SAN MATEO COUNTY ENERGY WATCH

OFFICE OF SUSTAINABILITY
COUNTY OF SAN MATEO

# RICAPS

## Regionally Integrated Climate Action Planning Suite

## Multi-city Working Group

## January 29, 2018

RICAPS technical assistance is available through the San Mateo County Energy Watch program, which is funded by California utility customers, administered by Pacific Gas and Electric Company (PG&E) under the auspices of the California Public Utilities Commission and with matching funds provided by C/CAG.

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# Agenda

**Introductions** 1:30 – 1:35

**Energy and Water Strategy outcomes and next steps** 1:35 – 1:45
- John Allan, Sustainability Coordinator, San Mateo County

**Announcing new BayREN Single Family Program offerings** 1:45 – 2:10
- Shraddha Mutyal, Project Manager, BayREN Single Family Program

**Energy Watch and Green Business Program resources** 2:10 – 2:30
- Caitlin Clark, Sustainability Coordinator, San Mateo County
- Hannah Doress, Resource Conservation Climate Specialist, San Mateo County

**Job Order Contracting study results** 2:30 – 2:40
- Kim Springer, Program Manager, San Mateo County

**Climate action plan technical assistance** 2:40 – 2:55
- Ben Butterworth, Sustainability Consultant, DNV GL

**RICAPS wrap up & next steps** 2:55 – 3:00
- Denise Lin, Sustainability Coordinator, San Mateo County

# San Mateo County Energy & Water Strategy

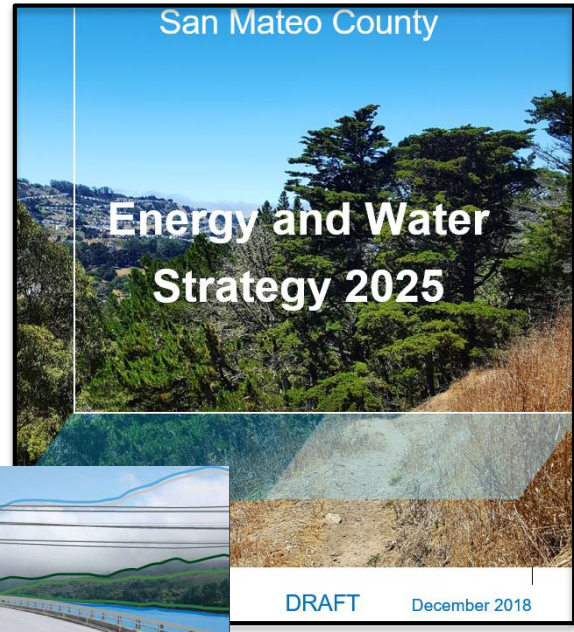
- Update to 2008 San Mateo County Energy Strategy
- Provides an analysis of current and future challenges and opportunities in the Energy and Water sectors
- 2025 Update identifies a series of goals, strategies and actions for San Mateo County

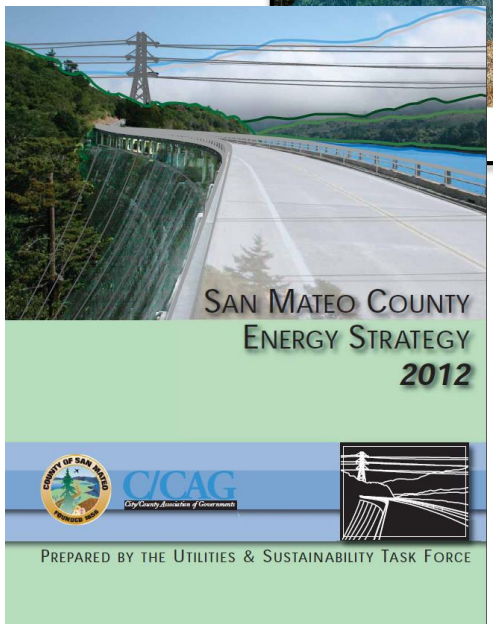
**2018**

- Update was proposed to C/CAG RMCP committee in March
- Stakeholder Working group launched in July
- 5 Working Group meetings refined the organizing framework of the document
- Full draft completed in December

**2019**

- Update with draft presented to C/CAG RMCP in January
- Draft to be circulated to wider audience for review in February
- Document will be presented to PCE Board and possibly C/CAG Board
- Document to be adopted by County and all 20 Cities



# 2019 Home+ Program

January 29, 2019

# Agenda

1. Home Upgrade Program Closeout
2. Home+ Goals
3. Home+ Offerings
4. Mid and Long Term Goals
5. Next Steps

# Home Upgrade

Energy Upgrade California®

- Active 2013 – 2018
- Whole home upgrade focus
  - Minimum 2 measures
- Avg $15,000 projects

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# San Mateo County Participation

