# Sonoma Clean Power

# **Programs Division**

# **Strategic Action Plan**

Updated June 30, 2020

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# <u>Acronyms</u>

- AER Advanced Energy Rebuild Program
- BAAQMD Bay Area Air Quality Management District
- BayREN Bay Area Regional Energy Network
- **CAISO** California Independent System Operator
- CALeVIP California Electric Vehicle Infrastructure Project
- **CEC** California Energy Commission
- **CPUC** California Public Utilities Commission
- CSE Center for Sustainable Energy
- **CTEF** Career Technical Education Foundation
- DCFC Direct Current Fast Charger
- DIY Do-It-Yourself
- DNV-GL An energy efficiency consultant
- DOE United States Department of Energy
- DRRS Demand Response Reporting System
- $\ensuremath{\mathsf{EM}}\xspace \ensuremath{\mathsf{EM}}\xspace$  Evaluation, Measurement and Verification
  - **EPRI** Electric Power Research Institute
- ERAP Energy Resiliency Audit Program
- EV Electric Vehicle
- **EVSE** Electric Vehicle Supply Equipment (i.e. charging stations)
- FY Fiscal Year (July-June)
- GHG Greenhouse Gasses
- HPWH Heat Pump Water Heater
- HVAC Heating, Ventilation and Air Conditioning
- JPA Joint Powers Authority
- LCFS Low Carbon Fuel Standard
- MW Megawatt
- **NEM** Net Energy Metering
- NRDC Natural Resources Defense Council

NSCAPCD - Northern Sonoma County Air Pollution Control District

- **PG&E** Pacific Gas and Electric
- PSPS Public Safety Power Shutoff
- **RCPA** Regional Climate Protection Authority
- **RFI** Request for Information
- SCP Sonoma Clean Power
- **SCTA** Sonoma County Transportation Authority
- **SGIP** Self Generation Incentive Program
- SOMAH Solar on Multifamily Affordable Housing
- **TBD** To be determined
- TCC The Climate Center
- **TNC** Transportation Network Company (e.g. Uber, Lyft)

# **Executive Summary**

Sonoma Clean Power (SCP) is enabled by a Joint Powers Agreement (JPA) which states the following as purposes for entering into the JPA :

- a) Reducing greenhouse gas emissions in Sonoma and Mendocino Counties and neighboring regions;
- b) Providing electric power and other forms of energy to customers at a competitive cost;
- c) Carrying out programs to reduce total energy consumption;
- d) Stimulating and sustaining the local economy, including by developing or promoting local distributed energy resources; and
- e) Promoting long-term electric rate stability, energy security, reliability, and resilience.

The purpose of this document is to supply a road map for the SCP Programs Section by clearly identifying strategies and the actions needed to accomplish those strategies.

This plan will facilitate the Programs Section in efficiently accomplishing its mission of achieving the goals of the JPA and providing local economic stimulus. In addition to an overall program road map, this document also attempts to prioritize actions based on available resources, regulatory constraints, and other areas of uncertainty.

Each of the strategies identified in this plan will refer to one or more of the purposes identified in the JPA. The evaluation of particular programs will include metrics specific to that program and will occur after the program has had a reasonable time to establish itself.

This document will be updated twice each year in January and June.

# Significant Progress

The following items describe the significant progress made by individual programs implemented by SCP:

- The GridSavvy program has resulted in the shipment of 3,139 (as of 6/09/20) electric vehicle charging stations and 25 smart thermostats to SCP customers. SCP is now able to dispatch these resources to lower peak demand. The addition of heat pump water heaters and batteries to the program is anticipated this year.
- 2) **Do-It-Yourself Energy and Water Saving Toolkits,** which include basic energy and water efficiency tools and products, have been placed in almost all Sonoma County and Mendocino County libraries. The 45 toolkits in circulation can be checked out just like a book and have proven to be very popular, with over 870 checkouts (as of 6/1/20) since inception in November 2016. The program has been suspended due to COVID-19 until libraries are authorized to re-open.
- 3) The **Education Program for Schools** in partnership with Sonoma Water was initiated in the Fall of 2017. A contract to continue the program through FY 20-21 was approved by SCP's Board.
- 4) Induction Cooktop Experience, a program that loans portable electric induction cooktops to customers, has seen 183 loans take place. A survey showed that customers overwhelmingly liked the new cooking experience with 44% of participating customers surveyed stating they made the switch to induction cooking. Daily Acts has started lending cooktops from their headquarters in Petaluma. Staff are investigating options for other loaning locations in north Sonoma County and in Mendocino County. This program has been suspended due to COVID-19 and will re-open when feasible.
- 5) A program to incentivize the **purchase of EV's by local non-profits** has resulted in 10 EVs being purchased. Conducting outreach for four additional nonprofits for FY 20-21 (as of 6/18/20).
- 6) The **Advanced Energy Rebuild program** was created in cooperation with PG&E and the BAAQMD to incentivize those rebuilding their homes after the 2017 fires to do so in an energy efficient manner. To date we have had 327 applications (as of 6/15/20) to the program. Although Advanced Energy Rebuild will no longer accept applications after 6/30/20, staff will

continue supporting projects submitted prior to this deadline. Homes being permitted under the 2019 Title 24 code cycle are eligible for PG&E's continuing rebuilding program.

