SILICON VALLEY CLEAN ENERGY

CPUC Staff Report on Direct Access Reopening

October 14, 2020

SB 237 (Hertzberg, 2018)

- Directives to the CPUC
  - Issue an order by June 1, 2019, increasing the “cap” on Direct Access-eligible load by 4,000 GWh
  - Provide recommendations on implementing further expansion of Direct Access (DA)

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CPUC SB 237 Implementation

- The CPUC met the 2019 deadline for issuing its order increasing the DA cap by 4,000 GWh (see D.19-05-043).
- Due to COVID-19 impacts, it missed this year's June 1 deadline for sending its recommendations to the Legislature.
- The CPUC extended the statutory deadline for this quasi-legislative proceeding to March 15, 2021 citing Pub. Util. Code § 1701.5(a). (see D. 20-09-011).
- The CPUC issued a Ruling with the draft DA Study on September 28, 2020.

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Draft DA Study Recommendations

- ESPs submit robust, transparent IRP filings and meet all D.19-11-016 procurement requirements
- ESPs meet their RPS obligations for the 2021-2024 compliance period
- ESPs comply with all RA requirements
- CPUC ensures CCAs mechanism to cover stranded costs
  - Legislature considers statutory authorization of CCA exit fees
- Legislature clarifies CPUC enforcement authority for IRP and RA compliance
  - Permits de-licensing/registration for ESPs and CCAs with repeated non-compliance
- If these conditions are met, then reopening will gradually occur at 10% annually

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Reopening cannot occur before 2026

- The Legislature sets preconditions to reopening that cannot be met until late 2025 at the earliest

EOY 2025	2026	2026	2027	2028
Confirmation 2021-2024 RPS requirements met	Confirmation all reopening preconditions met	First 10% (8,000 MWh) tranche launch	Compliance verification 2nd tranche	Second 10% tranche launch

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Next Steps

- **October 16th:** Comments on the Draft Study due
  - Staff working closely with CalCCA on comments and in-person advocacy at the CPUC
- **October 26th:** Reply Comments due
- **Q4 2020/Q1 2021:** Proposed Decision expected
  - SVCE/CalCCA will have the opportunity to comment on the Proposed Decision
- **30+ days after Proposed Decision:** Final Decision adopted on DA Expansion by CPUC.
- **March 15, 2021:** Final Study must be submitted to the legislature

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Questions?

SILICON VALLEY
CLEAN ENERGY

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SVCE Strategic Plan 2020 Update

SVCE Board of Directors
October 14, 2020

California Emissions - Electricity 15%

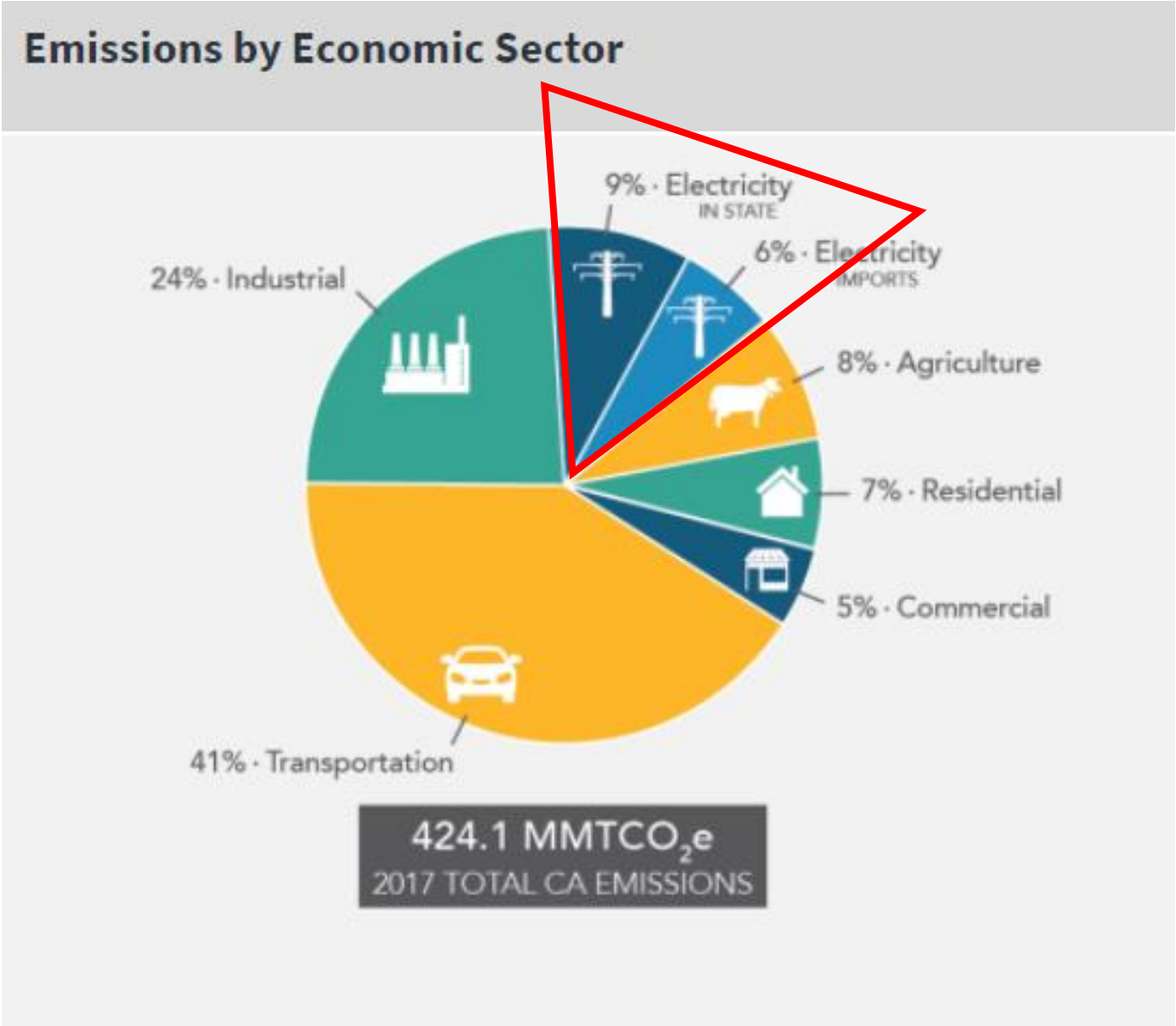
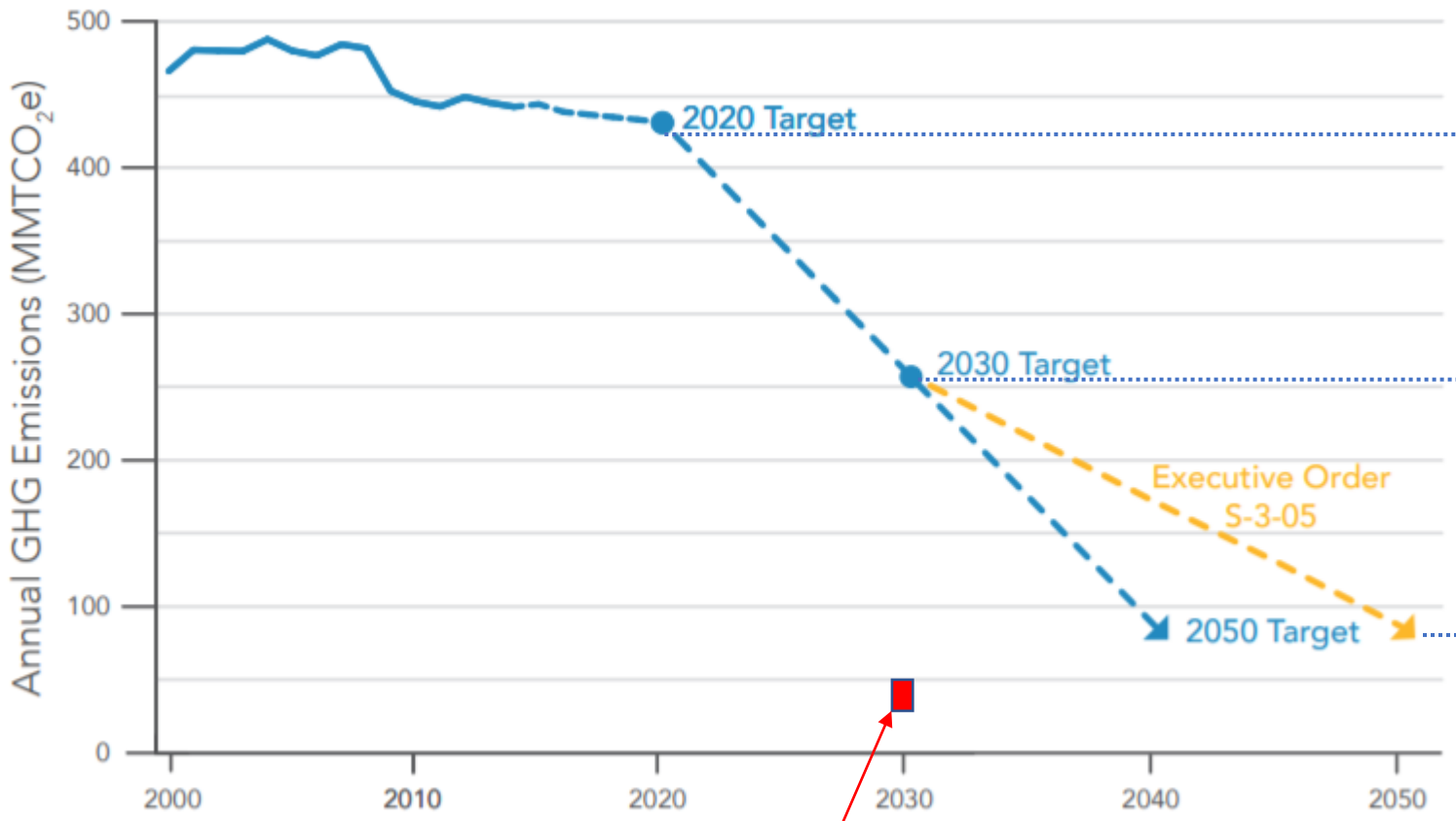


Figure courtesy of the California Air Resources Board: https://ww2.arb.ca.gov/ghg-inventory-data

CA GHG Reduction Goals AMBITIOUS & CRITICAL



2020: Back to 1990 levels
ACHIEVED

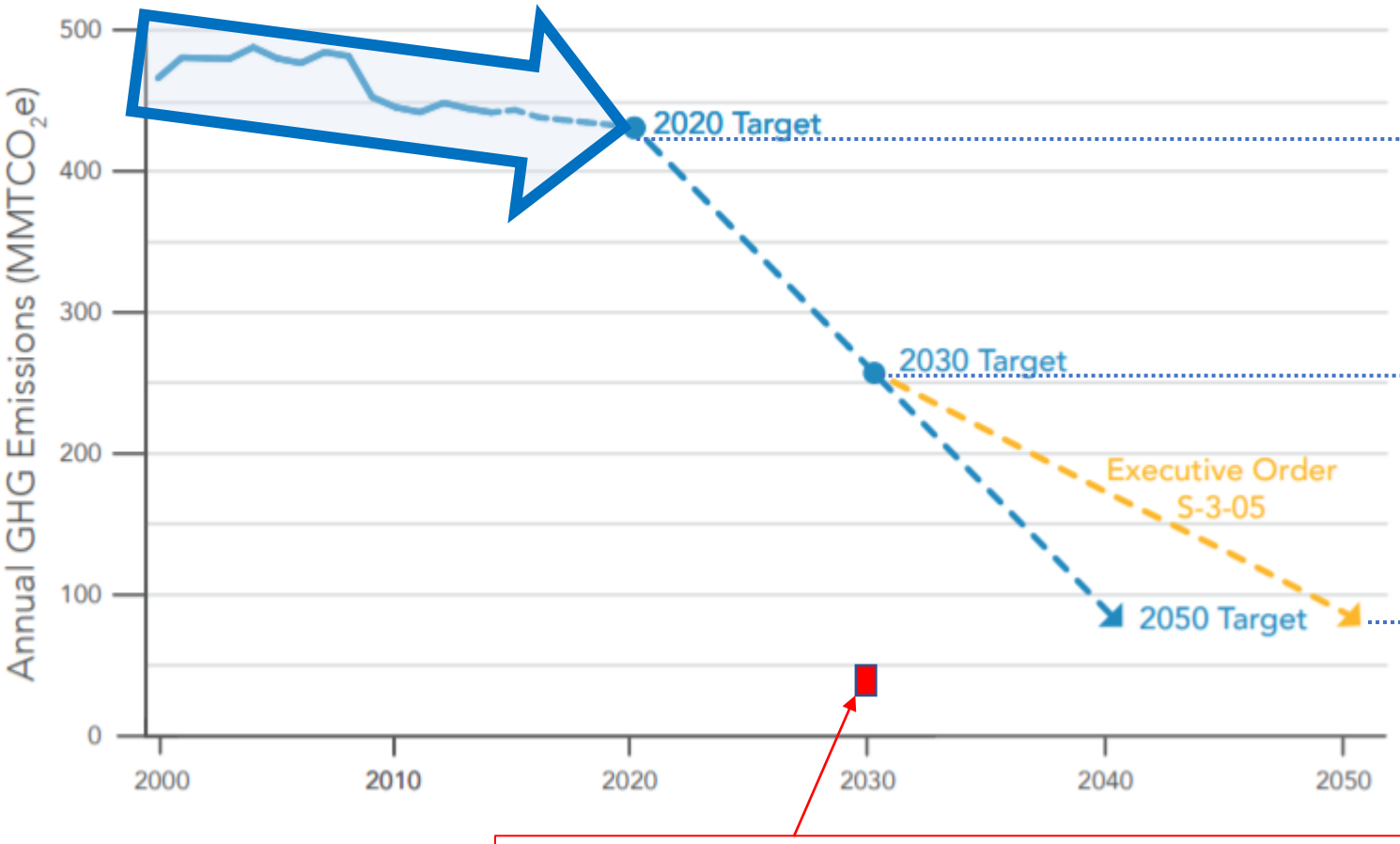
2030: 40% below 1990 levels
260 million tons

2050: 80% below 1990 levels

The electricity sector's portion of this statewide total is **46 MMT**, or 18% of allowable emissions in 2030. However, for CA to be on track to meet the SB 100 goals in 2045, that total drops to **38 MMT**.

