



SFPUC Power CAC

CleanPowerSF Integrated Resource Plan & Community Power Update

July 7th, 2020



CleanPowerSF Resource Planning

Kiara Hermann and Michael Hyams, CleanPowerSF

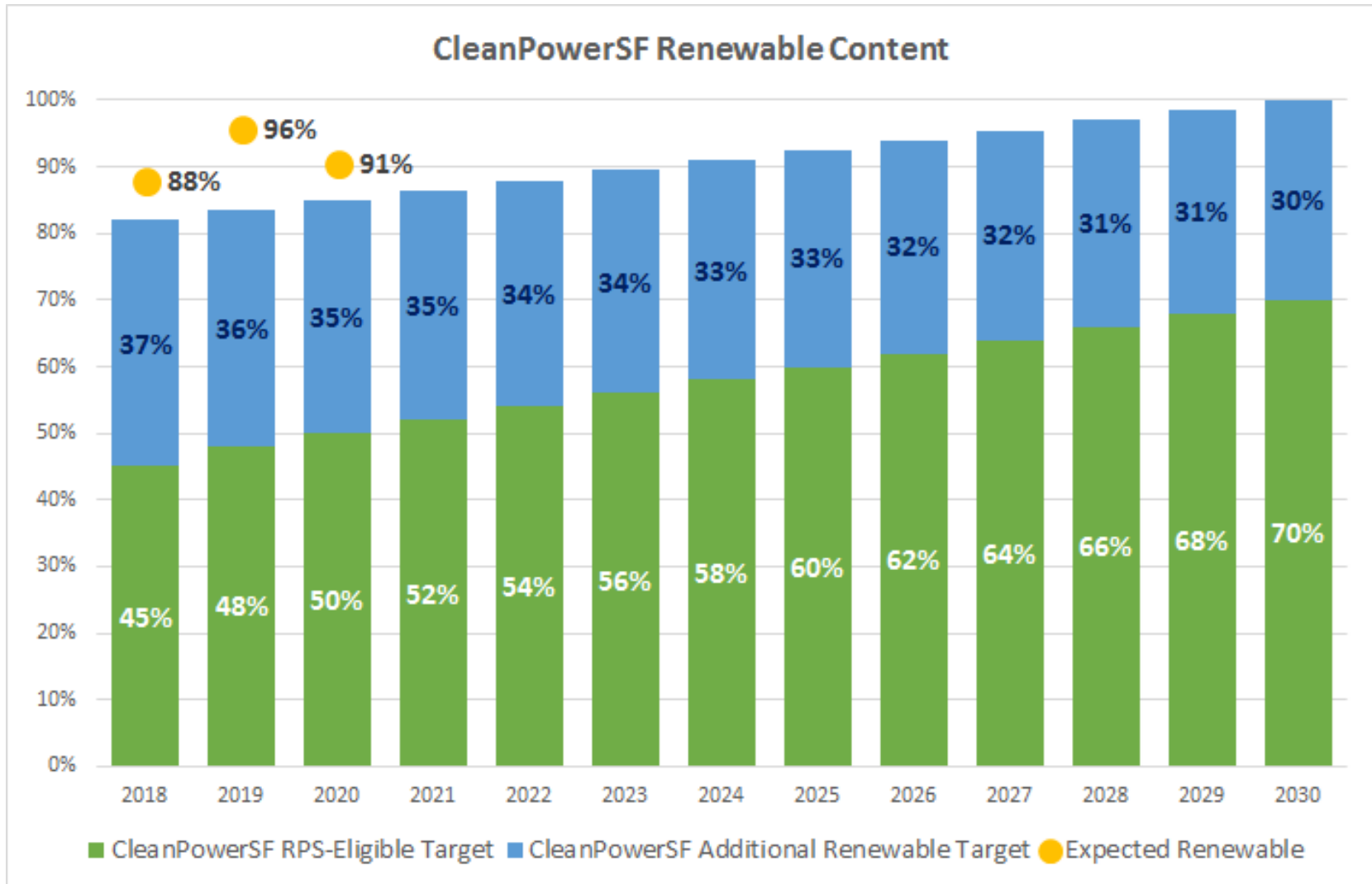


Now powering CleanPowerSF:
The San Pablo Raceway Solar Project



Program Goals and Progress to Date

50% RPS-eligible renewable by 2020; 100% renewable by 2030



New Renewable Energy Projects

Solar

- ☀ San Pablo Raceway (100 MW)
- ☀ Blythe Solar IV (62.5 MW)
- ☀ Maverick Solar 6 (100 MW)

