

# California Alternative Energy and Advanced Transportation Financing Authority

Investing in communities and the green economy

2019 Annual Report to the California State Legislature

March 2020

#### **About CAEATFA:**

The California Alternative Energy and Advanced Transportation Financing Authority (CAEATFA or the Authority) was established to advance the state's goals of reducing greenhouse gas emissions, increasing the deployment of sustainable and renewable energy sources, implementing measures that increase the efficiency of the use of energy, creating high quality employment opportunities, and lessening the state's dependence on fossil fuels. CAEATFA works towards these goals, by strategically targeting public funds to leverage private capital investment and spur market transformation.

CAEATFA has developed and is currently implementing various programs, including:

- Sales and Use Tax Exclusion Program for Manufacturers incentivizing manufacturers to grow in California, it provides a sales and use tax exclusion (STE) on equipment and machinery used in an Advanced Manufacturing process; for the "design, manufacture, production or assembly" of advanced transportation technologies or alternative source products, components or systems; or to process or utilize recycled feedstock.
- California Hub for Energy Efficiency Financing Pilot Programs implementing a series of programs designed to leverage private capital to help customers of the state's investor-owned utilities obtain lower-cost financing for energy efficiency retrofits. This program is being administered in collaboration with the California Public Utilities Commission (CPUC).
- Property Assessed Clean Energy Loss Reserve Program supports residential Property Assessed Clean Energy (PACE) programs by addressing concerns raised by the Federal Housing Finance Agency (FHFA) regarding risk to federal mortgage enterprises from PACE financings. The PACE Loss Reserve Program will reimburse first mortgage lenders for specified losses resulting from a PACE lien on a property during foreclosure or forced sale to collect unpaid property taxes.
- **Bond Program** provides lower-cost bond financing for eligible projects, which have most recently included Qualified Energy Conservation Bonds (QECBs) and Clean Renewable Energy Bonds (CREBs). As the primary energy bond conduit issuer for the State of California, CAEATFA continues to work with stakeholders on developing innovative approaches to financing gaps.

The CAEATFA Board consists of:

Fiona Ma, CPA, Chair State Treasurer

Betty T. Yee State Controller

Keely Martin Bosler Director, Department of Finance

David Hochschild Chair, California Energy Commission

Marybel Batjer President, California Public Utilities Commission

#### **Overview of 2019 Annual Report**

In accordance with the provisions of Section 26017 of the Public Resources Code, CAEATFA respectfully submits its Annual Report on program activities for the calendar year ending December 31, 2019.

This Annual Report contains information on the Authority's revenues and expenditures for fiscal year 2018-19 and projections of the Authority's need for the coming fiscal year. The report also includes an overview of activity under the Sales and Use Tax Exclusion (STE) Program, and the California Hub for Energy Efficiency Financing (CHEEF), Property Assessed Clean Energy (PACE) Loss Reserve Program, and CAEATFA's Bond Program.

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## SALES AND USE TAX EXCLUSION (STE) PROGRAM FOR MANUFACTURERS

## **Program Summary**

CAEATFA awards \$100 million in Sales and Use Tax Exclusion annually to certain manufacturers, to assist them in purchasing machinery and equipment to retain and expand high-end manufacturing

across the State – growing jobs, our regions and communities, and the green economy.

#### Legislative Background

In March 2010, Senate Bill 71 (Padilla, Chapter 10, Statutes of 2010) directed CAEATFA to implement the Sales and Use Tax Exclusion Program (STE Program). The legislation authorized CAEATFA to approve eligible projects for a sales and use tax exclusion (STE) on equipment and machinery (Qualified Property) used for the "design, manufacture, production, or assembly" of either advanced transportation technologies or alternative energy source products, components or systems, as defined. The purpose of this program is twofold: to promote the creation of California-based manufacturing jobs that will stimulate the California economy and to incentivize the manufacturing of green technologies that will help reduce greenhouse gases, as well as reductions in air and water pollution or energy consumption.

CAEATFA launched the STE Program in the fourth quarter of 2010; the CAEATFA Board approved the first eight applications for the program at its November 2010 meeting.

#### Inclusion of Advanced Manufacturing Projects

In September 2012, Senate Bill 1128 (Padilla, Chapter 677, Statutes of 2012) expanded the STE Program to include Advanced Manufacturing projects. The legislation also placed an annual limit of



\$100 million in STE awards for each calendar year. The Authority modified its regulations to accommodate the statutory changes and began accepting applications for Advanced Manufacturing

projects in October 2013. The CAEATFA Board approved its first two Advanced Manufacturing projects at its December 2013 meeting.

#### Inclusion of Recycled Feedstock Projects

Signed by Governor Jerry Brown on October 11, 2015, AB 199 (Eggman, Chapter 768, Statutes of 2015) further expanded the scope of the STE Program to include projects that process or utilize recycled feedstock (Recycled Feedstock). The Authority modified its regulations to accommodate the statutory changes and began accepting applications for Recycled Feedstock projects in August 2016. The CAEATFA Board approved its first Recycled Feedstock projects at its October 2016 meeting.

#### **Program Extension**

Most recently, AB 1583 (Eggman, 2019), the California Recycling Market Development Act, extended the Program's sunset date from January 1, 2021 to January 1, 2026.

#### Program Design and Evaluation Methodology

Under the STE Program's statute, all applications are evaluated to determine the extent to which the anticipated benefits to the State from a project exceed the estimated cost of the avoided sales and use tax. Specifically, through the net benefits test established in the STE Program's regulations, applicants are evaluated based on criteria designed to measure the fiscal and environmental benefits of their projects.

CAEATFA Staff evaluates the fiscal and environmental benefits that stem directly from the sales and use tax exclusion. Only additional the anticipated marginal production (and resulting fiscal and environmental benefits) associated with the sales and use tax exclusion are included for purposes of evaluating applications. The marginal additional production associated with the sales and use tax exclusion is determined based on an estimated increase in equipment purchases resulting from the sales and use tax exclusion. That is, because the sales and use tax exclusion in effect lowers the cost of purchasing capital equipment, applicants are assumed to purchase more such equipment than would be the case in the absence of the sales and use tax exclusion.

#### Who May Apply for an STE?

Eligible manufactures looking to relocate or expand their manufacturing facilities in California may apply for an STE.

#### How Are Applications Evaluated?

Applications are evaluated based on the estimated fiscal and environmental benefits of the project.

### What Can Be Purchased Using the STE?

Approved companies may use the STE for purchases of manufacturing equipment and machinery for up to three years, or when the company has reached its maximum Qualified Property amount, whichever comes first.

### Are There Any Program Fees?

Yes, there is an application fee of 0.05% of the Qualified Property amount requested (min. \$250, max \$10,000), and an administrative fee of 0.4% of the Qualified Property amount actually purchased during the term of the award (min. \$15,000, max. \$350,000).

The net present value of the total *fiscal benefits* over the lifetime of the Qualified Property is derived from the applicant's projected sale taxes, personal income taxes paid by the applicant's employees, corporation taxes on profits, property taxes and other indirect fiscal benefits of the applicant.

#### Sales and Use Tax Exclusion (STE) Program for Manufacturers

The methodology used to evaluate the *environmental benefits* differs based on the project type. The evaluation of Advanced Manufacturing projects focuses on the benefits resulting from the manufacturing process used to create a product, whereas evaluation of Alternative Source, Advanced Transportation, and Recycled Feedstock projects focuses on the benefits resulting from the end-product being manufactured.

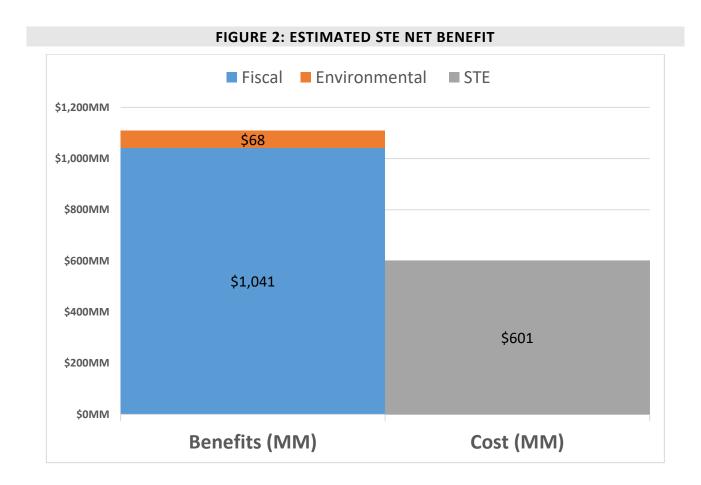
For Alternative Source and Advanced Transportation projects, the environmental benefits include estimates of the dollar value of greenhouse gas reductions and reduction on dependence of fossil fuels. The environmental benefits are also derived from the capacity of manufactured products to generate electricity from alternative sources, thereby reducing the need for traditionally generated electricity. For Recycled Feedstock projects, the environmental benefits include estimates of the dollar value of greenhouse gas reductions resulting from the increased total amount of recycled materials produced. CAEATFA relies on models from the U.S. EPA, California Air Resources Board, and other state agencies for quantifying the environmental benefits of recycling the various types of materials.

Because the environmental benefits of Advanced Manufacturing projects generally stem from the improvements to the manufacturing process itself, the environmental benefits for Advanced Manufacturing projects are not monetized in the application scoring process as they are with Alternative Source and Advanced Transportation projects. Instead, points are given for specific environmental process improvements, such as reductions in energy and water consumption, solid and hazardous waste, and air and other pollutants.



#### FIGURE 1: OVERVIEW OF STE APPLICATION PROCESS

Applications are evaluated to determine whether there is a fiscal benefit to the State, only considering the marginal increase in investment resulting from the STE. Figure 2 illustrates the estimated (at the time of application) net benefit over the life of the Program—over \$508MM as of December 2019.



#### **Historical Program Activity**

From the STE Program's inception through December 31, 2019, CAEATFA approved a total of 222 project applications, of which 86 are active, 86 are complete and 50 did not move forward.

The 172 active and complete projects were approved for a total of \$7.16 billion in anticipated Qualified Property purchases estimated to result in approximately \$600.84 million in STE. These projects are located across 33 counties, and are estimated to result in the retention and creation of 54,509 jobs. Under the program's evaluation process, 2,713 of these jobs are attributable to the STE Program. The projects are anticipated to produce an estimated \$68.25 million in environmental benefits and \$1.04 billion in fiscal benefits, resulting in approximately \$508.79 million in net benefits to the state.

The program has been fully subscribed since 2015, awarding the full \$100 million in annual STE, largely due to both growing the number of projects assisted as well as a few large projects.

Figure 3, below, shows the total number of STE projects considered each calendar year.

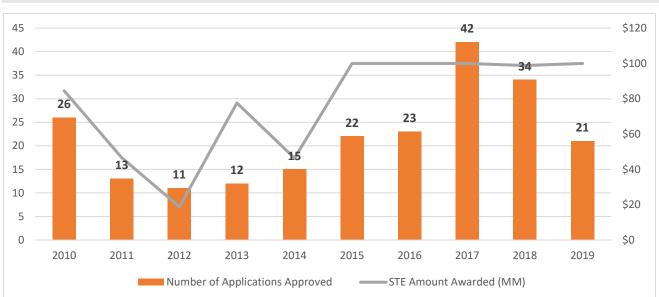
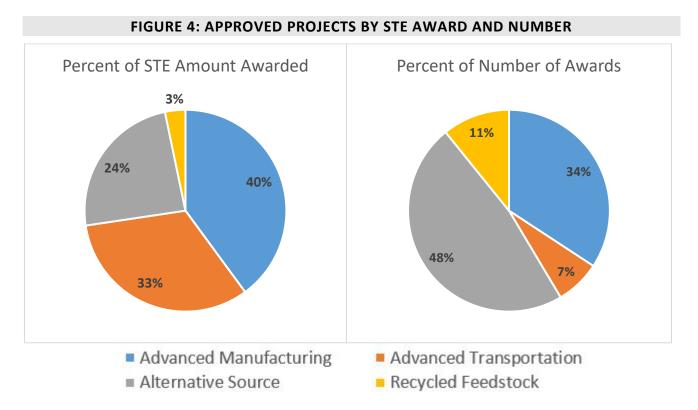


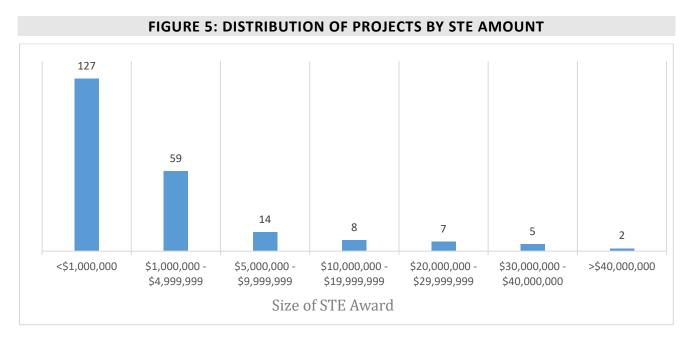
FIGURE 3: ANNUAL STE APPLICATIONS AND VALUE OF AWARDS

The largest number of approved projects have been in the Alternative Source category, while a higher amount of financial assistance has been provided to projects in the Advanced Manufacturing and Advanced Transportation categories. This is likely due to the high capital intensity of these types of projects.



#### Sales and Use Tax Exclusion (STE) Program for Manufacturers

To better ensure an equitable distribution of STE to the various industries, CAEATFA has established a per-applicant cap of \$10 million each calendar year, enabling the program to assist both small and larger projects. Historically, the majority of projects receive small awards, under \$1 million, while the program can also accommodate larger projects if there is STE remaining at the end of the calendar year. Detailed information on projects considered under the STE Program since its inception can be found in Appendix A.



## **Report of 2019 Activities**

#### **Applications Received**

CAEATFA received 42 new applications for consideration in the 2019 calendar year. The projects had a combined value of approximately \$1.51 billion in anticipated Qualified Property purchases at the time of application, and were estimated to result in over \$126.6 million in STE at the time of application submittal.<sup>1</sup>

#### Program Oversubscription and Competitive Process for July Board Meeting

After the May 17, 2019 application deadline for the July 2019 CAEATFA Board meeting, CAEATFA had received 12 new applications bringing the total year-to-date request to \$112.7 million in STE. Because the total amount of STE requested exceeded the \$100 million statutory cap, the STE Program Regulations<sup>2</sup> required that applications submitted for consideration in July be reviewed g based on competitive criteria points earned by each applicant until CAEATFA reached the \$100 million cap. The Regulations also provide that if the STE amount requested in the last application to be considered exceeds the STE available in the calendar year, the Board shall split the award between the 2019 and 2020 Program allocations (\$100 million in STE annually).

<sup>&</sup>lt;sup>1</sup> The estimated sales and use tax exclusion ("STE") amount is based on the current average statewide sales tax rate of 8.36%.

<sup>&</sup>lt;sup>2</sup> Regulation section 10032(a)(7).

Applicants were ranked baed on four competitive criteria: (1) unemployment rate in the county of the facility, (2) presence of corporate headquarters in California, (3) status as a small business, and

#### Sales and Use Tax Exclusion (STE) Program for Manufacturers

(4) being new to the Program.<sup>3</sup> Three applications before the Board at the July meeting, all of which the Board approvedNine applications requesting a total of \$123 million in Qualified Property for an estimated STE value of approximately \$10.29 million were placed on a waitlist to be considered in 2020.

#### **Applications Approved**

The Authority approved 21 projects in 2019 for a total dollar amount of \$1,196,172,248.80 in Qualified Property purchases, estimated to result in \$100 million in STE. Appendix B lists applications considered and approved in 2019.

#### **Project Locations and Anticipated Benefits**

The 2019 approved projects are located in 15 different counties throughout California. It is expected these projects will provide economic benefits to the state and local jurisdictions in the form of corporate taxes, personal income taxes, sales and property tax revenues, increased employment, and additional economic activity created by the manufacturing facilities and purchases from related suppliers.

Based on the net benefits methodology embodied in the STE Program regulations and on representation from these applicants, the Authority estimates the applicants approved in 2019 are anticipated to result in estimated combined environmental benefits valued at approximately \$2,334,328 and fiscal benefits valued at approximately \$205,503,240 over the lifetime of the projects. Together, these projected environmental and fiscal benefits will result in approximately \$107,648,744 in estimated net benefits over the lifetime of the projects. See Table 1, below, for a breakdown of the various projects and anticipated benefits by county.

County⁵	Number	Percentage of Total 2018 Projects (%)	Amount of Anticipated Qualified Property Purchases	Projected STE Amount	Estimated Environmental Benefit Value <sup>6</sup>		Estimated Quantifiable Net Benefit Value	Total Jobs	Total Jobs Attributed to the STE
Alameda	2	9.5%	\$118,257,783	\$9,886,350	\$924,621	\$13,274,901	\$4,313,878	494	22
Fresno	1	4.8%	\$79,196,100	\$6,620,794	N/A	\$15,571,185	\$8,950,391	192	14
Kern	1	4.8%	\$239,234,449	\$20,000,000	N/A	\$41,686,059	\$21,686,059	120	17
Kings	1	4.8%	\$16,508,315	\$1,380,095	\$451,076	\$7,864,837	\$6,935,818	31	2
Los Angeles	З	14.3%	\$240,296,040	\$20,088,749	\$39,199	\$34,560,910	\$14,511,360	4,973	239
Monterey	1	4.8%	\$73,473,675	\$6,142,399	\$151,181	\$31,297,045	\$25,305,827	1,457	85
Napa	1	4.8%	\$7,045,460	\$589,000	N/A	\$1,071,413	\$482,413	59	4
Orange	1	4.8%	\$239,234,449	\$20,000,000	N/A	\$20,979,059	\$979 <i>,</i> 059	1,064	48
Placer	1	4.8%	\$3,867,000	\$323,281	\$75 <i>,</i> 504	\$359,170	\$111,392	8	1
Riverside	1	4.8%	\$5,130,235	\$428,888	\$99,915	\$334,778	\$5,805	54	2
San Diego	2	9.5%	\$20,716,783	\$1,731,931	\$273,931	\$3,749,992	\$2,292,000	127	12
San Joaquin	1	4.8%	\$15,370,837	\$1,285,002	\$231,501	\$1,672,361	\$618,859	28	4
San Mateo	1	4.8%	\$11,260,000	\$941,336	\$69,820	\$1,932,190	\$1,060,674	22	2
Santa Clara	1	4.8%	\$96,875,430	\$8,098,786	N/A	\$13,591,326	\$5,492,540	1,272	33
Stanislaus	3	14.3%	\$31,972,785	\$2,672,925	\$17,580	\$17,558,014	\$14,902,669	287	18
<u>Total</u>	21	100.00%	\$1,198,439,341	\$100,189,536	\$2,334,328	\$205,503,240	\$107,648,744	10,188	503

#### TABLE 1: STE APPROVED PROJECTS BY COUNTY IN 2019<sup>4</sup>

Figure 6 shows a geographical representation of all projects approved under the STE Program in 2019.



#### FIGURE 6: STE PROJECTS APPROVED IN 2019, BY COUNTY

<sup>&</sup>lt;sup>3</sup> Effective July 1, 2019, the competitive criteria also awrded five points to Projects relocating or rebuilding due to a fire, flood, storm, or earthquake identified in a state of emergency proclamation made by the California State Governor within two years of the time of application. Because this criterion was not in effect when the applications were submitted, it was not included in the scores for the applicants considered at the July Board meeting. Additionally, no application submitted met this criterion.

<sup>&</sup>lt;sup>4</sup> Projected STE amounts and estimated benefits may not add up correctly due to rounding. Additionally, South Bayside Waste Managemet Authority's full award is included in these totals, although the award was split between the 2019 and 2020 STE allocations.