**Total incentives paid**
:$403,425

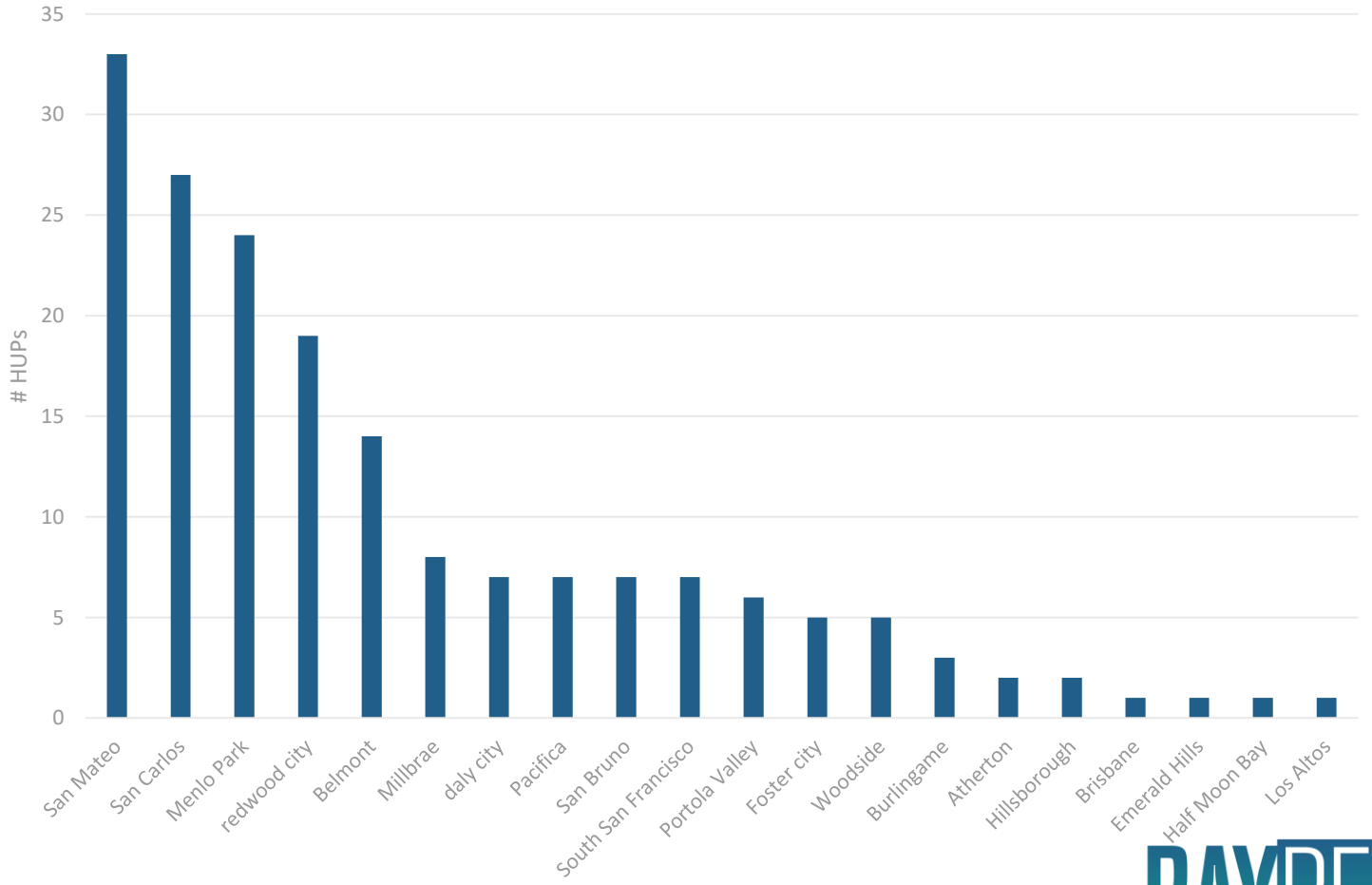
Avg $2,241/home

**Total Energy Savings**
:22,505 kWh

: 46.72 kW

:24,773 therms

Avg 15.23% energy savings/home

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# Why a new Program?

- High up-front costs for customers
  - Bigger barrier for moderate income households
- Energy bill savings are not primary motivations for upgrades
- Renters are currently ineligible
- High administrative burden on contractors

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# What are Home+ Program goals?