Figure courtesy of California Climate Change Scoping Plan:
https://ww3.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf

We've Made Progress Since 2000



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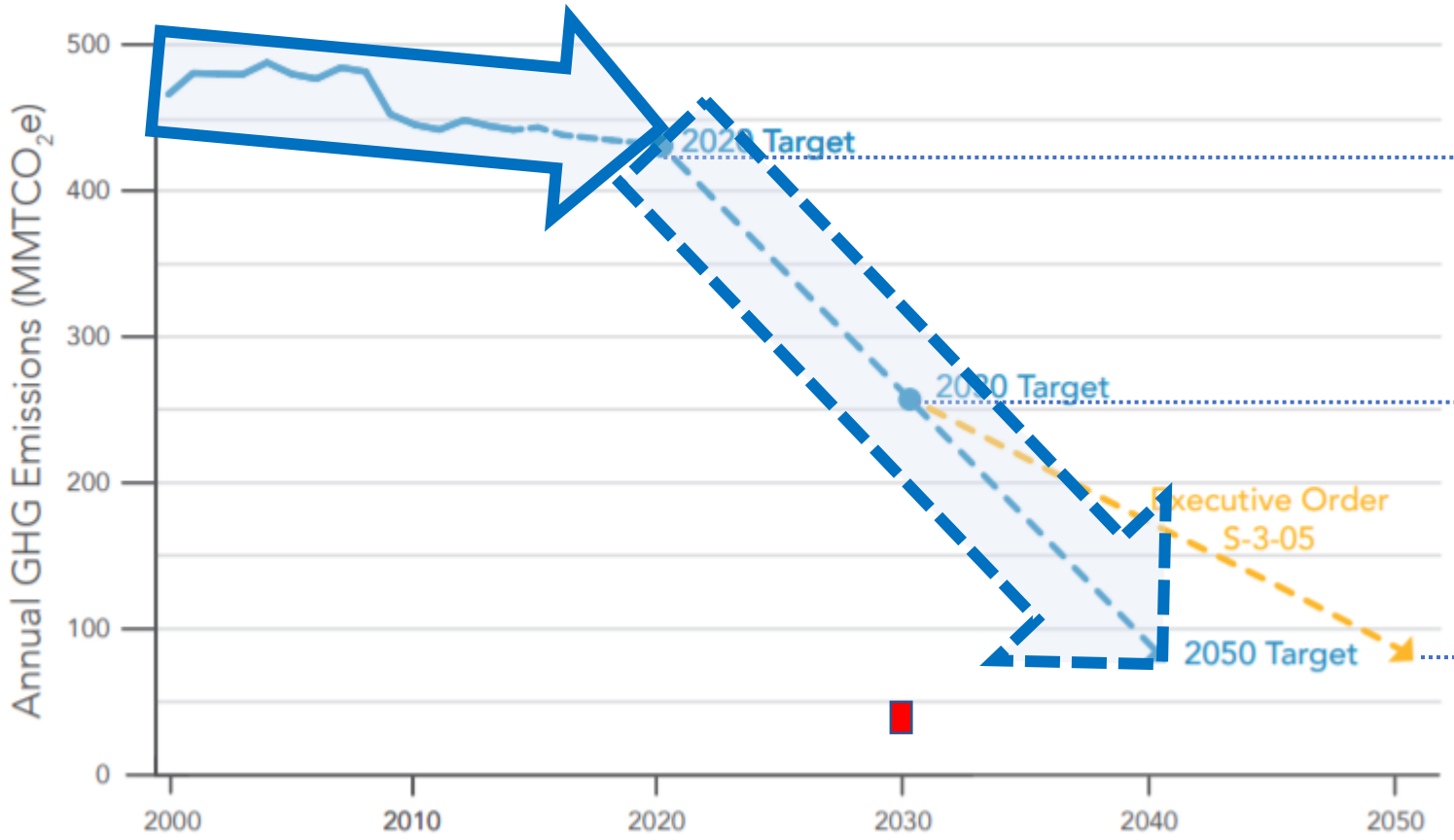
We Need to do MUCH MORE



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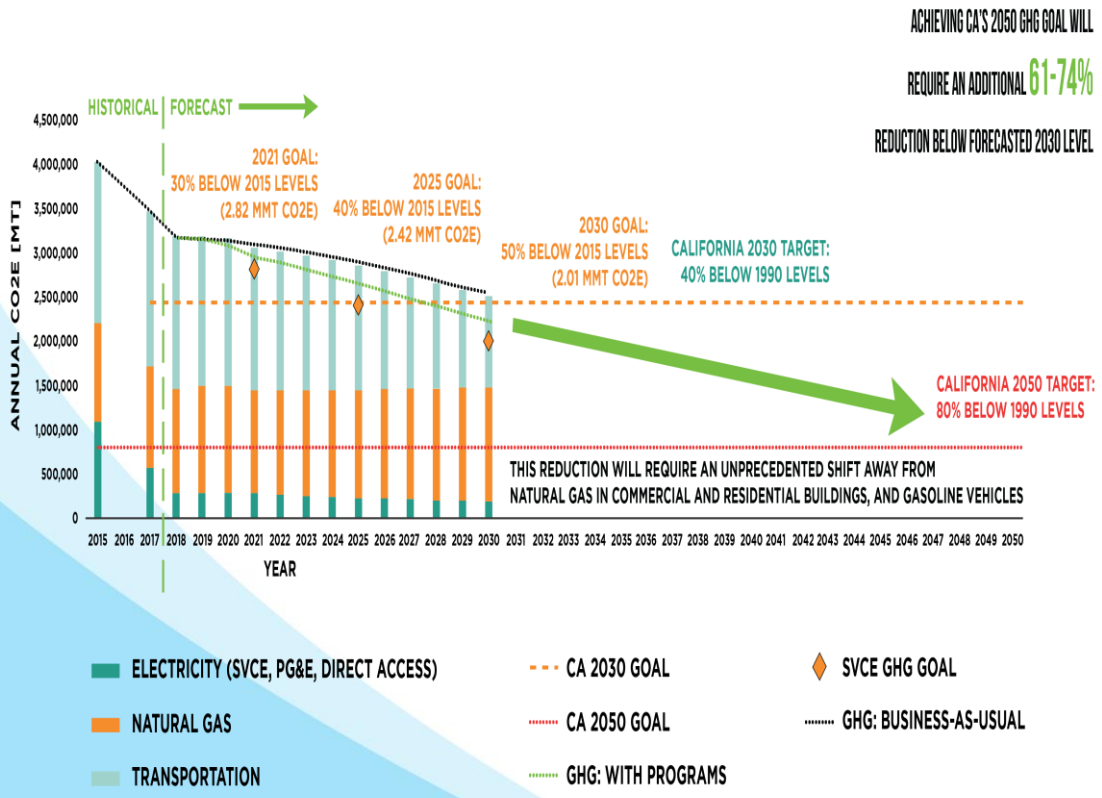
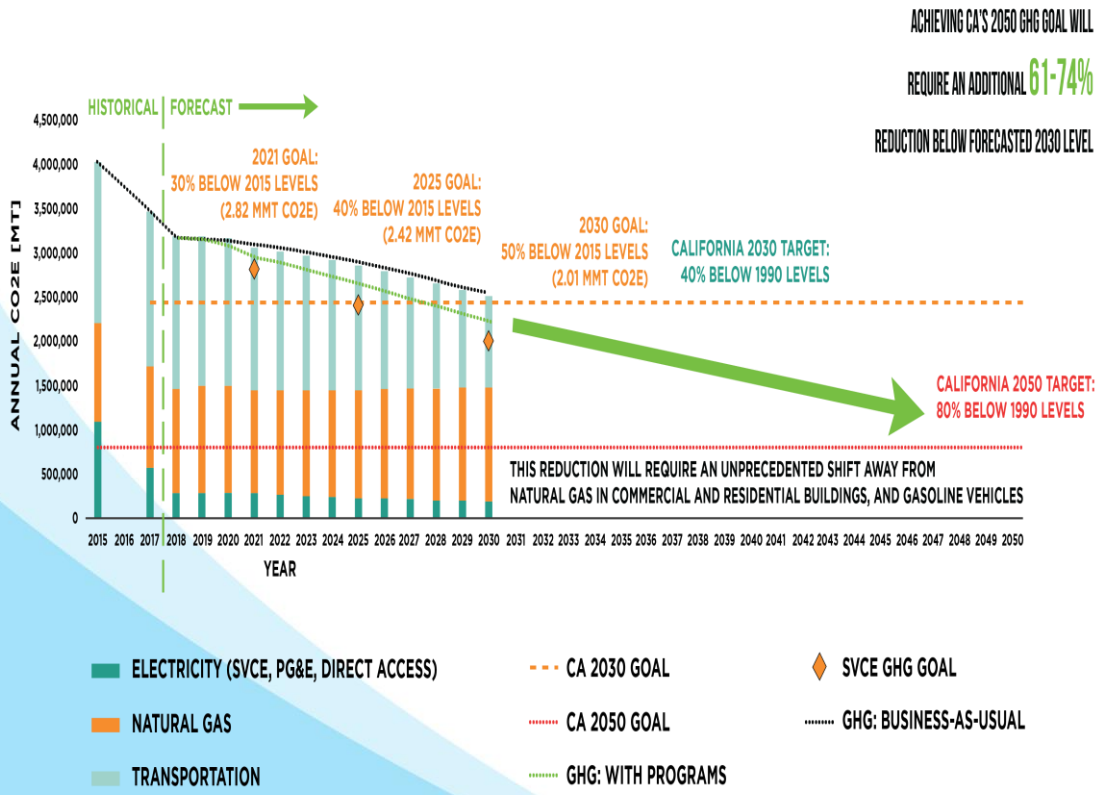
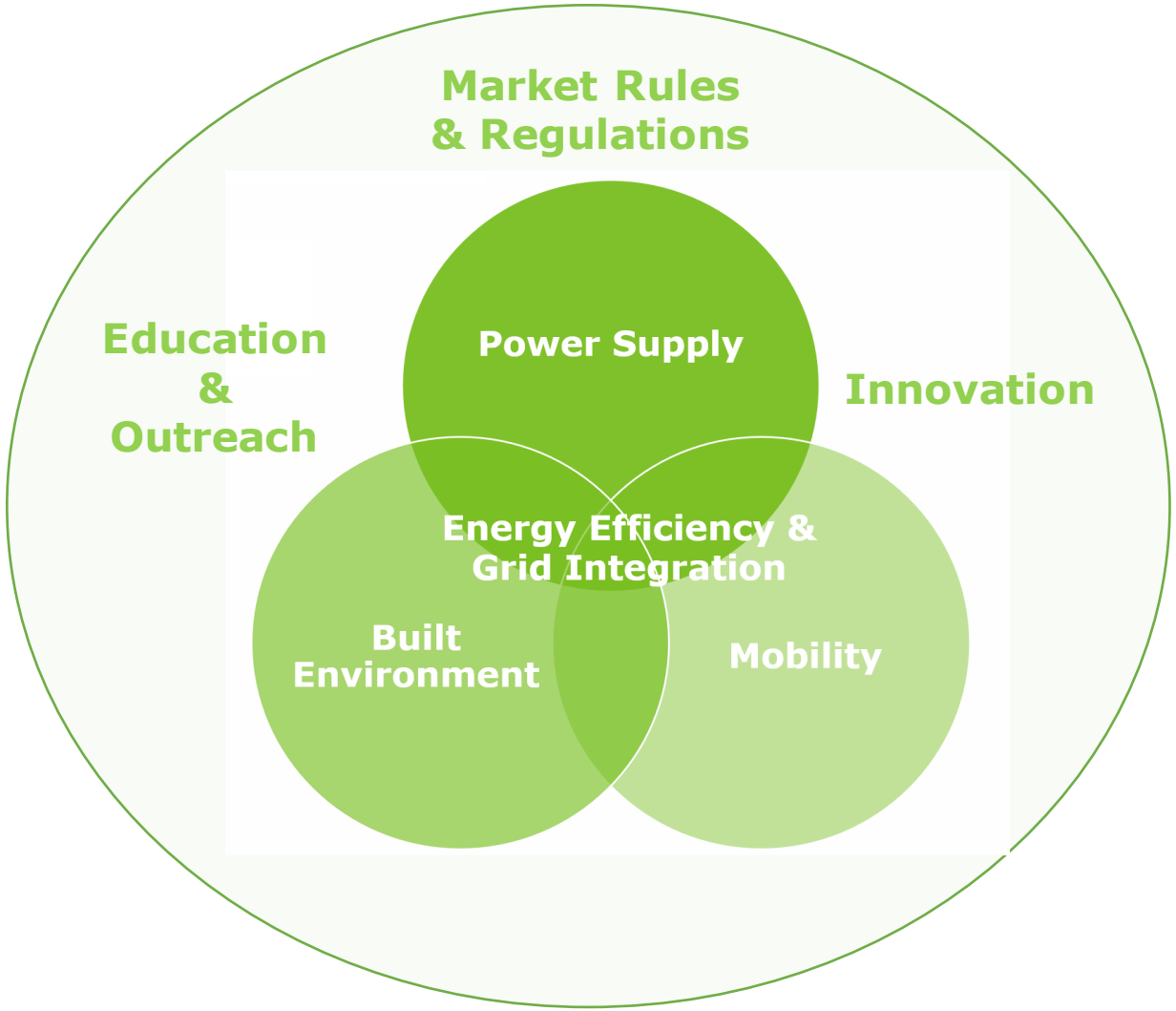
SVCE Community GHG Reduction Goals