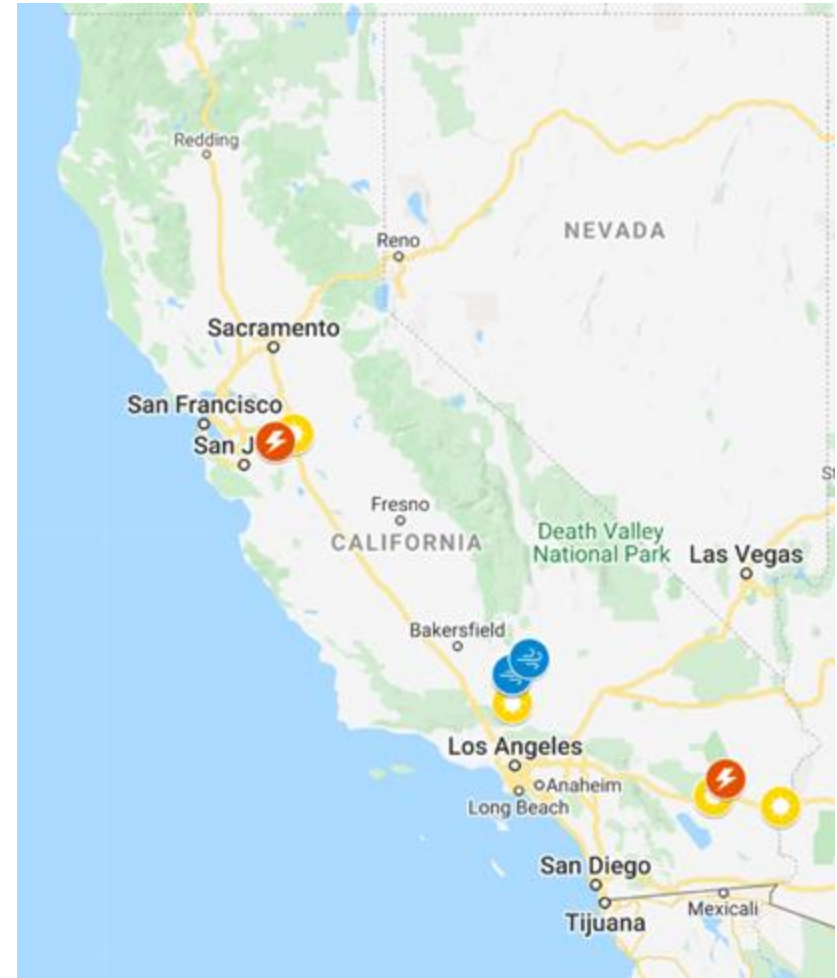
Wind

- ☞ Voyager IV (50.1 MW)
- ☞ Oasis (60.3 MW)

= 372.9 MW of clean energy development!

