

# Programs Strategic Roadmap Version 1

July 2018



# Programs Status

Program	Status
Ride & Drive	In-Progress. Events being scheduled.
Apartment Technical Assistance	In-Progress. Workshop held 7/10 with 25 apartment owners/managers.
New Vehicle Promotion	In-Progress. Dealer RFP released 7/13.
Community Pilots	In-Progress. Solicitation released 6/21.
Low-Income EV Incentive	Under development. Targeting Q4 launch.
<b>Reactive Program</b>	
Curbside & Multi-Unit Dwelling Pilots	Board approved \$1M match. Proposal to DOE submitted. Q4 initial steps.
Resilient Solar on Critical Facilities	AQMD grant awarded with EBCE. Q4 start.
EV Buses for DAC Schools	Consultant working with schools to submit 9/20
<b>Other</b>	
Staffing	Program Associate hired (internal) Program Manager offer pending

# PROGRAM ROADMAP

# What is a Roadmap?

It **is**

- Communication tool
- Iterative
- Qualitative first, later quantitative

It is **not**

- A project plan
- Technical analysis
- Program design

# What problem are we trying to solve?

- San Mateo County's GHG pollution
- Improve County economy & co-benefits
- Improve County resilience

# Objectives

- Speed
- PV, EV, storage
- Efficiency

Accelerate  
renewables  
& CO2  
reductions

Delivers benefits  
Builds support

- Customers
- Equity
- Workforce
- Geography

Program  
Strategy

Supports  
load-serving  
needs

Aligns with  
and builds  
capacity

- Shape load
- Generation
- Responsiveness
- Aggregation
- Grid services

- Staffing
- Technical
- Financial

# San Mateo Emissions

## ~~2015 RICAPS EMISSIONS INVENTORY~~

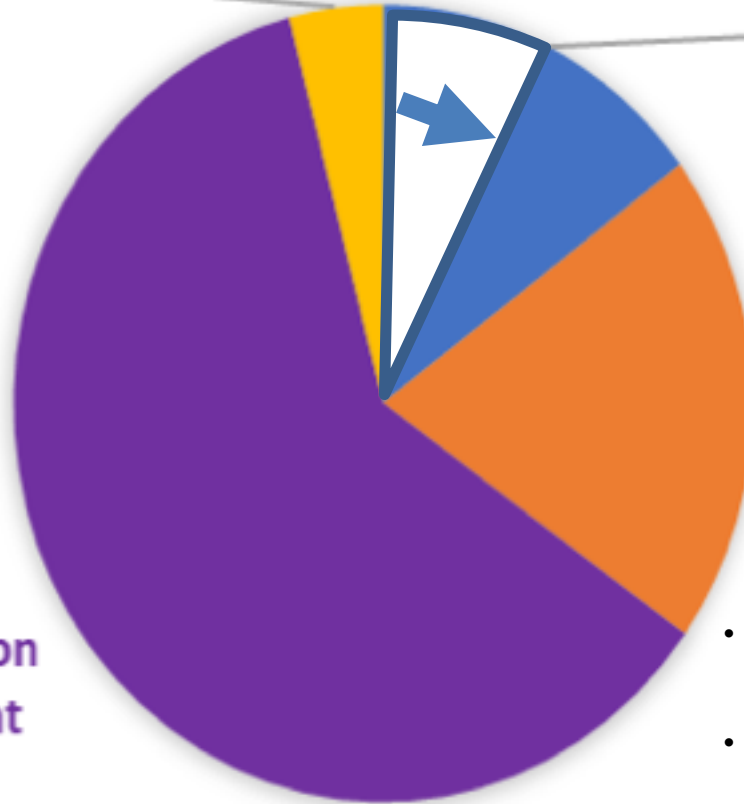
### 2017 “Back of Envelope” Calculation

Waste & Water  
4%

Electricity  
~~15%~~  
8%

Building NG  
20%

Transportation  
& Equipment  
61%



- Electricity emissions have gone down 50% (60% GHG Free in 2015 to 80% in 2017)
- Upstream fugitive emissions are not accounted for so NG impact is likely significantly higher.
- Air travel and embedded carbon of products not included

# Existing Targets

- **PCE Goals**

- 100% GHG-free power for 2021
- 20 MW of new local power by 2025
- 100% renewable energy by 2025

- **State Goals**

- 1990 Levels by 2020, 40% below 1990 Levels by 2030, 80% below 1990 levels by 2050
- 50% Renewable Energy by 2030
- 5M EVs by 2030
- 1,325 MW of storage by 2020
- 100% ZEV Transit Buses by 2040 (proposed)



# Philosophy – Near Term

- Momentum towards biggest GHG
- Technical readiness
- Leverage for community benefits
- Beachhead on buildings
- Opportunism

*Longer-term: analytics driven program targeting*

# Categories

1. Vehicle Electrification
2. Building Electrification
3. Community Engagement (low inc. esp.)
4. Load Shaping
5. Local Generation
6. Other
7. Reactive Program

# Dependencies

- Strong analytics
- Integrated AMI Data & Billing
- Comparative pricing of wholesale vs DER/IDSMS
- Unified DER dispatch service

# Toolkit

## Direct

- Incentives
  - Standards
- Direct install
- Technical Assistance
- Loan guarantees
- Tariffs
- Pilots & emerging tech
- Research
- Marketing & education

## Collaborative/Facilitative

- Aggregate procurement
- Convene/facilitate/coordinate
- Fund code enhancements

## Leveraged

- Grants
- Green Bonds/Environmental Impact Bonds

## Policy

- Advocate

# Other Considerations

- PCE will not duplicate or assume CPUC regulated program but may complement them
- Not every measure will support every objective
- Collectively the measures should be complementary
- Care should be taken with early moves to not preclude future opportunities

# Questions

## **Roadmap Approach**

1. How aggressive do we want to be on time-coincident renewables?
2. Are there specific community benefits targets to emphasize?
3. Do we want to target large customer “satisfaction”?
4. How much of the duck curve head should be addressed by storage vs other options (DR, EE, etc)?

## **Process**

1. Staff discussion
2. How to engage board and community
3. Improving data
4. AMI/billing integration