- Increase Program participation
  - Number of homes
  - Energy savings
  - Participating Contractors
- Make accessible to moderate income households
- Market non-energy benefits of EE effectively
  - Health, Indoor Air Quality, Comfort
- Smoothly transition existing contractors

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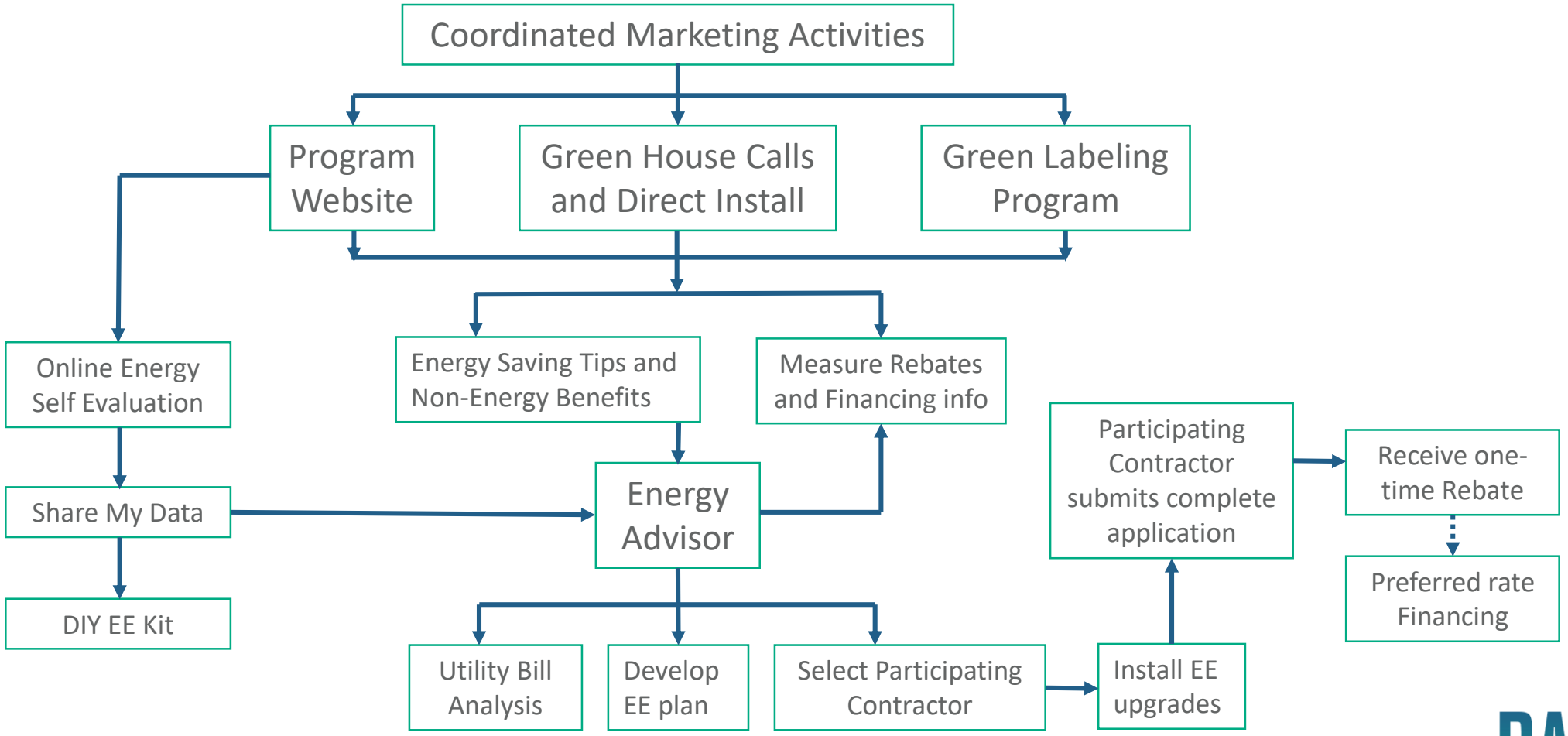
# Program Design Process

- Business Plan approved in 2018
- 3rd party implementer contracted
- Technical Advisory Group (TAG)
  - Members – County Representatives, Contractors, Raters, Marketing experts, Program design experts
  - Online questionnaire feedback
  - 2 in-person meetings
- County feedback
- Implementation Plan

