equipment purchased and ultimate production by the applicant.

<table>
<thead>
<tr>
<th>Types of Benefits</th>
<th>Plus:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fiscal Benefits:</td>
<td>Applications must receive a total score of 1,000 or more points.</td>
</tr>
<tr>
<td></td>
<td>Environmental Benefits: Estimated benefits from pollution reduction</td>
</tr>
<tr>
<td></td>
<td>including reduced greenhouse gas emissions.</td>
</tr>
<tr>
<td>Other Benefits:</td>
<td>Applications must receive an environmental score of at least 20</td>
</tr>
<tr>
<td></td>
<td>points.</td>
</tr>
<tr>
<td></td>
<td>• Area of high unemployment</td>
</tr>
<tr>
<td></td>
<td>• Number of Jobs</td>
</tr>
<tr>
<td></td>
<td>• R&amp;D in CA</td>
</tr>
<tr>
<td></td>
<td>• Workforce partnerships</td>
</tr>
</tbody>
</table>
Application Process

- Applications due on the third Friday of every month
- Board meets third Tuesday of every month

Application Submission
- Application submitted 60 days prior to a monthly Board meeting.
- Application Fee of 0.05% of Qualified Property (QP).
- Two-part application process: Part A (Narrative) & Part B (Spreadsheet)

Application Evaluation
- Staff reviews application.
- Applicant responds to staff questions.
- Project evaluated based on fiscal and environmental benefits to State.
- Staff makes recommendation whether to approve application.

CAEATFA Board Review
- Board reviews staff recommendation and votes at Board meeting.
- Board resolution authorizes Executive Director to enter into a legal agreement with the applicant.

Post-Approval Process
- Enters into legal agreement with CAEATFA.
- Administrative fee of 0.4% of QP.
- Semi-annual reporting of purchases.
- Annual compliance reports.
- 3 Years to purchase equipment (standard).
- 15% of QP must be purchased within 1 year.
Fees and Savings

Sample Fees and Estimated Net Savings

- **Application Fee**: 0.05% of the Qualified Property amount identified in the Application (minimum $250, maximum $10,000)
- **Administrative Fee**: 0.4% of the Qualified Property amount approved by the Board (minimum $15,000, maximum $350,000)

<table>
<thead>
<tr>
<th>Qualified Property Amount</th>
<th>$1,200,000</th>
<th>$15,000,000</th>
<th>$230,000,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Fee</td>
<td>$600</td>
<td>$7,500</td>
<td>$10,000</td>
</tr>
<tr>
<td>Maximum Administrative Fee</td>
<td>$15,000</td>
<td>$60,000</td>
<td>$350,000</td>
</tr>
<tr>
<td>Estimated Sales and Use Tax Excluded*</td>
<td>$100,320</td>
<td>$1,254,000</td>
<td>$19,228,000</td>
</tr>
<tr>
<td>Estimated Net Savings</td>
<td>$84,720</td>
<td>$1,186,500</td>
<td>$18,868,000</td>
</tr>
</tbody>
</table>

*Estimated tax and savings are based on a statewide average sales tax rate of 8.36%. Actual taxes and savings may vary.*
Program Impact

- As of December 31, 2017, CAEATFA has approved 167 projects.
Program Impact

- The Program’s active or completed projects were approved for a total of $5.51 billion in Qualified Property Purchases, estimated at $462.23 million in STE.

