

7/13/2021

item 6





City Council

**Item 6: Silicon Valley Power
Quarterly Strategic Plan
Update**

RTC 21-976

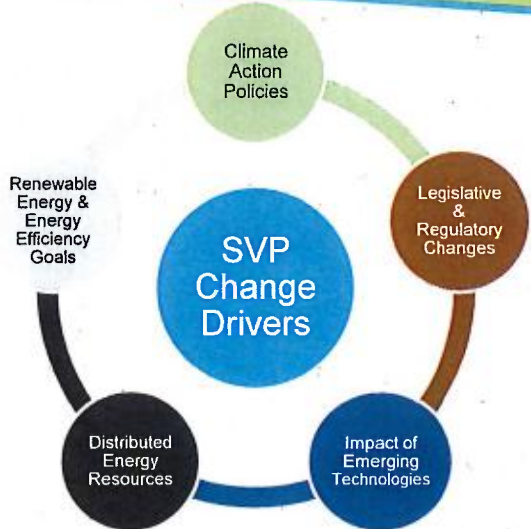
July 13, 2021

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Agenda

- Strategic Plan Update
- SVP Rebates
- Restricted Funding for Rebates
- Other Complementary Activities
- Upcoming Items
- 125 Years!

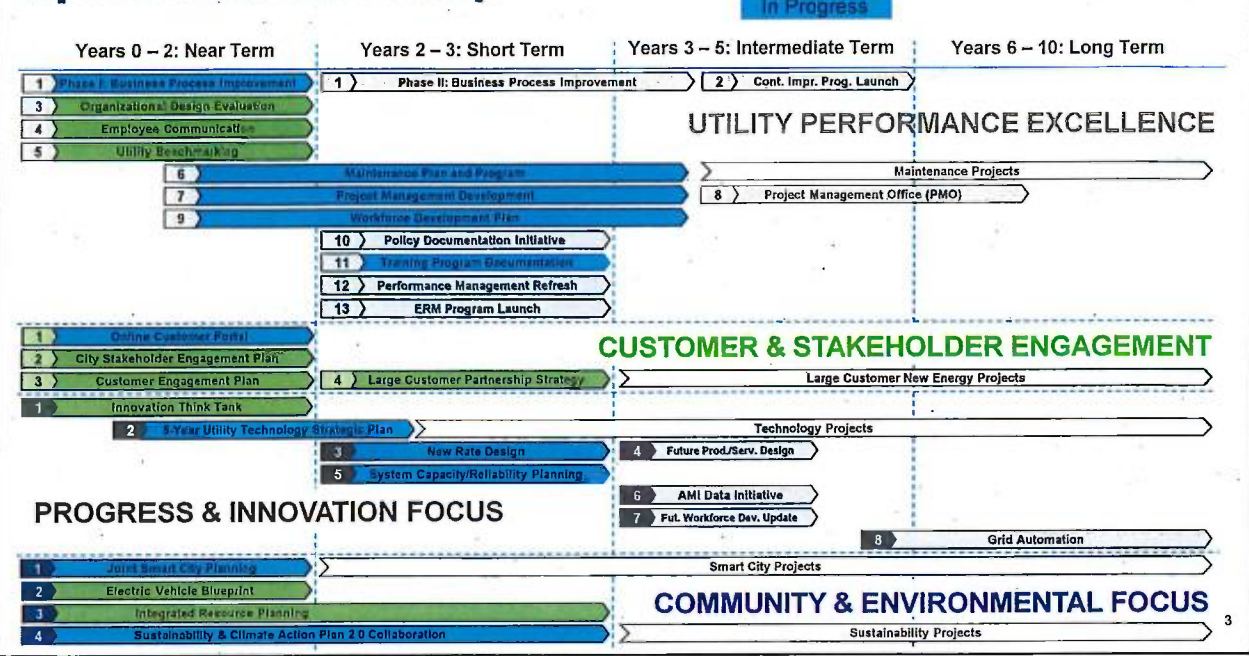


The diagram illustrates the 'SVP Change Drivers' at the center, surrounded by five interconnected factors: Climate Action Policies (top), Legislative & Regulatory Changes (right), Impact of Emerging Technologies (bottom right), Distributed Energy Resources (bottom left), and Renewable Energy & Energy Efficiency Goals (left).



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POST MEETING MATERIAL

Implementation Roadmap



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SVP Rebates

- Something available for any and all customers
- Designed specifically for Santa Clara community and its needs
- Evolving and responsive
- Aims to meet cost-effectiveness requirements and specific intent of enabling funding mechanisms
 - Requires significant reporting and verification efforts
- 6 FTE positions in budget - 3 vacancies currently (now under recruitment)
 - Staff manage all rebate programs and FRAP/MRAP programs

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Efficiency Rebate Impacts

- FY20 Program Net Annual Savings = 10,833,950 kWh
 - Equivalent to 2,033 homes annual usage
 - 28,730 tons GHG saved over lifecycle
- FY19 *Pre-Pandemic* Program Net Annual Savings = 25,396,178 kWh
 - Equivalent to 4,765 homes annual usage
 - 123,887 tons GHG saved over lifecycle



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Rebate Program Funding

- Funding for Rebates generally come from three restricted funding Sources
- Each source has its own restrictions
 - Public Benefit Charge (Public Utilities Code)
 - California Low Carbon Fuel Standard (LCFS) program
 - Greenhouse Gas Allowances/California Cap and Trade



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SVP Rebate Programs

- Equipment and Building
 - Funded through Public Benefit Charge
 - Residential
 - Commercial and Community
 - Solar PV Incentives
- Electric Transportation
 - Funded primarily with Low Carbon Fuel Credits and GHG Allowances