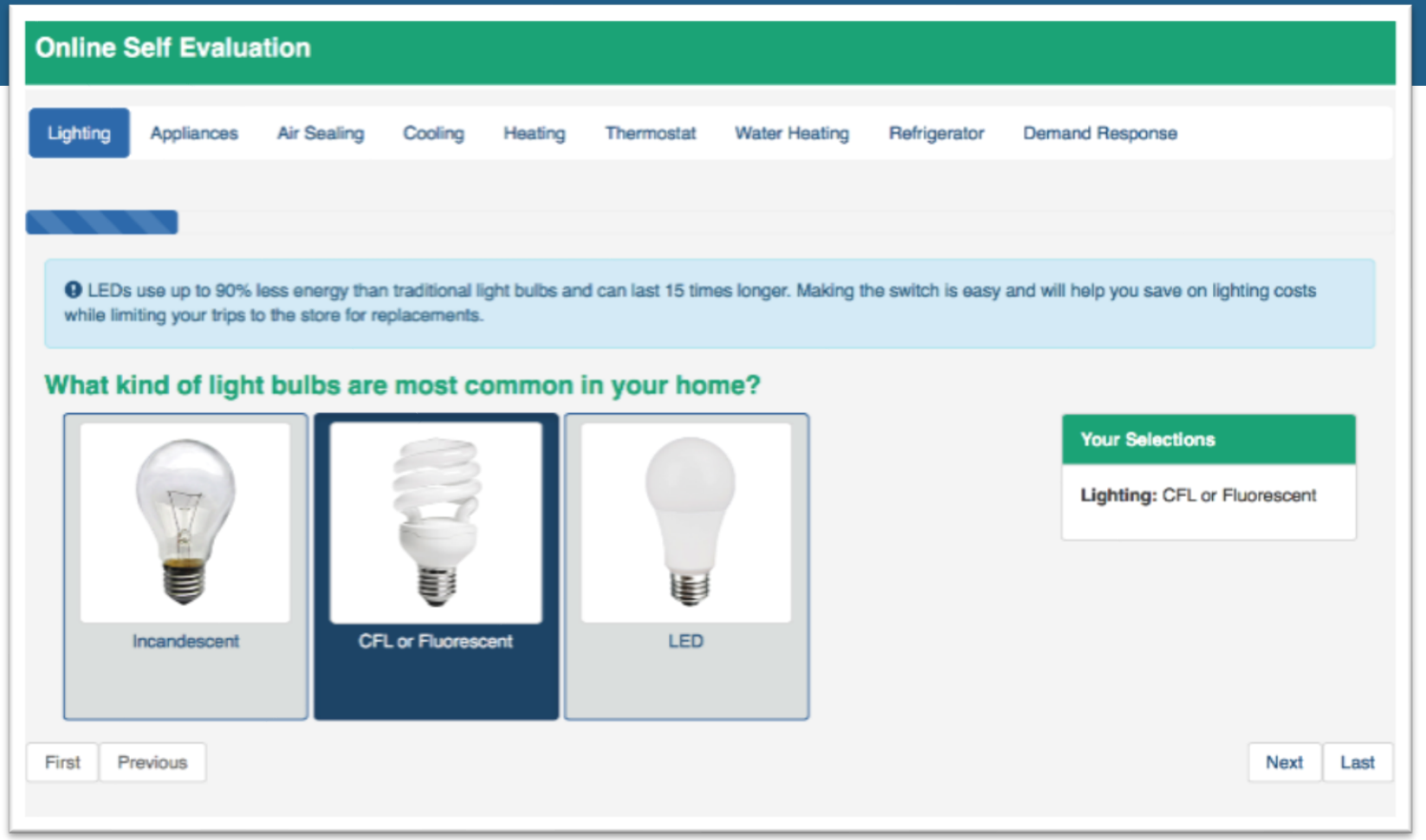
# Partnerships are the Key!

# How are we achieving our goals?



# Online Energy Self Evaluations

- Easy 10 minute survey
- Simple and easy to read results
- “Share My Data” to receive free EE Kit



# Energy Savings Kits

- Kits dependent on PG&E service IDs & require 'Share my Data' Authorization
- Kits valued at $70 (for electric/gas customers with qualifying A/V equipment - 72%)
- Water measures by request

| Electric & Gas Customer – NO AV Devices | |
|---|---|
| **Item** | **# of Units** |
| LEDs | 10 |
| Showerhead | 1 |
| Bath Aerator | 2 |
| Kitchen Aerator | 1 |

| Electric & Gas Customer – WITH AV Devices | |
|---|---|
| **Item** | **# of Units** |
| LEDs | 5 |
| Showerhead | 1 |
| Bath Aerator | 2 |
| Kitchen Aerator | 1 |
| Advanced Power Strip | 1 |

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# Green Home Visits

- Partnership with Rising Sun
- Target communities with low implementation rates
  - Language barriers
  - Senior Households
- Coordinated marketing with Counties

RISING SUN
CENTER FOR OPPORTUNITY

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# Green Labeling Program Coordination

- Partnering with Home Energy Score Assessors/Raters
- Refer customers to Energy Advisors
- Identify upgrade projects

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# Energy Advisor

- Collect Customer Data
- Education on EE benefits and financing options
- Develop an EE plan for customer
- Guidance to select a Participating Contractor
- Complementary program referral
- Continuing customer engagement