- 7) SCP was awarded a **\$9.8M grant from the CEC** to promote energy efficiency in the residential built environment. SCP is required to provide \$3.3M in matching funds for a program total of \$13.1M. We are halfway through the research phase of the grant and all equipment in the first phase of applied technology studies in 15 residential homes are being monitored for their energy savings. We are finalizing sites for the second phase of market ready technologies and are nearing the completion of the pre monitoring stage for those sites. Additionally, we have leased a store in downtown Santa Rosa to house the marketplace (The Advanced Energy Center) envisioned by the grant. Construction of improvements is almost complete and we anticipate a soft opening in mid to late September.
- 8) SCP service territory was selected for a **\$5.1M CALeVIP Project** from the CEC to increase the number of car charging stations in SCP territory. SCP is providing \$1.5M over three years to increase the number of incentivized chargers. In addition, SCP partnered with NSCAPCD to provide an additional \$150,000 for projects installed in the District's jurisdiction. The program opened for applications for funding on July 8<sup>th</sup> and was fully subscribed within a half an hour It is anticipated that the program will result in 50 DCFC and 500 Level 2 chargers being installed in SCP's territory. A special emphasis has been placed on directing chargers to rural, coastal, and low-income areas.
- 9) SCP completed a transit bus electrification study for the four public transit operations in SCP territory to assist in their effort to electrify their bus fleets in order to meet their Innovative Clean Transportation mandates.
- 10) SCP is funding a school bus electrification study for two school bus operators in SCP service territory to help them prepare for the transition to electric buses. The study is set to be completed by the end of 2020.
- SCP launched a program to provide up-front payments of SGIP funds for the installation of battery storage systems in residential settings. As of 6/15/20, 37 projects and \$771,300 in funding has been reserved. \$218,526 has been provided to offset the initial costs of battery installation. SCP will be reimbursed once the SGIP applications are processed through PG&E.
- 12) On July 1, 2020, SCP will launch the **Advanced Energy Build** program, which will provide incentives to developers of residential homes to either

pre-wire homes for all-electric appliances or build all-electric homes. The program also includes an incentive for adding battery storage to these projects.

- 13) In June, the Board of Directors authorized staff to implement an On-Bill Financing program. This program allows homeowners who are SCP customers to borrow up to \$10K at 0% interest to install certain energy efficient electric appliances in their homes.
- 14) SCP began claiming LCFS credits from the California Air Resources Board. This is a complicated process that involved tracking of the Electric Vehicle Supply Equipment (EVSE) that we have provided to SCP customers over the past 4 years.
- 15) Coinciding with the opening of the AEC, SCP will begin offering the SCP Electrify Tool to help educate customers on the GHG reduction benefits and potential dollar savings associated with switching to an electric home. The tool will be made available for free to residential customers.
- 16) Starting in May 2020, SCP started offering the Energy Resiliency Audit Program (ERAP) to small and medium sized commercial customers that are considered essential business or were impacted by PG&E's PSPS events in 2019.

# **New Programs Under Consideration**

SCP is including the following new activities in the plan:

- Explore Partnerships with other local non-profits Sonoma Clean Power could benefit through partnerships with other non-profits that are promoting energy efficiency, workforce development and electric vehicles.
- 2) Investigate Behavioral Demand Response in residential and commercial offerings A program that would incentivize residents and businesses to reduce energy use at a signal from SCP through its GridSavvy umbrella of offerings.
- 3) **Develop a Multi-Family EVSE Program** Multi-Family developments are notorious for difficultly in installing EVSE.
- 4) **Develop an Equity Outreach Program** Work with other non-profits on the development of programs specifically designed to benefit bypassed segments of our local population.
- 5) **Develop a targeted Equity Education Program** Develop courses targeted specifically to reach equity audiences. Potentially include incentives for completion of trainings.
- 6) Investigate the potential for an electrification program for the benefit of renters Renters may want to electrify but are at the mercy of landlords.
- 7) Investigate how best to pair battery storage with existing or planned solar systems at public education facilities.