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Public Benefits Program

- Charge of 2.85% on every bill
- Spending Restricted by Statute to Four Areas
 - Energy Efficiency/Conservation in Customer Settings
 - New Renewables – traditionally solar PV rebates
 - Low-Income Directed Programs, e.g. FRAP Program
 - RD&D Projects relate to above - E.g. Bulk Electric Storage System for storing intermittent Renewable Energy
- Cannot claim energy savings for building code requirements (only beyond code)
 - As building codes become more stringent, reduces claimed savings and where rebates allowed

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Residential Appliances and Equipment

- Heat Pump Water Heater
- Electric Clothes Dryer
- Pool Pump
- UNDER INVESTIGATION: Induction Cooktops
- JUST LAUNCHED: Electric Panel Upgrade
- COMING SOON: Consumer Market Place
- ENDED: Refrigerator Recycling; Room Air Cleaner, Ceiling Fan
- Programs developed based on potential in community and technical potential to provide real energy/GHG savings results in programs evolving
- When staff vacancies are filled, expect to launch additional programs and potentially re-instate free home energy audits



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Commercial and Community Focus

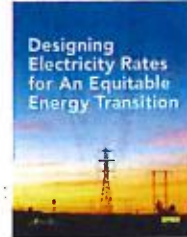
- Energy Efficiency Rebates
 - Free business energy audits
 - Commercial and Multifamily: HVAC, Food Service Equipment, Lighting & Lighting Controls, VFD Air Compressors, Building Control Optimization, Customized Projects
 - Energy Efficiency Grants to Non-Profits
 - *Available to City facilities too!*
 - Offerings evolve every year; investigating Induction Cooktop
 - Request Proposals from efficiency vendors for new programs regularly
- 2021 Targeted sectors:
 - Motel/Hotel bonus rebates
 - Energy Efficiency Grants for Small Businesses impacted by the pandemic

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Solar Rebates

- Cost of solar PV has fallen dramatically, achieving the goal of making mainstream
 - As a result, SVP has wind down the solar-only rebate offerings
- Currently: Low-Income Solar Grant Program
- Developing: Solar with Storage (battery) resiliency programs



Energy Institute
of Hass, UC
Berkeley

Staff is following California's investigation if the current system of Solar rebates and tariffs shift costs to lower- and average-income households from wealthier households

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Low Carbon Fuel Credit

- SVP receives credits for energy charged at publicly owned charging stations and through residential electric vehicle and electric forklift purchases
- SVP sells LCFS credits and funds restricted to activities that encourage clean mobility options
 - Funding City's fleet charging infrastructure
 - Publicly Accessible Chargers
 - Electric Bike and Forklift Rebates
 - Electric Vehicle Rebates
 - Dedicated portion of funding for Disadvantaged Communities and Low Income identified communities

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California Cap and Trade (GHG) Program

- Complex program that involves two separated activities
 - SVP as a power generator/consumer must purchase GHG allowances at auction for each metric ton emissions generated for electricity used by customers
 - SVP as a Load Serving Entity is allocated GHG allowances, can sell in the quarterly auctions
 - Must Reduce emissions or reduce customer bills
 - City electric vehicles, new bike paths, sustainable parks, and education programs
 - SVP historically has used the funds to offset additional renewables costs – helps maintain low rates

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Clean Electric Transportation

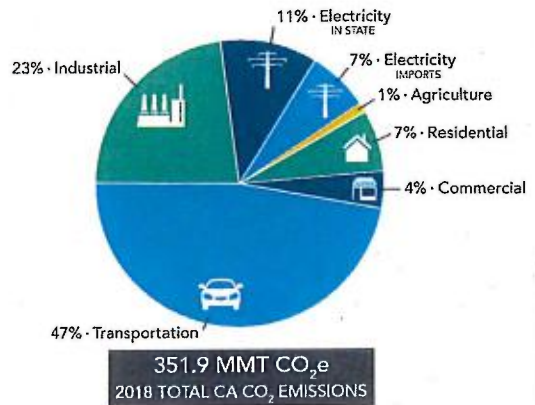
- Rebates Available
 - Residential, Multifamily, School and Non-profit EV Chargers Rebates
 - E-Bikes Rebates
 - Electric Forklifts Rebates
 - Low Income EV and Plug-in Hybrid Rebates
 - State Program: California Clean Fuel Rewards Direct Dealer Rebate for Vehicles
 - CALeVIP program for vehicle rebates, commercial & multi-family EV Chargers
 - SVP has committed \$1 million matching funds towards the program for the next 4 years
 - Bonuses for disadvantage community areas
- Additive to BAAQMD, State and Federal purchase programs for EVs

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Clean Electric Transportation continue

- Other activities that complement EV rebates:
 - Installation of 96 Public Charger Connectors to date
 - CALeVIP Program 2021
 - Reservations placed for 679 additional public chargers
 - Potential 214 fast chargers/465 Level 2
- Transportation is single largest source of GHG in California



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Upcoming Items

- Electrification Education Programs
- Multi-Family EV infrastructure technical assistance
- Online Marketplace for Energy Efficiency products (instant rebates)
- Council Consideration of Battery Storage Contract
- Council Consideration of Commercial Green Tariff Rate
- Multiple Council contract awards
- **Happy Quasiquicentennial!**



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The seal of the City of Santa Clara, California, is circular. It features a central illustration of a mission-style building with a red roof and a bell tower, set against a blue sky and green landscape. The text "CITY OF SANTA CLARA CALIFORNIA" is written around the top inner edge of the seal, and "1852" is at the bottom. Below the seal, the text "THE MISSION CITY" is visible.

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