Planned

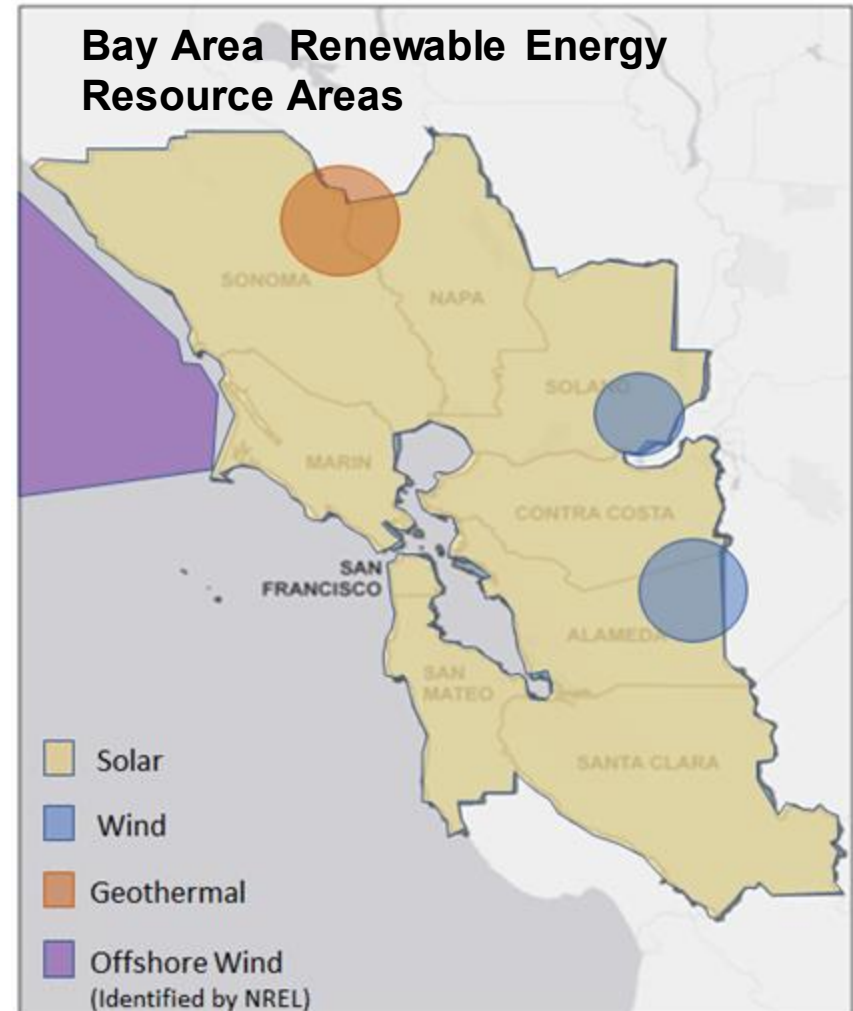
- ☀ Northern California Solar (70 MW)
- 🔋 Battery Storage (120 MW)