Note: Electricity emissions calculated using annual GHG emissions accounting methodology

SVCE Community GHG Reduction Goals





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Our Communities

Our Purpose & Destination

MISSION

Reduce dependence on fossil fuels by providing carbon free, affordable, and reliable electricity, and innovative programs for the SVCE community

MEASURE

SVCE, working with SVCE Member Agencies, aspires to achieve energy and transportation GHG reductions of 30% from the 2015 baseline by 2021, 40% by 2025, and 50% by 2030

Our Communities

CUPERTINO · CITY OF GILROY · LOS ALTOS HILLS CALIFORNIA · TOWN OF LOS GATOS · CITY OF MILPITAS · CITY OF MOUNTAIN VIEW · CITY OF MORGAN HILL · THE COUNTY OF SANTA CLARA · CITY OF SARATOGA · Sunnyvale

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Our Pathways

Clean Energy		Clean Buildings	Clean Transport
Outreach & Education	*Market Rules & Regulations*	*Energy Efficiency & Grid Integration*	*Innovation*

Our Team

Changes to Strategic Plan in 2020

Promoted quantifiable measure for our Mission and explicitly included working with and through member agencies

Reduced length of document by 50%

Goals, Strategies & Tactics Reduced from 159 to 80

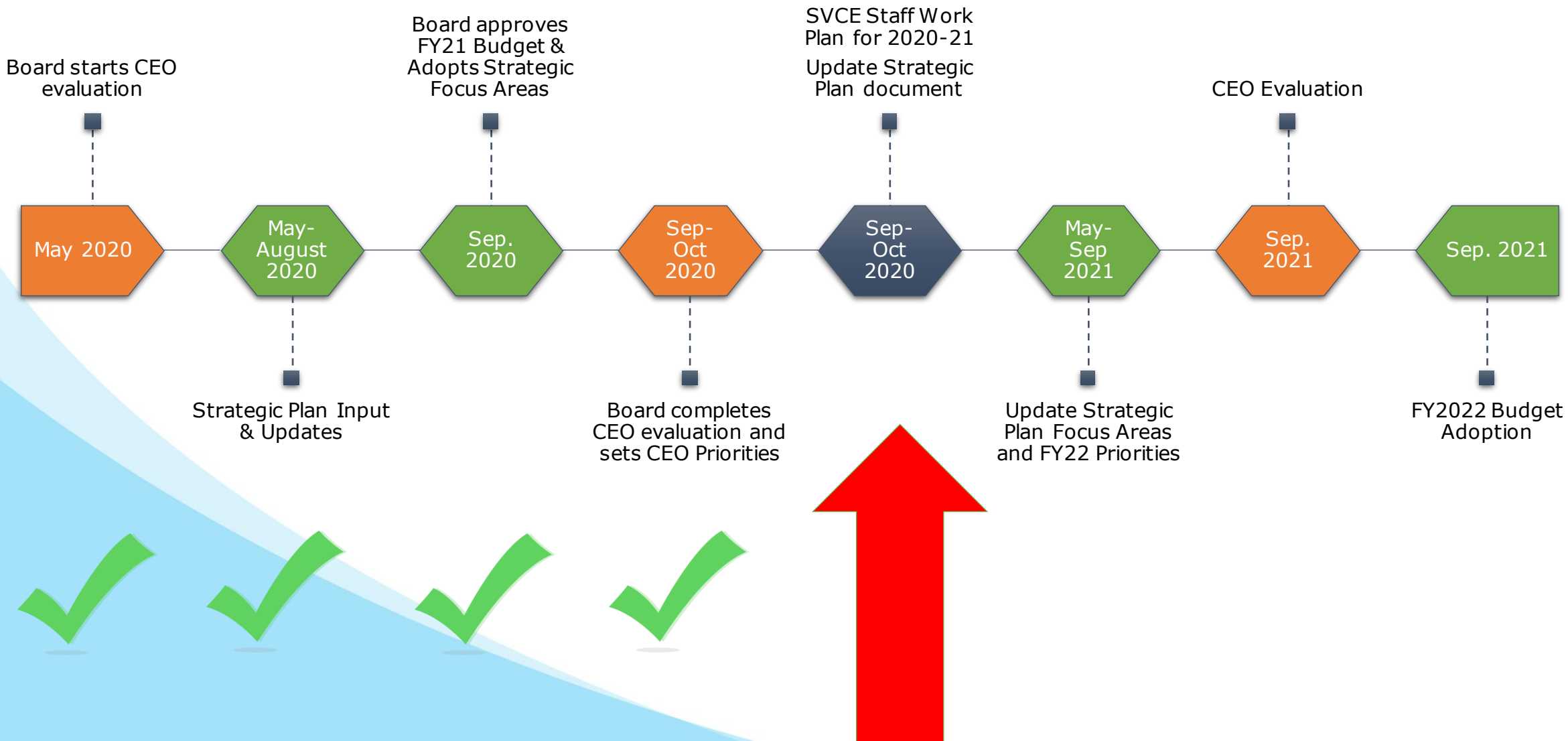
Goals 13 to 19

Strategies & Tactics from 146 to 61

Board Approved 5 Focus Areas for 2021

Proposing 2 activity updates to the Board in next 9 months

SVCE Strategic Planning & Work Plan Process is continuous



Recommendation

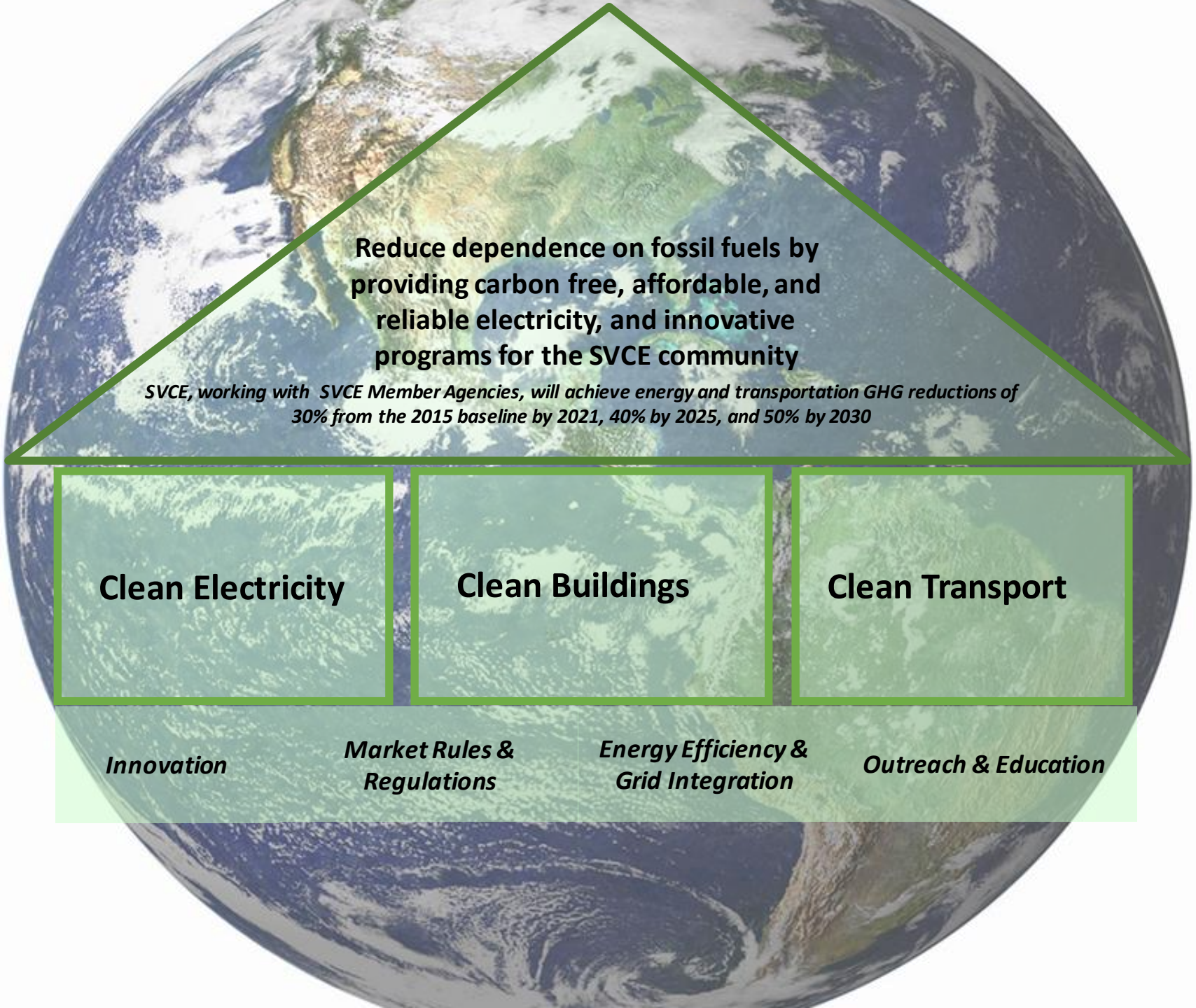
Adopt SVCE's updated Strategic Plan and direct the CEO to continue engaging with the Board throughout the year on progress

Backup & Reference

SVCE Mission Statement

Reduce dependence on fossil fuels by

- providing carbon free,
- affordable and
- reliable electricity and
- innovative programs for the SVCE community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Clean Electricity
Clean Buildings
Clean Transport
Innovation
Market Rules & Regulations
Energy Efficiency & Grid Integration
Outreach & Education

Focus Areas for 2020-21

- Additional Resources & Efficiencies
- Enterprise-wide systems, metrics & tools
- Focus on Equity
- Digital Pivot - Customer & Community engagement
- Community outreach and leverage

Landscape of Board Approved Policy/Plans

Strategic Focus Areas – 5 areas identified by Board in June 2020

Shorter Strategic Plan – October 2020

Integrated Resource Plan (every 2 years, as per CPUC)

Decarbonization Roadmap (every 3 years, as needed)

Electric Vehicle Infrastructure Plan (Board approved, xx)

Building Decarbonization Plan (Board proposed, xx)