<sup>&</sup>lt;sup>5</sup> There are applicants with multiple project sites under their application. For purposes of this table, the data was applied to the county in which most of the Qualified Property will be located.

<sup>&</sup>lt;sup>6</sup> The environmental benefits for Advanced Manufacturing projects are not monetized in the application scoring process as they are with Alternative Source and Advanced Transportation projects. Instead, points are given for specific environmental process improvements, such as reductions in energy and water consumption, solid and hazardous waste, and air and other pollutants.

#### Program Oversubcription and Regulatory Changes

By the July 2019 Board meeting, CAEATFA exhausted the \$100 million STE cap – the first time in program history for it to be fully awarded prior to the end of the year, and the first time the program's competitive criteria were used to determine which applicants would be considered. Given the limited amount of Program resources and recent competitive nature of the program, the CAEATFA Board requested that Staff re-evaluate program goals and priorities to determine how best to effectuate the purpose of the program. Additionally, Staff had been identifying additional program improvements from program implementation. Based on discussions with Board representatives and stakeholders at the September2019 Board meeting and public input through written comments, Staff prepared draft regulations. Proposed regulations were brought before the Board and adopted at the November 19, 2019 Board meeting. The Office of Administrative Law approved the regulations as emergency regulations, which became effective upon filing with the Secretary of State on December 16, 2019.

#### Competitive Criteria

The new regulations include several substantive changes to help address program oversubscription and to better effectuate the purposes of the program. First, the competitive criteria were updated to best reflect current policy goals and priorities. The competitive criteria include:

- (1) whether the project provides environmental benefits that can be quantified and monetized pursuant to the program's regulations;
- (2) the unemployment rate of the county in which the project is located;
- (3) the amount of sales and use tax exclusion per estimated number of jobs created as a result of the estimated marginal increase in equipment purchases from the STE;
- (4) if the project is to rebuild or relocate due to a natural disaster named in a state of emergency proclamation; and
- (5) if the applicant has a corporate headquarters located in California.

#### \$10 million in STE Per-Applicant Cap

The new regulations also reduce the annual per-applicant cap from \$20 million in STE to \$10 million in STE. The regulations still allow for applicants to receive additional STE if any of the \$100 million allocation remains at the end of the year.

#### 15% Purchase Requirement

Finally, the modified regulations also extend the timeframe to purchase 15% of Qualified Property from one year to 18 months, include execution of purchase orders as counting toward the 15%, and allow the Board to extend/waive the timeframe upon a finding of extraordinary circumstances. Providing a standard 18-month timeframe and allowing purchase orders to count toward the 15% helps accommodate projects with equipment purchases that have long lead-times while still encouraging applicants not to apply too soon, thereby maximizing the program's benefit to the state by encouraging applicant to apply when they have more certainty of the project's feasibility and likelihood of moving forward..

#### 2020 Program Oversubscription

CAEATFA began accepting applications for the 2020 calendar year after the modified regulations became effective. By the first application deadline for 2020 Board Consideration, CAEATFA received 19 complete applications requesting over \$90.9 million in STE, which, coupled with the 2019 waitlisted applications pending for consideration at the January 2020 Board meeting, brought the total year-to-date request to \$111.3 million in STE, making the program oversubscribed for the 2020 calendar year after just one application period.

Given the rapid oversubscription for the program for the 2020 calendar year, staff plans to make further modifications to the STE Program regulations during the regular rulemaking process in 2020, and will explore options to seek additional Program funding.

## CALIFORNIA HUB FOR ENERGY EFFICIENCY FINANCING (HUB) PROGRAMS

### **Program Summary**

The State of California has ambitious goals to reduce greenhouse gas emissions and address climate change. In 2006, the Legislature passed the California Global Warming Solutions Act (Assembly Bill 32), which created a comprehensive, multi-year program to reduce greenhouse gas (GHG) emissions in California. In the subsequent Scoping Plans, intended to describe the approach California will take to reduce GHGs, one of the primary methods identified is increasing efficiency in existing buildings. Senate Bill 350 (De Léon, 2015), later called for a double of energy efficiency in existing building by 2030.<sup>7</sup> Billions of square feet of existing commercial and residential properties—both the structures themselves and the energy using equipment they house—are currently in need of energy upgrades. There is simply not enough government or ratepayer funding to pay for these upgrades.

#### Background

The California Public Utilities Commission Decision (D.) 13-09-044 authorized a series of financing programs, designed to attract private capital to finance energy efficiency upgrades, and established the California Hub for Energy Efficiency Financing (the Hub, or CHEEF). The CPUC requested the California Alternative Energy and Advanced Transportation Financing Authority (CAEATFA) assume the administration of the Hub and directed the Investor Owned Utilities (IOUs) and CPUC staff to assist CAEATFA with implementation.

The Hub's financing programs have incentivized private finance companies to improve terms and expand credit criteria for the financing of energy efficiency projects by providing a credit enhancement via a loss reserve, funded with IOU energy efficiency ratepayer funds. This credit enhancement helps remove the upfront cost barrier for Californians to undertake energy efficiency retrofits and leverages private capital to provide customers with access to affordable, competitive financing.

The financing programs will be evaluated according to the CPUC goals that the solutions should:

- (1) Be scalable;
- (2) Be leveraged by private capital and able to support energy efficiency upgrades;
- (3) Reach underserved Californians who would not otherwise have participated in energy efficiency upgrades; and
- (4) Produce energy savings.

<sup>&</sup>lt;sup>7</sup> Achieving comprehensive and cost-effective energy efficiency in all existing buildings is state policy, and one of three primary approaches to meet California's aggressive energy and environmental targets [e.g., Senate Bill 100 (De Léon, 2018), Senate Bill 32 (Pavley, 2016), Assembly Bill 802 (Williams, 2015), Senate Bill 350 (De Léon, 2015), Assembly Bill 758 (2009, Skinner), Assembly Bill 32 (Nunez, 2006)].

#### California Hub for Energy Efficiency Financing (CHEEF) Programs

CAEATFA works with the CPUC, IOUs, finance companies, energy efficiency retrofit contractors, and several key vendors to develop and manage the series of energy efficiency financing programs. The financing programs developed and launched through the Hub include:

- The *Residential Energy Efficiency Loan (REEL) Assistance Program*, which provides financing for energy efficiency upgrades in residential properties including townhomes, condominiums, and mobile and manufactured homes.
- The *Small Business Energy Efficiency Financing (SBF) Program*, which provides financing for energy efficiency upgrades in commercial businesses and nonprofits through a variety of financing products.
- The Affordable Multifamily Energy Efficiency Financing (AMF) Program, which provides financing for energy efficiency upgrades in affordable, deed-restricted multifamily properties of 5 or more units where at least 50% of units are income restricted.

RESIDENTIAL	AFFORDABLE MULTIFAMILY	SMALL BUSINESS	
1-4 units of residential property including townhomes, condos and mobile/manufactured homes	Affordable, deed-restricted multifamily properties of 5 or more units, where at least 50% of the units are income restricted (low to moderate*)	For-profits and non-profits that have 100 or fewer employees, have less than \$15MM in annual revenue, or meet the U.S. Small Business Administration's size restrictions	
Off Bill	Off Bill On Bill, No disconnection	Off Bill On Bill, Possible disconnection	
Loans & Retail Installment Contracts Up to \$50,000	Loans, Leases, Equipment Finance Agreements, Service Agreements, Savings-based Payment Agreements		
Credit Enhanced (Loan Loss Reserve)	No maximum Credit Enhanced* (Loan Loss Reserve)	Up to \$5MM Credit Enhanced* (Loan Loss Reserve)	

#### FIGURE 7: HUB PROGRAM MATRIX

• At least 70% of the credit-enhanced financed amount must be eligible energy savings or demand response measures.

- Up to 30% of the credit-enhanced financed amount may fund non-energy efficiency improvements.
- Financing for distributed generation (DG) improvements like solar photovoltaic (PV) or battery storage may be included but will not receive a credit enhancement.

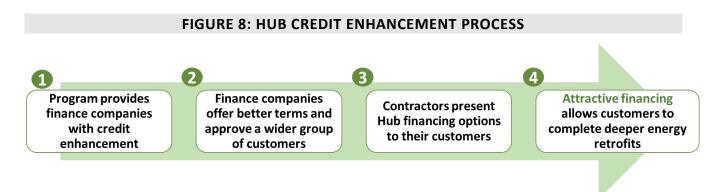
Launched 2016	Launched 2019	Launched 2019

\* Only first \$1MM in financing will receive a credit enhancement

<sup>T</sup> Property must receive electric and/or gas service from any of the following energy companies: Pacific Gas and Electric Company (PG&E®), San Diego Gas & Electric Company (SDG&E®), So uthern California Edison (SCE) or Southern California Gas Company (SoCalGas®)

\* Low to Moderate Income defined as up to 120% Area Median Income

#### The Credit Enhancement



The Hub's financing programs use a credit enhancement in the form of a loss reserve to support its leveraging of private capital and expand access to financing for borrowers. In exchange for the credit enhancement, private finance companies are able to **offer better terms** and **approve more customers**.

Better terms for customers include lower rates, larger financing amounts, and longer loan tenures and repayment periods, which in turn lead to lower monthly payments. The credit enhancement also allows private finance companies to expand access to financing to LMI and credit-challenged borrowers, including renters, tenants, and mobile homes. Within the Small Business Financing Program, newer businesses are able to qualify.

#### How the Hub Addresses Barriers

There are a significant number of barriers and challenges within the energy efficiency financing market, and the Hub works to address them through its program structure and targeted outreach. These barriers include limited access to private capital for financially underserved borrowers, the upfront cost of engaging in efficiency upgrades, and the complexities involved with lending to customers and businesses with complex debt stacks.

The Hub addresses these challenges in targeted actions and through its program design, as described below:

Market Barrier	The Hub's Solution
Upfront cost barrier for customers	<ul><li>100% financing available</li><li>Broader access to capital and improved financing terms</li></ul>
Owner/tenant split incentives	<ul><li>Renters and tenants allowed</li><li>Financing not secured by the property</li></ul>
Complex (and sometimes slow) rebate and incentive process	<ul> <li>Multiple pathways to project approval</li> <li>Quick private lender financing approval</li> <li>Contractor prefunding and progress payments available</li> <li>Flexibility: 30% of financing can be nonenergy measures, such as landscaping or remodeling</li> </ul>

#### **TABLE 2: MARKET BARRIERS AND HUB SOLUTIONS**

#### California Hub for Energy Efficiency Financing (CHEEF) Programs

Market Barrier	The Hub's Solution
Borrowers have complex debt structure	<ul> <li>Multiple financing structures available, including off- balance sheet</li> </ul>
Customers are too busy to undertake retrofits	<ul> <li>Program trains contractors to help remove complexity</li> <li>Established role for project developers to help coordinate and guide commercial projects</li> <li>Collaboration with IOUs and local governments to strengthen market impact and fill gaps</li> <li>Statewide marketing to help build awareness</li> </ul>
Consumer protection	<ul> <li>Program establishes minimum criteria for lenders and trains enrolled contractors on the program requirements</li> <li>Desktop reviews and post-project site inspections</li> <li>Lenders expand terms while maintaining underwriting standards</li> </ul>
Financially underserved borrowers	<ul> <li>Program meets the borrowers where they are – single, to-code, and self-install measures are available, as well as comprehensive projects</li> <li>Program design has flexibility to address traditionally underserved: renters, tenants, mobile homes, new businesses, LMI borrowers</li> </ul>

#### **Benefits to Stakeholders**

The Hub's credit enhancement, approach to market barriers, and overall program structure leads to a number of key benefits for financing stakeholder groups, including the State of California.

TABLE 3: HUB BENEFITS TO STAKEHOLDERS					
Customers	<b>Contractors</b>	Lenders	California		
<ul> <li>✓ Lower energy usage</li> <li>✓ Better financing terms</li> <li>✓ Lower monthly payments</li> <li>✓ 100% financing, no property lien</li> </ul>	<ul> <li>✓ Deeper retrofits</li> <li>✓ Larger scopes of work</li> <li>✓ Support from statewide marketing</li> <li>✓ Online listing helps attract new customers</li> </ul>	<ul> <li>✓ Mitigate risk through the loss reserve</li> <li>✓ Approve wider range of borrowers</li> <li>✓ Enter new markets and asset class</li> </ul>	<ul> <li>More energy saved in communities across the state</li> <li>Benefits of energy savings extended to underserved borrowers</li> </ul>		

## **Report Activity**

#### The Residential Energy Efficiency Loan (REEL) Assistance Program

CAEATFA serves California's single-family residential sector through the Residential Energy Efficiency Loan (REEL) Assistance Program. REEL provides attractive financing to owners and renters of existing residential properties who select from a broad list of energy efficiency measures intended to reduce energy consumption. Customers may upgrade a single-family home, townhome, condo, duplex, triplex, fourplex or manufactured home. Renovations for up to four units can be bundled into the same loan.

As with all Hub programs, eligibility requires that the property receive electric or natural gas service from at least one of the IOUs: PG&E<sup>®</sup>, SDG&E<sup>®</sup>, SCE<sup>®</sup> or SoCalGas<sup>®</sup>.

#### The Impact of the Credit Enhancement

The provision of a credit enhancement is at the heart of the Hub's financing program design. As a result of the loan loss reserve, REEL lenders have made improvements to their existing underwriting criteria that greatly benefit potential borrowers.

The credit enhancement mitigates risk for lenders by functioning as an insurance pool; in the event of customer default, lenders may file a claim and recover up to 90% of the loan value from the fund. In exchange for this risk mitigation, the program's participating lenders offer lower interest rates, longer terms and broader underwriting criteria to REEL customers than they otherwise would.

REEL lenders receive a credit enhancement of 11% of the claim eligible amount, or 20% if the borrower is considered underserved. Data regarding the number of underserved borrowers receiving REEL loans is discussed below.

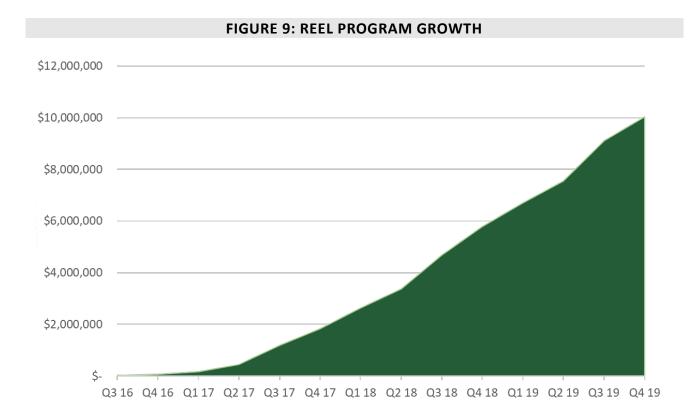
#### The Impact of REEL

REEL saw strong growth in 2019, enrolling 272 loans totaling \$4.6 million in financing. This amount represents 44% of the loan volume financed since the program's inception in 2016. By the end of 2019, seven lenders had enrolled in the program, and borrowers could choose from more than 391 retrofit contractors serving 51 counties across the state. The close of the year brought the grand total of REEL financing to \$10.4 million across 612 loans.

The average loan size in 2019 was \$17,044, and the four most common home improvements were, in order: heating/air conditioning (HVAC), windows, insulation, and duct work associated with HVAC equipment.

#### California Hub for Energy Efficiency Financing (CHEEF) Programs

Figure 9 shows REEL Program growth since inception in 2016. The program surpassed the \$10 million mark in December 2019.



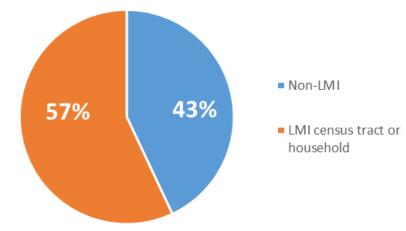
#### Financing for Underserved Californians

Program participation by traditionally underserved borrowers was robust in 2019, with 57% of loans made to borrowers who reside in either a low-to-moderate income (LMI<sup>8</sup>) census tract or an LMI household. Borrowers in Disadvantaged Communities as measured by CalEnviroScreen<sup>9</sup> accounted for 16% of loans made in 2019. Program totals for those metrics from inception through the end of 2019 are 47% and 28%, respectively. Figure 10 shows the number of loans made to Low-to-Moderate Income borrowers during 2019.

<sup>&</sup>lt;sup>8</sup> Low-to-Moderate Income is defined as less than 120% of Area Median Income.

<sup>&</sup>lt;sup>9</sup> (<u>https://oehha.ca.gov/calenviroscreen</u>) Figures in this report are for borrowers in the top quartile of pollution-burdened census tracts.

FIGURE 10: LOANS MADE TO LMI\* BORROWERS IN 2019



\*LMI (Low-to-moderate income) is defined as up to 120% of Area Median Income.

#### Statewide Financing

The program has made loans to borrowers in 40 counties. Figure 11 shows the number of REEL loans enrolled, by county, from the start of the program through the end of 2019.



#### FIGURE 11: REEL LOANS ENROLLED BY COUNTY

#### Testimonials: What REEL Borrowers Are Saying

REEL borrowers cite favorable outcomes from participating in the REEL Program, including affordable payments, attractive terms and ease of use. In 2019, the REEL Program developed a series of case studies using testimonials from real borrowers of the program. Below are some of the details gathered from these case studies.



#### **The Flores Family**

Project	High-efficiency furnace, smart thermostat, tankless water heater, heat pump, water
	filtration/softener
County	San Diego
REEL Loan Amount	\$15,906
Monthly Payment	\$146.76

"The affordable monthly payments really helped. We **improved the efficiency and comfort** of our home while staying within our budget."

—Jesse Flores



#### **The Allen Family**

Project	Ducted evaporative cooler, energy-efficient air conditioner
County	Kern
REEL Loan Amount	\$12,748
Monthly Payment	\$250

"It was a no-brainer to **save my cash** and utilize the financing offered through REEL." —*Sammie Allen* 

#### Outreach

**GoGreen Financing** – GoGreenFinancing.com is the consumer-facing website for all Hub programs, where potential borrowers can learn about the types of energy efficiency projects available to implement, find local REEL contractors who can install the measures, and explore the financing options provided by REEL lenders.

#### California Hub for Energy Efficiency Financing (CHEEF) Programs

During 2019, the website's first full year in operation, GoGreenFinancing.com had 207,000 users, resulting in more than 7,700 direct inquiries to REEL lenders. Social media, digital advertising, print and other consumer marketing activities by the IOUs and the Hub's marketing implementer, the Center for Sustainable Energy, drive customers to GoGreenFinancing.com.



**Contractor Outreach** – Frontier Energy, the REEL Contractor Manager, continued its outreach to potential REEL contractors. By the end of 2019, borrowers could choose from 391 contractors.

**IOU Customer Outreach** – The marketing support of the IOUs is invaluable to the success of the REEL Program. As trusted messengers, the IOUs have the opportunity to reach millions of customers, and their marketing efforts help build program awareness and increase visits to GoGreen Financing and the participating lenders.

In 2019, the IOUs marketed REEL and GoGreen Financing through a number of channels, including social, digital, email, direct mail, and messaging on bill inserts and envelopes. Additionally, IOUs represented REEL at numerous community events.

IOU marketing efforts also included distributing REEL-branded workout towels to gyms, enclosing program information in thousands of energy efficiency educational kits for sixth-graders, a billboard campaign that garnered 11 million views throughout the Central Valley and Southern California, and a radio ad campaign.

#### Next Steps

REEL has continued to grow since the CPUC's Evaluation, Measurement & Verification (EM&V) team began its assessment of the program in 2018.