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# Cash Rebates

Up to $5,000 per customer

| Measure | 2019 Rebate Amount |
|---|---|
| ***Operations and Maintenance Measures*** | |
| Smart Thermostat (must be listed on the ENERGY STAR qualified product list for Smart Communicating Thermostat) | $150 |
| Duct sealing ≤ 5% total leakage | $400 |
| ***Building Shell Measures*** | |
| Attic insulation ≥ R-44 (includes attic air sealing) | $0.75 / $ft^2$ (not to exceed $1,000 per home) |
| Wall insulation ≥ R-13 (2x4 framing) or ≥ R-19 (2x6 framing) | $2.00 / $ft^2$ (not to exceed $1,000 per home) |
| Building air sealing ≥ 30% total leakage reduction | $300 |
| ***Heating and Cooling Measures*** | |
| High efficiency central gas furnace ≥ 95% AFUE (must replace existing central gas furnace) | $850 |
| High efficiency central air conditioner ≥ 17 SEER (must replace existing central air conditioner) | $500 |
| High efficiency heat pump ≥ 17 SEER / 9.4 HSPF (must replace entire load associated with existing central air conditioner or electric heating system or heat pump) | $1,000 |
| ***Water Heating Measures*** | |
| High efficiency gas water heater ≥ 0.70 EF (must replace existing gas water heater) | $400 |
| Heat pump water heater ≥ 3.24 EF (must replace existing electric or heat pump water heater) | $1,500 |
| ***Bonus Rebates*** | |
| Combine one or more Building Shell measures with a Heating and Cooling measure | $500 |
| Downsize heating and/or cooling system compared to existing system | $100 |
| Combustion Appliance Safety (CAS) test-out | $150 |

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# For Participating Contractors and Raters

- Simplify onboarding and administrative requirements
- On going trainings and one-on-one mentoring
  - Safety, IAQ, comfort, health benefits, whole-home upgrades
- Contractor performance management

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# Mid and Long Term Program Goals

- Improved awareness of EE benefits
  - Energy and Non-energy
- Customer continues EE measure installations over years
- High propensity households identified and effectively engaged
- Access to performance based rebates
- Deeper energy savings of >10%
- Continued GHG reductions
- Improved Health and Safety of residents
- Improved contractor output and developing youths as future EE ambassadors

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# Questions?

Contact:

**Shraddha Mutyal**

Project Manager – BayREN Single Family Program

smutyal@bayareametro.gov

P: 415-778-5361

# BayREN 2019: Opportunities to partner

- City partner workshops
- Mailers or email blasts
- City communication materials (water bill inserts, recreation guides, etc.)
- Tabling at outreach events (Earth Day, library events, etc.)
- Digital marketing content
- Tailored requests from cities

- Express interest:
  - Rachael Londer, rlonder@smcgov.org
  - Denise Lin, dlin@smcgov.org

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# POLL QUESTION

Is your jurisdiction interested in partnering on any of the following for the BayREN program?

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- Dashboard and newsletter
- Toolkit updates and checkout prizes
- Contact: Caitlin Clark, cmclark@smcgov.org

# SMC GREEN BUSINESS PROGRAM

## How Cities Can Benefit

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## What do we do:

1. Provide technical assistance to:
- **Businesses**
- **City offices**
- **Nonprofits**

1. Provide staff time and expertise to support Cities.

1. Support your business community to **reduce GHGs**

# **Who** is doing it:

PENINSULA CLEAN ENERGY

SAN MATEO COUNTY PARKS

BRISBANE City of Stars

SAN MATEO COUNTY SILICON VALLEY
The best of the San Francisco Bay Area

COUNTY OF SAN MATEO PUBLIC WORKS

San Mateo County Libraries

COUNTY OF SAN MATEO HUMAN SERVICES AGENCY

THE CITY OF BURLINGAME CALIFORNIA INCORPORATED 1908

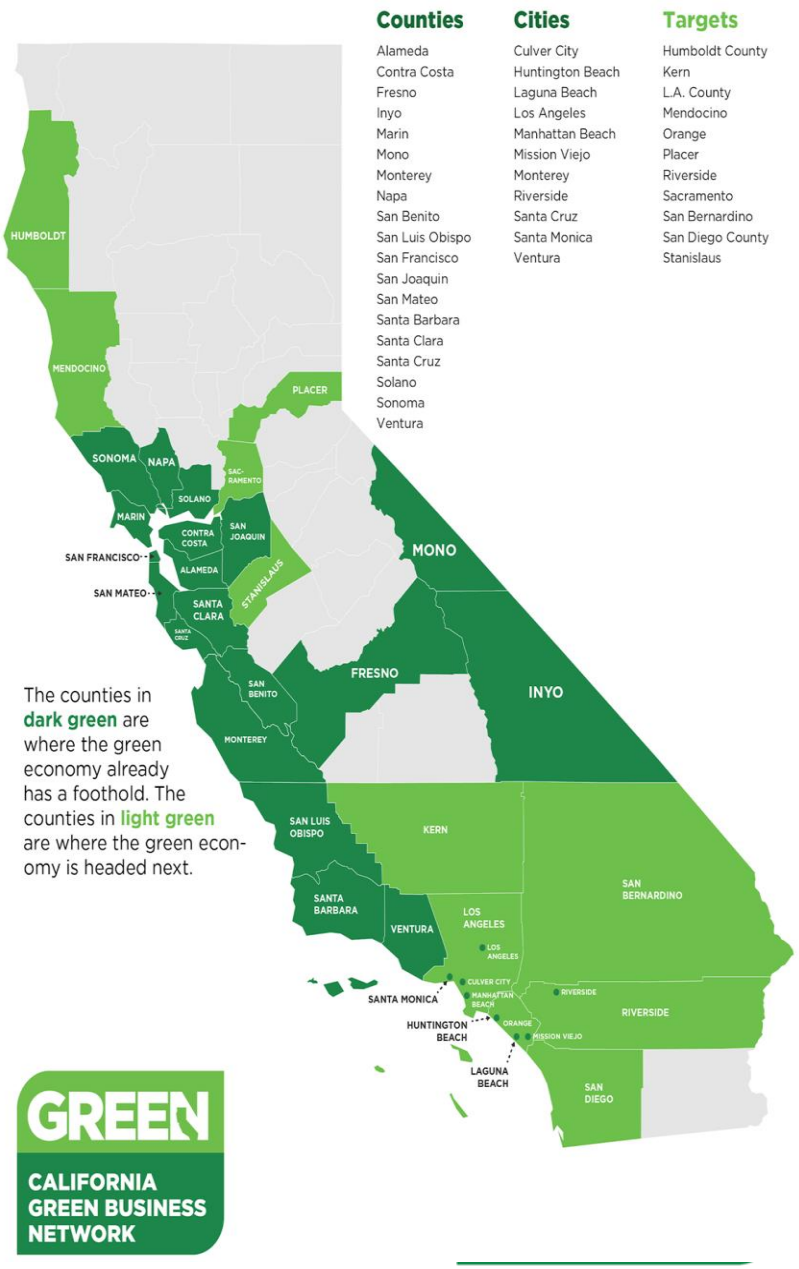
# San Mateo County & CAGBN

## San Mateo County

- 81 Certified Green Businesses San Mateo County
- 45 currently in-process businesses
- 10 active participants

## California Network

- 34 programs statewide
- 3000+ recognized businesses

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CALIFORNIA GREEN BUSINESS NETWORK

# OUR IMPACT 2018

Businesses that join our network conserve precious resources, prevent harmful pollution, and enhance their bottom-line.