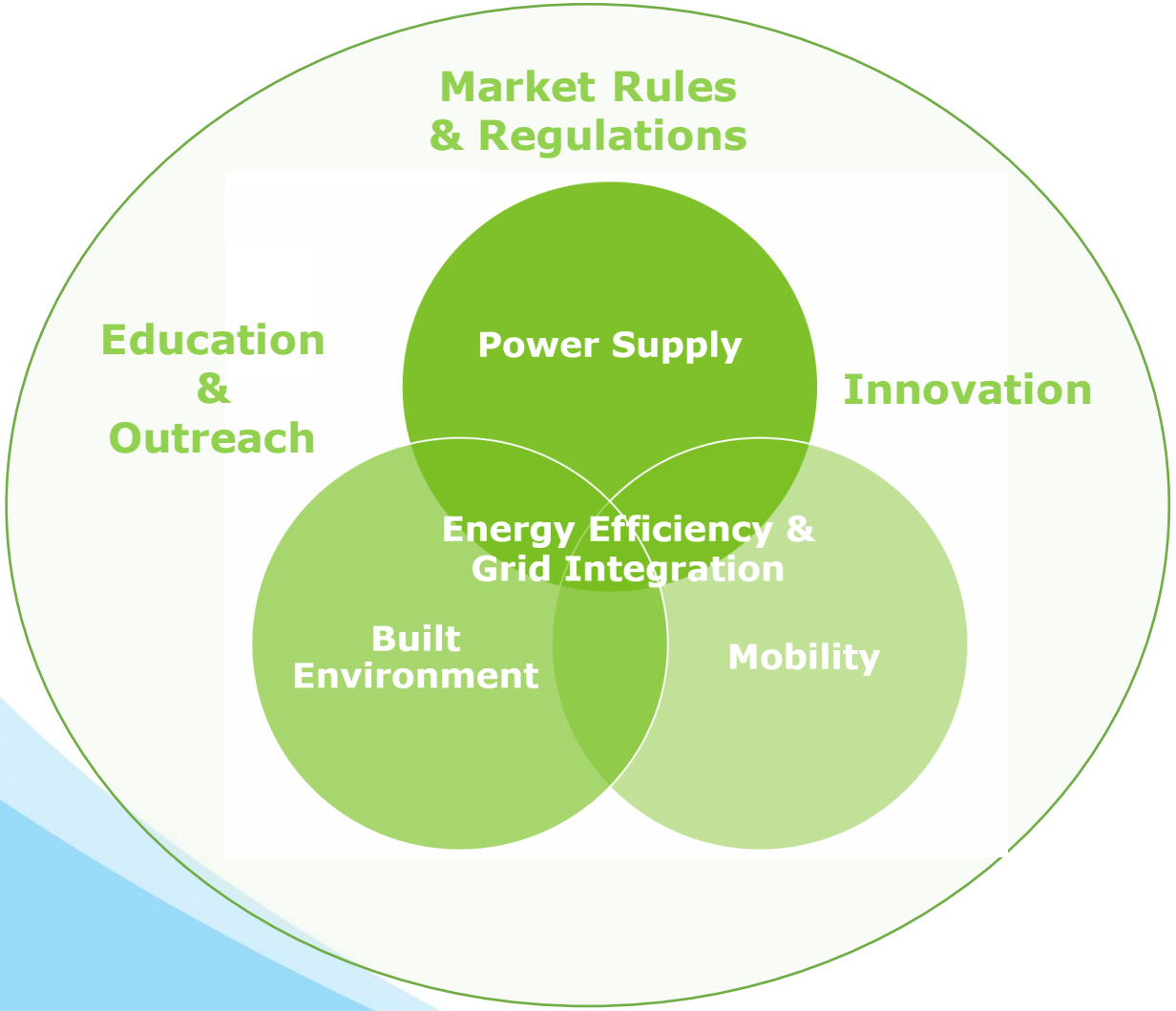
Policy Platform (every year)

For this year

Also approved by Board

SVCE Strategic Plan – 2020 Update

Strategies for Market Transformation



- Procure sustainable, affordable & **carbon-free supply**
- Electrify the **built environment** & **mobility**
- Promote **efficiency** & **utility grid integration**
- Remove **market barriers** (regulations & law)

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Recipe for Clean Energy Communities

ENTERPRISE RISK MANAGEMENT
CLEAN ENERGY PORTFOLIOS

MARKET INNOVATION
ALL-ELECTRIC LIVING & TRANSPORTATION

JOINT ACTION
COLLABORATIVE & NIMBLE DECISION-MAKING

SILICON VALLEY CLEAN ENERGY

Silicon Valley Clean Energy (SVCE)

Joint Action Agency formed to reduce dependence on fossil fuels by providing carbon free, affordable and reliable electricity and innovative programs

Campbell | Cupertino | Gilroy | Los Altos | Los Altos Hills | Los Gatos | Monte Sereno

Milpitas | Mountain View | Morgan Hill | Santa Clara County | Saratoga | Sunnyvale

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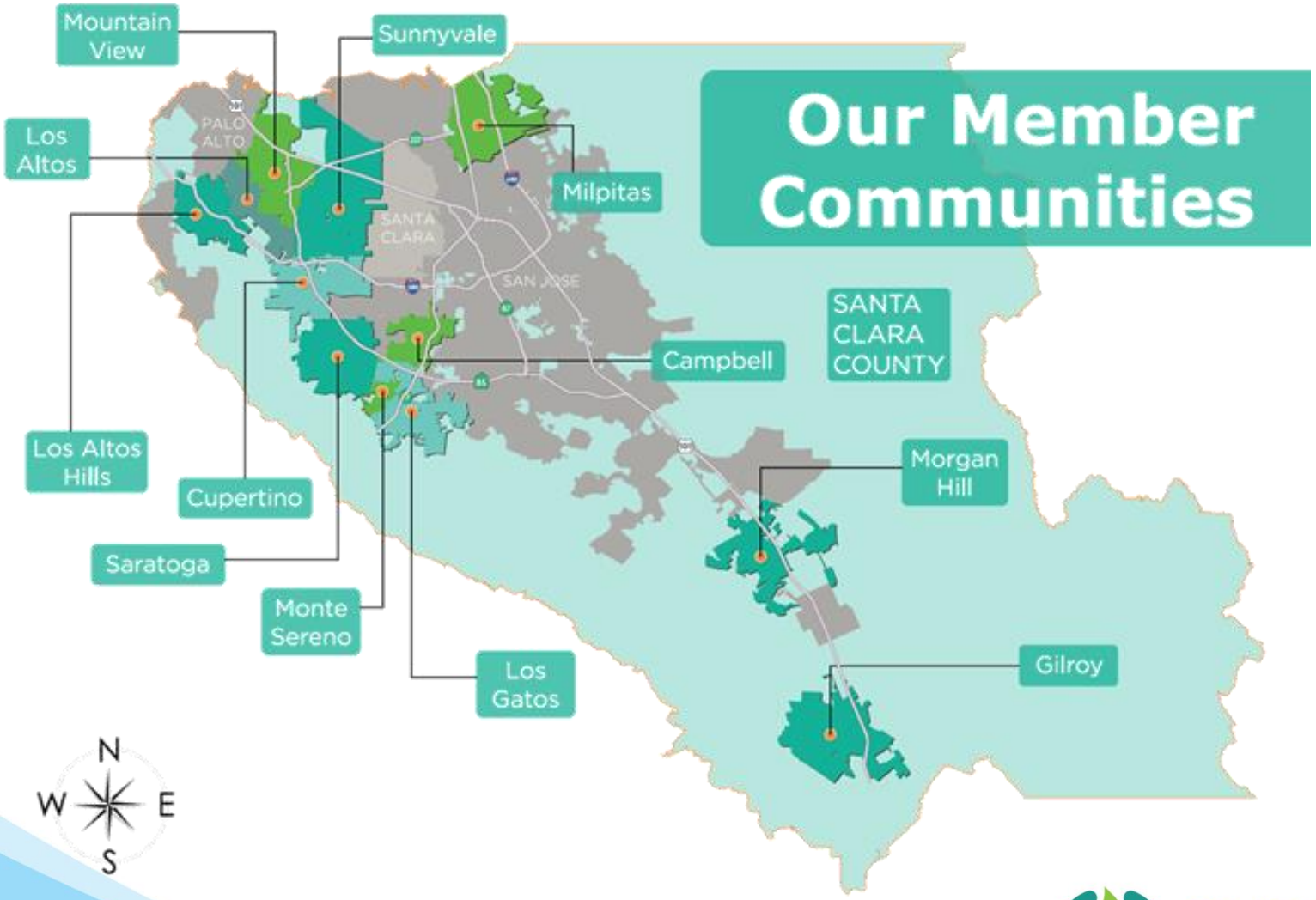
SVCE Communities



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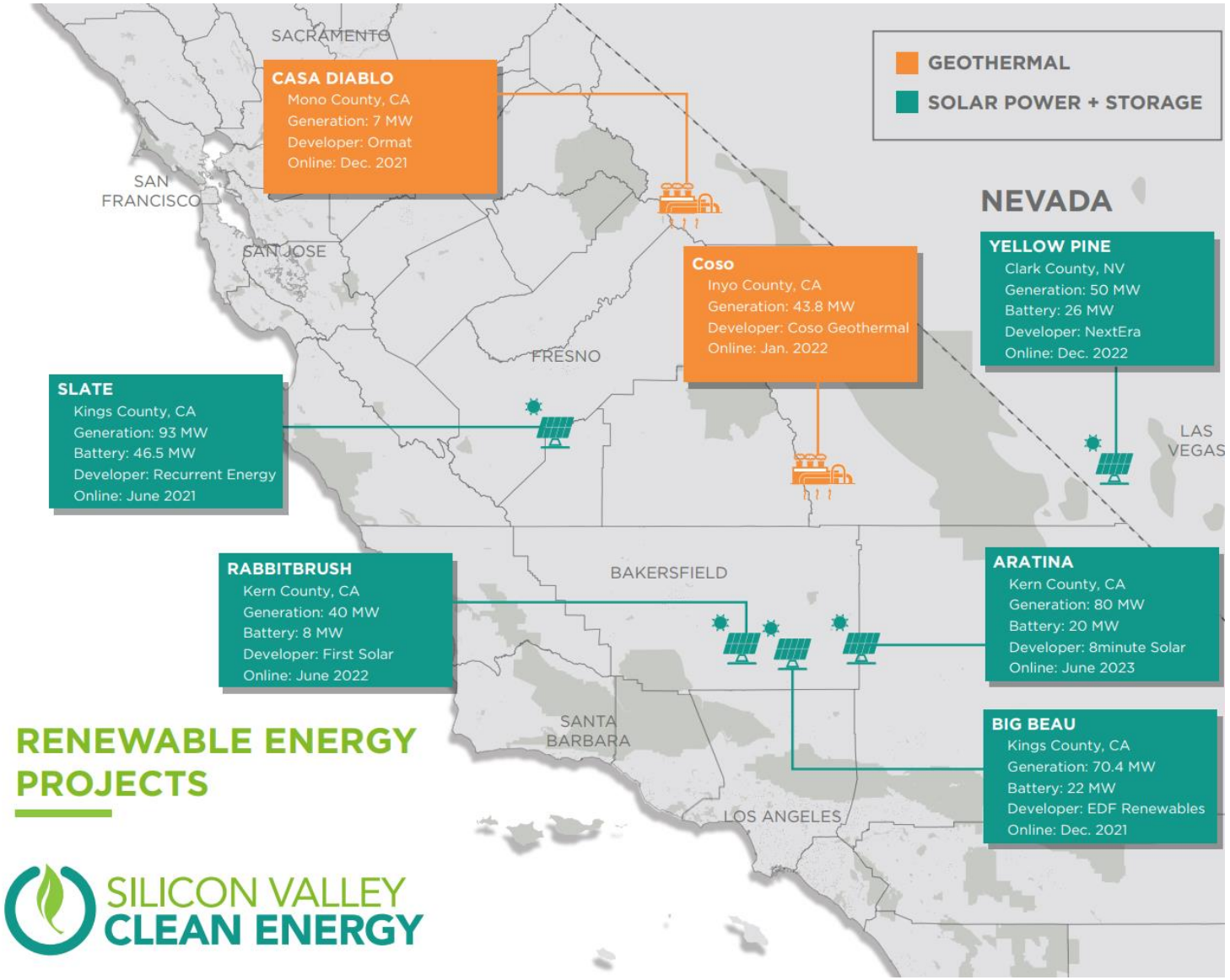
$1 B worth of Power Supply Contracts Online Starting next Summer



Joint Action: Rapid Progress, At-Scale

1

2016 October

Formation

2

2017 April

100% Carbon-Free Electricity

3

2018

Long-Term Renewable PPAs
Decarbonization Roadmap

4

2019-2020

- Renewable PPAs
- Reach Codes
- EV Plan
- Building Decarb Plan
- eHUB

5

Continuous Implementation & Innovation!