The outcome of the EM&V report is anticipated to be followed by a CPUC staff resolution offering recommendation on REEL's potential transition from a pilot to a longer term program. CAEATFA has recommended several next steps for program growth should REEL continue, including:

- Recruit a high-volume lender and develop automated online processes for REEL loan validation
- Incorporate project approval and enrollment processes into a web-based Project Platform for better scalability
- Revise program requirements to broaden its relevance to the market, such as allowing the credit enhancement to cover solar and energy storage and enabling publicly-owned utilities to participate

#### The Small Business Energy Efficiency Financing (SBF) Program

The Small Business Energy Efficiency Financing (SBF) Program officially launched and began financing its first projects in 2019. The program engaged in a limited launch in April, followed by a full program launch in September.

The SBF Program was designed to address multiple challenges to energy efficiency retrofits in the small business sector, including the lack of time and capital business owners are able to put towards energy upgrades, the limited access to attractive financing options for small businesses (which are often viewed as greater credit risks by finance companies), and the mixed incentives of business owners and tenants.



Small business owners and nonprofits, whether they own or rent the business property, are eligible for SBF. The program defines "small businesses" as those that meet at least one of the following size criteria:

- 100 or fewer employees
- \$15 million or less in annual revenue
- Alignment with the SBA definition of "small business" (up to \$41.5 million in annual revenue, depending on industry)

The first projects enrolled in the program have demonstrated the growing demand for energy efficiency financing products built for small businesses in California.

#### The SBF Credit Enhancement

The SBF Program offers a credit enhancement to enhance access to private capital for small business energy efficiency projects. The first \$1 million of each SBF project is credit enhanced as follows:

- The first \$50,000 of each financing agreement is credit enhanced at 20%
- The remainder (up to an additional \$950,000) is credit enhanced at 5%
- Maximum loss reserve contribution per project is \$57,500

#### Financing Instruments

The private finance companies that participate in SBF offer several financing options beyond traditional loans that address the financing needs of small businesses. This variety of products has already drawn interest in the program. The financing instruments available to borrowers through SBF include:

- Loans Customer takes ownership of measures
- Equipment Leases/Equipment Finance Agreements
  - o Customer gets use of measures

#### California Hub for Energy Efficiency Financing (CHEEF) Programs

- Title can transfer at end of lease term or at the beginning of term (Equipment Finance Agreement)
- Service Agreements
  - Customer gets use of measures
  - Regular, ongoing service and maintenance of measures is provided to the customer
  - o Title does not transfer to customer
  - Guarantee of functionality of measures or guarantee of energy savings

#### Program Design and Uptake

Leading up to the program's launch in September and in the months following, staff engaged in dedicated outreach to stakeholders, including finance companies, small business contractors and project developers, IOU third-party program implementers, and more.

There were several key takeaways from these conversations and the first projects enrolled in SBF:

- The program **fills a niche** for small business customers in that it complements existing IOUprovided rebates and incentives, as well as the IOUs' On-Bill Financing programs. Working together with the IOUs to promote SBF and its ability to serve as an alternative or addition to existing programs proved to be an essential feature in introducing SBF to potential customers.
- The initiative to undertake energy efficiency upgrades in the small business sector is frequently **driven by contractors** and project developers, rather than the customers themselves. To address the differentiation of this project development pipeline from the residential sector, staff focused on direct outreach within relevant trade associations and developed supportive marketing materials to help contractors explain the financing to their customers.
- The **flexibility** of SBF's offerings, including the ability to finance code-required repairs and other nonenergy projects, as well as the multiple financing instruments offered by the participating finance companies, are attractive to stakeholders.

The full launch of the program in 2019 included the development of a digital **Project Platform** for use by contractors, finance companies, and staff to manage projects through the financing process. The Project Platform contains comprehensive digital paperwork and information for each project seeking financing via SBF, including pre-approval details and measures installed.

The Platform was successfully launched in September 2019. CAEATFA staff provided detailed trainings to contractors and project developers on the new interface. The usability of the platform became another beneficial feature of the program within its first few months of operation.

#### The Initial Impact of SBF

#### First Projects

The program enrolled its first three projects in 2019, with several additional projects underway and expected to reach completion in early 2020. The first three projects represented nearly \$438,000 in private capital financing and were financed by two participating lenders. The businesses were in the agriculture and sales industries and were located in the Central Valley (Kings and Fresno counties).

#### California Hub for Energy Efficiency Financing (CHEEF) Programs

The three projects took advantage of the financing instruments available within SBF: two were enrolled as equipment leases, and the third was an equipment finance agreement.

#### Lenders

As of the close of 2019, three lenders had enrolled in the program: Alliance Funding Group (AFG), Ascentium Capital, and DLL Financial Solutions Partner. Between them, these finance companies offer four varieties of financing products: loans, service agreements, equipment leases, and equipment finance agreements.

The lenders offer financing between \$10,000 and \$5 million per project, with payback term lengths of up to 10 years.

#### **Contractors and Project Developers**

2019 also brought about the enrollment of the program's first contractors and project developers, who must complete training in order to offer financing from the program to their customers. The outreach conducted by staff among industry professionals led to the enrollment of 28 contractors and 8 project developers in 2019.

#### Next Steps

CAEATFA will work to grow the SBF Program in 2020 to enroll more projects and make its financing accessible to additional customers. Staff will engage in efforts to recruit new lenders to the program, with specific recruitment emphasis placed on enrolling a microlender to provide loans of \$10,000 or less, as well as a savings-based payment agreement provider.

### The Affordable Multifamily Energy Efficiency Financing (AMF) Program

The Affordable Multifamily Financing (AMF) Program targets a critical but hard-to-reach element of the state's existing building stock: multifamily buildings and complexes that house low income Californians. The program finances energy efficiency upgrades for multifamily properties of five or more units, where at least 50% of units are income-restricted at low to moderate (defined as up to 120% of Area Median Income). To be eligible for the program, properties must remain affordable for at least five years.

The AMF Program is designed to complement existing multifamily energy programs, specifically the Low-Income Weatherization Program (LIWP), administered by the State's Department of Community Services and Development, and the Solar On Multifamily Affordable Homes (SOMAH) program, administered by the CPUC via a competitively-selected team of nonprofit organizations. LIWP offers a generous incentive to qualifying affordable multifamily properties that install energy efficiency upgrades, and SOMAH requires the completion of an energy audit before issuing an incentive to install solar. CAEATFA specifically designed the AMF Program to work with these existing programs by offering its attractive financing for the portion of the measures not otherwise incentivized to help address gaps.

The AMF Program finances a broad array of energy efficiency measures, as well as any energy efficiency measure approved for rebate and incentive by any IOU, Renewable Energy Network or Community Choice Aggregator. Nonenergy measures may also be financed.

Key program features include:

- No minimum or maximum loan size
- The first \$1 million of each loan will be credit enhanced at 15% of the claim-eligible amount
- Fixed or variable rates allowed
- No underwriting requirements imposed on the finance company; underwriting is based on participating lenders' requirements

As with all Hub programs, eligibility requires that the property receive electric or natural gas service from at least one of the IOUs: PG&E<sup>®</sup>, SDG&E<sup>®</sup>, SCE<sup>®</sup> or SoCalGas<sup>®</sup>.

#### Progress and Outreach

CAEATFA launched AMF in mid-2019, following development of draft regulations and a public workshop during the first quarter. The CAEATFA Board approved AMF's emergency regulations in April, and the Office of Administrative Law enacted them in May.

In August, CAEATFA enrolled the AMF Program's first participating finance company, Renew Energy Partners (Renew). Renew offers AMF customers Savings-Based Payment Agreements in amounts ranging from \$250,000 to \$10 million, with terms of up to 10 years.

With regulations in place and a finance company enrolled, CAEATFA staff focused on outreach within the AMF industry during the second half of 2019. Staff conducted various outreach events across the state reaching stakeholders, including: San Joaquin Valley Affordable Housing Summit, the Nonprofit Housing Association Affordable Housing Conference in San Francisco, the San Diego Housing Federation annual conference and the Southern California Association of Nonprofit Housing conference in Los Angeles. These outreach efforts provided valuable opportunities to interact with potential customers and program partners, including finance companies, utility program implementers and housing organizations.

#### Next Steps

Because the debt stack for deed-restricted affordable multifamily projects is complex and restrictive, and because of the high expenses involved with energy efficiency retrofits to large multifamily properties, CAEATFA staff anticipates long project approval and completion timelines for this program.

With this in mind, CAEATFA will continue active outreach to property owners, utility program implementers and finance companies during 2020. In particular, staff will work to recruit a finance company that will provide a traditional unsecured lease product, as CAEATFA believes such a product to be key to the AMF program's success.

### Nonresidential Program

The Nonresidential Program was designed to encourage energy efficiency financing for public entities and large businesses and nonprofits. Unlike the other Hub programs, it does not include a credit enhancement; rather, the benefit offered by the Nonresidential Program is On-Bill Repayment (OBR) functionality. Launch of the Nonresidential Program is therefore dependent upon the development of OBR.

#### California Hub for Energy Efficiency Financing (CHEEF) Programs

As of the end of 2019, the Nonresidential Program is not being actively developed. Since CPUC Decision 17-03-026 requires all pilots to be launched by the end of 2019, and since OBR will not be released until 2020, CAEATFA staff directed resources to the launch of the SBF and AMF Programs in 2019.

In the event that CAEATFA is authorized to develop the Nonresidential Program in the future, prior work can be leveraged in its implementation. While developing the SBF Program design and regulations, CAEATFA anticipated how the Nonresidential Program would be incorporated into the Hub's offerings.

#### **On-Bill Repayment (OBR)**

On-Bill Repayment (OBR), whereby a borrower repays energy efficiency financing through their utility bill, is viewed by the CPUC as a critical component of the Hub programs, as it has the potential to both encourage program uptake and reduce default rates. SBF and AMF will incorporate OBR as a key feature upon its release, as will the Nonresidential Program should it be developed.

During 2019, CAEATFA staff worked with the IOUs and its Master Servicer, Concord Servicing, to establish an OBR infrastructure that guarantees the secure flow of funds between accounts and accurate transmission of corresponding data. This complex task necessitates close coordination with the IOUs, since each utility has a unique billing architecture and security protocols. When CAEATFA's OBR mechanism is launched, it will be the first in the nation to coordinate financing between multiple utilities and finance companies.

In the second half of 2019, CAEATFA began regression testing with the IOUs to ensure that the OBRrelated software coding successfully interacts with each IOU's established processes.

#### Next Steps

In 2020, CAEATFA will continue coordinating with the IOUs on program development and testing, with the goal of a mid-year launch of OBR functionality. Staff will also undertake the required tariff and regulatory processes.

## PROPERTY ASSESSED CLEAN ENERGY (PACE) LOSS RESERVE PROGRAM

## **Program Summary**

#### Legislative Background

The Property Assessed Clean Energy (PACE) Loss Reserve Program (the Program) was authorized in September 2013 to assist residential single family PACE financing by helping to increase its acceptance in the marketplace and protect against the risk of default and foreclosure. PACE allows local jurisdictions to finance renewable energy installations, energy and water efficiency retrofits, and electric vehicle charging infrastructure by issuing bonds that are repaid by participating property owners through their property tax assessments.

PACE initially launched as a financing mechanism for energy efficiency and renewable retrofits in 2008. However, on July 6, 2010, the Federal Housing Finance Agency (FHFA) issued a pronouncement that PACE programs "present significant safety and soundness concerns" and violated standard mortgage provisions since PACE tax liens have priority over any other loan or mortgage. The concerns expressed by FHFA caused the majority of the residential PACE programs throughout the country to be placed on hold at that time, including many of the existing residential PACE programs in California.

In response to FHFA's concerns and to further support the development of PACE in California, Senate Bill 96 (Committee on Budget and Fiscal Review, Chapter 356, Statutes of 2013) authorized CAEATFA to develop and administer the PACE Loss Reserve Program with an initial allocation of \$10 million. The program will assist in addressing FHFA's financial concerns to first mortgage lenders and collect data to better quantify actual risk, while helping the State reach its energy efficiency and renewable goals by supporting residential PACE.

### Program Design

The goal of the Program is to put first mortgage lenders in the same position they would be in without the PACE lien on the property. The PACE Loss Reserve makes first mortgage lenders whole for any direct losses incurred due to the existence of a PACE lien on a property. To that end, the Loss Reserve covers the following losses:

- (1) PACE payments paid while a first mortgage lender is in possession of a property subject to a PACE assessment.
- (2) Any losses to the first mortgage lender up to the amount of outstanding PACE assessments in a forced sale for unpaid taxes or special assessments.

PACE administrators may participate in the Program by applying to CAEATFA and demonstrating that they meet the Program's minimum underwriting criteria as established in statute and regulation.

Once enrolled, each eligible financing originated by an enrolled PACE administrator and included in its semi-annual reports may be covered by the Loss Reserve for its full term, or until the Loss Reserve is exhausted. Additionally, PACE administrators that applied to the Program on or before June 9, 2014 were allowed to enroll their existing portfolios under the Loss Reserve to maximize the Program's effectiveness. To allow new PACE programs (created on or after March 10, 2014) to enroll in the Program without delaying their operations, the Loss Reserve also covers financings originated up to 30 days before their enrollment date.

Enrolled PACE administrators must report to CAEATFA on the size and status of their portfolios in March and October of each year. Each report includes detailed information on the financings issued during the reporting period, including the assessor's parcel number, principal amount, annual assessment amount and term. The October reports also include information on the size and value of the cumulative financing portfolio and information on energy and water savings resulting from the funded projects, to the extent that information is available.

## **Report on 2019 Activity**

#### **Program Enrollment**

As of December 31, 2019, 21 PACE programs have participated in the PACE Loss Reserve Program. In 2019, CAEATFA Staff enrolled two PACE programs: PACE Funding (LA County) and CaliforniaFirst (WRCOG).

TABLE 4: PACE PROGRAMS ENROLLED EACH YEAR					
2014	2015	2016	2017	2018	2019
<ul> <li>MPOWER Placer</li> <li>mPOWER Folsom</li> <li>Berkeley FIRST</li> <li>Sonoma County Energy Independence Program</li> <li>CaliforniaFIRST</li> <li>WRCOG HERO</li> <li>SANBAG HERO</li> <li>California HERO</li> </ul>	<ul> <li>AllianceNRG</li> <li>LA HERO</li> <li>CaliforniaFIRST in LA County</li> <li>Ygrene</li> </ul>	<ul> <li>PACE Funding (CSCDA)</li> <li>CMFA PACE</li> </ul>	<ul> <li>CSCDA HERO Program</li> <li>Figtree PACE Program</li> <li>Spruce PACE</li> <li>mPOWER</li> </ul>	<ul> <li>PACE Funding (WRCOG)</li> </ul>	<ul> <li>PACE Funding (LA County)</li> <li>CaliforniaFIRST (WRCOG)</li> </ul>

Table 4, below, shows all of the PACE programs enrolled each year.

During initial program enrollment in June 2014, the 8 participating PACE programs enrolled 17,401 PACE financings with a total principal value of over \$350,000,000. To date, the Loss Reserve covers 151,453 PACE financings with a total outstanding principal value of \$3,538,700,436.67. For the 2019

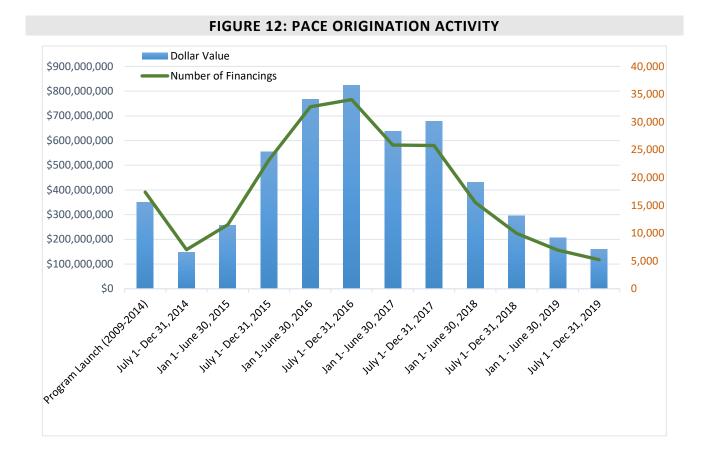
reporting periods, participating PACE programs enrolled 12,173 PACE financings with a total principal value of \$365,241,174.86. A chart of all Program enrollment activity as of December 31, 2019 can be found in Appendix C.

#### Claims on the Loss Reserve

To date, no claim has been made on the Loss Reserve. At Program development, CAEATFA Staff initially estimated that the \$10 million Loss Reserve would last between eight to twelve years. CAEATFA is working to analyze the Loss Reserve's potential long-term liability and longevity based on activity to date. In 2018, the PACE Loss Reserve Program staff selected a firm and began performing a risk analysis of the \$10 million loss reserve to help inform future efforts. The risk analysis is currently being finalized.

#### Program Impact and Results

After the Program's launch, residential PACE saw a significant increase in origination activity, with residential PACE administrators offering PACE financing in most counties in California. Figure 12, below, shows the growth of the enrolled portfolio of PACE financings in the Loss Reserve.



The Loss Reserve covers PACE financings for energy and water efficiency improvements, electric vehicle charging infrastructure, and clean energy improvements. Table 5, below, details the estimated environmental savings from enrolled financings issued as of June 30, 2019, as reported by each PACE program administrator.

#### TABLE 5: ESTIMATED ENVIRONMENTAL SAVINGS FROM ENROLLED PACE FINANCINGS

Program Name	Estimated Environmental Savings from Enrolled Financings <sup>10</sup>		
mPOWER Placer	23,598,985 kWh saved annually 4,365.8 MTCO2 saved annually		
mPOWER Folsom	556,453 kWh saved annually 102.9 MTCO2 saved annually		
Berkeley FIRST	54,408 kWh annually		
Sonoma County Energy Independence Program	22,500,112 kWh over lifetime 92,124 MTCO2 over lifetime 145,562 therms over lifetime		
CaliforniaFIRST	59,818,324 kWh generated annually 28,306,573 kWh saved annually 2,062,924 therms saved annually 67,496,702 gal saved annually		
WRCOG HERO Program	218,393,023 kWh saved annually 149,586,910 gal saved annually		
SANBAG HERO Program	132,465,508 kWh saved annually 81,867,045 gal saved annually		
California HERO Program	515,537,086 kWh saved annually 343,274,821 gal saved annually		
AllianceNRG	6,936,336 kWh generated annually 348,597 kWh saved annually 5,737 therms saved annually 727,985 gal saved annually		
LA HERO Program	193,754,502 kWh saved annually 205,885,983 gal saved annually		
CaliforniaFIRST in Los Angeles County	14,506,621 kWh generated annually 15,220,620 saved annually 1,109,247 therms saved annually 52,217,846 gal saved annually		
Ygrene Works Program	56 MW saved over lifetime 3,800,000,000 kWh saved over lifetime 956,000 MTCO2 saved over lifetime 3,300,000,000 gal saved over lifetime		
PACE Funding (CSCDA)	13,682,456 kWh generated annually 1,404,887 kWh saved annually 34,256 therms saved annually 12,471,000 gal saved annually		
California Municipal Finance Authority	842,733,379 kWh generated over lifetime 759,073,846 kWh saved over lifetime 160,386 MTCO2 saved over lifetime 963,441,499 gal saved over lifetime		
Spruce PACE	336,585 kWh generated annually 1,312 kWh saved annually		

<sup>&</sup>lt;sup>10</sup> Administrators use various distinct methodologies to assess the environmental impact of their program.