# WHAT MAKES A GREEN BUSINESS?

**Reduced Water Use**
Low flow toilets and auto-off faucets

**Conserve Energy**
Upgrade lighting and equipment to save energy

**Commute Sustainably**
Promote and incentivize alternative transportation for employees

**Prevent Pollution**
Eliminate and/or properly dispose of harmful chemicals

**Use Non-Toxic Cleaners**
Use safer, environmentally preferable cleaning chemicals

**Avoid Waste**
Eliminate unnecessary packaging, printing, and purchasing

**Recycle Materials**
Divert waste from the landfill through reuse, recycling and composting

**Hire Local Vendors**
Working locally means less vehicle use

# Six Week Certification Process

**STEP 1 - Enrollment and Registration**

**STEP 2 - Initial Walk-Through and Consultation**

**STEP 3 - Audits and Compliance Checks**

**STEP 4 - Implementation of Measures**

**STEP 5 - Final Site Visit and Verification**

**STEP 6 - Certification!**

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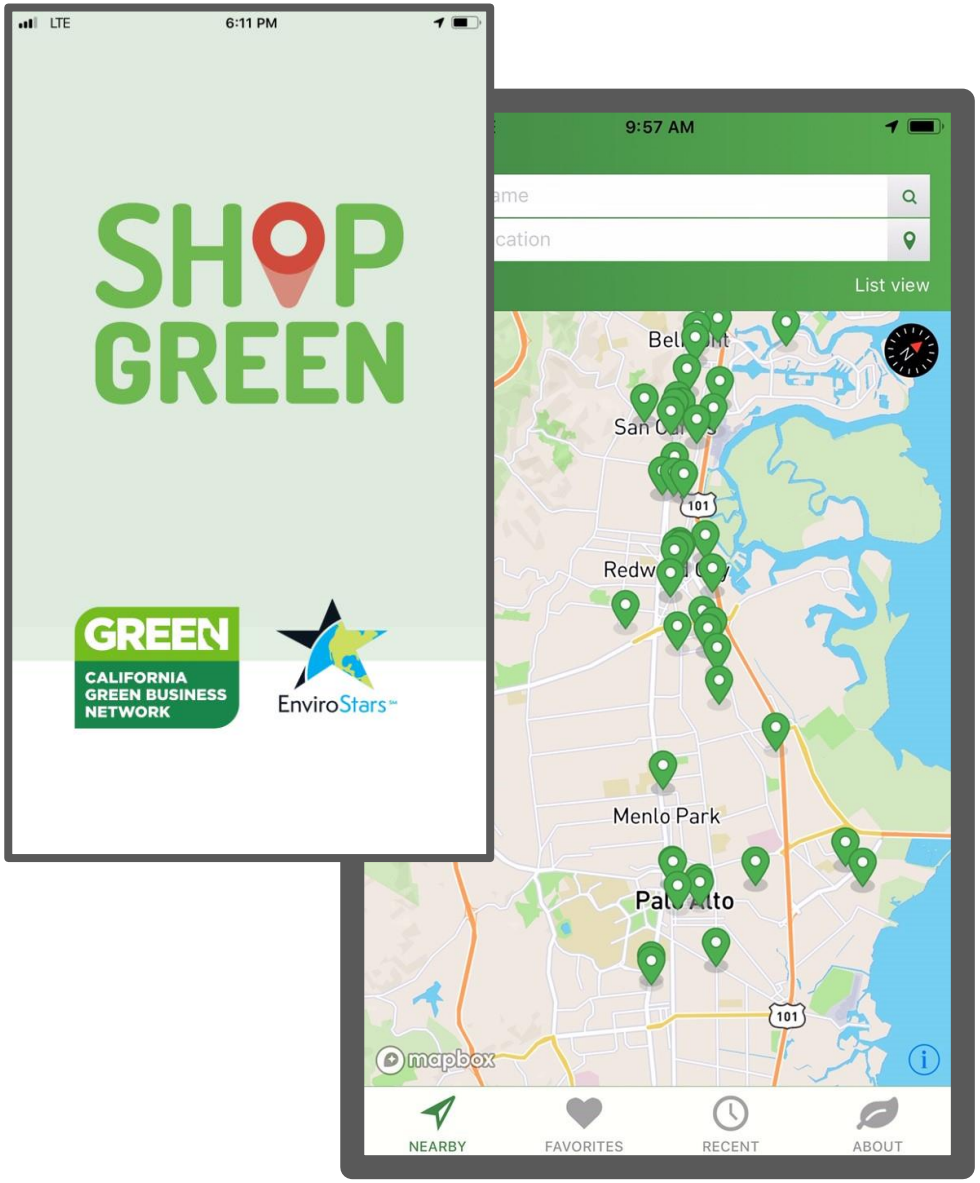
# Marketing Benefits

Receive free marketing for environmental leadership including geo-targeted promoted social posts




Distinguish yourself from competition - 42% of GB reported an increase in business

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# How Can We Help You?

- **Events, consultation, sourcing help, rebates.**
- Leverage your business community to **reduce GHGs**
- Presentations for **decision-makers** and business leaders.
- Pilot approaches to support **socially vulnerable business owners** and communities.

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# Ways You Can Help Us

- **Get City offices Green Certified**
- **Send us a list of local businesses you recommend for the program.**
- **Introduce us to business leaders and owners. (This is most effective).**
- **Invite us to present at events.**

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# THANK YOU!

## Get Started Today:
## www.greenbusinessca.org


**Shawn Orgel-Olson**
**sorgelolson@environmentalin.com**
**(831) 429-1364**

**Sheila Peck**
**speck@environmentalin.com**
**(831) 566-1497**

**Hannah Doress**
**SMC Office of Sustainability**
**hdoress@smcgov.org**
**(650)599-1468**


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# SMC GREEN BUSINESS PROGRAM

## Additional Information

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# Green Business Sectors

**Common Types**

- Office/Retail
- Restaurant
- Lodging

Brewery

Grocery Stores

- Medical Offices
- Auto Repair
- Printing Services
- Nonprofit
- Fire Station
- And so much more

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# How do we do it:

1. Five steps to certification:
   a. **Recruit** small-to-medium sized businesses
   b. **Assess** current environmental performance
   c. **Recommend** changes to their operations
   d. **Connect** business with rebates and incentives
   e. **Certify** that changes have been implemented

2. **Promote** Certified Green Businesses to the public

# Green Business Focus Areas

- GENERAL
- ENERGY
- POLLUTION PREVENTION
- SOLID WASTE
- TRANSPORTATION
- WASTEWATER
- WATER

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# Transportation | Benefits

- Alternative commutes are good for the environment, employers, and employees
- Certification requires promoting alternative commutes and alternative transportation for customers - with many options that fit a wide variety of settings.

# Green Business Partners

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# POLL QUESTIONS

Is your jurisdiction interested in getting its office certified under the Green Business Program?