Uncertainty, Risk, and COVID-19

SUPPLY
Project delays and financing issues due to COVID-19; new IRP/RA rules

PCIA
PCIA uncapped later in 2020, 10+M reserve call in 2021

LOAD LOSS
15% load loss for C&I customers; return to "normal" in 2022

PAYMENTS
Customer defaults, payment issues due to COVID-19

L&R ISSUES
Central buyer, PG&E BK, Transparency, PSPS, Long-duration storage

DIRECT ACCESS
Potential for additional DA market expansion

SILICON VALLEY CLEAN ENERGY

Pathway to 2030

	Now	Transition through 2025	2025 and beyond
Renewable & Carbon-Free Resources	Heavy reliance on existing and short-term renewable (RPS) resources Out-of-state hydro resources	Implement long-term, additive renewable resources Deploy strategic local renewables Longer-term hydro contracts, both in-state and out-of-state	Additional long-term renewables Increased deployment local renewables Less dependence on large hydroelectricity
GHG Accounting			
Resource Adequacy & Reliability			
DER & Grid Innovation			

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DER & Grid Innovation	Background research & stakeholder engagement; design and launch of flagship pilots	Leverage 100kW-10MWs of Demand Flexibility via flagship pilots	Leverage 10-100MWs Demand Flexibility by expanding flagship pilots into broad-based programs

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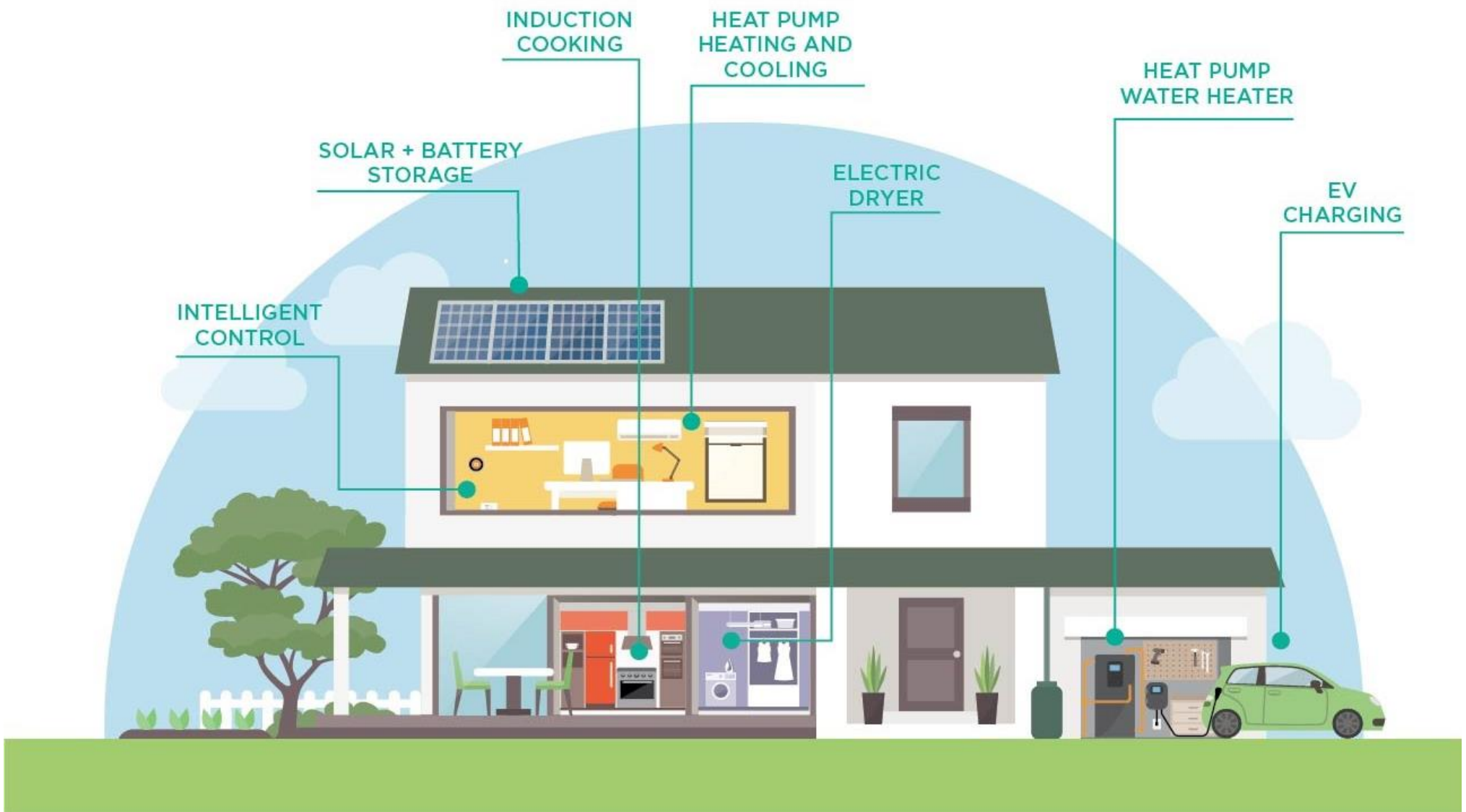
Local Market Vision: All-Electric Buildings & Transportation

Health & Comfort

Cost-Savings

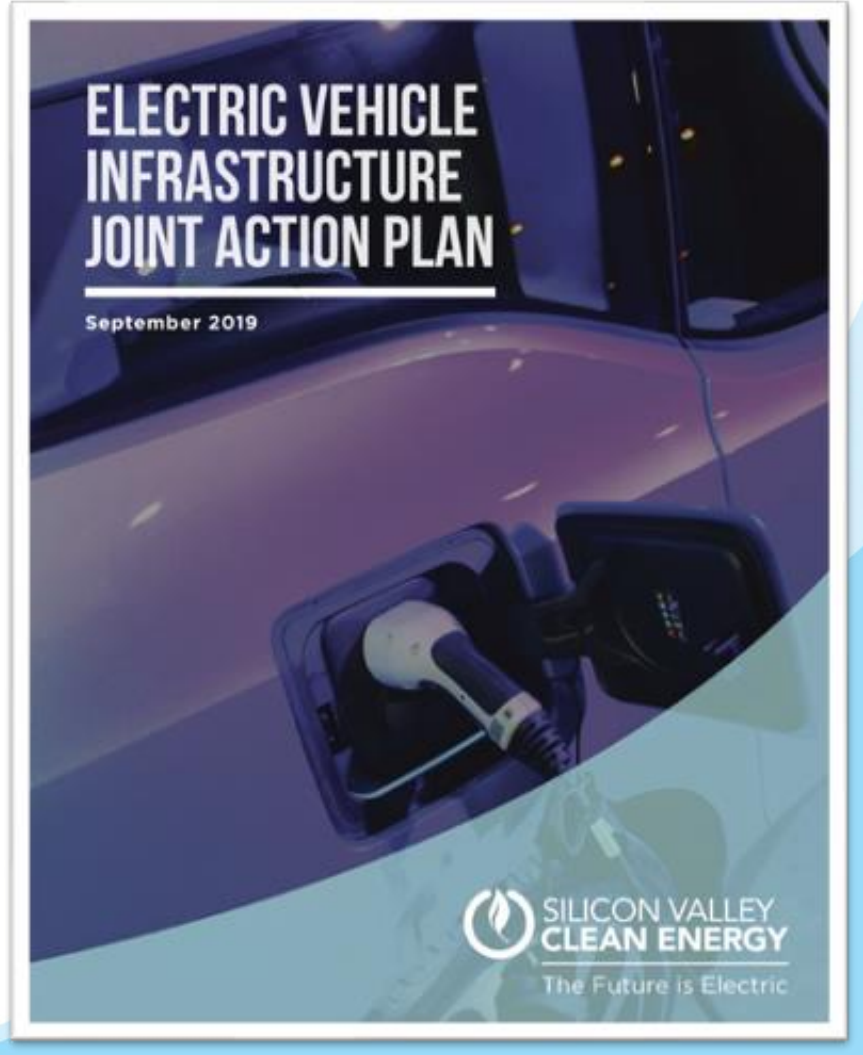
Improved Air Quality

Local Market Vision: All-Electric 'FutureFit' Home



Animating Local Markets: Electric Vehicles

- Silicon Valley Transportation Electrification Clearinghouse
- Regional EV Leadership Recognition
- Priority Zone DC Fast Charging
- Multi-Unit Residential Charging Technical Assistance
- Workplace Charging Rebates
- Fleet Electrification



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Animating Local Markets: Electric Vehicles

- Multifamily & Small/Medium Business Technical Assistance
- Concierge support to multifamily and small/medium business to install EV charging
- Targeted education/outreach and awareness-building
- Site assessments & recommendations (costs, equipment type, management, etc.)
- SVCE will learn about key challenges & continue to adapt

Administered by

CLEAResult®

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Animating Local Markets: Customer Education

- Online Tools: Customer Resource Center (CRC)
- Customers learn about, see the value of, and take action to transition to electric vehicles and appliances as well as solar + storage.
- Phased launch of website redesign with three tools to educate and encourage adoption of:
  - Electric vehicles
  - Solar + storage
  - High-efficiency electric appliances

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Animating Local Markets:
All-Electric Buildings Showcase

- SVCE customer awards & case studies
- Showcases top local all-electric buildings:
  - 13 residential homes
  - 5 commercial offices buildings
  - One multi-family development
- City Ventures honored for Depot Station at 2019 Silicon Valley Business Journal Structures Awards

www.svcleanenergy.org/all-electric-award

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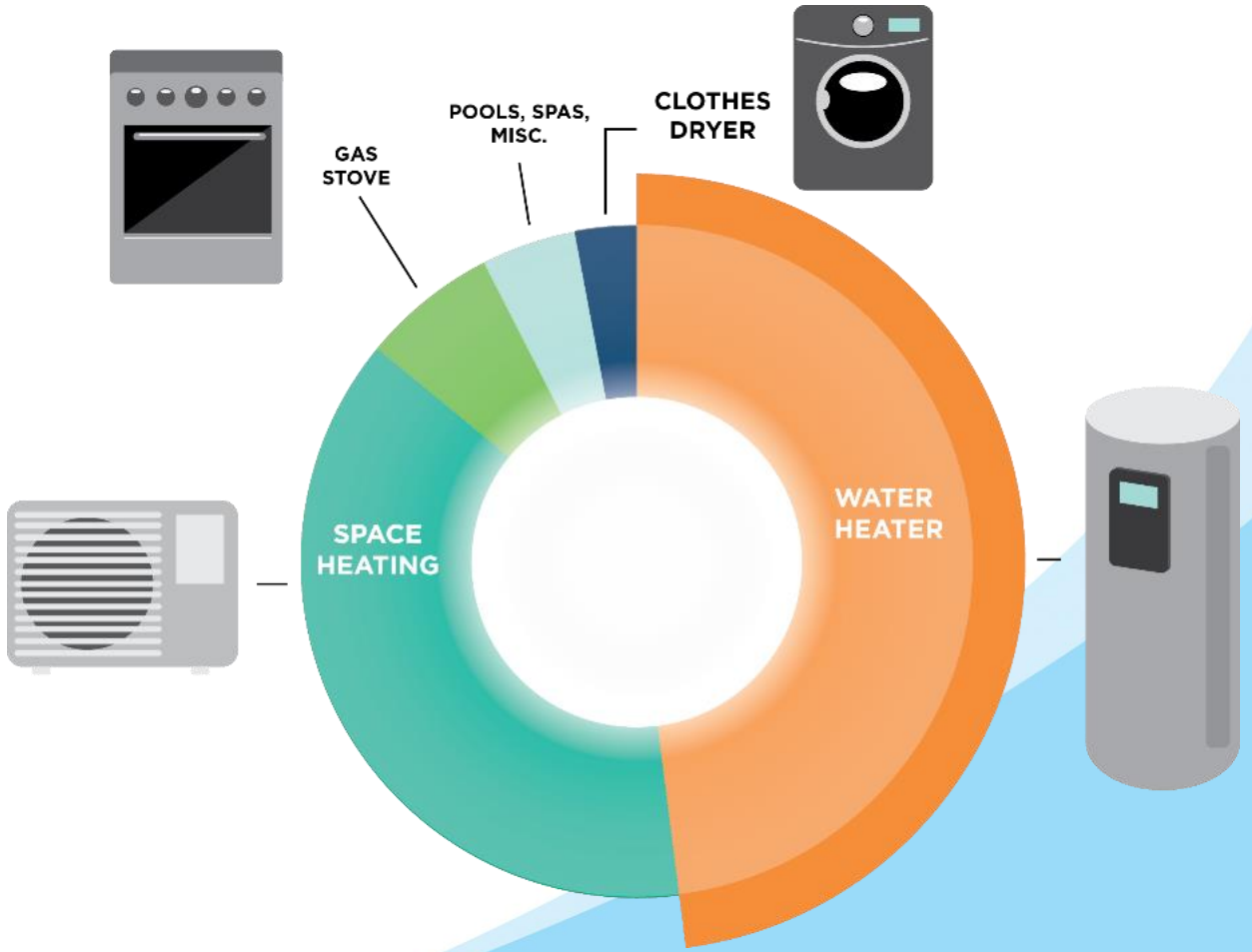
Animating Local Markets: Building Retrofits

- Gas water heater replacement w/ Heat Pump Water Heater
- $2,000 to $7,000 rebate (depending on configuration)
- 100 installed or in-process
- Future market stimulus:
  - Expand water heating retrofits
  - Add other appliances



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Animating Local Markets:
Smart Meter 'Data Hive'

SVCE data hive

- SVCE Data Hive launched on March 30
- Flagship pilot with UtilityAPI
- **Over 50 solution providers** registered on portal

Securely Share Your Utility Data

You can now securely share your utility data (bill history, smart meter intervals, etc.) with external companies. See the directory for a list of companies that have registered for data sharing. Sharing your utility data is secure, opt-in, and you can manage and revoke your authorizations from your My Authorizations dashboard. We follow the Green Button Connect standard and DataGuard Energy Data Privacy guidelines to ensure your utility data is kept secure during the data sharing process. For more information on utility data sharing and the consent process, visit authorization support.