Program Name	Estimated Environmental Savings from Enrolled Financings <sup>10</sup>		
CSCDA HERO	20,487,145 kWh saved annually 15,089,214 gal saved annually		
Figtree	1,460,415 kWh saved annually		
mPower Pioneer	4,355,114 kWh saved annually 805.7 MTCO2 saved annually		
PACE Funding (WRCOG)	463,835 kWh generated annually 37,393 kWh saved annually 1,376 therms saved annually 374,000 gal saved annually		
PACE Funding (LA County)	402,221 kWh generated annually 125,431 kWh saved annually 2,561 therms saved annually 636,270 gal saved annually		
CaliforniaFIRST (WRCOG)	242,596 kWh generated annually 3,705 kWh saved annually 270 therms saved annually 57,837 gal saved annually		

## **BOND FINANCING ACTIVITIES**

### **Program Summary**

CAEATFA has served as one of the State's primary alternative energy bond issuers since its inception in the 1980s. As a conduit bond issuer, CAEATFA has worked with both public and private entities in issuing over \$212 million in bond financing for 26 projects over its lifetime. The projects help to meet federal and state energy goals, and have included solar, hydroelectric, geothermal, biomass and cogeneration projects. A list of CAEATFA's outstanding bonds can be found in Table 6.

Most recently, CAEATFA successfully issued Qualified Energy Conservation Bonds to assist in the financing of a public utility's one megawatt (MW) solar project in San Diego (2010), and Clean Renewable Energy Bonds on behalf of the California Department of Transportation to install solar on approximately 70 of its properties across the state anticipated to save taxpayers \$52.5 million in energy costs.

The financial assistance and incentives that CAEATFA can provide as a conduit bond issuer are authorized by Federal statute and programs. CAEATFA did not have any new bond issuances in 2019.

CAEATFA continues to collaborate with stakeholders to discuss innovative approaches to meet the financing gaps for renewable energy and energy efficiency projects.

## **Outstanding Bonds**

The Authority had two outstanding bond issues in 2019, amounting to a combined total of \$5,008,366 in bond debt as of December 31, 2019.

TABLE 6: OUTSTANDING BONDS						
Closing Date	Bond Short Name	Bond Type	Final Maturity	Amount of Issue	Outstanding Debt	
06/10/2009	Caltrans Projects Series 2009	CREB <sup>11</sup>	12/15/2023	\$20,000,000	\$1,704,533	
11/18/2010	Fallbrook Public Utility District Solar Project Series	QECB <sup>12</sup>	11/18/2027	\$7,227,000	\$3,303,833	

TOTAL: \$82,227,000 \$5,008,366

<sup>&</sup>lt;sup>11</sup> Clean Renewable Energy Bond

<sup>&</sup>lt;sup>12</sup> Qualified Energy Conservation Bond

## **REPORT OF AUTHORITY'S FINANCES**

This report of the Authority's finances is submitted pursuant to Public Resources Code Section 26017.

### **Revenues and Expenditures – FY 2018-19**

The Authority's total revenues for fiscal year 2018-19 were \$2,703,502 and the total expenditures were \$4,464,000.

Total Revenues <sup>13</sup> :	\$2,703,502
Expenditures:	
Salaries and Wages	\$1,413,000
Staff Benefits	\$614,000
Operating Expenses and Equipment	\$2,437,000
Total Expenditures <sup>14</sup>	\$4,464,000

#### TABLE 7: REVENUES AND EXPENDITURES - FY 2018-19

### Projected Needs and Requirements – FY 2019-20; FY 2020-21

The Authority anticipates it has the financial needs and requirements identified in Table 8 for the 2019-20 and 2020-21 fiscal years.

	FY 2019-20	FY 2020-21
Total Salaries and Wages	\$1,477,000	\$1,180,000
Staff Benefits	\$751,000	\$603,000
Total Operating Expenses and Equipment	\$2,979,000	\$2,365,000
Total Projected Needs and Requirements	\$5,207,000	\$4,148,000

TABLE 8: PROJECTED NEEDS AND REQUIREMENTS<sup>15</sup> – FY 2019-20; FY 2020-21

<sup>&</sup>lt;sup>13</sup> Total revenues include fees collected from the STE and Bond Programs. Total revenues listed do not include reimbursements received from the IOUs to cover costs associated with CAEATFA's administration of the CHEEF.

<sup>&</sup>lt;sup>14</sup> Total expenditures include expenditures associated with all of CAEATFA's programs, including the administration of the CHEEF.

<sup>&</sup>lt;sup>15</sup> The values in this Section are as reported in the <u>Governor's Proposed Budget for the 2020-21 fiscal year</u>. As noted in the Governor's Proposed Budget, "Fiscal year 2018-19 budget display reflects the best available information for use in decision-making for this department and/or these fund(s). Additional review and reconciliation of 2018-19 ending fund balances will occur in the spring to evaluate if a budget adjustment is required."

# APPENDIX A: SALES AND USE TAX EXCLUSION APPLICATIONS CONSIDERED TO DATE

	Application Number	Date of Board Consideration	Applicant Name	City	County	Project Type	Use of Proceeds	QP Amount	STE Amount (Anticipated)	STE Used to Date	QP Amount Reported	% Reported	Estimated Environmental	Estimated Fiscal	Estimated Net Benefit <sup>2</sup>	Expected Total Jobs <sup>1</sup>	Expected Total Jobs from STE <sup>2</sup>	Project Status
1	13-SM005	4/16/2013	Vitriflex, Inc.	Milpitas	Santa Clara	Alternative Source	Solar Photovoltaic Component Manufacturing	\$16,330,000	\$1,366,821	\$372,404	\$4,422,853	27%	\$1,256,397	\$886,066	\$775,642	47	4	Active
2	13-5M012	12/17/2013	CE&P Imperial Valley 1, LLC	Brawley	Imperial	Advanced Manufacturing	Biomass Processing and Fuel Production	\$444,811,275	\$37,230,704	\$0	\$0	0%	N/A	\$51,344,220	\$14,113,516	650	84	Active
з	14-5M001	2/18/2014	Enovix Corporation	Fremont	Alameda	Advanced Manufacturing	Lithium Ion Battery Manufacturing	\$16,234,215	\$1,358,804	\$443,558	\$5,283,133	33%	N/A	\$1,920,567	\$561,763	78	6	Active
4	14-SM005	5/20/2014	MSB Investors, LLC	Santa Barbara	Santa Barbara	Alternative Source	Biogas Capture and Production	\$17,696,003	\$1,490,003	\$875,673	\$10,466,288	59%	\$319,442	\$1,392,985	\$222,423	75	5	Active
5	14-SM009	8/19/2014	nanoPrecision Products, Inc.	El Segundo, Camarillo	Los Angeles	Advanced Manufacturing	Optical Ferrule Manufacturing	\$7,963,972	\$670,366	\$425,181	\$5,049,657	63%	N/A	\$840,081	\$169,314	50	4	Active
6	14-5M011	9/16/2014	Rialto Bioenergy Facility, LLC	Bloomington	San Bernardino	Alternative Source	Biogas Capture and Production	\$14,722,168	\$1,239,607	\$1,229,519	\$14,707,168	100%	\$765,232	\$1,662,628	\$1,188,254	35	3	Active
7	14-5M012	9/16/2014	Anaheim Energy, LLC	Anaheim	Orange	Alternative Source	Biogas Capture and Production	\$19,143,601	\$1,611,891	\$1,600,767	\$19,139,987	100%	\$568,979	\$1,938,411	\$895,499	40	5	Active
•	15-SM006	6/16/2015	Efficient Drivetrains, Inc.	Milpitas	Santa Clara	Advanced Transportation	Electric Vehicle Drivetrain Manufacturing	\$5,008,800	\$421,741	\$315,331	\$3,768,913	75%	\$1,434,548	\$970,990	\$1,983,797	57	4	Active
9	15-5M011	8/18/2015	Orbital ATK, Inc.	Northridge	Los Angeles	Advanced Manufacturing	Defense and Aerospace Manufacturing	\$16,275,154	\$1,370,368	\$1,243,416	\$14,837,196	91%	N/A	\$3,648,303	\$2,277,935	320	10	Active
10	15-SM014	10/20/2015	Space Exploration Technologies Corp.	Hawthome	Los Angeles	Advanced Manufacturing	Aerospace Manufacturing	\$360,169,639	\$30,326,284	\$13,867,684	\$165,274,766	46%	N/A	\$40,537,040	\$10,210,756	4,200	183	Active
11	15-SM020	12/15/2015	Millennium Space Systems, Inc.	El Segundo	Los Angeles	Advanced Manufacturing	Aerospace Manufacturing	\$4,284,672	\$360,769	\$186,603	\$2,221,439	52%	N/A	\$1,389,088	\$1,028,319	55	4	Active
12	16-SM004	1/19/2016	rPlanet Earth, LLC	Vernon	Los Angeles	Advanced Manufacturing	Plastic Recycling	\$119,800,000	\$10,087,160	\$5,055,336	\$57,715,218	48%	N/A	\$34,955,481	\$24,868,321	625	59	Active
15	16-SM006	1/19/2016	California Safe Soil	McClellan	Sacramento	Advanced Manufacturing	Soil Amendments Production	\$3,750,000	\$315,750	\$169,306	\$2,013,952	54%	N/A	\$1,623,748	\$1,307,998	22	2	Active
14	16-5M008	10/18/2016	Waste Management of Alameda County	San Leandro	Alameda	Recycled Resource Extraction	Mixed Recycling	\$77,272,550	\$6,506,349	\$2,894,113	\$34,434,454	45%	\$141,898	\$8,381,777	\$2,017,327	344	20	Active
15	16-SM017	10/18/2016	Mid-Valley Disposal	Fresno	Fresno	Recycled Resource Extraction	Mixed Recycling	\$6,821,909	\$574,405	\$511,312	\$6,116,176	90%	\$29,922	\$592,293	\$47,811	54	5	Active
16	16-SM018	10/18/2016	Mid Valley Disposal	Kerman	Fresno	Recycled Resource Extraction	Mixed Organics	\$3,739,543	\$314,870	\$226,279	\$2,701,648	72%	\$12,990	\$275,785	-\$26,094	24	3	Active
17	16-5M026	12/13/2016	XT Green, Inc.	Corona	Riverside	Advanced Manufacturing	Advanced Carpet Recycling	\$8,970,500	\$755,316	\$186,238	\$2,216,005	25%	N/A	\$2,260,835	\$1,505,519	84	15	Active
18	16-SM037	12/13/2016	Gilead Sciences, Inc.	La Verne	Los Angeles	Advanced Manufacturing	Biopharmaceutical Manufacturing	\$51,645,674	\$4,348,566	\$3,978,168	\$47,274,208	92%	N/A	\$3,908,387	-\$440,179	746	48	Active
19	17-SM001	1/17/2017	North Fork Community Power	North Fork	Madera	Alternative Source	Biomass Processing and Fuel Production	\$6,819,733	\$574,222	\$230,398	\$2,736,317	40%	\$276,774	\$940,730	\$643,283	24	3	Active
20	17-SM002	1/17/2017	Atara Biotherpeutics, Inc.	Thousand Oaks	Ventura	Advanced Manufacturing	Biopharmaceutical Manufacturing	\$16,285,217	\$1,371,215	\$899,825	\$10,725,281	66%	N/A	\$8,830,079	\$7,458,864	103	6	Active
21	17-SM007	2/21/2017	BYD Coach & Bus LLC	Lancaster	Los Angeles	Advanced Transportation	Electric Bus Manufacturing	\$3,189,014	\$268,515	\$256,986	\$3,065,074	96%	\$1,728,198	\$11,841,232	\$13,300,915	1,279	33	Active
22	17-5M018	3/21/2017	Calgren Dairy Fuels, LLC	Pixley	Tulare	Alternative Source	Biomass Processing and Fuel Production	\$20,373,200	\$1,715,423	\$1,244,171	\$14,882,428	73%	\$1,627,153	\$2,424,238	\$2,335,968	68	12	Active
23	17-5M043	5/16/2017	Boehringer Ingelheim Fremont, Inc.	Fremont	Alameda	Advanced Manufacturing	Biopharmaceutical Manufacturing	\$214,040,484	\$18,022,209	\$8,786,730	\$105,104,429	49%	N/A	\$58,787,003	\$40,764,795	747	14	Active
24	17-5M006	6/20/2017	CR&R Incorporated	Lakeside and Perris	Riverside	Alternative Source	Biomass Processing and Fuel Production	\$11,610,900	\$977,638	\$956,300	\$11,375,918	98%	\$187,531	\$888,838	\$98,731	47	6	Active

	Application Number	Date of Board Consideration	Applicant Name	City	County	Project Type	Use of Proceeds	QP Amount	STE Amount (Anticipated) <sup>4</sup>	STE Used to Date <sup>4</sup>	QP Amount Reported	% Reported	Estimated Environmental Repetit	Estimated Fiscal	Estimated Net Benefit <sup>2</sup>	Expected Total Jobs <sup>1</sup>	Expected Total Jobs from STE <sup>2</sup>	Project Status
25	17-SM023	6/20/2017	Organic Energy Solutions	San Bernardino	San Bernardino	Alternative Source	Biomass Processing and Fuel Production	\$24,440,000	\$2,057,848	\$1,644,435	\$19,662,197	80%	\$602,601	\$1,552,332	\$97,085	106	17	Active
26	17-5M042	6/20/2017	Aranda Tooling, Inc.	Chino	San Bernardino	Advanced Manufacturing	Tooling and Metal Stamping	\$10,035,231	\$844,966	\$778,850	\$9,257,741	92%	N/A	\$6,607,393	\$5,762,427	180	11	Active
27	17-SM044	6/20/2017	Sunergy California LLC	McClellan	Sacramento	Alternative Source	Solar Photovoltaic Manufacturing	\$7,823,286	\$658,721	\$319,031	\$3,816,156	49%	\$2,877,987	\$3,761,032	\$5,980,298	195	12	Active
28	17-5M047	6/20/2017	Crimson Renewable Energy, LP	Bakersfield	Kem	Alternative Source	Biodiesel Production	\$21,833,100	\$1,838,347	\$1,344,422	\$16,081,590	74%	\$641,781	\$7,253,563	\$6,056,996	62	6	Active
29	17-5M049	6/20/2017	Cicular Polymers LLC	Lincoln	Placer	Advanced Manufacturing	Advanced Carpet Recycling	\$7,548,500	\$635,584	\$237,264	\$2,838,081	38%	N/A	\$1,177,470	\$541,886	78	6	Active
30	17-SM050	6/20/2017	eco.logic brands, inc.	Manteca	San Joaquin	Advanced Manufacturing	Recycled Paper Bottles Manufacturing	\$6,944,000	\$584,685	\$276,814	\$3,303,216	48%	N/A	\$757,657	\$172,972	66	5	Active
51	17-SM052	7/18/2017	Sanitation Districts of Los Angeles County	Whittier and Carson	Los Angeles	Alternative Source	Biomass Processing and Fuel Production	\$11,928,310	\$1,004,364	\$398,292	\$4,762,988	40%	\$95,175	\$2,099,961	\$1,190,772	41	4	Active
52	17-SM053	7/18/2017	Recology San Francisco	San Francisco	San Francisco	Recycled Resource Extraction	Mixed Recycling	\$3,633,145	\$305,911	\$257,621	\$3,073,876	85%	\$6,194	\$359,894	\$60,177	119	3	Active
33	17-SM054	8/15/2017	AMRO Fabricating Corporation	South El Monte	Los Angeles	Advanced Manufacturing	Aerospace Manufacturing	\$5,120,000	\$431,104	\$382,895	\$4,580,084	89%	N/A	\$611,847	\$180,743	92	7	Active
54	17-SM008	9/19/2017	Aemerge RedPak Services Southern California, LLC	Hesperia	San Bernardino	Advanced Manufacturing	Medical Waste Recycling	\$37,000,676	\$3,115,457	\$576,520	\$6,863,148	19%	N/A	\$3,399,447	\$283,990	55	9	Complete
35	17-SM013	9/19/2017	PolyPeptide Laboratories, Inc.	Torrance	Los Angeles	Advanced Manufacturing	Peptide Pharmaceutical Manufacturing	\$12,750,000	\$1,073,550	\$632,439	\$7,550,390	59%	N/A	\$1,026,253	-\$47,297	240	7	Active
36	17-SM033	9/19/2017	National Steel and Shipbuilding Company	San Diego	San Diego	Advanced Manufacturing	Thin Steel Plate Manufacturing	\$40,300,000	\$3,410,100	\$2,847,956	\$34,065,342	84%	N/A	\$8,549,758	\$5,139,658	5,220	72	Active
37	17-SM037	9/19/2017	Lollicup USA, Inc.	Chino	San Bernardino	Advanced Manufacturing	Food Grade Recycled Packaging Manufacturing	\$10,345,200	\$871,066	\$415,292	\$4,967,607	48%	N/A	\$4,455,345	\$3,584,279	396	9	Active
38	17-SM059	10/17/2017	CalPlant I, LLC	Willows	Glenn	Advanced Manufacturing	Medium Density Fiberboard Manufacturing	\$92,278,983	\$7,769,890	\$7,433,621	\$88,918,906	96%	N/A	\$15,697,094	\$7,927,204	412	31	Active
39	17-SM060	10/17/2017	QuantumScape Corporation	San Jose	Santa Clara	Advanced Manufacturing	Electric Vehicle Battery Manufacturing	\$18,243,000	\$1,536,061	\$696,663	\$8,333,315	45%	N/A	\$1,213,783	-\$322,277	135	12	Active
40	17-5M061	11/14/2017	Ontario CNG Station, Inc.	Ontario	San Bernardino	Alternative Source	Renewable Hydrogen Production	\$2,000,000	\$168,400	\$153,833	\$1,827,000	91%	\$3,715	\$260,821	\$96,136	13	2	Active
41	17-SM062	11/14/2017	Trademark Brewing, LLC	Long Beach	Los Angeles	Advanced Manufacturing	Beverage Production	\$1,834,741	\$156,169	\$83,940	\$1,004,072	54%	N/A	\$808,675	\$652,506	50	4	Active
42	17-SM063	11/14/2017	CR&R Incorporated	Stanton	Orange	Recycled Resource Extraction	Mixed Organics	\$8,389,685	\$706,411	\$577,624	\$6,909,373	82%	\$43,087	\$1,514,068	\$850,743	34	2	Active
43	17-SM056	12/19/2017	TBC- The Boring Company	Hawthome	Los Angeles	Advanced Manufacturing	Specialized Concrete Ring Manufacturing	\$3,160,000	\$266,072	\$182,180	\$2,179,191	69%	N/A	\$2,385,590	\$2,119,518	24	1	Active
44	17-SM064	12/19/2017	WIE-AGRON Bioenergy, LLC	Watsonville	Santa Cruz	Alternative Source	Biodiesel Production	\$3,300,000	\$294,700	\$171,130	\$2,047,036	58%	\$116,974	\$909,611	\$731,885	18	1	Active
45	17-SM063	12/19/2017	Sila Nanotechnologies, Inc.	Alameda	Alameda	Advanced Manufacturing	Silicon Anode Powder Manufacturing	\$11,018,845	\$927,787	\$912,254	\$10,912,132	99%	N/A	\$916,086	-\$11,701	123	10	Active
46	18-5M001	1/16/2018	Mid-Valley Recycling, LLC	Kerman	Fresno	Recycled Resource Extraction	Mixed Organics	\$1,970,000	\$164,692	\$25,080	\$300,000	15%	\$16,507	\$144,811	-\$3,374	12	2	Active
47	18-SM002	1/16/2018	IF Copack, LLC, dba Initative Foods	Sanger	Fresno	Advanced Manufacturing	Advanced Food Production	\$17,115,645	\$1,430,868	\$616,490	\$7,355,093	43%	N/A	\$3,266,279	\$1,835,411	113	11	Active
48	18-SM003	2/20/2018	Best Express Foods, Inc.	Stockton	San Joaquin	Advanced Manufacturing	Advanced Food Production	\$4,293,330	\$358,922	\$204,272	\$2,443,439	57%	N/A	\$1,766,397	\$1,407,475	35	2	Active
49	18-5M008	4/17/2018	Faraday&Future Inc.	Hanford; Compton; Gardena	Kings	Advanced Transportation	Electric Vehicle Manufacturing	\$239,234,449	\$20,000,000	\$13,071,050	\$156,352,277	65%	\$1,008,206	\$38,031,362	\$19,039,568	1,244	85	Active