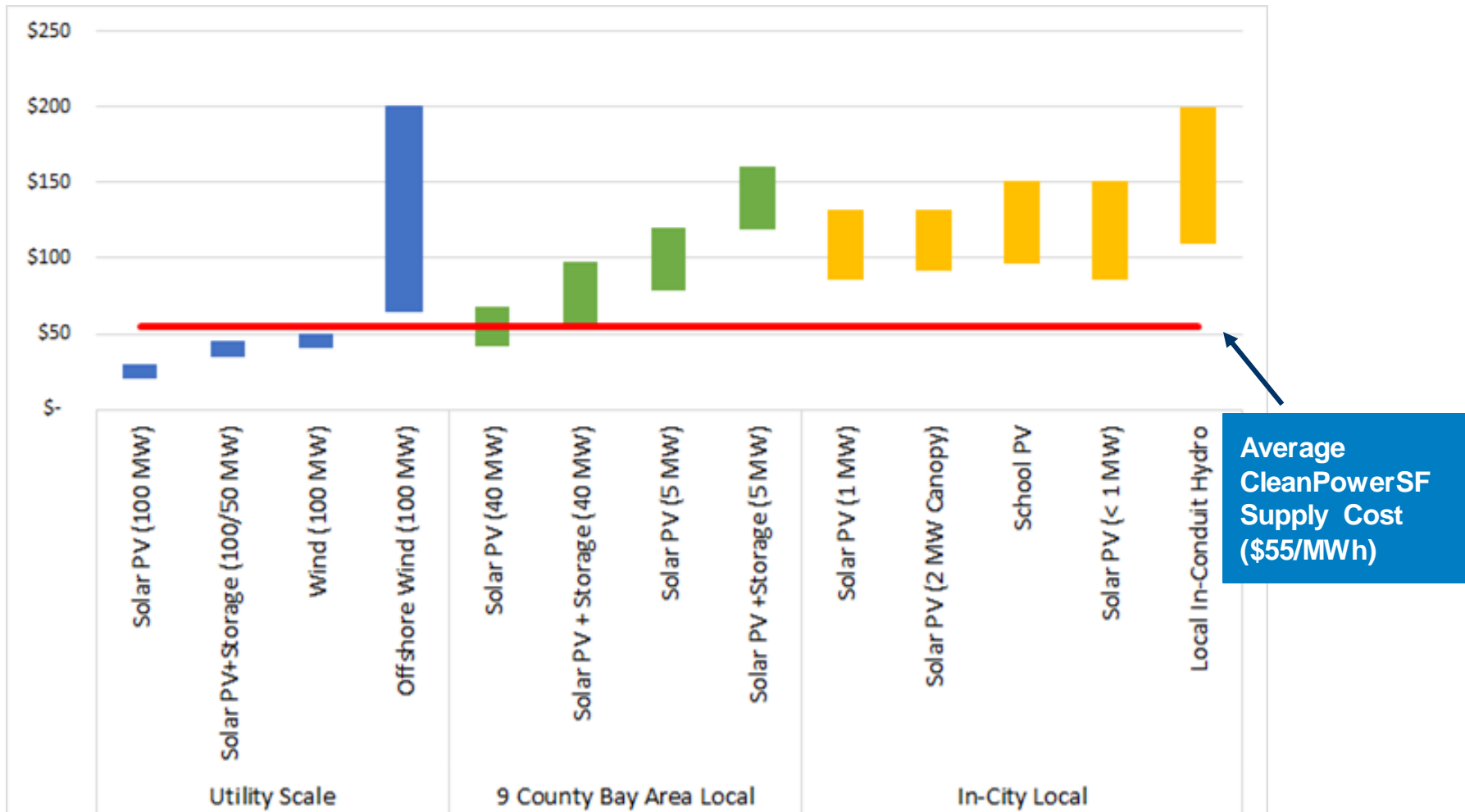
Active and planned new renewable energy projects.

Local Renewable Energy Report

- Examines local renewable energy development opportunities:
 - In City, City-owned sites
 - Regional, City-owned sites
 - Other opportunities in and near San Francisco
- Sites ranked on suitability by:
 - Energy production potential
 - Cost (\$/MWh)
 - Development timeframe (5-10 year target)
 - Other site-specific characteristics

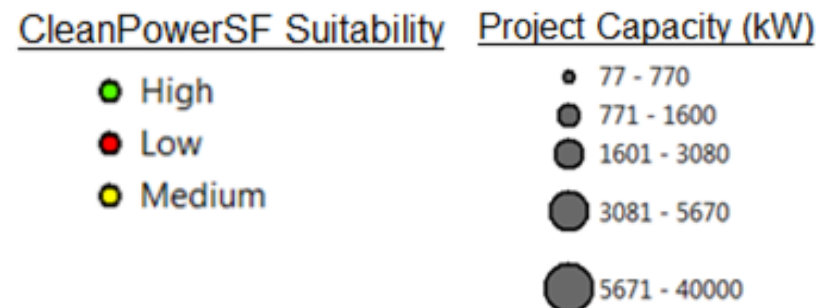
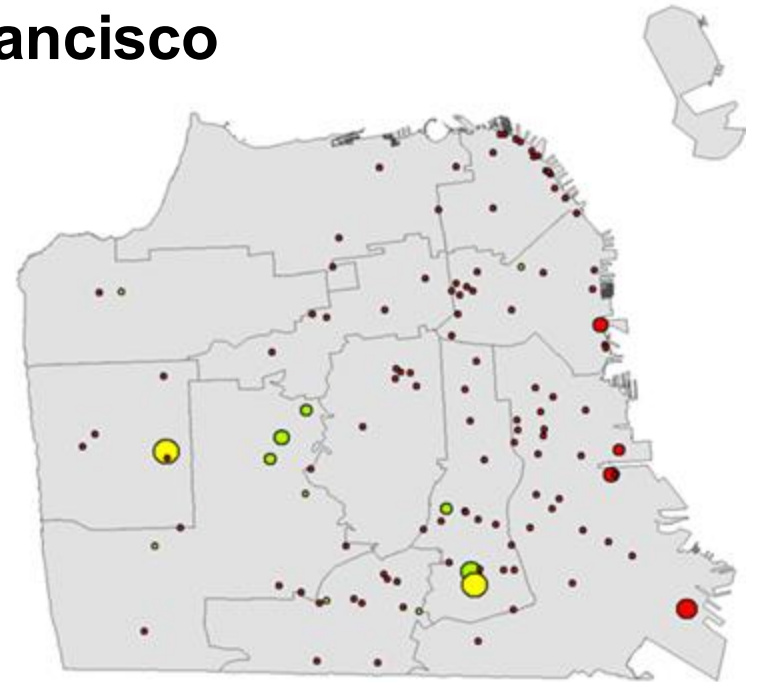