SILICON VALLEY CLEAN ENERGY

More info: data.svcleanenergy.org

Animating Local Markets — Regionally!

Standardizing (Advanced) Building Codes

- Regional collaboration:
  - SVCE, Peninsula Clean Energy & San Mateo County Office of Sustainability
- Local Building Codes for New Construction:
  - Limit Natural Gas Usage
  - Increase Electric Vehicle Charging
- SVCE member municipalities:
  - Advanced Codes passed in 9 municipalities: Mountain View, Morgan Hill, Milpitas, Monte Sereno, Saratoga, Los Altos Hills, Los Gatos, Cupertino & Campbell
  - Under consideration / development: Santa Clara County, Sunnyvale & Los Altos

SILICON VALLEY CLEAN ENERGY

PENINSULA CLEAN ENERGY

OFFICE OF SUSTAINABILITY
COUNTY OF SAN MATEO

Animating Local Markets — Regionally!

Community Control over State Funding

- Regional Electric Vehicle Charging Infrastructure Stimulus:
  - SVCE & Peninsula Clean Energy
- $60+million for two counties:
  - $33 million from California Energy Commission & matched by local partners
- Summer 2020: first-come / first-served incentives
  - DC Fast Chargers: $50,000 to $70,000
  - Level 2 Chargers: $4,500

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PENINSULA CLEAN ENERGY

Animating Local Markets — Regionally!

Energy Storage & Resilience

- Regional initiative: 4 community power agencies
- Community Resilience program launching summer 2020
- Deploy 30MW+ of new battery storage at homes and businesses
- Market prioritizes customers at-risk of wildfire power shut-offs

EAST BAY COMMUNITY ENERGY

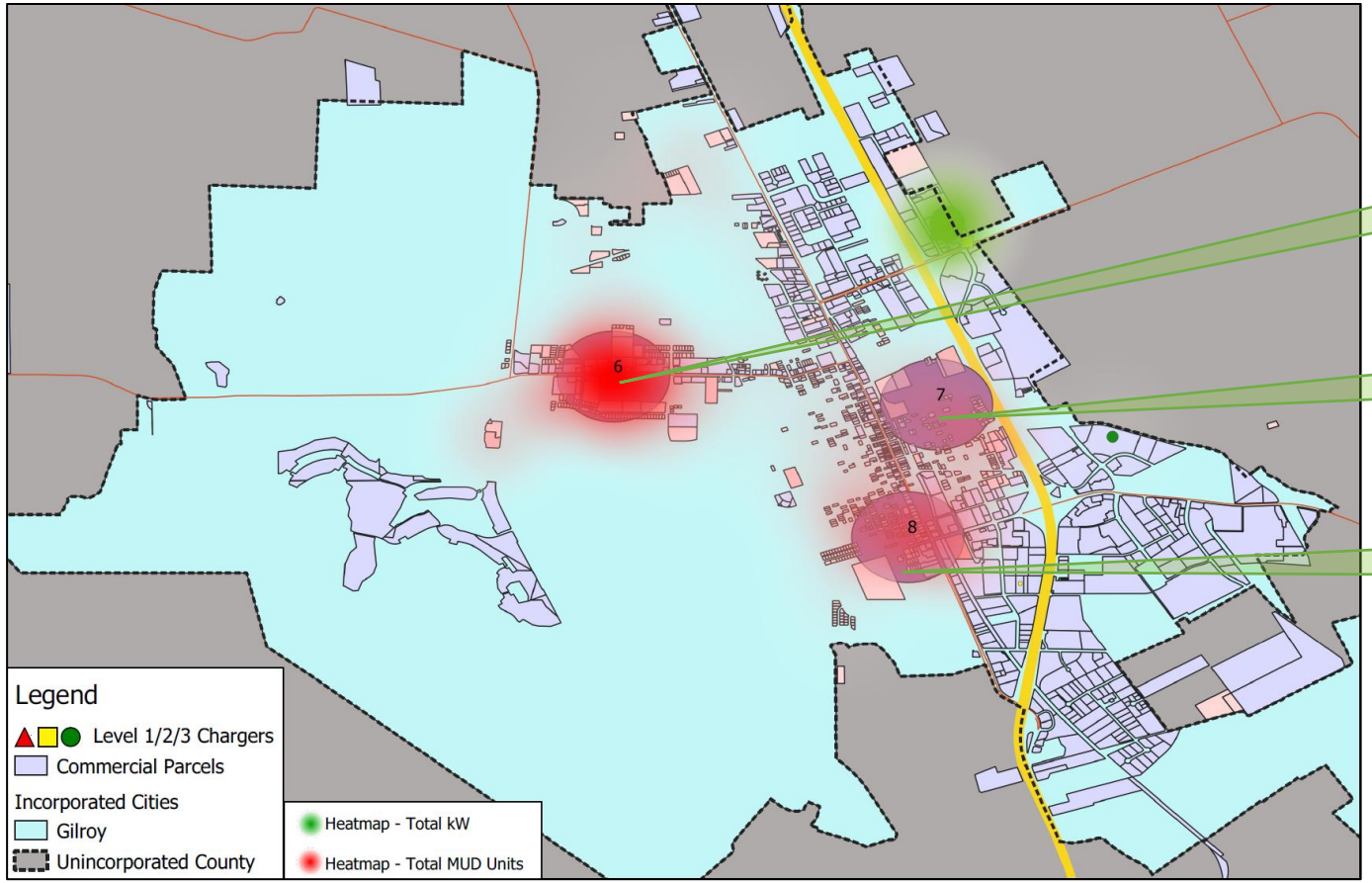
PENINSULA CLEAN ENERGY

SILICON VALLEY POWER. CITY OF SANTA CLARA

SILICON VALLEY CLEAN ENERGY

Animating Local Markets — Regionally!

Targeting EV Charging & Grid Integration



Cluster 6
Units: 806

Cluster 7
Units: 370

Cluster 8
Units: 592

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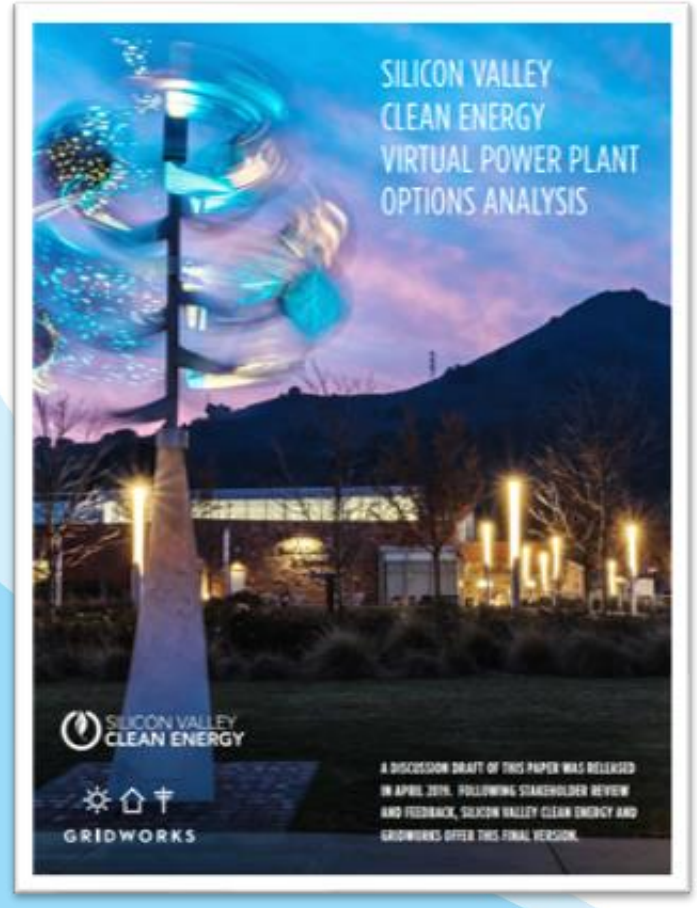
Animating Local Markets — Statewide!

Grid Integration Thought Leadership



- **Virtual Power Plant Options Analysis***

  Explains how community energy can support grid integration (Summer 2019)

- **Virtual Power Plant Valuation****

  Quantifies benefits created by enabling customer load flexibility (Winter 2019)

*https://tinyurl.com/SVCEVPPOptionsAnalysis
***Abstract submitted for Distributed Energy Conference, Fall 2020*

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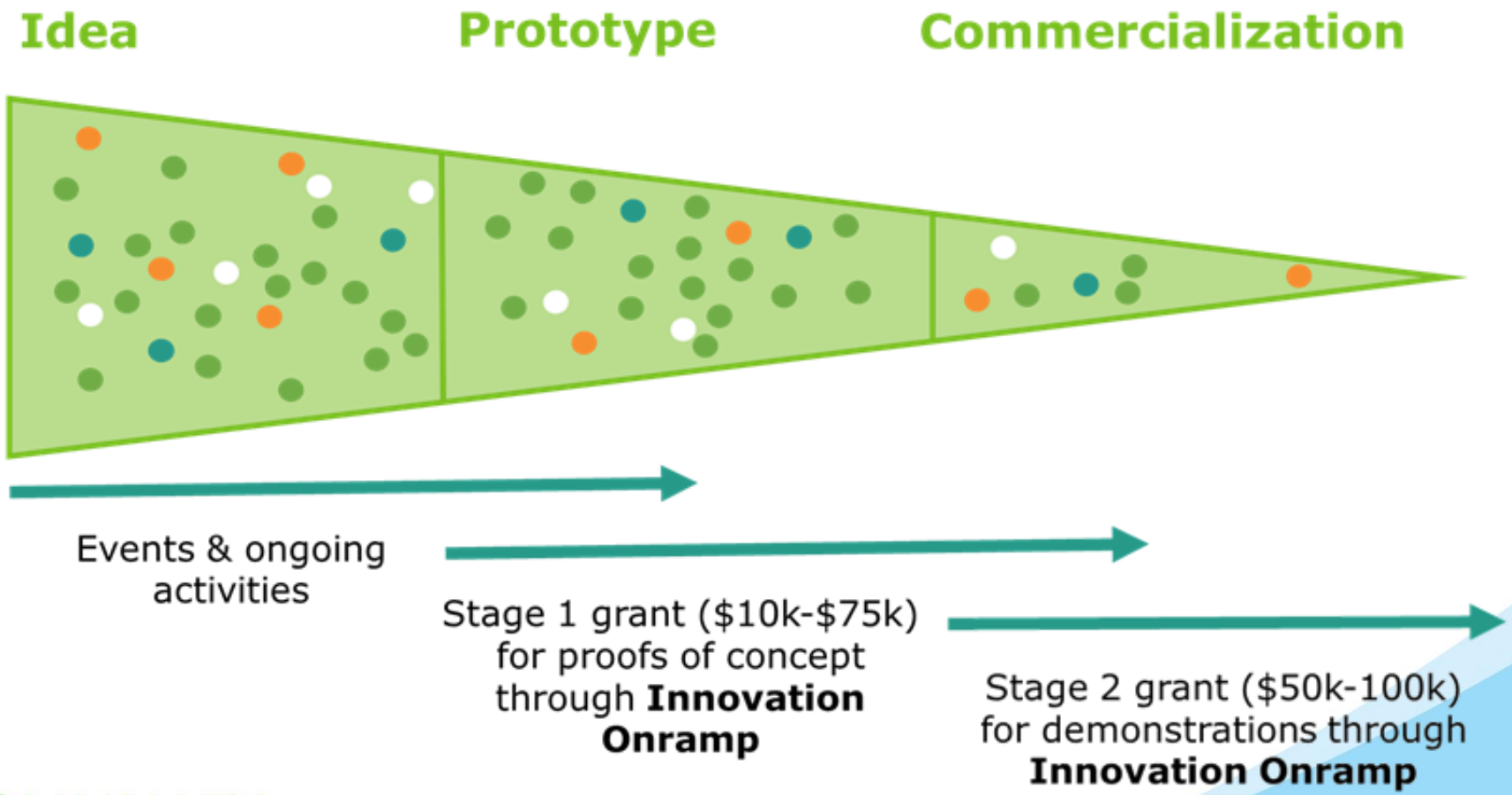
Innovation Stimulus