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50	18-5M011	5/15/2018	Peninsula Plastics Recycling, Inc.	Turlock	Stanislaus	Recycled Resource Extraction	Plastic and Mixed Recycling	\$3,800,000	\$317,680	\$200,683	\$2,400,519	63%	\$7,488	\$1,692,646	\$1,382,454	16	2	Active
51	18-5M013	5/15/2018	GreenWaste Recovery, Inc.	San Jose	Santa Clara	Recycled Resource Extraction	Mixed Recycling and Organics	\$11,999,548	\$1,003,162	\$778,043	\$9,306,737	78%	\$46,114	\$2,430,654	\$1,473,605	86	5	Active
52	18-5M015	6/19/2018	Space Exploration Technologies Corp.	Hawthorne; Los Angeles; Irvine	Los Angeles	Advanced Manufacturing	Aerospace Manufacturing	\$142,708,000	\$11,930,389	\$2,430,974	\$29,078,640	20%	N/A	\$15,139,753	\$3,209,365	7,023	118	Active
53	18-5M018	6/19/2018	WET	Sun Valley	Los Angeles	Advanced Manufacturing	Water Feature Manufacturing	\$4,927,301	\$411,922	\$216,205	\$2,586,181	52%	N/A	\$873,330	\$461,408	280	5	Active
54	18-5M019	8/21/2018	Eurostampa California, LLC	Napa	Napa	Advanced Manufacturing	Advanced Packaging Label Production	\$2,852,000	\$238,427	\$209,866	\$2,510,353	88%	N/A	\$433,975	\$195,548	58	3	Active
55	18-5M021	8/21/2018	The Almond Company	Madera, Chowchilla	Madera	Advanced Manufacturing	Advanced Food Production	\$3,750,000	\$313,500	\$203,086	\$2,429,254	65%	N/A	\$1,448,619	\$1,135,119	25	2	Active
56	18-5M023	9/18/2018	Katerra Construction LLC	Тгасу	San Joaquin	Advanced Manufacturing	Multifamily Unit Building Component Manufacturing	\$71,608,261	\$5,986,451	\$3,126,445	\$37,397,666	52%	N/A	\$15,745,595	\$9,759,144	680	50	Active
57	18-5M026	10/16/2018	CalBioGas Kern LLC	Bakersfield	Kern	Alternative Source	Dairy Biogas Production	\$31,909,025	\$2,667,595	\$1,031,374	\$12,337,013	39%	\$359,810	\$6,333,623	\$4,025,838	100	8	Active
58	18-5M027	10/16/2018	CalBioGas Hanford LLC	Hanford	Kings	Alternative Source	Dairy Biogas Production	\$20,422,826	\$1,707,348	\$727,556	\$8,702,818	43%	\$208,263	\$3,690,904	\$2,191,818	67	6	Active
59	18-5M028	10/16/2018	CalBioGas West Visalia LLC	Tulare	Tulare	Alternative Source	Dairy Biogas Production	\$22,172,277	\$1,853,602	\$620,208	\$7,418,757	33%	\$202,638	\$3,655,350	\$2,004,386	71	6	Active
60	18-5M029	11/13/2018	MSB investors, LLC	Santa Barbara	Santa Barbara	Recycled Resource Extraction	Mixed Recycling	\$44,661,209	\$3,733,677	\$740,049	\$8,852,261	20%	\$115,040	\$3,630,121	\$11,484	74	10	Active
61	18-5M032	11/13/2018	Vivotein, LLC	Ontario	San Bernardino	Advanced Manufacturing	Animal Feed and Organic Fertilizer	\$7,895,770	\$660,086	\$101,179	\$1,210,270	15%	N/A	\$564,872	-\$95,214	36	5	Active
62	18-5M033	11/13/2018	Nate's Fine Foods LLC	Roseville	Placer	Advanced Manufacturing	Advanced Food Production	\$3,886,000	\$492,070	\$37,794	\$452,076	8%	N/A	\$1,312,727	\$820,658	79	5	Active
63	18-5M034	11/13/2018	Star Manu LLC	Ontario	San Bernardino	Advanced Manufacturing	Health and Beauty Products	\$2,821,986	\$235,918	\$103,265	\$1,235,227	44%	N/A	\$534,834	\$298,916	65	3	Active
64	18-5M035	12/18/2018	UTCRAS, LLC	Bakersfield	Kem	Advanced Manufacturing	Rail Transportation Manufacturing	\$3,174,400	\$265,380	\$109,040	\$1,304,302	41%	N/A	\$599,624	\$334,244	41	3	Active
65	18-5M037	12/18/2018	Aemetis Advanced Products Keyes, Inc.	Riverbank	Stanislaus	Alternative Source	Biomass Processing and Fuel Production	\$153,076,838	\$12,797,224	\$207,328	\$2,480,000	2%	\$1,371,022	\$17,565,901	\$6,139,699	622	72	Active
66	18-SM038	12/18/2018	Drink, Inc.	Richmond	Contra Costa	Advanced Manufacturing	Beverage Bottling Manufacturing	\$3,636,029	\$303,972	\$90,126	\$1,078,061	30%	N/A	\$1,897,358	\$1,593,386	62	4	Active
67	19-5M001	2/19/2019	Biogas Energy, Inc.	Roseville	Placer	Alternative Source	Biomass Processing and Fuel Production	\$3,867,000	\$323,281	\$0	50	0%	\$75,504	\$359,170	\$111,392	8	1	Active
68	19-5M003	2/19/2019	Watonga RNG 1, LLC	San Diego	San Diego	Alternative Source	Biogas Capture and Production	\$5,500,000	\$459,800	\$411,228	\$4,918,999	89%	\$80,989	\$1,000,104	\$621,293	٥	0	Active
69	19-5M004	2/19/2019	Sanitation Districts of Los Angeles County	Whittier	Los Angeles	Recycled Resource Extraction	Mixed Recycling	\$15,212,303	\$1,271,749	\$797,404	\$9,538,329	63%	\$39,199	\$2,747,895	\$1,515,345	65	4	Active
70	19-SM005	2/19/2019	CR&R Incorporated	Perris and Lakeview	Riverside	Recycled Resource Extraction	Mixed Paper and Mixed Organics	\$5,130,235	\$428,888	\$204,121	\$2,441,633	48%	\$99,915	\$334,778	\$5,805	54	2	Active
71	19-5M006	2/19/2019	Intuitive Surgical, Inc. and its Subsidiary, Intuitive Surgical Operations, Inc.	Sunnyvale	Santa Clara	Advanced Manufacturing	Advanced Robotic Surgical Systems and Tools	\$96,875,430	\$8,098,786	\$754,639	\$9,026,776	9%	N/A	\$13,591,326	\$5,492,540	1,272	33	Active
72	19-SM007	3/19/2019	Graham Packaging PET Tehcnologies, Inc.	Modesto	Stanislaus	Advanced Manufacturing	Plastic Bottle Manufacturing	\$10,347,274	\$865,032	\$734,200	\$8,782,294	85%	N/A	\$3,727,188	\$2,862,156	17	1	Active
73	19-5M008	4/16/2019	Tesia, Inc. (FKA Tesia Motors, Inc.)	Fremont	Alameda	Advanced Transportation	Electric Vehicle Manufacturing	\$81,906,653	\$6,847,396	\$5,634,484	\$67,398,134	82%	\$924,621	\$6,382,653	\$460,384	288	10	Active
74	19-SM009	4/16/2019	Northrop Grumman Systems Corporation	Paimdale	Los Angeles	Advanced Manufacturing	Aerospace Manufacturing	\$211,964,787	\$17,720,236	\$625,352	\$7,480,290	4%	N/A	\$26,906,447	\$9,186,191	4,886	232	Active

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75	19-5M011	5/21/2019	Quantitative BioSciences, Inc	Modesto	Stanislaus	Alternative Source	Biogas Capture and Production	\$875,511	\$73,193	\$36,618	\$438,017	50%	\$17,580	\$93,692	\$38,079	2	0	Active
76	19-5M012	5/21/2019	SANCO Services, L.P.	Escondido	San Diego	Alternative Source	Biogas Capture and Production	\$15,216,783	\$1,272,131	\$615,162	\$7,358,392	48%	\$192,942	\$2,749,888	\$1,670,707	127	12	Active
77	19-5M025	5/21/2019	Fortis Solution Group West, LLC	Napa	Napa	Advanced Manufacturing	Advanced Packaging Label Production	\$7,045,460	\$589,000	\$135,988	\$1,626,655	23%	N/A	\$1,071,413	\$482,413	59	4	Active
78	19-5M026	5/21/2019	Taft Ammonia Company, LLC	Taft	Kern	Advanced Manufacturing	Fertilizer Production	\$239,234,449	\$20,000,000	\$0	\$0	0%	N/A	\$41,686,059	\$21,686,059	120	17	Active
79	19-5M002	6/18/2019	Verdeco Recycling, Inc.	South Gate	Los Angeles	Advanced Manufacturing	Recycled Food Packaging Manufacturing	\$13,118,950	\$1,096,744	\$0	\$0	0%	N/A	\$4,906,568	\$3,809,824	22	3	Active
80	19-5M027	6/18/2019	Joby Aero, Inc.	Marina	Monterey	Advanced Transportation	Electric Vertical Take-Off and Landing (eVTOL) Aircraft Manufacturing	\$73,473,675	\$6,142,399	\$593,597	\$7,100,438	10%	\$151,181	\$31,297,045	\$25,305,827	1,457	85	Active
81	19-5M028	6/18/2019	HWY33 Pistachios, LLC	Cantua Creek	Fresno	Advanced Manufacturing	Pistachio Processing and Production	\$79,196,100	\$6,620,794	\$3,013,128	\$36,042,201	46%	N/A	\$15,571,185	\$8,950,391	192	14	Active
82	19-5M029	6/18/2019	Edwards Lifesciences LLC	Irvine	Orange	Advanced Manufacturing	Cardiovascular Technology Manufacturing	\$239,234,449	\$20,000,000	\$0	\$0	0%	N/A	\$20,979,059	\$979,059	1,064	48	Active
83	19-5M030	6/18/2019	Sioneer Stockton, LLC	Stockton	San Joaquin	Recycled Resource Extraction	Glass Recycling and Pozzolan Manufacturing	\$15,370,837	\$1,285,002	\$298,571	\$3,571,426	23%	\$231,501	\$1,672,361	\$618,859	28	4	Active
84	19-5M031	6/18/2019	Entekra, LLC	Modesto	Stanislaus	Advanced Manufacturing	Pre-Engineered Structural Shell Production	\$20,750,000	\$1,734,700	\$0	\$0	0%	N/A	\$13,737,134	\$12,002,434	268	17	Active
85	19-5M032	7/16/2019	South Bayside Waste Management Authority	San Carlos	San Mateo	Alternative Source	Organics and Municipal Solid Waste	\$11,260,000	\$941,336	\$59,081	\$717,473	6%	\$69,820	\$1,932,190	\$1,060,674	22	2	Active
86	19-5M033	7/16/2019	Allogene Therapeutics, Inc.	Newark	Alameda	Advanced Manufacturing	Biopharmaceutical Manufacturing	\$36,351,130	\$3,038,954	\$0	\$0	0%	N/A	\$6,892,248	\$3,853,294	206	12	Active
87	19-5M034	7/16/2019	Lakeside Pipeline LLC	Hanford	Kings	Alternative Source	Dairy Biogas	\$16,508,315	\$1,380,095	\$202,510	\$2,422,367	15%	\$451,076	\$7,864,837	\$6,935,818	31	2	Active
66	10-5M002	11/17/2010	ABEC Bidart Stockdale, LLC	Bakersfield	Kem	Alternative Source	Biogas Capture and Production	\$1,131,584	\$102,974	\$90,622	\$1,118,794	99%	\$228,808	\$73,809	\$199,643	26	3	Complete
89	10-5M004	11/17/2010	First Solar, Inc.	Santa Clara	Santa Clara	Alternative Source	Solar Photovoltaic Manufacturing	\$37,700,000	\$3,430,700	\$3,409,567	\$37,692,991	100%	\$1,668,971	\$1,971,559	\$209,831	174	17	Complete
90	10-5M007	11/17/2010	The Solaria Corporation	Fremont	Alameda	Alternative Source	Solar Photovoltaic Manufacturing	\$7,800,000	\$709,800	\$375,885	\$4,474,135	57%	\$834,403	\$1,564,665	\$1,689,268	180	17	Complete
91	10-5M013	11/17/2010	NuvoSun Incorporated	Milpitas	Santa Clara	Alternative Source	Solar Photovoltaic Manufacturing	\$20,000,000	\$1,820,000	\$1,736,128	\$19,996,323	100%	\$2,137,232	\$2,594,509	\$2,911,741	160	18	Complete
92	10-5M015	11/17/2010	Bloom Energy Corporation	Sunnyvale	Santa Clara	Alternative Source	Solid Oxide Fuel Cell Systems Manufacturing	\$37,447,693	\$3,407,740	\$2,978,510	\$35,340,433	94%	\$362,054	\$11,144,189	\$8,298,503	1,004	83	Complete
93	10-5M012	12/15/2010	SunPower Corporation	Milpitas	Santa Clara	Alternative Source	Solar Photovoltaic Manufacturing	\$8,000,000	\$728,000	\$704,816	\$7,745,227	97%	\$903,595	\$1,877,730	\$2,053,325	94	11	Complete
94	10-5M020	12/15/2010	Ameresco Butte County LLC	Paradise	Butte	Alternative Source	Landfill Gas Capture and Production	\$1,085,554	\$98,785	\$62,105	\$759,410	70%	\$71,701	\$185,955	\$138,870	12	1	Complete
95	10-5M022	12/15/2010	Ameresco Forward LLC	Manteca	San Joaquin	Alternative Source	Landfill Gas Capture and Production	\$2,227,596	\$202,711	\$119,409	\$1,447,556	65%	\$37,823	\$277,169	\$112,281	11	1	Complete
96	10-5M023	12/15/2010	Ameresco Johnson Canyon LLC	Gonzales	Monterey	Alternative Source	Landfill Gas Capture and Production	\$766,293	\$69,733	\$53,372	\$638,910	86%	\$33,124	\$168,912	\$132,303	12	1	Complete
97	10-5M024	12/15/2010	Ameresco San Joaquin LLC	Linden	San Joaquin	Alternative Source	Landfill Gas Capture and Production	\$1,723,486	\$156,837	\$113,649	\$1,378,738	80%	\$99,894	\$419,234	\$362,292	12	1	Complete
98	10-5M025	12/15/2010	Ameresco Vasco Road LLC	Livermore	Alameda	Alternative Source	Landfill Gas Capture and Production	\$1,828,204	\$166,367	\$112,036	\$1,358,331	74%	\$66,258	\$333,415	\$233,306	11	1	Complete
99	10-5M026	12/15/2010	BioFuels Point Loma, LLC	San Diego	San Diego	Alternative Source	Wastewater Treatment Biogas Capture and Production	\$6,236,024	\$567,478	\$449,162	\$5,512,428	88%	\$120,126	\$509,292	\$61,939	25	3	Complete

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300	10-5M028	12/15/2010	California Institute of Technology	Pasadena	Los Angeles	Alternative Source	R&D of Solar Fuel Generator Systems	\$13,400,000	\$1,219,400	\$996,694	\$11,899,376	89%	\$0	\$702,662	-\$516,738	133	15	Complete
303	11-5M001	1/25/2011	Leyden Energy, Inc.	Fremont	Alameda	Advanced Transportation	Lithium Ion Battery Manufacturing	\$1,306,525	\$118,894	\$99,647	\$1,213,373	93%	\$21,400	\$944,754	\$847,260	26	2	Complete
302	11-5M003	1/25/2011	Alameda-Contra Costa Transit District	Emeryville	Alameda	Alternative Source	Demonstration Hydrogen Fuel Production	\$5,387,950	\$490,303	\$362,320	\$4,473,087	83%	\$16,040	\$274,173	-\$200,090	6	1	Complete
305	11-5M006	3/22/2011	Mt. Poso Cogeneration Company, LLC	Bakersfield	Kem	Alternative Source	Biomass Processing and Fuel Production	\$14,374,000	\$1,308,034	\$1,164,294	\$14,374,000	100%	\$197,027	\$3,470,273	\$2,359,266	97	11	Complete
304	11-5M009	6/28/2011	DTE Stockton, LLC	Stockton	San Joaquin	Alternative Source	Biomass Processing and Fuel Production	\$10,120,000	\$920,920	\$823,638	\$10,120,000	100%	\$2,221,793	\$4,297,636	\$5,598,509	62	7	Complete
305	11-5M010	7/26/2011	SCS Energy	Fresno	Fresno	Alternative Source	Biogas Capture and Production	\$3,155,300	\$255,579	\$247,020	\$3,049,632	97%	\$40,230	\$271,233	\$55,884	9	1	Complete
306	11-5M019	11/15/2011	Zero Waste Energy Development Company, LLC	San Jose	Santa Clara	Alternative Source	Biogas Capture and Production	\$17,156,875	\$1,389,707	\$942,179	\$11,273,784	66%	\$1,355,423	\$2,233,575	\$2,199,291	174	17	Complete
307	11-5M016	12/13/2011	Tesia Motors, Inc.	Fremont; Hawthorne; Palo Alto;	Alameda	Advanced Transportation	Electric Vehicle Manufacturing	\$292,000,000	\$23,652,000	\$24,546,045	\$291,889,530	100%	\$2,386,636	\$35,023,610	\$13,758,246	1,237	108	Complete
308	12-5M003	3/20/2012	Stion Corporation	San Jose	Santa Clara	Alternative Source	Solar Photovoltaic Manufacturing	\$6,417,810	\$519,843	\$490,342	\$6,036,069	94%	\$277,896	\$253,546	\$11,600	28	3	Complete
309	12-5M004	5/15/2012	Soitec Solar Industries LLC	San Diego	San Diego	Alternative Source	Concentrated Photovoltaic Manufacturing	\$104,381,342	\$8,454,889	\$7,351,987	\$90,047,265	86%	\$3,706,841	\$10,302,813	\$3,334,765	399	44	Complete
110	12-5M006	5/15/2012	John Galt Biogas Inc.	Gait	Sacramento	Alternative Source	Biogas Capture and Production	\$1,025,769	\$83,087	\$61,712	\$735,019	72%	\$112,933	\$128,931	\$158,777	6	1	Complete
111	12-5M007	5/15/2012	Reflexite Soitec Optical Technology LLC	San Diego	San Diego	Alternative Source	Concentrated Photovoltaic Manufacturing	\$24,500,000	\$1,984,500	\$2,005,024	\$24,200,004	99%	\$357,750	\$1,704,725	\$77,975	114	8	Complete
112	12-5M008	6/19/2012	North Star Biofuels LLC	Watsonville	Santa Cruz	Alternative Source	Biodiesel Production	\$4,115,500	\$333,356	\$343,220	\$4,115,500	100%	\$84,522	\$2,616,810	\$2,367,976	30	1	Complete
113	12-5M009	10/16/2012	ABEC New Hope LLC	Galt	Sacramento	Alternative Source	Biogas Capture and Production	\$2,633,359	\$213,302	\$84,096	\$1,004,735	38%	\$41,150	\$208,573	\$36,421	22	3	Complete
114	12-5M012	11/13/2012	Zero Waste Energy, LLC	Marina	Monterey	Alternative Source	Biogas Capture and Production	\$1,187,000	\$96,147	\$94,295	\$1,126,587	95%	\$18,139	\$95,062	\$17,054	5	1	Complete
115	12-5M013	11/13/2012	Oberon Fuels, Inc.	Brawley	Imperial	Alternative Source	Biogas Capture & Bio DME Production	\$13,500,000	\$1,093,500	\$379,524	\$4,510,780	33%	\$423,866	\$679,196	\$9,561	17	3	Complete
116	13-5M001	1/15/2013	CleanWorld	Davis	Yolo	Alternative Source	Biomass Processing and Fuel Production	\$5,851,298	\$489,754	\$459,934	\$5,462,394	93%	\$106,588	\$506,088	\$122,923	24	3	Complete
117	13-5M002	3/19/2013	Buster Biofuels, LLC	Escondido	San Diego	Alternative Source	Biodiesel Production	\$1,905,343	\$159,477	\$160,430	\$1,905,343	100%	\$103,496	\$786,032	\$730,051	32	2	Complete
118	13-5M007	6/18/2013	ABEC Bidart-Old River, LLC	Bakersfield	Kem	Alternative Source	Biogas Capture and Production	\$6,254,045	\$523,464	\$328,667	\$3,926,732	63%	\$351,613	\$523,038	\$351,188	28	2	Complete
119	13-5M009	8/20/2013	North State Rendering Co Inc.	Oroville	Butte	Alternative Source	Biomass Processing and Fuel Production	\$7,355,324	\$613,641	\$619,318	\$7,355,324	100%	\$305,075	\$422,917	\$112,351	12	2	Complete
120	13-5M010	9/17/2013	Central Valley Ag Power, LLC	Oakdale	Stanislaus	Alternative Source	Biomass Processing and Fuel Production	\$3,481,313	\$291,386	\$293,077	\$3,480,725	100%	\$38,218	\$394,801	\$141,634	23	2	Complete
121	13-5M011	10/15/2013	Blue Line Transfer, Inc.	S. San Francisco	San Mateo	Alternative Source	Biomass Processing and Fuel Production	\$4,976,469	\$416,530	\$326,788	\$3,881,088	78%	\$43,980	\$423,841	\$51,291	20	3	Complete
122	13-5M013	11/19/2013	Crimson Renewable Energy, LP	Bakersfield	Kem	Alternative Source	Biomass Processing and Fuel Production	\$14,065,000	\$1,177,241	\$1,181,210	\$14,064,999	100%	\$136,306	\$2,737,899	\$1,696,964	38	2	Complete
123	13-5M015	12/17/2013	Tesia Motors, Inc.	Fremont, Palo Alto, Hawthorne	Alameda	Advanced Transportation	Electric Vehicle Manufacturing	\$415,000,000	\$34,735,500	\$34,929,532	\$414,840,044	100%	\$4,847,406	\$54,306,869	\$24,418,775	2,050	115	Complete
124	14-5M004	5/20/2014	Pixley Biogas, LLC	Pixley	Tulare	Alternative Source	Biogas Capture and Production	\$3,363,238	\$283,185	\$283,108	\$3,362,323	100%	\$287,308	\$321,007	\$325,130	9	2	Complete

