Sonoma Clean Power

Programs Division Strategic Action Plan

Updated January 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
- **CCP** Center for Climate Protection**CEC** California Energy Commission
- **CPUC** California Public Utilities Commission
- **CSE** Center for Sustainable Energy
- **CTE** 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
- EM&V Evaluation, Measurement and Verification
- **eMW** Electric Motor Werks
- **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
- MCAQMD Mendocino County Air Quality Management District
- MCE MCE Clean EnergyMW 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
- **TNC** Transportation Network Company (e.g. Uber, Lyft)

Executive Summary

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

- 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 will also attempt to prioritize individual 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

SCP has implemented the following activities in the Programs Section:

- The GridSavvy program has resulted in the shipment of 2,982 (as of 1/03/20) electric vehicle charging stations to SCP customers and is the genesis of a locally controlled demand response program.
- 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 41 toolkits in circulation can be checked out just like a book and have proven to be very popular, with over 866 checkouts (as of 1/09/20) since inception in November 2016.
- 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.
- 5) A program to incentivize the **purchase of EV's by local non-profits** has resulted in 10 EV's being placed and 2 non-profits under contract searching for an EV (as of 12/31/19).
- 6) The Advanced Energy Rebuild program has been 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 246applications (as of 12/31/19) to the program. Although the SCP program ended 12/31/19, staff will continue to support people rebuilding their homes if they were permitted under the 2016 building code. Homes being permitted under the 2019 code are eligible for PG&E's continuing re-building 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 have begun

the research phase of the grant and installations of monitoring equipment in 15 residential homes have been completed. Additionally, we have leased a store in downtown Santa Rosa to house the marketplace (The Advanced Energy Center) envisioned by the grant. Construction on improvements to the space have begun.

- 8) SCP was awarded a \$5.1M grant from the CEC to increase the number of car charging stations in SCP territory. SCP has agreed to provide \$1.5M over three years as the local match funds for the grant. Activation of the funding is expected in October of 2020.
- 9) SCP completed analyses of four public transit operations in SCP territory in their effort to electrify their bus fleets.

New Programs

SCP is including the following new activities in the plan:

- Advanced Energy Build With PG&E taking over the Advanced Energy Rebuild Program, SCP staff are planning to implement the Advanced Energy Build Program which would provide similar, but lower incentives to new single-family development.
- 2) **Battery Incentive Program** Investigate the potential for a residential battery storage program.
- 3) **SGIP Assistance** SCP will be piloting a program to assist battery installers with applications to and reimbursements from the Self Generation Incentive Program (SGIP)
- 4) **PSPS Assistance** Provide assistance to commercial and industrial customers in understanding and preparing for PSPS events.
- 5) **School Bus Program** Staff are researching how SCP may be of assistance to local school bus operators in switching to electric buses.
- 6) **Reach Codes** Assist member jurisdictions with the implementation of building "reach" codes that help reduce greenhouse gas emissions.
- 7) **E-bike Incentive** Investigate the potential for an incentive towards the purchase of E-bikes.
- 8) **Carbon Sequestration** Investigate potential strategies that allow for meaningful sequestration of carbon.
- 9) **Low GHG Agriculture** Exploring programs and strategies for low GHG agriculture.
- 10) **Investigate Vehicle-to-Building technologies:** Investigate potential programs to allow electric vehicles to provide backup power to buildings through vehicle-to-building technologies.

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) **Support Solar Sonoma County:** The Center for Climate Protection decided to terminate its management of Solar Sonoma County.
- 2) **Demand Charge Reduction Program:** After nearly two years of trying to interest SCP's commercial customers in battery systems to reduce demand charges, staff have determined that there is not an appetite for this program.
- 3) Interface with the CPUC and Stakeholders on Review of the Three-Prong Test: The CPUC has eliminated the 3-prong test in the evaluation of programs for energy and fuel switching using public good funds.
- Working with each SCP jurisdiction to identify the most likely locations for Level 3 charging stations: This program was rolled into the CALeVIP effort.
- 5) **Investigate Expansion of Free Charging Station Program to Multifamily Properties:** With the future launch of CALeVIP, multifamily properties will be eligible to apply for fund to install charging stations.
- 6) Add Battery Storage to SCP's ProFIT Program: ProFIT was transferred to the purview of the Procurement team. They are best equipped to explore adding battery storage to the ProFIT systems.