Cost Comparison of Local Renewable Energy Development



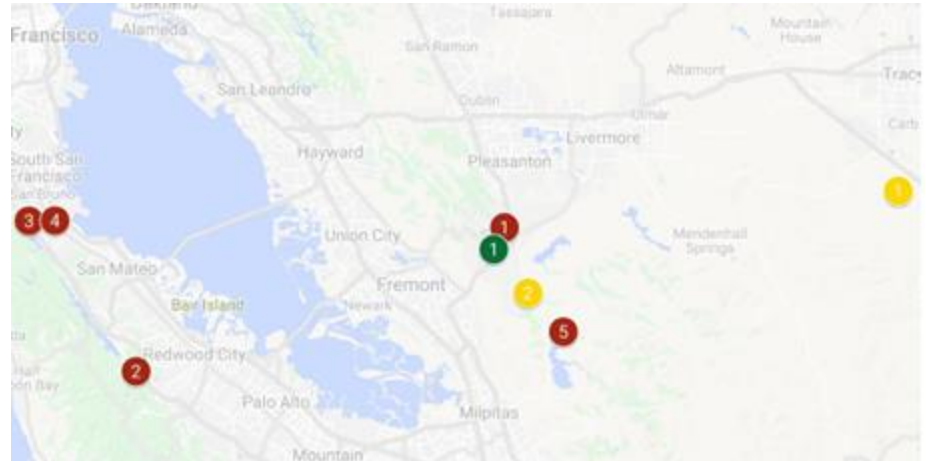
City-owned Sites within San Francisco

- 132 sites reviewed, 14 identified as Medium to High Suitability
- 9.3 MW High Suitability, 16.6 MW Medium Suitability
- Projected costs: **\$79/MWh to \$151/MWh**



Regional City-owned Sites

- 6 sites reviewed, 3 identified as Medium to High Suitability
- 40 MW of High Suitability, 4 MW of Medium Suitability
- Projected costs: **\$42/MWh to \$104/MWh**



High Suitability

1 Sunol Golf Course

Medium Suitability

1 Tesla Portal

2

Sunol Wastewater Treatment Plant

Low Suitability

1 Sunol Yard

2 Pulgas Reservoir

3 Harry Tracy Admin

4 Millbrae Yard

5 Calaveras Dam

Near-Term Next Steps

High Suitability Sites (49 MW solar + 20 MW batteries)

- Analyze ratepayer impacts in Integrated Resource Plan (IRP)
- Conduct additional site-specific feasibility analysis
- Include highest suitability sites in 10-year capital plan