- Estimated Benefits of these projects:

<table>
<thead>
<tr>
<th>Category</th>
<th>Benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fiscal Benefits</td>
<td>$763.68 Million</td>
</tr>
<tr>
<td>Environmental Benefits</td>
<td>$100.03 Million</td>
</tr>
<tr>
<td>Quantifiable Net Benefit</td>
<td>$214.96 Million</td>
</tr>
<tr>
<td>Total Jobs Retained or Created</td>
<td>33,921</td>
</tr>
<tr>
<td>Total Jobs Attributable to STE</td>
<td>1,879</td>
</tr>
</tbody>
</table>
CAEATFA Manufacturing Sales and Use Tax Exclusion Program

Melanie Holman, Program Analyst
mholman@sto.ca.gov
(916) 651-5103

Or

Xee Moua, Program Analyst
xmoua@sto.ca.gov
(916) 653-3303

For more information:

▶ Website: http://www.treasurer.ca.gov/caeatfa/ste/index.asp
Energy Efficiency Financing for All
Programs developed by the State of California
California will only achieve its building energy reduction goals through leveraging private capital

California Legislature has set ambitious climate change mitigation goals:

**AB 32**  Required state to **reduce its GHG emissions** to 1990 levels by 2020.

**AB 758**  recognized the need for California to address climate change through **reduced energy consumption in existing buildings** (residential, commercial, and public).

**AB 802**  authorized energy efficiency programs to **bring existing buildings up to current code** and creates a building energy-use benchmarking and disclosure.

**SB 350**  required doubling of the state’s **energy efficiency savings by 2030**

**SB 32**  required the state to **reduce GHG emissions 40% below 1990 levels by 2030**
$50 Billion

Needed to retrofit CA’s existing buildings*
Ratepayer and taxpayer $ are insufficient

Built before energy efficiency standards were implemented in 1978:

More than 50%, and possibly 75% of CA’s 13 million homes**

More than 40% of commercial buildings**

California Legislature has set ambitious climate change goals  

but . . . Residential energy retrofits face financing barriers

- Projects require large upfront costs and consumers lack necessary capital
- Contractors don’t offer the most efficient options if they think customers lack funds
- Existing loan products don’t meet needs
  - Many homeowners do not want to use their property as collateral
  - Credit card rates are high
  - Credit Union and Bank unsecured loans are limited to 5 year terms and max loan amounts do not cover full retrofit
Other property types face their own barriers to financing energy upgrades

- Business owners are stretched thin and won’t navigate complex solutions
- Reluctance to put scarce capital into energy upgrades: other investments yield higher returns

- Building owners lack capital to make EE upgrades; mortgage holders will not allow new debt
- Property owners see EE investments as too much work and savings as unreliable

- Complex process to get capital investments approved
- Utility OBF financing usually limited to $1MM per meter
California Public Utilities Commission authorized $75 million in ratepayer funds toward a series of statewide financing pilots to retrofit existing buildings.

**CAEATFA** - housed in the State Treasurer’s Office, develops programs to leverage private capital to support the State’s energy and environmental policy goals.

**CHEEF** - administered by CAEATFA, is a public-private partnership engaging lenders and contractors, designed to encourage an **uptake of energy efficiency projects** through increased access to financing.

**The Investor Owned Utilities (IOUs)** are CAEATFA’s partners in developing and implementing the CHEEF pilots.

**Marketing Implementor**
Center for Sustainable Energy runs the Statewide marketing campaign, connecting small business owners to the Program.
Pilot Programs features are designed to address financing barriers

- Leveraging private capital
- Attractive financing terms
- Statewide marketing campaign
- On-bill repayment options
- Centralized hub to find contractors and lenders
- Single measures to full building retrofits
Private capital is leveraged through a credit enhancement, offered as a loan loss reserve

- Mitigates risk for finance companies as they can access the loan loss reserve in the case of a default
- In exchange for this risk mitigation, finance companies pass on benefits to borrowers in the form of:
  - Broader underwriting criteria (ie more borrowers qualify)
  - Lower rates
  - Longer terms -> lower monthly payments
  - Larger amounts available to borrow
## CHEEF Pilot Program Overview