Program Strategies and Levels of Action

This plan identifies eight program strategies:

Program Strategy 1.	Promote the Use of Electric Vehicles in Transportation
Program Strategy 2.	Promote Fuel Switching in New and Existing Building Stock
Program Strategy 3.	Identify and Apply for External Funding to Support Programs
Program Strategy 4.	Promote the Aggregation of Loads and Resources
Program Strategy 5.	Support the Integration of Distributed Energy Resources in SCP's Territory
Program Strategy 6.	Support the Transition to Carbon Free Building Codes and Practices
Program Strategy 7.	Test and Evaluate the Use of New Technologies
Program Strategy 8.	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.

- Required by regulatory or other deadlines;
- 2. Other strategies or actions are dependent on outcome;
- 3. Achievable in the near-term; and
- 4. Funding and resources are available.

- 5. Actively exploring;
- 6. Anticipated, yet not immediate, deadline;
- 7. Funding is proposed; and
- Necessary for planning and development of long-term actions.

- 9. In the conceptual phase;
- 10. Not enough information to proceed currently;
- 11. Lower priority; and
- 12. 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
- **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 staff have created a spreadsheet of all the school bus operators in our service territory. This list will be used to communicate potential SCP programs.

- Involved Parties: RCPA, Sonoma County Transit, Santa Rosa City Bus, City of Petaluma, Mendocino Transit Authority, Cadmus.
- Metric: Completion of the transit electrification study reports, to be determined

Goal: N/A

Immediate Action Two:

Provide Free Charging Stations.

- **Project:** Provide free Level 2 charging stations to eligible SCP customers.
- Status: Contract with eMotorWerks to continue free charging station program through June 2020 has been executed. SCP is working to claim LCFS credits for this program, which will help expand EV program funding in future years.

Involved Parties: eMotorWerks, 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, 10 non-profits have taken advantage of this incentive.

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 charge 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 program in Sonoma and Mendocino. SCP is matching the CEC grant with \$1.65M. Program design is underway with an anticipated program launch of October 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 E-bike 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 E-bike incentive programs and interviewing local bike store owners to gage interest.

Involved Parties: RCPA

Metric: Number of E-Bikes incentivized

Goal: 100 bikes incentivized in the first fiscal year 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 a partnership 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: To be determined.

Near-Term Action Two:

Promote the use of Electric Vehicles in Car Sharing

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

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

Metric: To be determined.

Goal: To be determined.

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: To be determined.

Goal: To be determined.

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: To be determined.

Metric: To be determined.

Goal: To be determined.

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: To be determined.

Goal: To be determined.

///End of Strategy One\\\

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:** The CEC Lead Locally Grant commenced July 9, 2018.
- Status: The CEC Lead Locally Grant commenced July 9, 2018. Monitoring equipment and new technologies have been installed in 15 demonstration homes as part of the Phase 1 research. Phase 2 research locations are being identified. Advanced Energy Center construction began in November 2019.
- Involved Parties: Frontier Energy, DNV GL, RCPA, TLCD Architecture, County of Sonoma Energy & Sustainability Division.
- Metric: Satisfaction of Grant goals.
- **Goal:** Defined in grant documents

Immediate Action Two:

Develop an On-Bill Financing Program within SCP's Territory.

- **Project:** Implement an on-bill financing program.
- **Status:** Staff are working with Counsel on a draft customer contract. It may be necessary to hire a program implementer. This Action will be incorporated into the Lead Locally CEC grant above.