# **Discontinued Programs**

Discontinued programs are programs that were initiated as a pilot and were either not successful, or successful enough to jumpstart market transformation.

1) **Advanced Energy Rebuild**: While we will continue to administer this program until all approved projects are complete, the program stopped accepting new applications on June 30, 2020.

# **Program Strategies and Levels of Action**

This plan identifies eight program strategies:

- Promote the Use of Electric Vehicles in Transportation
- Promote Fuel Switching in New and Existing Building Stock
- Identify and Apply for External Funding to Support Programs
- Promote the Aggregation of Loads and Resources
- Support the Integration of Distributed Energy Resources in SCP's Territory
- Support the Transition to Carbon Free Building Codes and Practices
- Test and Evaluate the Use of New Technologies
- Promote Public Education Involving Energy Efficiency and Fuel Switching

This plan identifies three levels of action:

Immediate Action	Near-Term Action	Long-term Action
Ongoing or to be initiated within the next year.	To be initiated within one to three years.	No defined start date for action, likely longer than three years.
<ol> <li>Required by regulatory or other deadlines;</li> </ol>	1. Actively exploring;	1. In the conceptual phase;
2. Other strategies or actions are dependent on	2. Anticipated, yet not immediate, deadline;	<ol> <li>Not enough information to proceed currently;</li> </ol>
outcome; 3. Achievable in the	<ol> <li>Funding is proposed; and</li> </ol>	3. Lower priority; and
near-term; and 4. Funding and resources are available.	<ol> <li>Necessary for planning and development of long-term actions.</li> </ol>	4. Funding not available

# Program Strategy One

(PS1)

# **Promote the Use of Electric Vehicles in Transportation**

This strategy fulfills the following goals of SCP's JPA:

- a) Reducing greenhouse gas emissions in Sonoma County and neighboring regions and;
- d) Stimulating and sustaining the local economy.

## **Immediate Action One:**

Promote Transit and School Bus Electrification.

- **Project**: Determine infrastructure needs for full electrification of bus fleets.
- **Status:** SCP contracted with Cadmus to analyze the infrastructure needs of transit agencies to upgrade their fleets to all electric propulsion. Final reports were delivered to each of the transit agencies. SCP entered into a new contract with Cadmus to conduct a similar study for two school bus operators in Sonoma and Mendocino counties.
- **Involved Parties**: RCPA, Sonoma County Transit, Santa Rosa City Bus, City of Petaluma, Mendocino Transit Authority, Cadmus, West County Transportation, Mendocino Unified School District.
- **Metric:** Completion of the school bus electrification study reports.
- **Goal:** Complete school bus electrification studies by Dec 31, 2020.

## **Immediate Action Two:**

Provide Free Charging Stations.

- **Project**: Provide free Level 2 charging stations to eligible SCP customers.
- **Status**: A contract with Enel X to continue the free charging station program through June 2021 has been executed. SCP is claiming LCFS credits for this program, which will help expand program funding in future years.

Involved Parties: Enel X, Olivine.

- Metric: Number of EVSE shipped and activated.
- **Goal:** Ship 200 units per fiscal year.

# **Immediate Action Three:**

Provide electric mobility solutions for local non-profits.

- **Project:** Identify local non-profits that provide transportation services and incentivize their use of electric vehicles.
- **Status:** SCP has implemented a program that provides \$12,500 towards the purchase or lease of an EV by non-profits. To date, 12 non-profits have taken advantage of this incentive. The program has been budgeted to continue in FY 20-21.

Involved Parties: RCPA, local non-profits.

Metric: Number of vehicles incentivized.

**Goal:** 5 vehicles per fiscal year.

## **Immediate Action Four:**

Implement CALeVIP program.

- **Project:** The CEC launched CALeVIP to work with local partners to develop and implement EV charging incentive projects that meet regional needs. Funds are provided from the Alternative and Renewable Fuel and Vehicle Technology Program.
- **Status:** SCP was awarded \$5.1M for implementation of an EV charging project in Sonoma and Mendocino counties. SCP is matching the CEC project with \$1.65M. Program design is complete with a program launch date of July 8, 2020.

Involved Parties: RCPA, BAAQMD, NSCAPCD, MCAPCD, CSE, CEC.

- **Metric:** Number of EVSE installed.
- Goal: Incentivize a total of 500 Level 2 chargers and 50 DCFC.
   Incentivize 4 DCFC in Mendocino.
   Incentivize 3 DCFC in the Coastal and rural areas of our service territory.

## **Immediate Action Five:**

Develop an eBike Incentive Program.

**Project:** Incentivize the purchase of electric bicycles either through upstream, in-store, or rebate processes. Coordinate implementation with local bike stores and advocates.