<table>
<thead>
<tr>
<th></th>
<th>REEL (Residential)</th>
<th>Affordable Multi-Family</th>
<th>Small Business</th>
<th>Non Residential</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Designed for</strong></td>
<td>Homeowners or renters, upgrading 1-4 units</td>
<td>Owners of properties with at least 50% income restricted units</td>
<td>SBA size small businesses and non-profits</td>
<td>Any size business or non-profit; government and public entities</td>
</tr>
<tr>
<td><strong>Financing Products</strong></td>
<td>Loans, RICs Up to $50,000</td>
<td>Loans, leases &amp; ESAs* any size**</td>
<td>Loans, leases &amp; ESAs Up to $2.5MM**</td>
<td>Loans, leases, ESAs Up to $5MM</td>
</tr>
<tr>
<td><strong>Repayment</strong></td>
<td>Direct to lender</td>
<td>Direct to lender or through utility bill</td>
<td>Direct to lender or through utility bill</td>
<td>Through utility bill</td>
</tr>
<tr>
<td><strong>Credit Enhancement</strong></td>
<td>Loan Loss Reserve Up to $20MM</td>
<td>Loan Loss Reserve Up to $2.9MM</td>
<td>Loan Loss Reserve Up to $14MM</td>
<td>None</td>
</tr>
<tr>
<td><strong>Status</strong></td>
<td>Launched summer 2016</td>
<td>Launching 2019</td>
<td>Launching fall 2018</td>
<td>Launching 2019</td>
</tr>
</tbody>
</table>

* ESA = Energy Service Agreement  ** Only first $1MM in financing will receive a credit enhancement
Residential Energy Efficiency Loan Assistance Program (REEL) launched in the summer of 2016

Lenders have financed more than $2.7 Million in REEL Loans

6.87% Average interest rate

$17,000 Average loan size

56% Homes located in LMI Census Tracts*

200 Participating Contractors

6 Approved Lenders

Most popular measures

HVAC  Windows  Insulation  Duct seal

Also Eligible for Financing:

- Cool roofs
- Energy Star appliances
- Lighting
- Pool pumps and motors
- Water heaters
- 30% of the project can be non-energy measures such as landscaping or painting
REEL has grown quickly since its launch

Loan Volume Since Pilot Began

152 Enrolled Loans

Program Start through Q1 2017
Q2 2017
Q3 2017
Q4 2017
Q1 2018

Blue = 1 loan
Orange = 2 loans
Purple = 3 loans
Green = 4 loans
Black = 6 loans
REEL Benefits Homeowners, Lenders and Contractors

Homeowners
- Borrow up to 100% of project costs
- Finance without lien on the property, home equity requirements, fees, or prepayment penalties
- Access better rates and terms

Lenders
- Attract new customers and offer a truly green product
- Mitigate risk through a loan loss reserve
- Offer attractive terms and approve a wide range of borrowers

Contractors
- Offer financing to sell deeper energy retrofits and projects with larger scopes
- Featured on statewide websites
- Gain new customers and referrals from the Program
| Tangible benefits provided by Lenders to Borrowers due to CHEEF Loan Loss Reserve |
|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|
| Credit expansion                | FICO min reduced from 660 to 640 | FICO min = REEL min of 580     | FICO min remained at 600        | FICO min reduced from 640 to 580* |
| Rate reduction                  | 640 bp (for FICO of 640)         | 668 bp (for FICO of 580)       | 1097 bp (for FICO of 600)       | 1050 bp (For FICO of 580)        |
| Term extension (means lower monthly payments) | From 5 years to 5, 10 or 15 | From 5 years to 5, 10 or 15 | From 5 years to 5, 10 or 15 | From 5 years to 5, 10 or 15 |
| Amount available to borrow      | From $10k to $50k                | From $20k to $50k              | From $20k to $50k               | From $15k to $50k                |

A CalCoast borrower with a 600 FICO score taking out a $10,000 5-year loan will save $3,383 in interest over the five years.
Small business pilot program will fill a financing gap not served by other programs