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125	14-5M007	5/20/2014	E&J Gallo Winery	Livingston	Merced	Alternative Source	Biogas Capture and Production	\$17,592,381	\$1,481,278	\$1,249,865	\$14,846,239	84%	\$363,691	\$1,142,019	\$24,432	45	7	Complete
126	14-5M008	6/17/2014	Niagara Bottling, LLC	San Bernardíno	San Bernardino	Advanced Manufacturing	Water Bottling Facility	\$30,000,000	\$2,526,000	\$2,525,683	\$29,996,239	100%	N/A	\$7,988,338	\$5,462,338	86	6	Complete
127	14-5M022	12/16/2014	Bowerman Power LFG, LLC	Irvine	Orange	Alternative Source	Landfill Gas Capture and Production	\$7,030,000	\$591,926	\$520,311	\$6,179,466	88%	\$273,723	\$1,091,792	\$773,589	30	3	Complete
128	14-5M021	1/20/2015	Pacific Ethanol Madera, LLC	Madera	Madera	Advanced Manufacturing	Corn Oil Production	\$4,763,500	\$401,087	\$271,375	\$3,222,978	68%	N/A	\$988,793	\$587,707	3	o	Complete
129	14-5M023	1/20/2015	WM Renewable Energy, LLC	Novato	Marin	Alternative Source	Biogas Capture and Production	\$2,004,360	\$168,767	\$168,072	\$1,996,102	100%	\$71,130	\$347,143	\$249,507	19	1	Complete
130	15-SM003.	2/17/2015	Silevo, Inc.	Fremont	Alameda	Alternative Source	Solar Photovoltaic Manufacturing	\$106,551,184	\$8,971,610	\$6,347,130	\$75,381,594	71%	\$3,402,597	\$9,175,513	\$3,606,500	319	33	Complete
131	15-5M006.	4/21/2015	California Renewable Power, LLC	Perris	Riverside	Alternative Source	Biogas Capture and Production	\$13,079,755	\$1,101,315	\$1,101,315	\$13,079,755	100%	\$137,797	\$1,839,848	\$876,329	48	4	Complete
132	15-5M003	5/19/2015	Weber Metals, Inc.	Paramount	Los Angeles	Advanced Manufacturing	Metal Forging	\$167,661,606	\$14,117,107	\$11,339,860	\$135,006,352	81%	N/A	\$35,048,735	\$20,931,628	192	18	Complete
133	15-SM005	6/16/2015	U.S. Corrugated of Los Angeles, Inc.	Santa Fe Springs	Los Angeles	Advanced Manufacturing	Corrugated Packaging Manufacturing	\$23,969,087	\$2,018,197	\$2,018,197	\$23,969,087	100%	N/A	\$7,825,890	\$5,807,693	160	13	Complete
134	15-SM007	6/16/2015	The Monadnock Company	Industry	Los Angeles	Advanced Manufacturing	Specialty Aerospace Fastener Manufacturing	\$6,475,000	\$543,193	\$465,419	\$5,540,581	86%	N/A	\$1,847,167	\$1,301,972	299	10	Complete
135	15-SM008	7/21/2015	Hi Shear Corporation	Torrance	Los Angeles	Advanced Manufacturing	Specialty Aerospace Fastener Manufacturing	\$39,385,000	\$3,316,217	\$3,199,996	\$38,077,811	97%	N/A	\$3,432,623	\$116,406	1,117	43	Complete
136	15-SM009	7/21/2015	Las Gallinas Valley Sanitary District	San Rafael	Marin	Alternative Source	Biogas Capture and Production	\$788,757	\$66,413	\$66,413	\$788,757	100%	\$10,707	\$44,763	-\$10,941	7	0	Complete
137	15-5M012	9/15/2015	Rolls-Royce High Temperature Composites, Inc.	Huntington Beach	Orange	Advanced Manufacturing	Composites Manufacturing	\$8,728,000	\$734,898	\$702,916	\$8,348,171	96%	N/A	\$788,866	\$53,969	105	6	Complete
138	15-5M010	10/20/2015	Karma Automotive LLC	Moreno Valley	Riverside	Advanced Manufacturing	Plug-In Hybrid Vehicle Manufacturing	\$38,194,860	\$3,216,007	\$3,216,007	\$38,194,860	100%	N/A	\$4,025,187	\$809,179	205	16	Complete
139	15-SM015	10/20/2015	Madera Renewable Energy, LLC	Madera	Madera	Alternative Source	Biogas Capture and Production	\$1,999,507	\$168,358	\$168,244	\$1,999,507	100%	\$418,611	\$201,229	\$431,481	7	1	Complete
340	15-5M016	10/20/2015	Hanford Renewable Energy, LLC	Hanford	Kings	Alternative Source	Biogas Capture and Production	\$3,748,012	\$315,583	\$311,895	\$3,708,525	99%	\$974,447	\$435,837	\$1,094,701	9	1	Complete
341	15-5M017	11/17/2015	Space Systems/Loral LLC	Palo Alto	Santa Clara	Advanced Manufacturing	Aerospace Manufacturing	\$5,586,000	\$470,341	\$203,707	\$2,419,329	43%	N/A	\$812,787	\$342,446	354	3	Complete
342	15-5M013	12/15/2015	ABEC #2 LLC	Buttonwillow	Kem	Alternative Source	Biogas Capture and Production	\$5,990,614	\$504,410	\$419,042	\$4,976,743	83%	\$180,513	\$618,883	\$294,986	14	0	Complete
343	15-SM024	12/15/2015	Tesia Motors, Inc.	Fremont; Hawthorne; Palo Alto;	Alameda	Advanced Transportation	Electric Vehicle Manufacturing	\$463,625,000	\$39,037,225	\$39,037,008	\$463,622,420	100%	\$4,766,289	\$61,843,129	\$27,572,193	1,439	41	Complete
344	16-SM003	1/19/2016	Kîte Pharma, Inc.	El Segundo	Los Angeles	Advanced Manufacturing	Biopharmaceutical Manufacturing	\$13,763,050	\$1,158,849	\$1,158,554	\$13,763,037	100%	N/A	\$5,393,473	\$4,234,624	305	18	Complete
345	16-SM005	1/19/2016	Escondido Bioenergy Facility, LLC	Escondido	San Diego	Alternative Source	Biogas Capture and Production	\$1,900,000	\$159,980	\$49,901	\$396,906	31%	\$28,355	\$344,260	\$212,635	11	1	Complete
146	16-5M002	2/16/2016	The Gill Corporation and Its Subsidiary, Castle Industries	El Monte, Ontario	Los Angeles	Advanced Manufacturing	Aerospace Manufacturing	\$8,472,000	\$713,342	\$271,936	\$3,231,275	38%	N/A	\$2,371,545	\$1,658,203	608	36	Complete
347	16-SM009	10/18/2016	Waste Management Recycling and Disposal Services of California, Inc.	Sun Valley	Los Angeles	Recycled Resource Extraction	Mixed Organics	\$3,500,000	\$294,700	\$287,174	\$3,411,408	97%	\$8,008	\$568,386	\$281,694	37	1	Complete
348	16-5M011	10/18/2016	SANCO Services, LP	Escondido	San Diego	Recycled Resource Extraction	Mixed Recycling	\$24,190,000	\$2,036,798	\$1,440,631	\$17,116,898	71%	\$91,615	\$3,306,064	\$1,360,881	112	12	Complete
349	16-5M013	10/18/2016	Recology San Francisco	San Francisco	San Francisco	Recycled Resource Extraction	Mixed Recycling	\$7,917,170	\$666,626	\$634,667	\$7,775,140	98%	\$16,789	\$701,902	\$52,065	127	8	Complete

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150	16-5M014	10/18/2016	Monterey Regional Waste Management District	Marina	Monterey	Recycled Resource Extraction	Mixed Recycling	\$11,401,677	\$960,021	\$960,021	\$11,401,677	100%	\$44,567	\$1,310,429	\$394,975	35	4	Complete
151	16-5M021	11/15/2016	GreenWaste Recovery, Inc.	San Jose	Santa Clara	Recycled Resource Extraction	Mixed Recycling and Organics	\$4,458,683	\$375,421	\$129,037	\$4,438,683	100%	\$9,786	\$910,539	\$544,904	26	2	Complete
152	16-5M031	12/13/2016	Eslinger Biodiesel Inc.	Fresno	Fresno	Alternative Source	Biomass Processing and Fuel Production	\$8,394,385	\$706,807	\$706,274	\$8,394,385	100%	\$570,932	\$2,291,152	\$2,155,277	34	2	Complete
153	16-5M033	12/13/2016	ABEC #3 LLC dba Lake View Farms Dairy Biogas	Bakersfield	Kem	Alternative Source	Biogas Capture and Production	\$2,401,884	\$202,239	\$202,239	\$2,401,884	100%	\$33,640	\$311,256	\$142,657	25	3	Complete
154	16-5M034	12/13/2016	ABEC #4 LLC dba CE&S Dairy Biogas	Bakersfield	Kem	Alternative Source	Biogas Capture and Production	\$2,701,502	\$227,467	\$227,466	\$2,701,502	100%	\$57,815	\$506,804	\$337,152	24	4	Complete
155	16-5M036	12/13/2016	Tesia Motors, Inc.	Fremont; Hawthorne; Palo Alto;	Alameda	Advanced Transportation	Electric Vehicle Manufacturing	\$560,917,080	\$47,229,218	\$47,229,218	\$560,917,080	100%	\$7,883,861	\$46,343,056	\$6,997,699	1,585	80	Complete
156	17-5M003	1/17/2017	Tesia Motors, Inc.	Fremont	Alameda	Advanced Transportation	Electric Vehicle Manufacturing	\$287,322,328	\$24,192,540	\$24,113,805	\$287,322,316	100%	\$2,796,551	\$20,997,523	-\$398,467	1,011	43	Complete
157	17-5M011	2/21/2017	HZIU Kompogas SLO inc.	San Luis Obispo	San Luis Obispo	Alternative Source	Biomass Processing and Fuel Production	\$7,104,020	\$598,158	\$587,193	\$7,023,772	99%	\$38,784	\$529,337	-\$30,037	33	5	Complete
158	17-5M009	4/18/2017	Best Express Foods, Inc.	Stockton	San Joaquin	Advanced Manufacturing	Advanced Food Production	\$3,502,976	\$294,951	\$293,997	\$3,502,753	100%	N/A	\$1,185,647	\$890,697	78	4	Complete
159	17-5M019	4/18/2017	ChargePoint Inc.	Campbell	Santa Clara	Advanced Manufacturing	Electric Vehicle Charging Station Production	\$1,660,000	\$139,772	\$137,073	\$1,638,600	99%	N/A	\$341,105	\$201,333	35	3	Complete
350	17-5M022	5/16/2017	SJV Biodiesel, LLC	Pixley	Tulare	Alternative Source	Biodiesel Production	\$6,680,600	\$562,507	\$560,241	\$6,680,072	100%	\$287,262	\$2,711,381	\$2,436,136	20	2	Complete
161	17-5M021	6/20/2017	Advance International Inc.	Livermore	Alameda	Advanced Manufacturing	Advanced Food Production	\$2,283,000	\$192,229	\$190,841	\$2,282,784	100%	N/A	\$884,553	\$692,324	98	6	Complete
162	17-5M045	6/20/2017	U.S. Corrugated of Los Angeles, Inc.	Cerritos	Los Angeles	Advanced Manufacturing	Corrugated Packaging Manufacturing	\$5,834,792	\$491,289	\$488,982	\$5,834,792	100%	N/A	\$2,325,511	\$1,834,222	95	9	Complete
163	17-5M058	10/17/2017	SunLine Transit Agency	Thousand Palms	Riverside	Alternative Source	Renewable Hydrogen Production	\$7,000,000	\$589,400	\$585,206	\$7,000,000	100%	\$23,821	\$720,765	\$155,186	4	1	Complete
354	18-5M004	3/20/2018	Tesia, Inc. (FKA Tesia Motors, Inc.)	Fremont	Alameda	Advanced Transportation	Electric Vehicle Manufacturing	\$239,234,449	\$20,000,000	\$19,989,926	\$239,113,950	100%	\$2,581,524	\$19,018,169	\$1,399,693	842	36	Complete
365	18-5M007	3/20/2018	Sierra Institute for Community and Environment	Quincy	Plumas	Alternative Source	Biomass Processing and Fuel Production	\$316,286	\$43,162	\$21,535	\$257,591	50%	\$4,940	\$31,347	-\$6,874	8	2	Complete
366	18-5M006	4/17/2018	Siva Power, Inc.	Santa Clara	Santa Ciara	Alternative Source	Solar Photovoltaic Manufacturing	\$6,746,508	\$564,008	\$396,214	\$4,739,398	70%	\$339,550	\$729,070	\$504,612	62	6	Complete
367	18-5M009	5/15/2018	Tahoe Asphalt, Inc.	South Lake Tahoe	El Dorado	Recycled Resource Extraction	Asphalt Recycling	\$511,000	\$42,720	\$42,720	\$511,000	100%	\$3,484	\$85,695	\$46,549	2	1	Complete
368	18-5M016	6/19/2018	Zanker Road Resource Management, Ltd.	San Jose	Santa Ciara	Recycled Resource Extraction	Mixed Recycling	\$11,132,857	\$930,707	\$919,887	\$11,003,429	99%	\$154,295	\$1,438,809	\$662,398	57	5	Complete
369	18-5M025	10/16/2018	EDCO Disposal Corporation	Lemon Grove	San Diego	Recycled Resource Extraction	Mixed Recycling	\$3,750,505	\$313,542	\$313,542	\$3,750,500	100%	\$18,776	\$700,109	\$405,343	24	1	Complete
170	18-5M030	11/13/2018	Clerprem USA Corp.	Sacramento	Sacramento	Advanced Manufacturing	Passenger Seating System Manufacturing	\$876,493	\$73,275	\$73,253	\$876,230	100%	N/A	\$231,095	\$157,820	10	1	Complete
171	18-5M031	11/13/2018	Niagara Bottling, LLC	Rialto	San Bernardino	Advanced Manufacturing	Water Bottling	\$70,220,748	\$5,870,455	\$5,214,888	\$62,379,041	89%	N/A	\$6,595,424	\$724,970	189	14	Complete
172	18-5M014	12/18/2018	FirstElement Fuel Inc.	Oakland	Alameda	Advanced Manufacturing	Fuel Grade Hydrogen Production	\$2,050,000	\$171,380	\$171,380	\$2,050,000	100%	N/A	\$429,910	\$258,530	23	2	Complete
173	10-5M001	11/17/2010	Bowerman Power LFG, LLC	Irvine	Orange	Alternative Source	Landfill Gas Capture and Production	\$9,240,000	\$840,840	\$0	\$0	0%	\$398,492	\$1,008,052	\$363,704	30	3	Inactive
174	10-5M003	11/17/2010	ABEC Bidart Old River, LLC	Bakersfield	Kern	Alternative Source	Biogas Capture and Production	\$4,738,000	\$431,158	\$0	\$0	0%	\$3,080,806	\$438,844	\$3,088,491	50	6	Inactive