**Status:** RCPA staff have been researching eBike incentive programs and interviewing local bike store owners to gauge interest. SCP anticipates launching a limited-duration incentive program in October 2020.

#### Involved Parties: RCPA

- Metric: Number of eBikes incentivized.
- **Goal:** 100 bikes incentivized in the first iteration of the program.

#### **Near-Term Action One:**

Support e-Mobility options.

- **Project:** Work with local partners on e-mobility strategies, like e-scooters, to promote shift in transportation modes.
- **Status:** Explore partnerships with other organizations for electric mobility and last-mile solutions in SCP territory.

**Involved Parties:** To be determined but may include the SCTA and RCPA.

Metric: T	ΒD
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Goal: TBD

## Near-Term Action Two:

Promote the use of Electric Vehicles in Car Sharing.

- **Project:** Explore the feasibility of electric car sharing.
- **Status:** Explore partnerships with car share providers to provide incentives to EVs in SCP territory offered on provider's service.

Involved Parties: May include Maven, Zipcar, other providers.

- Metric: TBD
- Goal: TBD

## **Near-Term Action Three:**

Foster electric vehicle adoption in low-income communities.

- **Project:** Collaborate with low-income communities, community groups, and other stakeholders to identify barriers to adoption of electric vehicles and strategies to overcome those barriers.
- **Status:** In concept phase.

**Parties Involved**: To be determined but may include community service groups.

Metric: TBD

Goal: TBD

# **Near- Term Action Four:**

Foster electric vehicle charging station expansion in low-income communities.

**Project:** Collaborate with low-income communities, community groups, and other stakeholders to identify barriers to charging station expansion. Work with EVSE providers to expand charging to low-income communities.

**Status:** In concept phase.

Involved Parties: TBD

Metric: TBD

Goal: TBD

## **Near- Term Action Five:**

Create a Multi-Family EVSE Program.

- **Project:** Develop a program that assists the owners of multi-family developments in planning for and installing EVSE for their tenants.
- **Status:** In concept phase.

Involved Parties: TBD

- Metric: TBD
- Goal: TBD

# Long-Term Action One:

Promote the use of All-Electric Autonomous Vehicles in SCP Territory.

- **Project:** Develop relationships with autonomous vehicle developers and work closely with them to develop services within the SCP service area.
- **Status:** In concept phase.

**Parties Involved:** To be determined but may include the RCPA, SCTA, and regional partners.

- Metric: TBD
- Goal: TBD

///End of Strategy One $\setminus$ 

# Program Strategy Two

(PS2)

# Promote Fuel Switching in New and Existing Building Stock

This strategy fulfills the following goals of SCP's JPA:

- a. Reducing greenhouse gas emissions in Sonoma County and neighboring regions;
- c. Carrying out programs to reduce total energy consumption and;
- *d.* Stimulating and sustaining the local economy, including by developing or promoting local distributed energy resources.

## **Immediate Action One:**

Project Management for the Lead Locally CEC Grant.

- **Project:** Implement the CEC Lead Locally Grant.
- **Status:** The CEC Lead Locally Grant commenced July 9, 2018. New technologies related to the Applied Research Study have been installed in 15 demonstration homes as part of the Phase 1 research. Phase 2 research locations are being identified and most sites are completing their pre-monitoring for baseline data. Advanced Energy Center construction began in November 2019.
- **Involved Parties:** Frontier Energy, DNV GL, RCPA, TLCD Architecture, County of Sonoma Energy & Sustainability Division, Flannel by HIVE.
- Metric: Satisfaction of Grant goals.
- **Goal:** Defined in grant documents.

## **Immediate Action Two:**

Implement an On-Bill Financing Program.

- **Project:** Implement an on-bill financing program.
- **Status:** Staff have developed a customer contract. A program implementer has been hired. This Program was approved by SCP's Board and launch is anticipated to occur concurrently with the opening of the AEC. This Action will be incorporated into the Lead Locally CEC grant above.

Involved Parties: Frontier Energy, Calpine.

**Metric:** Number participants in the on-bill financing program.

**Goal:** 100 per year.

# Immediate Action Three:

Promote Induction Cooking as an Alternative to Natural Gas.

- **Project:** Loan portable induction cooktops to customers and Induction Kitchen Demonstration Area.
- **Status:** Staff will continue to loan portable induction cooktops to SCP customers so that they can experience the ease and safety of this technology. Cooktops are now being loaned by Daily Acts in Petaluma. SCP staff are seeking other partners. The induction lending program is currently on hold due to COVID 19. The Advanced Energy Center will provide an onsite opportunity to touch and feel different induction cooktops combined with a convection oven. Staff hope to attract culinary schools and other educational programs to the Induction Cooking Demonstration Area.