Features
- No industry restrictions
- Non-profits are eligible
- 30% of financing can be used for non energy-efficiency measures
- Will support loans, leases and Energy Service Agreements
- 5-20% loan loss reserve contribution for each enrolled financing
- 3 paths for energy efficiency measures to qualify

CAEATFA is holding a Small Business Program Workshop April 19th at 10:00 am. Program to launch fall of 2018
We think private financing will complement OBF for:
- Projects greater than $100,000 or less than $5,000
- Where the customer uses OBF for the first $100,000 of cost, but needs private capital to cover remaining costs
- Customers wanting an equipment lease or Energy Service Agreement (ESA)
- Larger measures requiring payback longer than 5 years or projects that may never be “bill neutral”
- Projects that save energy but aren’t eligible for a rebate
- Projects with a non energy-efficiency component
- Lighting measures not on the Qualified List of Products (QLP)
- Custom projects where the business does not want to for the utility’s custom incentive approval
- Customers needing to replace equipment urgently who can’t wait for OBF approval

We think private financing will complement Commercial PACE for:
- Tenant occupants (most small business owners rent space)
- Customers not wanting a lien on their property
- Smaller projects for which a PACE transaction is too costly
Financing for Affordable Multi-Family buildings will complement existing offerings and fill a niche

Program Features
- Improved rates and terms through use of a credit enhancement
- Allow non-debt projects like Energy Savings Agreements
- Allow incorporation of energy savings performance insurance
- Leverage existing utility rebate programs
- Broad list of allowable energy efficiency measures
- 30% of financing can be used for non-efficiency measures
CHEEF seeks to offer first Open Market OBR platform in country

A variety of finance entities, offering variety of products can enter into transactions with customers, and then allow those customers to repay their loans on the bill.

A Master Administrator collects remittances from 4 utility companies, and organizes payments to multiple participating financial entities.
The NonResidential Pilot Program is the most flexible and allows for financing distributed generation and storage

- **Property Types**
  - Large commercial, governmental, municipal, public

- **Eligible Measures**
  - Energy Efficiency, Demand Response, Distributed Generation, Storage

- **Non-Energy Measures**
  - Up to 30% of financing can be used for other improvements: water efficiency, painting, etc

- **Repayment**
  - On the Utility Bill

- **Financial Products**
  - Loans, Leases, Energy Service Agreement

- **Utility Program Integration**
  - Combine with Utility rebates and incentives, or 0% OBF financing
NonResidential program with on-bill repayment presents an opportunity for government buildings

- Customer makes single payment for energy charges and repayment of upgrades
- Utility passes the financing payment along to the financing company via CHEEF structure
- Combine with Energy Service Agreement, for a non-debt structure repaid completely on the utility bill
  - Energy Service Agreements can be “bill neutral” or even cash-flow positive
  - Customer pays for energy efficiency as a service. Payments are based on actual energy saved
- Potential to consider building upgrades as an operating expenses

Launching 2019
How can government agencies participate in the financing pilot programs?

- **Help us spread the word**
  - Get the message out to homes, businesses and non-profits: They can invest in Energy Efficiency!
  - Let banks, credit unions, or financial institutions you have relationships with know they can apply to participate
  - Let contractors and ESCOs know they can apply to participate

- **Partner with us to use our private financing to fill gaps in your existing grant or loan programs**
  - For Affordable Multifamily Buildings, small businesses, non-profits, large commercial, municipal buildings

- **Upgrade your own buildings through our NonResidential Pilot Program**
  - Comment on Program design during our rulemaking process
How to find us

CAEATFA
- Treasurer.ca.gov/ceaatfa

Miriam Joffe-Block, Program Manager
- mjblock@treasurer.ca.gov

Pilot Programs
- www.thecheef.com

Homeowners
- GoGreenFinancing.com

Small Business Workshop
- www.thecheef.com/commercial
  - Thursday, April 19th, 10:00am
  - 801 Capitol Mall, or via webinar