	Application Number	Date of Board Consideration	Applicant Name	City	County	Project Type	Use of Proceeds	QP Amount	STE Amount (Anticipated)	STE Used to Date	QP Amount Reported	% Reported	Estimated Environmental Benefit	Estimated Fiscal Benefit <sup>2</sup>	Estimated Net Benefit <sup>2</sup>	Expected Total Jobs <sup>1</sup>	Expected Total Jobs from STE <sup>2</sup>	Project Status
175	10-SM003	11/17/2010	Gallo Cattle Company	Atwater	Merced	Alternative Source	Biogas Capture and Production	\$1,245,000	\$113,295	\$0	\$0	0%	\$791,959	\$130,374	\$809,038	30	3	Inactive
176	10-5M006	11/17/2010	Solyndra LLC	Fremont	Alameda	Alternative Source	Solar Photovoltaic Manufacturing	\$381,776,000	\$34,741,616	\$25,127,322	\$277,309,757	73%	\$22,202,363	\$20,765,274	\$8,226,021	2,084	225	Inactive
177	10-SM009	11/17/2010	Nanosolar Inc.	San Jose	Santa Clara	Alternative Source	Solar Photovoltaic Manufacturing	\$140,187,900	\$12,757,099	\$4,306,412	\$53,035,063	38%	\$10,527,415	\$6,992,728	\$4,763,045	410	36	Inactive
178	10-5M011	11/17/2010	Stion Corporation	San Jose	Santa Clara	Alternative Source	Solar Photovoltaic Manufacturing	\$105,473,402	\$9,598,080	\$0	\$0	0%	\$3,512,324	\$6,207,404	\$121,648	493	47	Inactive
179	10-5M014	11/17/2010	Calísolar Inc.	Sunnyvale	Santa Clara	Alternative Source	Solar Photovoltaic Manufacturing	\$39,000,000	\$3,549,000	\$0	\$0	0%	\$1,971,609	\$1,975,797	\$398,407	273	13	inactive
180	10-5M010	12/15/2010	Simbol, Inc.	Calipatria, Niland, Brawley	Imperial	Alternative Source	Lithium and Battery Material Manufacturing	\$42,484,174	\$3,866,060	\$164,278	\$1,938,796	5%	\$558,363	\$9,552,414	\$6,244,717	212	23	inactive
181	10-SM016	12/15/2010	Quantum Fuel Systems Technologies Worldwide, Inc.	Irvine	Orange	Alternative Source	Solar Photovoltaic Manufacturing	\$8,943,838	\$814,073	\$0	\$0	0%	\$508,282	\$5,895,571	\$5,589,780	94	11	Inactive
182	10-5M018	12/15/2010	Green Vehicles, Inc.	Salinas	Monterey	Advanced Transportation	Electric Vehicle Manufacturing	\$3,708,030	\$337,433	\$0	\$0	0%	\$63,608	\$3,018,494	\$2,746,669	126	14	Inactive
185	10-5M019	12/15/2010	Soliant Energy, Inc.	Monrovia	Los Angeles	Alternative Source	Solar Photovoltaic Manufacturing	\$9,966,300	\$906,952	\$0	\$0	0%	\$1,142,989	\$1,709,894	\$1,945,932	38	5	Inactive
184	10-5M021	12/15/2010	Ameresco Crazy Horse LLC	Salinas	Monterey	Alternative Source	Landfill Gas Capture and Production	\$1,558,460	\$141,820	\$0	\$0	0%	\$103,093	\$432,228	\$393,501	12	1	Inactive
185	10-SM027	12/15/2010	Alta Devices, Inc.	Sunnyvale	Santa Clara	Alternative Source	Solar Photovoltaic Manufacturing	\$40,843,000	\$3,716,895	\$1,108,616	\$13,653,538	33%	\$561,404	\$5,025,666	\$1,870,175	322	37	Inactive
186	11-5M002	1/25/2011	MisSolé	Sunnyvale	Santa Clara	Alternative Source	Solar Photovoltaic Manufacturing	\$26,092,000	\$2,374,372	\$881,599	\$10,883,941	42%	\$3,246,664	\$1,363,913	\$2,236,206	56	3	Inactive
187	11-5M007	5/18/2011	Amonix, Inc.	Seal Beach	Orange	Alternative Source	Solar Photovoltaic Manufacturing	\$2,278,900	\$207,380	\$0	\$0	0%	\$244,895	\$557,789	\$595,304	153	2	Inactive
188	11-SM005	6/28/2011	Recology East Bay	Oakland	Alameda	Alternative Source	Biomass Processing and Fuel Production	\$3,703,090	\$336,981	\$0	\$0	0%	\$111,243	\$506,852	\$281,113	46	5	Inactive
189	11-5M012	8/23/2011	CE Obsidian Energy, LLC	Imperial	Imperial	Alternative Source	Geothermal Brine Extraction	\$174,453,978	\$14,130,772	\$0	\$0	0%	\$7,487,143	\$11,697,269	\$5,053,640	381	39	Inactive
190	11-SM014	8/23/2011	SoloPower Inc.	San Jose	Santa Clara	Alternative Source	Solar Photovoltaic Manufacturing	\$8,411,240	\$681,310	\$494,484	\$6,104,736	73%	\$419,024	\$575,484	\$313,197	40	1	Inactive
191	11-SM015	8/23/2011	Amonix, Inc	Seal Beach; Milpitas	Orange; Santa Clara	Alternative Source	Solar Photovoltaic Manufacturing	\$7,879,667	\$638,253	\$0	\$0	0%	\$740,148	\$2,884,021	\$2,985,916	200	12	Inactive
192	12-5M001	2/21/2012	Soraa, Inc.	Fremont	Alameda	Alternative Source	Energy Efficient LED Lighting Manufacturing	\$57,002,457	\$4,617,199	\$1,708,596	\$20,380,383	36%	\$30,775,968	\$2,368,664	\$28,527,434	180	14	Inactive
195	12-5M010	10/16/2012	Electric Vehicles International, LLC	Stockton	San Joaquin	Advanced Transportation	Electric Vehicle Manufacturing	\$5,744,962	\$465,342	\$256,836	\$3,170,809	55%	\$83,283	\$906,371	\$524,512	114	8	Inactive
194	12-5M011	10/16/2012	Clean World Partners LLC	Sacramento	Sacramento	Alternative Source	Biomass Processing and Fuel Production	\$11,796,759	\$955,537	\$0	\$0	0%	\$204,651	\$977,083	\$226,196	24	3	Inactive
195	13-SM004	4/16/2013	EJ Harrison and Sons Rentals, Inc.	Oxnard	Ventura	Alternative Source	Biogas Capture and Production	\$1,212,095	\$101,452		\$0	0%	\$19,311	\$108,487	\$26,345	6	1	Inactive
196	13-5M014	12/17/2013	Boxer Industries, Inc.	Redwood City	San Mateo	Advanced Manufacturing	Carbon Black Production	\$6,553,000	\$548,486	\$429,578	\$5,101,878	78%	N/A	\$539,522	-\$8,964	12	1	Inactive
197	14-SM002	3/18/2014	CleanWorld	San Bernardino	San Bernardino	Alternative Source	Biomass Processing and Fuel Production	\$6,698,715	\$564,032	\$0	\$0	0%	\$163,485	\$858,211	\$437,665	26	3	inactive
198	14-SM006	5/20/2014	Recology Bioenergy	Vacaville	Solano	Alternative Source	Biogas Capture and Production	\$25,967,035	\$2,186,424	\$0	\$0	0%	\$271,168	\$2,747,503	\$832,247	57	8	Inactive
199	14-SM010	8/19/2014	AltAir Paramount, LLC	Paramount	Los Angeles	Alternative Source	Renewable Diesel Production	\$16,325,984	\$1,374,648	\$911,002	\$10,819,502	66%	\$287,233	\$6,023,164	\$4,935,750	141	3	inactive

	Application Number	Date of Board Consideration	Applicant Name	City	County	Project Type	Use of Proceeds	QP Amount	STE Amount (Anticipated)	STE Used to Date'	QP Amount Reported	% Reported	Estimated Environmental Benefit	Estimated Fiscal Benefit <sup>2</sup>	Estimated Net Benefit <sup>2</sup>	Expected Total Jobs <sup>2</sup>	Expected Total Jobs from STE <sup>2</sup>	Project Status
200	14-5M014	8/19/2014	Mendota Bioenergy, LLC	Mendota	Fresno	Alternative Source	Biogas Capture and Production	\$2,200,000	\$185,240	\$10,045	\$119,300	5%	\$28,671	\$596,885	\$440,316	28	3	Inactive
201	14-5M013	9/16/2014	Lockheed Martin Corporation	Palmdale, Helendale	Los Angeles, San Bernardino	Advanced Manufacturing	Aerospace Manufacturing	\$345,296,354	\$29,073,953	\$0	\$0	0%	N/A	\$38,053,138	\$8,979,185	1,213	91	Inactive
202	14-SM019	10/21/2014	Solexel, Inc.	Milpitas	Santa Clara	Alternative Source	Solar Photovoltaic Manufacturing	\$20,500,000	\$1,726,100	\$1,726,100	\$20,500,000	100%	\$475,809	\$1,261,678	\$11,387	128	12	Inactive
203	14-5M024	3/17/2015	Heas Automation, Inc.	Oxnard	Ventura	Advanced Manufacturing	CNC Machine Manufacturing	\$81,426,200	\$6,836,086	\$0	\$0	0%	N/A	\$38,174,218	\$31,318,132	1,235	51	Inactive
204	15-5M005.	4/21/2015	GKN Aerospace Chem- Tronics, Inc.	Santa Ana	Orange	Advanced Manufacturing	Aerospace Manufacturing	\$118,687,529	\$9,993,490	\$1,918,895	\$22,789,729	19%	N/A	\$8,483,497	-\$1,509,993	231	13	Inactive
205	15-SM004	6/16/2015	T2Energy, LLC	Vista	San Diego	Advanced Manufacturing	Omega Oil Production	\$4,737,500	\$398,898	\$0	\$0	0%	N/A	\$1,881,353	\$1,482,455	48	3	Inactive
206	16-SM001	1/19/2016	Atieva USA Inc	Menio Park, Tracy, Sacramento	San Mateo, San Jouquin, Sacramento	Advanced Transportation	Electric Vehicle Manufacturing	\$530,750,000	\$44,689,150	\$0	\$0	0%	\$5,593,675	\$137,469,584	\$98,374,109	1,547	98	Inactive
207	16-SM013	10/18/2016	CRM Co., LLC.	Stockton	San Joaquin	Recycled Resource Extraction	Crumb Tire Rubber	\$3,400,000	\$286,280	\$0	\$0	0%	\$5,872	\$1,015,541	\$735,133	32	2	Inactive
208	16-SM019	10/18/2016	MSB Investors, LLC	Santa Barbara	Santa Barbara	Recycled Resource Extraction	Mixed Recycling	\$32,403,272	\$2,728,356	\$0	\$0	0%	\$80,208	\$2,985,127	\$336,980	75	11	Inactive
209	16-SM022	10/18/2016	EDCO Disposal Corporation	San Diego	San Diego	Recycled Resource Extraction	Mixed Recycling	\$10,000,000	\$842,000	\$0	\$0	0%	\$47,049	\$961,493	\$166,542	45	5	Inactive
210	16-5M023	10/18/2016	EDCO Transport Services	Signal Hill	Los Angeles	Recycled Resource Extraction	Mixed Recycling	\$10,500,000	\$884,100	\$0	\$0	0%	\$48,397	\$1,094,340	\$258,637	37	5	Inactive
211	17-5M012	1/17/2017	TAP Power LLC	Arcata	Humboldt	Alternative Source	Biomass Processing and Fuel Production	\$9,213,514	\$775,778	\$0	\$0	0%	\$340,641	\$1,120,388	\$685,251	33	4	Inactive
212	17-5M016	3/21/2017	Colony Energy Partners- Tulare, LLC	Tulare	Tulare	Alternative Source	Biomass Processing and Fuel Production	\$20,800,000	\$1,751,360	\$0	\$0	0%	\$581,721	\$2,675,765	\$1,506,126	49	7	Inactive
213	17-5M017	3/21/2017	FoodService Partners, LLC	Richmond	Contra Costa	Advanced Manufacturing	Advanced Food Production	\$8,500,000	\$715,700	\$0	\$0	0%	N/A	\$6,165,933	\$5,450,233	240	15	Inactive
214	17-5M020	4/18/2017	CALAMCO NH3 LLC	Taft	Kem	Advanced Manufacturing	Fertilizer Production	\$107,607,827	\$9,060,579	\$0	\$0	0%	N/A	\$16,925,300	\$7,864,721	84	11	Inactive
215	17-5M048	6/20/2017	Tracy Renewable Energy, LLC	Тгасу	San Joaquin	Alternative Source	Ethanol Production	\$52,246,456	\$4,399,152	\$0	\$0	0%	\$1,620,925	\$15,913,811	\$13,135,585	97	10	Inactive
216	17-5M051	6/20/2017	Schlosser Forge Company	Rancho Cucamonga	San Bernardino	Advanced Manufacturing	Aero Engine Ring Forging	\$53,568,357	\$4,510,456	\$0	\$0	0%	N/A	\$4,530,814	\$20,359	263	17	Inactive
217	17-SM046	7/18/2017	Pacific Ethanol Stockton, LLC	Stockton	San Joaquin	Alternative Source	Biogas Capture and Production	\$5,932,500	\$499,517	\$0	\$0	0%	\$273,362	\$693,533	\$467,378	31	5	Inactive
218	17-SM010	8/15/2017	Verdeco Recylcing, Inc.	South Gate	Los Angeles	Advanced Manufacturing	Recycled Food Packaging Manufacturing	\$4,940,350	\$415,977	\$0	\$0	0%	N/A	\$1,699,834	\$1,283,856	8	1	Inactive
219	18-SM005	3/20/2018	Thermal Technology, LLC	Santa Rosa	Sonoma	Advanced Manufacturing	Additive Manufacturing	\$8,726,448	\$729,531	\$0	\$0	0%	N/A	\$799,519	\$69,988	21	2	Inactive
220	18-SM010	5/15/2018	GB CNC Services, LLC	Fountain Valley	Orange	Advanced Manufacturing	Turned Part Manufacturing	\$7,680,000	\$642,048	\$0	\$280,397	4%	N/A	\$1,164,200	\$522,152	37	2	Inactive
221	18-SM012	6/19/2018	Chanje Energy, Inc.	Hawthome	Los Angeles	Advanced Transportation	Electric Vehicle Manufacturing	\$22,329,400	\$1,866,738	\$0	\$0	0%	\$15,578,624	\$71,861,266	\$85,573,152	260	15	Inactive
222	18-5M020	8/21/2018	WIE-AGRON Bioenergy, LLC	Watsonville	Santa Cruz	Alternative Source	Biodiesel Production	\$7,685,000	\$642,466	\$0	\$0	0%	\$73,544	\$1,216,403	\$647,480	45	7	Inactive
							Totals:	\$9,774,554,603	\$825,508,530	\$413,820,149	\$4,910,009,772	50%	\$182,472,901	\$1,493,394,715	\$850,359,895	65,906	3,630	

	Application Number	Date of Board Consideration	Applicant Name	City	County	Project Type	Use of Proceeds	QP Amount	STE Amount (Anticipated)	STE Used to Date <sup>4</sup>	QP Amount Reported	% Reported	Estimated Environmental Benefit	Estimated Fiscal Benefit <sup>2</sup>	Estimated Net Benefit <sup>a</sup>	Expected Total Jobs <sup>1</sup> from S	obs Statur
				Арр	olications I	Previously	Considered a	nd Denied									
	Application No.	Applicant Name	Chy	County	Project Type	Use of Proceeds	QP Amount	STE Amount (Antidpated) <sup>4</sup>	Entimated Flocal Departs <sup>2</sup>	Estimated Not Denetit <sup>2</sup>	Expected Total Johr <sup>a</sup>	Expected Total Jobs from STE <sup>1</sup>					
1	16-5M020	Zanker Road Resource Management	San Jose	Santa Clara	Recycled Resource Extraction	Mixed Recycling	\$1,512,796	\$127,377	\$227,254	\$100,565	14	2					
2	19-5M013	FirstElement Fuel Inc.	Beverly Hills	Los Angeles	Advanced Manufacturing	Fuel Grade Hydrogen	\$2,503,766	\$209,315	\$455,672	\$246,357	23	2					
3	19-5M014	FirstElement Fuel Inc.	Campbell	Santa Ciara	Advanced Manufacturing	Fuel Grade Hydrogen	\$2,202,766	\$184,151	\$438,733	\$254,582	23	2					
4	19-5M015	FirstElement Fuel Inc.	Concord	Contra Costa	Advanced Manufacturing	Fuel Grade Hydrogen	\$2,594,766	\$216,922	\$460,711	\$243,789	23	2					
5	19-5M016	FirstElement Fuel Inc.	Culver City	Los Angeles	Advanced Manufacturing	Fuel Grade Hydrogen	\$2,594,766	\$216,922	\$460,977	\$244,054	23	2					
6	19-5M017	FirstElement Fuel Inc.	Fountain Valley	Orange	Advanced Manufacturing	Fuel Grade Hydrogen	\$2,594,766	\$216,922	\$459,241	\$242,319	23	2					
7	19-5M018	FirstElement Fuel Inc.	Mission Hills	Los Angeles	Advanced Manufacturing	Fuel Grade Hydrogen	\$2,503,766	\$209,315	\$455,672	\$246,357	23	2					
8	19-5M019	FirstElement Fuel Inc.	Redwood City	San Mateo	Advanced Manufacturing	Fuel Grade Hydrogen	\$2,503,766	\$209,315	\$434,860	\$245,545	23	2					
9	19-5M020	FirstElement Fuel Inc.	San Diego	San Diego	Advanced Manufacturing	Fuel Grade Hydrogen	\$2,594,766	\$216,922	\$460,516	\$243,594	23	2					
10	19-5M021	FirstElement Fuel Inc.	Sherman Oaks	Los Angeles	Advanced Manufacturing	Fuel Grade Hydrogen	\$1,966,766	\$164,422	\$424,502	\$260,081	23	2					
11	19-5M022	FirstElement Fuel Inc.	Studio City	Los Angeles	Advanced Manufacturing	Fuel Grade Hydrogen	\$2,267,766	\$189,585	\$441,945	\$252,360	23	2					
12	19-5M023	FirstElement Fuel Inc.	Sunnyvale	Santa Ciara	Advanced Manufacturing	Fuel Grade Hydrogen	\$2,202,766	\$184,151	\$438,733	\$254,582	23	2					

\* Under the Program the value of a specific project's sales and use tax exclusion is calculated using the statewide sales and use tax average. The statewide average was estimated at 9.1% through June 2011 and changed to 8.1% in July 2011, 8.37% in July 2013, 8.42% in March 2014, and 8.36% in January 2018.

\* These benefits are estimates that are calculated under the Program's evaluation system at the time of Board approval. Applicants are required to provide annual reports to CAEATFA on actual project activity.