Involved Parties: SCP Staff, Daily Acts.

- Metric: Number of cooktops lent.
- **Goal:** Loan out 100 induction cooktops per year.

Expand program to Mendocino County and rural areas of our service territory.

## **Immediate Action Four**

Develop an Education Program to be Facilitated through the Advanced Energy Center

- **Project:** Develop an education program that will inform contractors, retailers, and the public of the advantages of using various energy efficiency technologies or building techniques.
- **Status:** SCP will be working with parties below to develop a yearlong training calendar.
- Involved Parties: Sonoma County, RCPA, Design Avenues LLC.
- **Metric:** Number of classes staged and number of participants in those classes per calendar/fiscal year.
- **Goal:** Host 50 classes per calendar year and 1,000 attendees.

## **Immediate Action Five:**

Implement the Advanced Energy Build Incentive Program.

Sonoma Clean Power Programs Group Strategic Action Plan

- **Project:** Design an incentive program that will accelerate the adoption of "pre-wired" and all electric new construction homes in SCP's service territory.
- **Status:** SCP has received Board of Directors approval for the program budget and a contract for program administration has been executed with TRC Engineers, Inc. Program launch is expected to be July 1, 2020.

Involved Parties: TRC

- **Metric:** Number of dwellings participating in the program
- **Goal:** 500

#### Immediate Action Six:

Provide a tool that will educate customers on electrification and help in the transition to full electrification.

- **Project:** Contract or develop a web tool that is designed to educate customers about electrification technologies/measures, help evaluate the potential GHG and dollar savings, and motivate them to take action that will result in reductions in GHG emissions.
- **Status:** Staff has contracted with YellowTin to provide SCP Electrify, a cloud-based electrification engagement platform. The webtool is expected to launch in August2020.

Involved Parties: YellowTin.

- **Metric:** Number of website hits and number of accounts on the platform.
- **Goal:** 500 unique website hits in the calendar year.

100 residential accounts on the platform by the first anniversary of the launch of the Program.

#### **Immediate Action Seven:**

Explore Partnerships with other local non-profits.

- **Project:** Develop partnerships with other non-profits that are promoting energy efficiency, workforce development and electric vehicles.
- **Status:** SCP staff have reached out to the LIME Foundation and will make contact with SOMAH, Grid Alternatives and other similar organizations.
- Involved Parties: LIME Foundation, SOMAH, Grid Alternatives.

Metric: TBD Goal: TBD

# Near Term Action One:

Investigate the potential for an electrification program for the benefit of renters.

- **Project:** Develop a program focused on rental properties that allows renters to upgrade the appliances in their homes through cooperation with landlords.
- Status: In development.

Involved Parties: TBD

- Metric: TBD
- Goal: TBD

///End of Strategy Two\\\

# Program Strategy Three

(PS3)

# Identify and Apply for External Funding to Support Programs

This strategy fulfills the following goals of SCP's JPA:

- c. Carrying out programs to reduce total energy consumption and;
- *d. Stimulating and sustaining the local economy, including by developing or promoting local distributed energy resources.*

# **Immediate Action One:**

Monitor Existing Funding Channels for Potential Opportunities.

- **Project:** Monitor funding channels such as the DOE, CEC, CPUC, Air Districts, etc. for potential partnership opportunities.
- **Status:** SCP is partnering with EPRI on several grant solicitations sponsored by the CEC and DOE.

Involved Parties: CEC, to be determined.

Metric: N/A

# Long-Term Action One:

Monitor Programs that Could Scale with CPUC Energy Efficiency Funds.

- **Project:** Monitor potential programs that could meet CPUC requirements for the use of publicly funded energy efficiency funds.
- **Status:** Ongoing.
- **Involved Parties:** To be determined based on program offering.
- **Metric:** To be determined
- **Goal:** To be determined

///End of Strategy Three $\setminus$ 

# Program Strategy Four

(PS4)

# Promote the Aggregation of Loads and Resources

This strategy fulfills the following goals of SCP's JPA:

- *b. Providing electric power and other forms of energy to customers at a competitive cost;*
- c. Carrying out programs to reduce total energy consumption;
- *d. Stimulating and sustaining the local economy, including by developing or promoting local distributed energy resources; and*
- e. Promoting long-term electric rate stability, energy security, reliability, and resilience.

## **Immediate Action One:**

Implement GridSavvy Community.

- **Project:** Develop a contract with a "Scheduling Coordinator" to aggregate the "technical aggregators" operating in SCP territory and manage bidding of a demand response program into the CAISO DRRS. This process is necessary to ensure SCP remains in compliance, but also to maximize the value of the various resources available to the public.
- **Status:** We have entered into a contractual relationship with Olivine to administer a demand response program called GridSavvy. To date we have been able to dispatch a fleet of electric car chargers. We have recently added smart thermostats and HPWH's to our webstore that can also be dispatched. This effort will dovetail with the CEC grant work described in Program Strategy Two.