Innovation Stimulus:
$100,000 'Innovation Onramp' Grants



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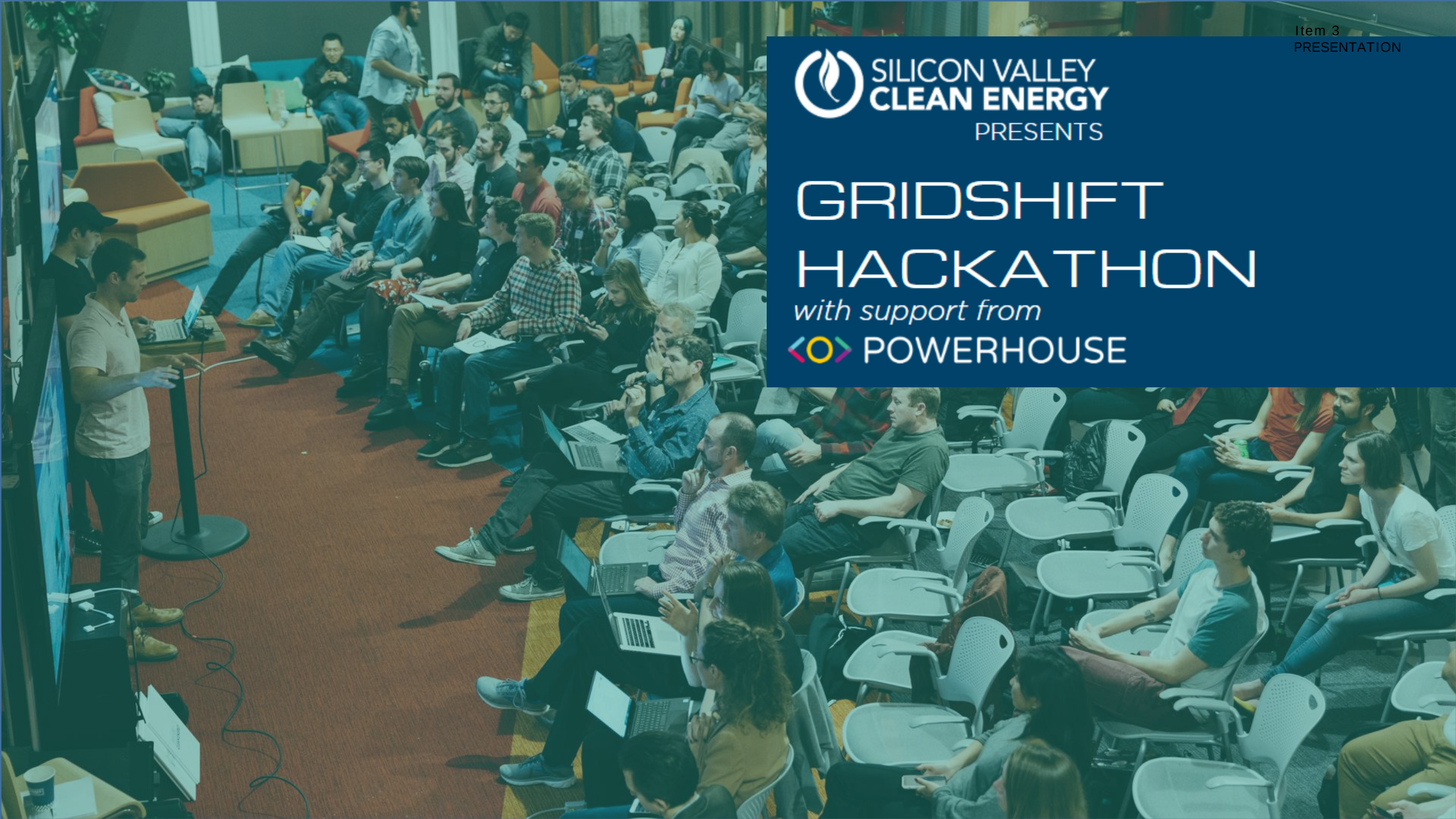
Innovation Stimulus:
GridShift Hackathon

- Sponsored by 4 community power agencies
- 100 developers competed for 24 hours:
  - **1st Place to Grove ($10k):** intuitive interface for smart scheduling a customer's flexible electrical loads
  - **2nd Place to Green Routes ($4k):** electric vehicle app for drivers to find charging stations & optimize for carbon, cost & convenience
  - **People's Choice Award to WattsDown ($2k):** app linked to a smart light in homes that alerts customers to planned power shut-offs & high electricity prices

SILICON VALLEY CLEAN ENERGY
CITY OF PALO ALTO UTILITIES
SAN JOSE CLEAN ENERGY
A Program of the City of San José
EAST BAY COMMUNITY ENERGY



SILICON VALLEY CLEAN ENERGY
PRESENTS

GRIDSHIFT HACKATHON

with support from

POWERHOUSE

COVID-19 Stimulus:
Balancing Multiple Policy Objectives

Need/Equity

Speed

Near-term Materiality

Mission-Aligned

Fairness

Longer-term Value

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COVID-19 Stimulus: Striking the Balance

Program		Estimated $
Customer Relief	1a) $100 bill credit to residential low-income customers	$2.5 million
	1b) $250 bill credit to qualifying and responding small business customers	$1.0 million
Workforce Relief	2a) Workforce Electrification Training with $500 stipend	$1.0 million
	2b) Workforce Home Electrification Installation	$0.5 million
Community Resiliency	3a) Resiliency Infrastructure Planning Support	$1.0 million
	3b) Resiliency Infrastructure Capital Project Support	$4.0 million

Total: ~$10 million

$10 Million in local COVID-19 Relief

Customer Relief,
Workforce Training &
Community Resilience

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SILICON VALLEY CLEAN ENERGY

Power Prepay – Authorize CEO to Enter Into Agreements To Finalize Power Prepayment

SVCE Board of Directors

October 14, 2020

Overview

- **Transacting Parties**

1. Tax-exempt Load Serving Entity (LSE, also called "Prepay Buyer")
2. Taxable financial counterparty (bank, called "Prepay Supplier")

- **Process**

1. Prepay Supplier assigned into existing or future energy supply contract(s) held by LSE
2. Municipal bonds issued by conduit, amounting to combined notional value of assigned contracts
3. Prepay Supplier pays the contract price to PPA Seller, immediately transferring all electricity and attributes to LSE
4. LSE pays Prepay Supplier at discounted rate, achieving procurement cost savings

- **Takeaway**

Prepay Supplier holds and utilizes capital, creating taxable vs. tax-exempt arbitrage that enables discount

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Summary of Benefits and Risk

- **Benefits**
  - ✓ Savings over the 30-year term expected to be 8% - 12% per year on power quantities delivered under the pre-pay structure compared to spot market purchases / current contracts
  - ✓ Equates to @$2.5MM to $3.5MM per year or @0.50% to 0.75% rate reduction
  - ✓ Favorable risk allocation where SVCE only pays for energy that is delivered (same as contracts today)
  - ✓ Debt is non-recourse to SVCE
  - ✓ Rating agencies comfortable with comparable deals at SMUD, SCPPA, others
- **Risks**
  - ✓ Loss of savings and back to square one
  - ✓ Lost investment of staff time

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Timing and Cost

- **Timing**
  - ✓ Transaction is dependent on number of market factors which are in constant fluctuation; opportunities to transact can be episodic
  - ✓ Moving forward and preparing paperwork takes months
  - ✓ Invest the time now to prepare for future approval, execution and success
- **Cost**
  - ✓ Majority of the costs are contingent and paid through bond proceeds at closing
  - ✓ Various parties involved: bond underwriter, energy supplier, lawyers (bond/tax/disclosure/underwriter's), municipal advisor, and rating agencies
  - ✓ Estimated costs of $1.5MM (paid for by bond issuance)
  - ✓ Exploring creation of a JPA Conduit Issuer at a cost of $15k (out of pocket)

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Getting Ready

Bond Conduit Formation

- SVCE, EBCE, MCE, CCCE
- Work has been initiated
- To be completed in Q4 2020 or Q1 2021
- Minimal cost ~$15K

Documentation and Transaction Terms

- SVCE & EBCE
- Work has been initiated
- To be completed by Q1 2021
- Select pre-pay supplier, hire legal counsel, municipal finance advisor and other necessary professionals; nearly all fees are contingent on a deal being transacted.

Agreements with Professionals to Complete Transaction

- SVCE needs to secure professional assistance to complete the work necessary to develop, draft, and finalize appropriate documents to bring the complete Prepayment Transaction
  - bond counsel,
  - tax counsel,
  - issuers counsel,
  - disclosure counsel,
  - municipal financial advisor,

and any other consultant needed to support the completion of the Prepayment Transaction

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Professionals selected by EBCE/SVCE

Bond Counsel: Orrick, Herrington & Sutcliffe	• Role: Represent bondholders
Tax Counsel: Orrick, Herrington & Sutcliffe	• Role: Provide tax opinion on transaction
Issuer's Counsel (also known as Prepay Counsel or Prepaid Counsel): Chapman & Cutler LLP	• Role: Represent issuer's interests, supporting drafting and negotiating terms of prepay agreement and associated energy supply agreements
Disclosure Counsel: Chapman & Cutler LLP	• Role: Prepare Official Statement / Prospectus
Municipal Advisor: TBD, solicitation in process	• Role: Advise Prepay Buyer in negotiations; required by Municipal Securities Rulemaking Board (MSRB)

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Fiscal Impact of this Recommendation

- There is no negative fiscal impact to SVCE. Funds for the Contracts would be contingent and paid directly from the proceeds from the sale of the bonds except for a payment by SVCE of no more than $15,000 to Issurer's Counsel if the transaction does not close.

- Cost is estimated to be between $1-1.5 million

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Next Steps - Timing

August 2020	• SVCE Finance Committee Briefing #1
September 2020	• SVCE Board Briefing on Getting Ready to Transact a Power Prepay
September 2020	• SVCE Finance Committee Discussion #2
October 2020	• SVCE Board Authorizes CEO to get Prepayment Transaction Finalized for Board Consideration
Q4 2020 - Q1 2021	• Documentation and Transaction Terms Developed • Conduit JPA to SVCE Board
TBD - Q1 2021 or later	• Transaction brought to SVCE Board for approval when market is ready

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Request

- Recommend that the SVCE Board authorize CEO to enter into agreements necessary to carry out the tasks to finalize the Prepayment Transaction that will be subsequently submitted to the Board for approval
- This action was approved and recommended by the Finance & Administration Committee on September 15, 2020

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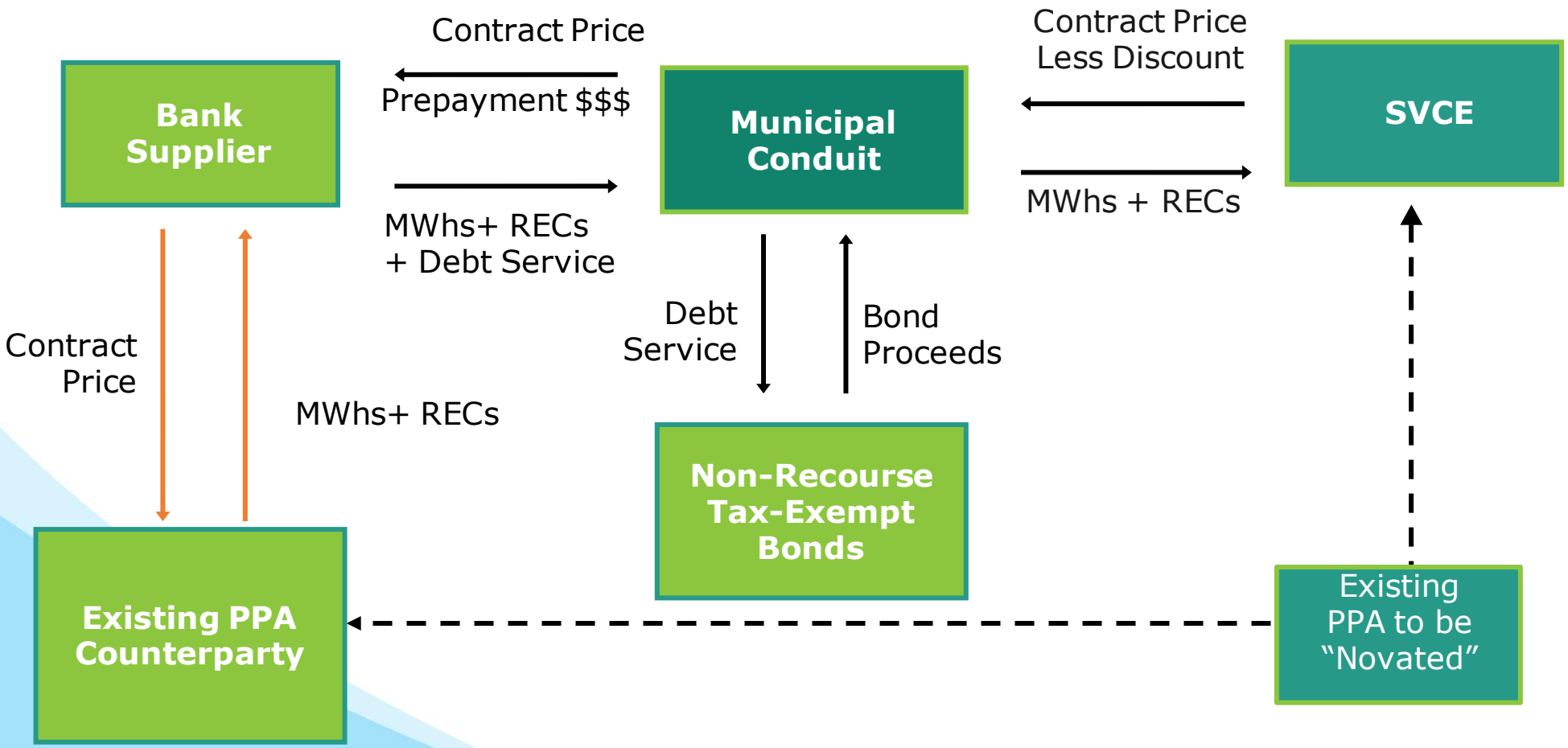
Additional Background Slides

Structure Overview



Glossary of Terms

Power Purchase Agreement "PPA" – contract to receive and pay for a specific type of energy (i.e. renewable solar, wind, etc.) at a specific price over the term of the contract (i.e. 15 years)

Tax-exempt Prepayment – payment in advance by a municipal utility for a number of years of contracted energy and financing the prepayment with tax-exempt debt

"Novate" – to assign a PPA contract to another party for a some or all of the contract term

"Recourse to…" – secured or guaranteed by the referenced entity

"Non-recourse…" – not secured or guaranteed by the referenced entity

"Conduit issuer" – entity formed to issue debt but not responsible to repay the debt (non-recourse!)