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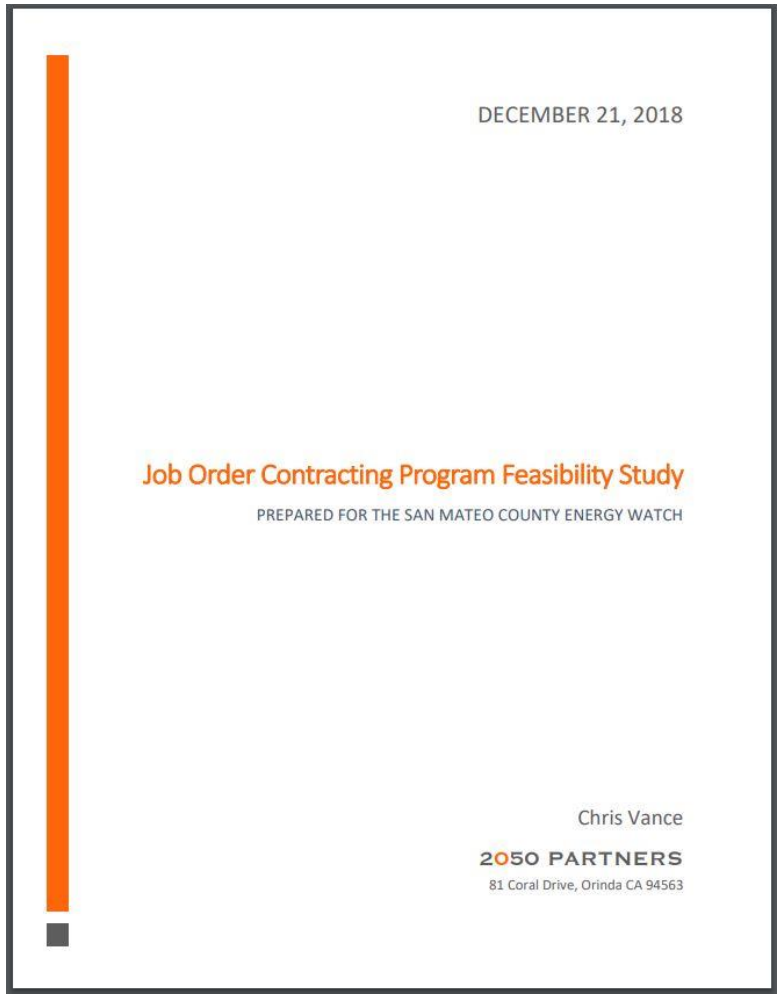
# POLL QUESTIONS

Is your jurisdiction interested in hosting an event for businesses with support from a Green Business Program expert?

# Job Order Contracting study

- Study results: https://goo.gl/RkvRzm

- Contact
  - Kim Springer, kspringer@smcgov.org
  - John Allan, jallan@smcgov.org



# Background and Objectives:

- EE Projects can sometimes take more than a year to complete
- Public Procurement processes can take three months
- Programs and incentives for EE projects can change during the course of the project

- Discover if Cooperative-Procured JOCs can be used to accelerate the bidding process
- Evaluate familiarity of city staff with JOC
- Better understand what kinds of projects city staff would be interested in pursuing via JOC

- Hired 2050 Partners, Inc. to complete feasibility study

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# Outcome of Study

- Cooperatively Procured JOC is not a fit for the majority of work cities believe they will be engaged in 2019 on
- Leverage ezIQC Contracts for mechanical retrofit needs for time and cost savings

- Consider pre-qualifying engineering firms for technical assistance to cities if PG&E services can't keep up with demand

- Consider piggybacking on Atherton's PPA effort or consider a joint purchase model if there is considerable interest

- JOC is not suitable to EVCI procurement

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# RICAPS CAP Technical Assistance: 2019

**Ben Butterworth**



SAFER, SMARTER, GREENER

# DNV GL RICAPS Assistance 2019

- Majority of DNV GL's budget for 2019 focused on CAP technical support for cities
  - GHG emissions forecasting
  - Selection + evaluation of mitigation measures
  - Leverage CAP template to develop written CAP report

- 2016 + 2017 community-wide GHG inventories
  - DNV GL + OOS staff collaborating to complete inventories

- Timeline
  - Work to be completed by June 30, 2019

- Reach out to me (Benjamin.butterworth@dnvgl.com) or Denise (dlin@smcgov.org) if you have questions

# Electrification Measures

- Working with PCE + OOS to develop electrification measures
  - Goal: Support cities in reducing GHG emissions through the development of electrification measures that cities can use to evaluate/compare electrification strategies
  - Electrification measures to be integrated into existing RICAPS Menu of Measures

- Example measures:
  - All-electric new construction reach codes
  - Incentivizing electric panel upgrades
  - Encouraging battery storage with solar systems
  - Expanding EV charging infrastructure
  - Electrifying municipal vehicle fleets

- Timeline:
  - January: Select Measures
  - March: Complete draft calculations
  - April: Integrate measures into RICAPS Menu of Measures

# Questions?

**Benjamin.butterworth@dnvgl.com**

**www.dnvgl.com**

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# Wrap Up & Next Steps

# THANK YOU!

Questions?
Contact: Denise Lin, dlin@smcgov.org

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