**Involved Parties:** Olivine, Enel X, AO Smith, Rheem, ecobee.

- **Metric:** Number of participants in GridSavvy per technology. Size of dispatchable load participating.
- **Goal:** 800 EVSE, 50 HPWH, 100 thermostats by end of 2020 calendar year. 0.75 MW of flexible resource by December 31, 2020

## Near Term Action One:

Investigate Behavioral Demand Response in residential and commercial offerings.

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- **Project:** Develop a program that would incentivize residents and businesses to reduce energy use at a signal from SCP.
- **Status:** In development.
- Involved Parties: Olivine
- Metric: TBD
- Goal: TBD

///End of Strategy Four\\\

# **Program Strategy Five**

(PS5)

# Support the Integration of Distributed Energy Resources in SCP's Territory

This strategy fulfills the following goals of SCP's JPA:

- *a.* Reducing greenhouse gas emissions in Sonoma County and neighboring regions;
- *b. Providing electric power and other forms of energy to customers at a competitive cost;*
- *d. Stimulating and sustaining the local economy, including by developing or promoting local distributed energy resources; and*
- e. Promoting long-term electric rate stability, energy security, reliability, and resilience.

**Immediate Action One:** 

Develop an alternative to mandatory on-site solar systems in new construction.

- **Project:** Work with the CEC on the development and codification of PermaGreen, a commitment from property owners to purchase EverGreen as an alternative to mandatory on-site solar systems in new construction.
- **Status:** SCP has enrolled one residential customer in PermaGreen and continues to monitor progress. New customer enrollments have been paused.

Involved Parties: CEC

- **Metric:** To be determined
- **Goal:** To be determined

## **Immediate Action Two:**

Develop a Residential Battery Storage Program.

- **Project:** In cooperation with Customer Service, develop a residential battery storage program that is designed to offset any negative impacts of the switch to Time of Use billing and assist with resiliency due to PSPS events.
- **Status:** An RFI was circulated and interviews were held with several battery companies. It is most likely that this effort will be

managed through the Advanced Energy Center as described in Program Strategy Two and GridSavvy.

Involved Parties: Sonnen, Tesla, Sun Power.

- **Metric:** Number of participants in program.
- **Goal:** 50 battery systems are installed by the end of the calendar year.

## **Immediate Action Three:**

Investigate how best to pair battery storage with existing or planned solar systems at municipal facilities.

- **Project:** Work with our member agencies to identify existing and planned solar facilities that might benefit from adding a battery storage component.
- **Status:** An agreement has been negotiated and approved by our Board by which Terraverde Inc will perform the work described above.

Involved Parties: SCP member agencies.

- Metric: Number of systems analyzed.
- **Goal:** Analysis of 25 solar systems.

## **Immediate Action Four:**

Investigate how best to pair battery storage with existing or planned solar systems at public education facilities.

- **Project:** Work with school districts within our member jurisdictions to identify existing and planned solar facilities that might benefit from adding a battery storage component.
- **Status:** Staff is drafting a scope of work for which Terraverde Inc will perform the work described above.
- **Involved Parties:** TerraVerde, School districts within SCP member jurisdictions.
- Metric: Number of systems analyzed.
- **Goal:** Analysis of 50 sites.

///End of Strategy Five\\\

# Program Strategy Six

(PS6)

# Support the Transition to Carbon Free Building Codes and Practices

This Strategy fulfils the following goals of SCP's JPA:

- *a.* Reducing greenhouse gas emissions in Sonoma County and neighboring regions;
- c. Carrying out programs to reduce total energy consumption and;
- d. Stimulating and sustaining the local economy

# **Immediate Action One:**

Provide Assistance to Commercial Customers in Optimizing Energy Efficiency.

- **Project:** Enter into a contract with the County of Sonoma Energy and Sustainability Division to provide energy audits to businesses in SCP's service territory.
- **Status:** Contract is in place. As of June 1<sup>st</sup>, 2020, 3 customers have received assistance.

Parties Involved: County of Sonoma Energy & Sustainability Division.

- Metric: Number of businesses assisted.
- **Goal:** 10 per calendar year.

# Immediate Action Two:

Provide Backup Power Assistance to Commercial Customers in Preparation for PSPS events.

- **Project:** Entered into a contract with the Center for Sustainable Energy to provide energy resiliency audits to essential businesses and businesses impacted by prior PSPS events in SCP's service territory.
- **Status:** Program launched in May 2020 and has started providing audits to 13 sites.