History and Tax Law Behind Municipal Prepaid Energy Transactions

- Municipal electric and gas utilities (and tax-exempt entities such as CCAs) in the US can prepay for a supply of electricity or natural gas from a taxable (corporate) entity and fund that prepayment with tax-exempt municipal bonds:
  - Must sell that commodity to their retail end-users that reside within their traditional service area.

- Prepayment transactions are legal and Codified in US Tax Law: Since first prepayments of natural gas were done in the early 1990's, the IRS issued rules allowing tax-exempt prepayments and Congress enacted legislation specifically allowing the transactions (National Energy Policy Act of 2005; Section 1327).

- Over 90 municipal prepayment transactions totaling over $50 Billion have been completed in the US – over 95% of them for natural gas. Natural gas is much easier to "prepay" because the commodity is homogenous and is easy to store.

- Prepayments have saved utility ratepayers (natural gas, electricity from gas fired power plants and energy from renewable power projects) billions of $ in reduced rates and energy charges and will continue to do so over the 30-year life of the transactions.

Renewable Energy Prepayment -Key Elements of an SVCE Transaction -

- Existing Renewable PPA's are assigned or "novated" to the taxable prepaid supplier
- SVCE continues to take and pay for energy and attributes delivered through the contract
- Maintains the existing terms of PPAs, including scheduling and operations
  - Preserves critical PCC-1 and "long-term" attributes for renewable contracts
- Debt associated with program is issued through a conduit and is non-recourse to SVCE; does not impact SVCE's balance sheet or credit metrics,
- Debt is recourse to (guaranteed by) the bank that receives the prepayment
- If program terminates early or prepaid supplier fails to perform, the SVCE forgoes the future savings and assigned contracts return to status quo

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Eleven Prepayments Totaling Over $5.7 Billion Have Been Completed in California

Date	Amt. ($000)	Issuer	Description	Beneficiary
6/2006	230,845	Vernon Nat. Gas Fin Auth	Nat Gas	City of Vernon Elec
1/2007	209,350	Roseville Natural Gas Fin Auth	Nat. Gas	City of Roseville Elec
5/2007	757,055	Northern Ca Gas Auth No. 1	Nat. Gas	SMUD
9/2007	887,360	Long Beach Bond Fin Auth	Nat. Gas	City of Long Beach
10/2007	504,445	So. Ca. Pub. Power Auth	Nat. Gas	Multiple MOUs
10/2007	251,695	Long Beach Bond Fin. Auth	Nat. Gas	City of Long Beach
8/2009	901,620	M-S-R Energy Authority	Nat. Gas	MID/Redding/SVP
10/2009	514,160	So Ca Pub Power Auth (Windy Flats)	Elec (Wind)	LADWP, Mult. MOUs
4/2010	778,665	Cal. Statewide Comm Dev Auth	Nat. Gas	SMUD
2010/11	394,700	So Ca Pub Power Auth (Milford 1 & 2)	Elec (Wind)	LADWP, Mult. MOUs
12/2018	539,615	Northern Ca Energy Auth	Gas/Elec	SMUD
Total	**5,717,815**			

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Long Duration Storage Procurement Efforts and Formation of a Super Joint Powers Agency

SVCE Board Meeting
October 14, 2020

Purpose

- Overview of Super Joint Power Agency
- Long-Duration Storage Goals and Procurement
- Seek Board feedback
- Timeline
- Next Steps

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Business Need for Long-Duration Energy Storage (LDES) & Joint Procurement Super-JPA

Long Duration Energy Storage

- California Climate Goals require a clean electric grid & large-scale procurement of renewable power
- Keeping the lights on with high penetrations of renewable power requires energy storage
- CPUC has IRP requirements for Long Duration Energy Storage (LDES)
- Bills in 2020 session have included LDES
- Rolling blackouts result in more interest in storage

Joint Procurement Super JPA

- CCAs are proactive in purchasing cleaner power and are also focused on affordability & reliability
- LDES investments may be too large for any one CCA to successfully complete
- LDES is technically complex and has associated financial risk
- Joint procurement de-risks technology and financial risk

Super JPA Joint Procurement

9 CCA's are taking steps to form a joint procurement Super-JPA

San Francisco Water Power Sewer
Services of the San Francisco Public Utilities Commission

CleanPowerSF
Same Service • Cleaner Energy

Central Coast Community Energy

EAST BAY COMMUNITY ENERGY

MCE | My community. My choice.

PENINSULA CLEAN ENERGY

REDWOOD COAST EnergyAuthority

SAN JOSE CLEAN ENERGY

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Sonoma Clean Power

9 CCAs - by the numbers

CCA considering Super JPA	Annual Load 2019 (GWh)	Est Peak Load (MW)	Customer Accounts
Central Coast Community Energy	3,094	679	275,750
Clean Power SF	2,706	460	380,000
East Bay Community Energy	5,819	990	533,000
Marin Clean Energy	5,275	505	470,000
Peninsula Clean Energy	3,600	733	293,000
Redwood Coast Energy	699	125	62,000
San Jose Clean Energy	3,286	1,081	332,500
Silicon Valley Clean Energy	3,898	800	270,000
Sonoma Clean Power	2,360	417	227,000
Total	**30,737**	**5,790**	**2,843,250**

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Super JPA Highlights

- **Objective:** Develop a cost-effective, risk-minimized, CCA-controlled structure to develop or acquire necessary resources exceeding the procurement needs of a single CCA.
- **Structure:** Joint Powers Authority composed of CCAs; Enabling Agreement with Opt-in Project Participation
- **Target Projects:** Stand-alone storage and renewable resources exceeding individual CCA demand
  - Long Duration Storage – first project
- **JPA Timeline:** Form JPA by end of 2020 and not later than early 2021

Super JPA - Joint Procurement Benefits

- Economies of Scale
- Enhanced Negotiating Power
- Shared Risk – execution, development and performance
- Potential for Shared Financing – prepay/bonds
- Strategic value in demonstrating CCA self-procurement, reliability contributions (if successful)

Super-JPA - Joint Procurement Non-Benefits

- ***Joint Procurement allows for sharing of risk but does not eliminate underlying risk***
  - Project Development and Performance Risk
  - Regulatory, Policy and Market Risk
  - Potential for establishment and/or expansion of centralized procurement entity or mandated procurement
- ***Sharing risk with other members may increase risk for individual members due to step-up and/or other contract provisions***

Proposed Super JPA Structure

- Enabling Agreement – allows for CCAs to potentially participate in projects – ***no obligation***
- Super JPA intended to be the direct party to any contract with storage or project developers
  - We will learn details on this as we go through the solicitation process
  - CCAs that chose to participate will sign Project Participation Agreement(s) with Super JPA

First Joint Procurement Project Target:
Long Duration Storage Agreement by September 2021

Super JPA Agreement Schedule

- First Draft of JPA Enabling Agreement circulated to potential JPA member attorneys in late September
- Collaborative revisions are ongoing
- Draft JPA Agreement is scheduled for completion by the end of October 2020
- Potential Members are targeting November-December timeframe for individual governing body consideration and approval
  - Some potential JPA members may take a bit longer for local approval processes

Long Duration Energy Storage

Long Duration Energy Storage ("LDES")

- LDES are energy storage technologies with 8-hour minimum discharge duration
- Technologies – lithium ion, chemical flow batteries, gravity, pumped hydro, compressed air, etc.
- Can be grid-charged – not renewable
- Used to integrate renewables onto the grid and support reliability

CPUC's Integrated Resource Plan (IRP) - LDES needed to meet GHG reduction goals

LDES Procurement Goals

- Target up to 500 MW of LDS from one or more projects with on-line date no later than 2026
  - Notional value $2 billion
- Assess Project Viability, Uncertainty & Risk
- LDS should not be procured for compliance alone – *must have market and/or strategic value and be* ***cost-effective***
    - Cost, Energy value, Resource Adequacy, Ancillary Services

LDES Procurement Efforts

- June 2020
  - Multi-CCA Request for Information (RFI)
  - 13 CCAs participated
  - Over 58 projects submitted
- Sept. – October 2020
  - Stakeholder Outreach – CPUC, CAISO & Legislature
- October 2020
  - Multi-CCA (8) Request for Offers/Proposal

Super JPA & LDES Procurement Timeline

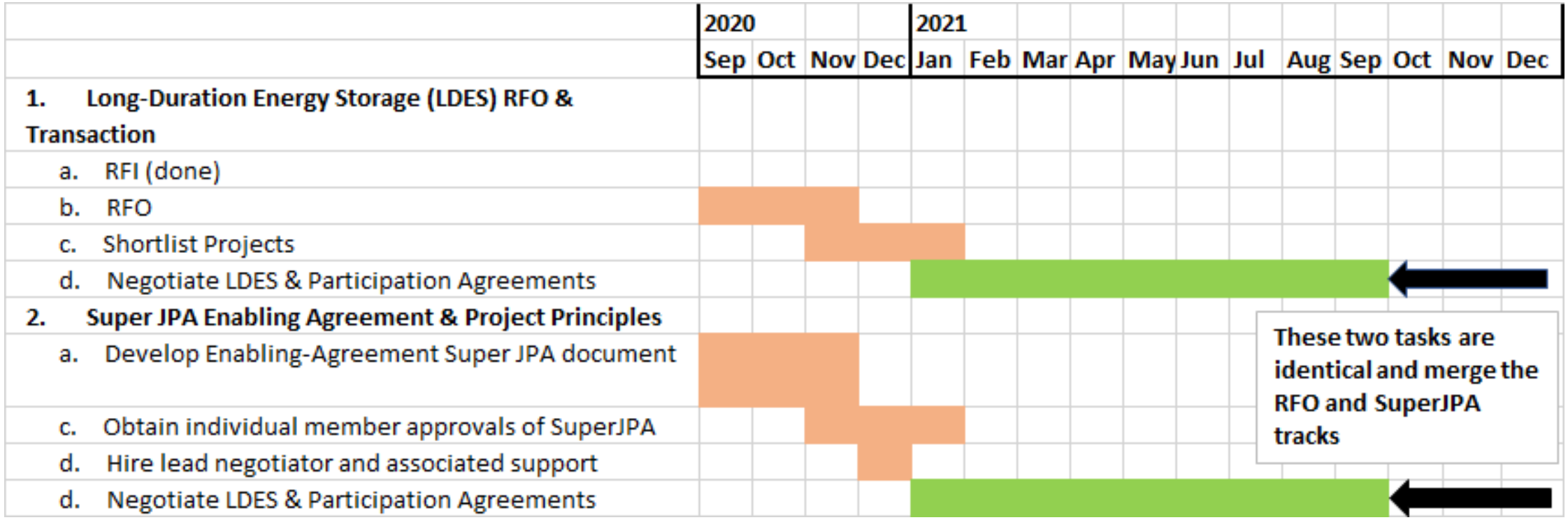
June 2020
Initiate Super JPA Formation Agreement

October 2020
Finalize Super JPA Agreement
Issue LDES RFO

Dec. - February 2021
CCA Super JPA Board Approvals
Evaluate RFO Proposals

March - September 2021
Negotiate/Execute LDES Project(s)
CCA Board Approvals for Project Participation Agreement

JPA & LDES Procurement Timeline



Next Steps

- Input from the Board
- Discuss comments with Executive Committee, as necessary
- Schedule for December 2020 Board meeting for approval

Backup

Super JPA Buying Power

CCA	Annual Load 2019 (GWh)	Est Peak Load (MW)
Central Coast Community Energy	3,094	679
Clean Power SF	2,706	460
EBCE	5,819	990
Marin Clean Energy	5,275	505
Peninsula Clean Energy	3,600	733
Redwood Coast Energy	699	125
San Jose Clean Energy	3,286	1,081
Silicon Valley Clean Energy	3,898	800
Sonoma Clean Power	2,360	417
Total	**30,737**	**5,790**