Involved Parties: Frontier Energy.

- 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 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 at this Induction Demonstration Area.

Involved Parties: SCP Staff, Daily Acts.

Metric: Number of cooktops lent out.

Goal: Loan out 100 induction cooktops per year.

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

Immediate Action Four:

Implement the Advanced Energy Rebuild Incentive Program.

- **Project:** Partner with PG&E and BAAQMD on an incentive program that will accelerate the adoption of highly efficient and all electric homes in the fire rebuild zones.
- Status: The AER incentive was available to parties rebuilding in the burn zones of Sonoma and Mendocino counties through December 2019. We have received 340 applications as of Jan.1, 2020.

Involved Parties: PG&E, BAAQMD

Metric: Number of dwellings participating in the program

Goal: 350

Immediate Action Five:

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 Six:

Implement the Advanced Energy Build Incentive Program.

- **Project:** Design an incentive program that will accelerate the adoption of highly efficient and all electric homes in SCP's service territory.
- **Status:** SCP has received Board of Directors approval for the program budget. The contract is under legal review.
- Involved Parties: TRC, PG&E (potential)
- Metric: Number of dwellings participating in the program
- **Goal:** 500

Immediate Action Seven:

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

- **Project:** Contract or develop a 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: SCP currently offers the ChooseEV tool for customers looking to switch to an electric vehicle. Staff is working to contract with YellowTin to provide a white-labeled, cloud-based electrification engagement platform.

Involved Parties: Yenter Group, YellowTin.

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- 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.

///End of Strategy Two \setminus

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 was awarded a \$9.8M grant which is described in more detail in Program Strategy Two. SCP service territory was selected for a \$5.1M incentive program by the CEC as described in Program Strategy One. We will continue to monitor grant opportunities and apply as appropriate.

Involved Parties: CEC, to be determined.

Metric: N/A

Long-Term Action One:

Monitor Cost-Effectiveness of Programs that Could Scale with CPUC Energy Efficiency Funds.

- **Project:** Monitor potential programs that meet CPUC cost-effectiveness metrics to implement and scale using 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\\\

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, eMW, 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.

///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:** A standard contract to allow our customers to purchase 20 years' worth of EverGreen has been developed. Initial talks with the CEC have been positive.

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

///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 1st, 2019, 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:

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 green house gas reduction measures beyond those required by code.
- **Status:** SCP is actively engaging with NRDC, the Building Decarbonization Collation, and a group of California jurisdictions to provide the assistance described above.
- **Involved Parties:** Local cities and counties, NRDC, the Building Decarbonization Collation.

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- 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.

Parties Involved: To be determined

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

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

///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 Bio-Mass Power Generation in SCP Territory.

- **Project:** Identify bio-mass 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:** Bio-mass analysis for Sonoma County completed by Sonoma Water several years ago.

Involved Parties: Sonoma Water.

Metric: To be determined

Goal: To be determined

Near Term Action Two:

Investigate Vehicle-to-Building technologies

- **Project:** Investigate potential programs to 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 manufactures.
- Metric: To be determined

Goal: To be determined

///End of Strategy Seven\\\

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 at the local dealership level.
- **Status:** A funding agreement to extend the program has been completed.

Involved Parties: CTE, 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, ChooseEV tool, 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, Yenter Group, 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 6000students 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).
- Involved 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

///End of Strategy Eight \setminus

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*);
- Develop an On-Bill Financing Program within SCP's Territory (*PS2*);
- Promote Induction Cooking as an Alternative to Natural Gas (PS2);
- Implement the Advanced Energy Rebuild Incentive Program (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*)
- Monitor Existing Funding Channels for Potential Opportunities (*PS3*);
- Implement GridSavvy Community (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*);
- Provide Assistance to Commercial Customers in Optimizing Energy Efficiency (*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*).

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*);
- 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*).

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)