Parties Involved: Center for Sustainable Energy.

Metric: Number of businesses assisted.

**Goal**: 20 sites by the end of 2020.

# **Immediate Action Three:**

Assist Local Jurisdictions on Ordinances that Encourage Greenhouse Gas Reduction in Local Buildings.

- **Project:** Assist local city and county staff in the investigation and adoption of "reach" codes that push energy efficiency and greenhouse gas reduction measures beyond those required by code.
- **Status:** SCP is actively engaging with interested cities, and reach codes have been passed in Windsor and Santa Rosa.
- **Involved Parties:** Local cities and counties, NRDC, the Building Decarbonization Collation.
- Metric: Number of municipalities with Reach Codes adopted.
- **Goal:** Five in SCP jurisdiction.

#### **Near-Term Action One:**

Explore programs and strategies for low GHG agriculture.

- **Project:** Assist agricultural customers with low-GHG farming practices, with a focus on reducing methane and nitrous oxide emissions.
- **Status:** In concept phase. Potential to work with wineries and other agricultural customers to participate in a waste-to-energy program.

Parties Involved: TBD

Metric: TBD

Goal: TBD

# Long-Term Action One:

Investigate carbon sequestration strategies.

- **Project:** Investigate potential strategies that allow for meaningful sequestration of carbon.
- **Status:** In concept phase.

Parties Involved: TBD

- Metric: TBD
- Goal: TBD

///End of Strategy Six $\setminus$ 

# Program Strategy Seven

(PS7)

# **Test and Evaluate the Use of New Technologies**

This strategy fulfills the following goals of SCP's JPA:

- a. Reducing greenhouse gas emissions in Sonoma County and neighboring regions;
- *b. Providing electric power and other forms of energy to customers at a competitive cost;*
- c. Carrying out programs to reduce total energy consumption and;
- *d.* Stimulating and sustaining the local economy, including by developing or promoting local distributed energy resources.

## **Near-Term Action One:**

Investigate the Use of Biomass Power Generation in SCP Territory.

- **Project:** Identify biomass feed stock supplies in SCP territory (particularly Mendocino County) as well as small scale biomass conversion technologies that may provide cost effective local power generation.
- **Status:** Biomass analysis for Sonoma County completed by Sonoma Water several years ago.

Involved Parties: Sonoma Water.

Metric: TBD

Goal: TBD

## **Near Term Action Two:**

Investigate Vehicle-to-Building technologies.

- **Project:** Investigate potential technologies that allow electric vehicles to provide backup power to buildings through vehicle-to-building technologies.
- **Status:** In concept phase.
- **Involved Parties:** To be determined but may include vehicle manufacturers.
- Metric: TBD
- Goal: TBD

///End of Strategy Seven $\setminus\setminus$ 

# Program Strategy Eight

(PS8)

# Promote Public Education Involving Energy Efficiency, Fuel Switching, and Electric Vehicles

This strategy fulfills the following goals of SCP's JPA:

- *a.* Reducing greenhouse gas emissions in Sonoma County and neighboring regions; and
- e. Promoting long-term electric rate stability, energy security, reliability, and resilience.

## **Immediate Action One:**

Continue the Switch Program.

- **Project:** SCP has for several years funded the Switch Program which provides an electric car "kit" which students can assemble and disassemble in order to learn how electric cars are put together. This familiarity with electric vehicles will make them more likely to incorporate EV's into their lives as well as the potential for students to enter the EV industry.
- **Status:** A funding agreement to extend the program has been completed.

Involved Parties: CTEF, Switch.

- **Metric:** Number of vehicles in the program.
- **Goal:** Seven vehicles.

#### Immediate Action Two:

Continue to Offer Consumer-Facing Educational EV Resources.

- **Project:** SCP has for several years offered a number of educational resources to help customers switch to driving an EV. These resources include the EV Buyers Guide, DriveEv.org, the EV Roadmap, EV 101, and EV collateral (e.g. flyers)
- **Status:** Tools and materials currently available on <u>DriveEV.org</u>.

Involved Parties: SCP Marketing Staff, RCPA.

- **Metric:** Number of unique visits and engagement time on website.
- **Goal:** 200 unique visits and an average of 2 minutes spent on the website and subsequent tools.

# **Immediate Action Three:**

Continue the Energy Education Program for Schools in SCP Territory.

- **Project:** Contract with Sonoma Water to expand their existing education program to include energy efficiency, fuel switching and climate change throughout Sonoma and Mendocino County schools.
- **Status:** Contract is in place and curriculum has been developed. SCP coordinated with Sonoma Water on materials and branding. Sonoma Water has implemented the education program for the 2019/20 school year. SCP has contracted with Sonoma Water to continue the program through fiscal year 20-21.