# APPENDIX B: STE APPLICATIONS RECEIVED FOR CONSIDERATION IN 2019

### Appendix B: Sales And Use Tax Exclusion Applications Received for Consideration in 2019

	Applicant Name	Project Location	Eligibility Pathway	Qualified Property Amount	Estimated STE Amount	Status
1	Biogas Energy, Inc.	Roseville (Placer)	Alternative Source	\$3,867,000	\$323,281	Approved February
2	Watonga RNG 1 LLC	San Diego (San Diego)	Alternative Source	\$5,500,000	\$459,800	Approved February
3	Sanitation Districts of Los Angeles County	Whittier (Los Angeles)	Recycled Resource Extraction	\$15,212,303	\$1,271,749	Approved February
4	CR&R Incorporated	Perris (Riverside); Lakeview (Riverside)	Recycled Resource Extraction	\$5,130,235	\$428,888	Approved February
5	Intuitive Surgical, Inc. and its Subsidiary, Intuitive Surgical Operations, Inc.	Sunnyvale (Santa Clara)	Advanced Manufacturing	\$96,875,430	\$8,098,786	Approved February
6	Graham Packaging PET Technologies, Inc.	Modesto (Stanislaus)	Advanced Manufacturing	\$8,925,143	\$746,142	Approved March
7	Northrup Grumman Systems Corporation	Palmdale (Los Angeles)	Advanced Manufacturing	\$211,964,787	\$17,720,256	Approved April
8	Tesla, Inc.	Fremont (Alameda)	Advanced Transportation	\$81,906,672	\$6,847,398	Approved April
9	Northrup Grumman Systems Corporation	Redondo Beach (Los Angeles)	Advanced Manufacturing	\$169,365,330	\$14,158,942	Withdrawn
10	Quantitative BioSciences, Inc.	Modesto (Stanislaus)	Alternative Source	\$875,511	\$73,193	Approved May
11	SANCO Services, LP	Escondido (San Diego)	Alternative Source	\$15,216,783	\$1,272,131	Approved May
12	Taft Ammonia Company, LLC	Taft (Kern)	Advanced Manufacturing	\$239,234,449	\$20,000,000	Approved May
13	Fortis Solutions Group West, LLC	Napa (Napa)	Advanced Manufacturing	\$7,045,460	\$589,000	Approved May
14	FirstElement Fuel, Inc.	Beverly Hills (Los Angeles)	Advanced Manufacturing	\$2,503,766	\$209,315	Denied

### Appendix B: Sales And Use Tax Exclusion Applications Received for Consideration in 2019

	Applicant Name	Project Location	Eligibility Pathway	Qualified Property Amount	Estimated STE Amount	Status
15	FirstElement Fuel, Inc.	Campbell (Santa Clara)	Advanced Manufacturing	\$2,202,766	\$184,151	Denied
16	FirstElement Fuel, Inc.	Concord (Contra Costa)	Advanced Manufacturing	\$2,594,766	\$216,922	Denied
17	FirstElement Fuel, Inc.	Culver City (Los Angeles)	Advanced Manufacturing	\$2,594,766	\$216,922	Denied
18	FirstElement Fuel, Inc.	Fountain Valley (Orange)	Advanced Manufacturing	\$2,594,766	\$216,922	Denied
19	FirstElement Fuel, Inc.	Mission Hills (Los Angeles)	Advanced Manufacturing	\$2,503,766	\$209,315	Denied
20	FirstElement Fuel, Inc.	Redwood City (San Mateo)	Advanced Manufacturing	\$2,503,766	\$209,315	Denied
21	FirstElement Fuel, Inc.	San Diego (San Diego)	Advanced Manufacturing	\$2,594,766	\$216,922	Denied
22	FirstElement Fuel, Inc.	Sheman Oaks (Los Angeles)	Advanced Manufacturing	\$1,966,766	\$164,422	Denied
23	FirstElement Fuel, Inc.	Studio City (Los Angeles)	Advanced Manufacturing	\$2,267,766	\$189,585	Denied
24	FirstElement Fuel, Inc.	Sunnyvale (Santa Clara)	Advanced Manufacturing	\$2,202,766	\$184,151	Denied
25	Verdeco Recycling	South Gate (Los Angeles)	Advanced Manufacturing	\$11,932,550	\$997,561	Approved June
26	Joby Aero, Inc.	Marina (Monterey)	Advanced Transportation	\$73,473,675	\$6,142,399	Approved June
27	HWY33 Pistachios, LLC	Cantua Creek (Fresno)	Advanced Manufacturing	\$79,196,100	\$6,620,794	Approved June
28	Edwards Lifesciences LLC	Irvine (Orange)	Advanced Manufacturing	\$239,234,449	\$20,000,000	Approved June
29	Sioneer Stockton, LLC	Stockton (San Joaquin)	Recycled Resource Extraction	\$15,370,837	\$1,285,002	Approved June
30	Entekra, LLC	Modesto (Stanislaus)	Advanced Manufacturing	\$20,750,000	\$1,734,700	Approved June
31	Best Express Foods, Inc.	Hayward (Alameda)	Advanced Manufacturing	\$4,061,129	\$339,510	Waitlisted (Approved January 2020)
32	Aemetis Biogas LLC	Ceres (Stanilaus)	Alternative Source	\$6,090,000	\$509,124	Waitlisted (Approved January 2020)

### Appendix B: Sales And Use Tax Exclusion Applications Received for Consideration in 2019

	Applicant Name	Project Location	Eligibility Pathway	Qualified Property Amount	Estimated STE Amount	Status
33	Aemetis Biogas LLC	Ceres (Stanilaus)	Alternative Source	\$1,356,240	\$113,382	Waitlisted (Approved January 2020)
34	Aemetis Biogas LLC	Ceres (Stanilaus)	Alternative Source	\$1,285,457	\$107,464	Waitlisted (Approved January 2020)
35	South Bayside Waste Management Authority	San Carlos (San Mateo)	Alternative Source	\$11,260,000	\$941,336	Approved July
36	Allogene Therapeutics, Inc.	Newark (Alameda)	Advanced Manufacturing	\$36,351,130	\$3,038,954	Approved July
37	Lakeside Pipeline LLC	Hanford (Kings)	Alternative Source	\$16,508,315	\$1,380,095	Approved July
38	Five Points Pipeline LLC	Riverdale (Fresno)	Alternative Source	\$15,017,114	\$1,255,431	Waitlisted (Approved January 2020)
39	Merced Pipeline LLC	Merced (Merced)	Alternative Source	\$31,922,542	\$2,668,725	Waitlisted (Approved January 2020)
40	East Valley Water District Bernardino)		Alternative Source	\$60,328,000	\$5,043,421	Waitlisted (Approved January 2020)
41	CR&R Incorporated	Perris (Riverside)	Alternative Source	\$1,861,500	\$155,621	Withdrawn
42	AltAir Paramount, LLC	Paramount (Los Angeles)	Alternative Source	\$1,200,000	\$100,320	Waitlisted (Approved January 2020)

# APPENDIX C: PACE LOSS RESERVE PROGRAM ENROLLMENT ACTIVITY THROUGH 2019

### Appendix C: PACE Loss Reserve Program Enrollment Activity through 2019

Year	Par Program		New Financings Actual Total		Ne	w Financings	Estimated Total			
rear			January 1st – June 30th		Outst	anding Portfolio	July 1st	– December 31st	Enro	olled Portfolio
	1	mPOWER Placer			464	\$10,502,382.62	312	\$9,540,534.04	776	\$20,042,916.66
	2	mPOWER Folsom	Note	vailable - PACE	3	\$54,181.18	4	\$86,847.90	7	\$141,029.08
	3	Berkeley FIRST**		ns enrolled entire	13	\$299,233.74	-	\$0.00	13	\$299,233.74
	4	CaliforniaFIRST	-	outstanding portfolios		\$0.00	151	\$3,435,462.04	151	\$3,435,462.04
2014	5	Sonoma County	ounty during initial application		1,550	\$43,702,974.25	65	\$1,524,472.34	1,615	\$45,227,446.59
	6	WRCOG HERO	-	d in June 2014	9,911	\$189,339,784.00		\$34,971,957.65	11,668	\$224,311,741.65
	7	SANBAG HERO	<i>p</i>		4,286	\$80,398,364.90		\$32,056,560.00	6,049	\$112,454,924.90
-	8	California HERO			1,174	\$25,974,938.48	2,970	\$67,054,570.85	4,144	\$93,029,509.33
		Total:			17,401	\$350,271,859.17	7,022	\$148,670,404.82	24,423	\$498,942,263.99
	1	mPOWER Placer	313	\$9,007,272.29	878	\$44,537,362.74	361	\$10,422,668.14	1,239	\$54,960,030.88
	2	mPOWER Folsom	12	\$358,423.79	19	\$858,358.59	10	\$229,578.67	29	\$1,087,937.26
	3	Berkeley FIRST**	-	\$0.00	12	\$272,231.98	-	\$0.00	12	\$272,231.98
	4	CaliforniaFIRST	1,044	\$23,904,858.49	1,195	\$27,195,540.14	2,231	\$55,875,048.47	3,426	\$83,070,588.61
	5	Sonoma County	67	\$1,659,819.77	1,475	\$41,157,542.98	46	\$1,288,617.74	1,521	\$42,446,160.72
	6	WRCOG HERO	1,535	\$33,837,187.89	12,795	\$252,378,022.05	2,361	\$53,783,476.55	15,156	\$306,161,498.60
2015	7	SANBAG HERO	2,509	\$49,728,567.21	7,608	\$143,435,075.39	2,550	\$54,760,955.71	10,158	\$198,196,031.10
	8	California HERO	6,035	\$138,783,046.73	10,326	\$240,306,305.35	8,032	\$191,433,540.91	18,358	\$431,739,846.26
	9	AllianceNRG					1	\$25,474.99	1	\$25,474.99
	10	CaliforniaFIRST (LA)					282	\$8,663,915.65	282	\$8,663,915.65
	11	LA HERO					5,050	\$126,779,290.63	5,050	\$126,779,290.63
-	12	Ygrene					2,281	\$50,669,809.81	2,281	\$50,669,809.81
		Total:	11,515	\$257,279,176.17	34,308	\$750,140,439.22	23,205	\$553,932,377.27	57,513	\$1,304,072,816.49
	4		244	60 242 404 60	4 402	¢44.550.400.00	25.2	60 404 754 00	4 745	¢52 752 460 70
	1 2	mPOWER Placer mPOWER Folsom	311 26	\$9,312,194.68 \$713,934.71	1,493 54	\$44,558,408.98 \$732,306.69	252 9	\$8,194,751.80 \$187,784.35	1,745 63	\$52,753,160.78 \$920,091.04
	2	Berkeley FIRST**	- 20	\$713,934.71	11	\$246,745.00	-	\$187,784.33	11	\$246,745.00
	4	CaliforniaFIRST	3,531	\$90,107,437.45	6,957	\$169,216,761.62	3,907	\$110,192,499.48	10,864	\$279,409,261.10
	5	Sonoma County	51	\$1,776,171.84	1,378	\$38,507,299.21	50	\$1,415,174.67	1,428	\$39,922,473.88
	6	WRCOG HERO	2,222	\$46,649,263.50	15,624	\$320,840,795.46	2,393	\$49,380,509.74	18,017	\$370,221,305.20
	7	SANBAG HERO	2,289	\$46,363,907.06	11,518	\$227,139,077.08	-	\$51,629,199.72	14,102	\$278,768,276.80
2016	8	California HERO	8,533	\$183,279,942.82	25,306	\$574,336,722.18	10,899	\$232,821,239.40	36,205	\$807,157,961.58
	9	AllianceNRG	2	\$95,960.41	3	\$121,435.40	-	\$0.00	3	\$121,435.40
	10	CaliforniaFIRST (LA)	1,088	\$32,228,028.12	1,451	\$43,224,206.38	1,877	\$64,646,218.07	3,328	\$107,870,424.45
	11	LA HERO	6,529	\$166,552,162.84	10,032	\$252,287,718.07	5,721	\$150,665,091.33	15,753	\$402,952,809.40
	12	Ygrene	8,152	\$189,939,247.42	10,068	\$232,048,888.23	6,176	\$148,659,905.36	16,244	\$380,708,793.59
	13	PACEFunding	9 ////////////////////////////////////	\$251,239.75	9 ////////////////////////////////////	\$251,239.75	121	\$4,036,153.52	130	\$4,287,393.27
-	14	CMFA PACE Total:	32,743	\$767,269,490.60	92 004	\$1,903,511,604.05	47 <b>34,036</b>	\$2,533,503.48 \$824,362,030.92	47	\$2,533,503.48 \$2,727,873,634.97
		Total.	32,743	\$707,205,450.00	83,304	\$1,503,511,004.05	34,030	3024,302,030.92	117,540	\$2,727,873,034.97
	1	mPOWER Placer	184	\$5,631,524.68	1,683	\$51,611,437.71	183	\$5,498,466.65	1,866	\$57,109,904.36
	2	mPOWER Folsom	9	\$229,668.63	71	\$1,811,317.38	8	\$237,161.37	79	\$2,048,478.75
	3	Berkeley FIRST**	-	\$0.00	11	\$246,745.00		\$0.00	11	\$246,745.00
	4	CaliforniaFIRST	3,273	\$91,144,466.34	12,216	\$323,675,795.73	3,769	\$105,445,216.29	15,985	\$429,121,012.02
	5	Sonoma County	39	\$934,951.16	1,206	\$28,137,490.97	32	\$900,375.11	1,238	\$29,037,866.08
	6	WRCOG HERO	1,686	\$36,735,663.92	15,449	\$301,692,765.95	1,797	\$40,821,119.58	17,246	\$342,513,885.53
	7	SANBAG HERO	1,738	\$35,304,161.93	12,034	\$206,919,594.59	580	\$12,256,787.69	12,614	\$219,176,382.28
	8	California HERO	8,276	\$177,688,563.47	33,652	\$729,747,735.40 \$2,478,196.22		\$184,293,420.37 \$1,122,030.42	41,428	\$914,041,155.77
2017	9 10	AllianceNRG CaliforniaFIRST (LA)	69 1 5 7 4	\$2,260,800.21	72		32		104 5 675	\$3,600,226.64 \$187,372,866.09
2017	10 11	LA HERO	1,574 3,767	\$54,207,538.45 \$102,176,910.54	4,485 18,045	\$148,223,916.66 \$466,401,044.72	1,190 3,172	\$39,148,949.43 \$87,588,394.76	5,675 21,217	\$553,989,439.48
	12	Ygrene	4,745	\$102,170,910.34	19,490	\$460,975,116.00		\$135,120,402.68	21,217 24,277	\$596,095,518.68
	13	PACEFunding	196	\$5,916,311.47	327	\$10,203,704.70		\$10,245,084.69	679	\$20,448,789.39
	14	CMFA PACE	294	\$9,754,686.31	341	\$12,287,902.02	908	\$29,753,963.38	1,249	\$42,041,865.40
	15	CSCDA HERO					1,025	\$21,147,951.97		\$21,147,951.97
	16	Figtree PACE					100	\$2,661,327.11	100	\$2,661,327.11
	17	Spruce PACE					12	\$357,431.78	12	\$357,431.78
	18	mPower Pioneer					41	\$1,265,377.60	41	\$1,265,377.60
		Total:	25,850	\$636,636,745.99	119,082	\$2,744,412,763.05	25,764	\$677,863,460.88	144,846	\$3,422,276,223.93

#### Appendix C: PACE Loss Reserve Program Enrollment Activity through 2019

Year		Program		New Financings January 1st – June 30th		Actual Total Outstanding Portfolio		New Financings July 1st – December 31st		Estimated Total Enrolled Portfolio	
			1		1						
	1	mPOWER Placer	40	\$1,083,211.83	1,595	\$49,266,208.03	9	\$321,581.40	1,604	\$49,587,789.43	
	2	mPOWER Folsom	1	\$31,293.53	61	\$1,676,458.06	-	\$0.00	61	\$1,676,458.06	
	3	Berkeley FIRST**	-	\$0.00	10	\$211,323.67	-	\$0.00	10	\$211,323.67	
	4	CaliforniaFIRST	2,116	\$60,101,409.02	16,136	\$420,767,571.18	926	\$26,514,095.46	17,062	\$447,281,666.64	
	5	Sonoma County	41	\$1,300,393.73	1,122	\$24,955,602.09	18	\$692,772.85	1,140	\$25,648,374.94	
	6	WRCOG HERO	805	\$18,555,186.85	15,560	\$280,708,255.21	396	\$8,890,520.62	15,956	\$289,598,775.83	
	7	SANBAG HERO**	-	\$0.00	12,034	\$206,919,594.59	-	\$0.00	12,034	\$206,919,594.59	
	8	California HERO	3,864	\$92,564,733.92	43,310	\$879,391,643.35	2,024	\$49,881,912.09	45,334	\$929,273,555.44	
2018	9	AllianceNRG	421	\$15,486,341.48	518	\$18,856,515.69	108	\$4,646,042.91	626	\$23,502,558.60	
	10	CaliforniaFIRST (LA)	590	\$18,963,009.03	5,481	\$172,957,644.74	291	\$10,608,663.64	5,772	\$183,566,308.38	
	11	LA HERO	1,830	\$52,716,557.99	17,782	\$480,617,639.31	950	\$30,589,549.29	18,732	\$511,207,188.60	
	12	Ygrene	2,397	\$65,173,725.85	26,639	\$617,259,147.60	1,421	\$39,481,516.78	28,060	\$656,740,664.38	
	13	PACEFunding	1,144	\$33,097,291.58	1,782	\$52,306,625.20	2,126	\$67,700,386.18	3,908	\$120,007,011.38	
	14	CMFA PACE	1,300	\$47,758,004.91	2,427	\$84,634,182.87	1,051	\$40,868,690.16	3,478	\$125,502,873.03	
	15	CSCDA HERO	767	\$16,826,874.43	1,615	\$34,771,715.23	419	\$9,168,040.39	2,034	\$43,939,755.62	
	16	Figtree PACE	58	\$1,752,611.39	153	\$4,293,597.48	2	\$91,879.36	155	\$4,385,476.84	
	17	Spruce PACE	35	\$1,242,742.32	43	\$1,509,546.87	-	\$0.00	43	\$1,509,546.87	
	18	mPower Pioneer	111	\$3,781,109.31	169	\$5,668,622.32	123	\$3,722,437.19	292	\$9,391,059.51	
	19	PACE Funding (WRCOG)					129	\$3,487,088.18	129	\$3,487,088.18	
		Total:	15,520	\$430,434,497.17	146,437	\$3,336,771,893.49	9,993	\$296,665,176.50	156,430	\$3,633,437,069.99	
	-					*** · · * ** · · ·		44.44			
	1	mPOWER Placer	1	\$23,654.63	1,420	\$37,143,251.11	0	\$0.00	1,420	\$37,143,251.1	
	2	mPOWER Folsom**	-	\$0.00	58	\$1,355,669.17	0	\$0.00	58	\$1,355,669.17	
	3	Berkeley FIRST**	-	\$0.00	9	\$170,880.00	0	\$0.00	9	\$170,880.00	
	4	CaliforniaFIRST	862	\$24,814,188.38	16,251	\$423,833,010.59	806	\$26,028,086.87	17,057	\$449,861,097.46	
	5	Sonoma County	41	\$1,433,386.00	1,057	\$23,068,135.84	21	\$779,629.26	1,078	\$23,847,765.10	
	6	WRCOG HERO	201	\$4,656,407.84	14,882	\$281,364,978.00	184	\$4,215,451.22	15,066	\$285,580,429.22	
	7	SANBAG HERO**	-	\$0.00	10,398	\$182,467,696.00	0	\$0.00	10,398	\$182,467,696.00	
	8	California HERO	1,288	\$31,518,479.19	40,723	\$846,003,725.00	785	\$19,507,489.24	41,508	\$865,511,214.24	
	9	AllianceNRG	15	\$494,626.75	637	\$22,532,855.85	0	\$0.00	637	\$22,532,855.85	
2019	10	CaliforniaFIRST (LA)	66	\$2,694,035.40	5,222	\$166,818,891.58	0	\$0.00	5,222	\$166,818,891.58	
	11	LA HERO	689	\$25,621,044.84	18,269	\$459,895,948.00	468	\$16,645,859.27	18,737	\$476,541,807.27	
	12	Ygrene	1,134	\$32,447,448.55	25,502	\$577,375,251.16	863	\$25,457,114.93	26,365	\$602,832,366.09	
	13	PACEFunding	1,316	\$38,979,031.90	4,823	\$147,018,559.98	1,113	\$33,272,847.68	5,936	\$180,291,407.66	
	14	CMFA PACE	659	\$23,735,544.01	3,887	\$134,751,580.96	314	\$10,959,785.45	4,201	\$145,711,366.41	
	15	CSCDA HERO	226	\$5,696,061.58	2,067	\$45,147,559.00	195	\$5,838,274.64	2,262	\$50,985,833.64	
	16	Figtree PACE**	-	\$0.00	142	\$4,122,968.90	0	\$0.00	142	\$4,122,968.90	
	17	Spruce PACE**	-	\$0.00	34	\$1,214,206.42	0	\$0.00	34	\$1,214,206.42	
	18	CaliforniaFirst (WRCOG)	45	\$1,214,260.83	45	\$1,214,260.83	21	\$682,836.70	66	\$1,897,097.53	
	19	mPower Pioneer	61	\$1,900,405.28	340	\$9,912,574.42	48	\$1,615,485.11	388	\$11,528,059.53	
	20	PACE Funding (WRCOG)	78	\$2,073,104.69	196	\$5,348,938.87	151	\$3,766,281.52	347	\$9,115,220.39	
	21	PACEFunding (LA)	265	\$8,826,285.50	265	\$8,826,285.50	257	\$10,344,067.60	522	\$19,170,353.10	
		Total:	6,947	630C 437 0CF 37	446 337	\$3,379,587,227.18		\$159,113,209.49		\$3,538,700,436.67	

\* The total enrolled portfolio through December 31st is an estimate because the numbers donot take into account any payments made since July 1st.
 PACE Programs report the actual outstanding portfolio value through June 30th each year.
 \*\* PACE Program is no longer actively enrolling PACE Financings