Involved Parties: Sonoma Water.

- **Metric:** Number of students and teachers reached in the educational calendar year.
- **Goal:** Reach 6000 students and 30 teachers in the educational calendar year.

# **Immediate Action Four:**

Continue the DIY Tool Kit Program.

- **Project:** The DIY Toolkit Program provides a selection of energy and water saving devices that can be checked out from local libraries. SCP is one of four partners and partial funder of the program in Sonoma County, and one of three partners and full funder in Mendocino County.
- **Status:** 32 kits are currently in rotation in Sonoma County Libraries and 13 kits in rotation in Mendocino County Libraries. The kits combined have been checked out over 823 times (768 check outs in Sonoma and 55 in Mendocino). The program is currently suspended due to COVID-19.
- I**nvolved Parties**: Sonoma County General Services Department, Sonoma County Library, Sonoma Water, Sonoma-Marin Saving Water Partnership, Mendocino County Library.
- **Metric:** Number of times the toolkits are checked out per year.
- **Goal:** Total of 60 checkouts in Mendocino and 350 checkouts in Sonoma each year.

# **Immediate Action Five:**

Develop an Equity Outreach Program.

- **Project:** Work with other non-profits on the development of programs specifically designed to benefit bypassed segments of our local population.
- **Status:** Programs and Marketing staff are developing an outreach strategy.

Involved Parties: TBD

Metric: TBD

Goal: TBD

# Near Term Action One:

Develop a targeted Equity Education Program.

- **Project:** Develop an electrification education program targeted to reach equity audiences. Include incentives for completion of trainings.
- **Status:** In development.

Involved Parties: TBD

- Metric: TBD
- Goal: TBD

///End of Strategy Eight\\\

# **Summary of Actions**

# Immediate Actions:

- Promote Transit and School Bus Electrification (PS1);
- Provide Free Charging Stations (PS1);
- Provide electric mobility solutions for local non-profits (PS1);
- Implement CALeVIP Program (PS1);
- Develop E-bike Incentive Program (*PS1*);
- Project Management for the Lead Locally CEC Grant (PS2);
- Implement the On-Bill Financing Program within SCP's Territory (PS2);
- Promote Induction Cooking as an Alternative to Natural Gas (PS2);
- Develop an Education Program to be Facilitated through the Advanced Energy Center (*PS2*);
- Implement the Advanced Energy Build Incentive Program (PS2);
- Provide a tool that will educate customers on electrification and help in the transition to full electrification. *(PS2)*
- Explore Partnerships with other local non-profits (PS2)
- Monitor Existing Funding Channels for Potential Opportunities (PS3);
- Implement GridSavvy Community (PS4);
- Investigate Behavioral Demand Response in residential and commercial offerings (PS4);
- Develop an alternative to mandatory on-site solar systems in new construction (*PS5*);
- Develop a Residential Battery Storage Program (PS5);
- Investigate how best to pair battery storage with existing or planned solar systems at municipal facilities (*PS5*);
- Investigate how best to pair battery storage with existing or planned solar systems at public education facilities (*PS5*);
- Provide Assistance to Commercial Customers in Optimizing Energy Efficiency (*PS6*);
- Provide Backup Power Assistance to Commercial Customers in Preparation for PSPS events (PS6);

- Assist with Local Jurisdictions on Ordinances that Encourage Greenhouse Gas Reduction in Local Buildings *(PS6)*;
- Continue the Switch Program (*PS8*);
- Continue to Offer Consumer-Facing Educational EV Resources (PS8);
- Continue the Energy Education Program for Schools in SCP Territory (*PS8*);
- Continue the DIY Tool Kit Program (PS8);
- Develop an Equity Outreach Program (*PS8*).

# **Near-Term Actions:**

- Support e-Mobility options (PS1);
- Promote the use of Electric Vehicles in Car Sharing (PS1);
- Foster electric vehicle adoption in low-income communities (PS1);
- Foster electric vehicle charging station expansion in low-income communities (*PS1*);
- Create a Multi-Family EVSE Program (*PS1*);
- Investigate the potential for an electrification program for the benefit of renters (*PS2*);
- Explore programs and strategies for low GHG agriculture (*PS6*);
- Investigate the use of Bio-Mass Power Generation in SCP Territory (PS7);
- Investigate Vehicle-to-Building technologies (PS7);
- Develop a targeted Equity Education Program (PS8).

# Long-Term Actions:

- Promote the use of All-Electric Autonomous Vehicles in SCP Territory (PS1);
- Monitor Cost-Effectiveness of Programs that Could Scale with CPUC Energy Efficiency Funds (*PS3*);
- Investigate carbon sequestration strategies (PS6).