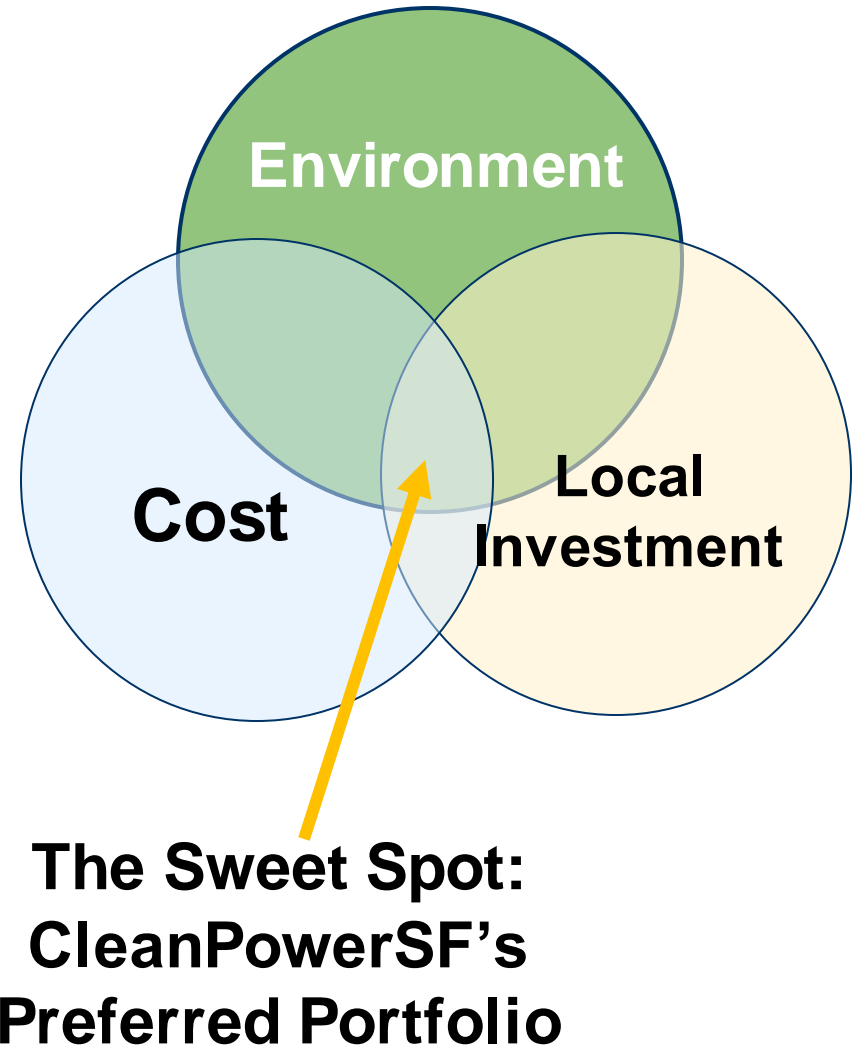


Medium Suitability Sites and Other Opportunities

- Monitor and conduct additional analysis as needed

Integrated Resource Planning

- State law requires utilities to submit an **Integrated Resource Plan (IRP)** every two years.
 - Next IRP due in September 2020
 - Submitted to **California Public Utilities Commission (CPUC)**
- Identify portfolio options that balance our core program goals:
 - **Environment:** 100% renewable electricity by 2030
 - **Affordability:** Maintain affordable and stable rates
 - **Local Investment:** Invest in local resources and jobs



CleanPowerSF IRP Modeling: Four Portfolios



CleanPowerSF Goals by 2030

- ✓ 100% renewable by 2030
- ✓ Local resource prioritization



CleanPowerSF Goals by 2025

- ✓ 100% renewable by 2025
- ✓ Local resource prioritization



CleanPowerSF Goals and Time Coincidence by 2030

- ✓ 100% renewable by 2030
- ✓ Resource generation meets customer usage in real time
- ✓ Local resource prioritization



CPUC 46 MMT Case

- ✓ Portfolio that meets the CPUC's assigned emissions benchmark (Required)

Increased Electric Vehicle (EV) Adoption

What if 100% of new vehicle registrations in 2030 are EVs?

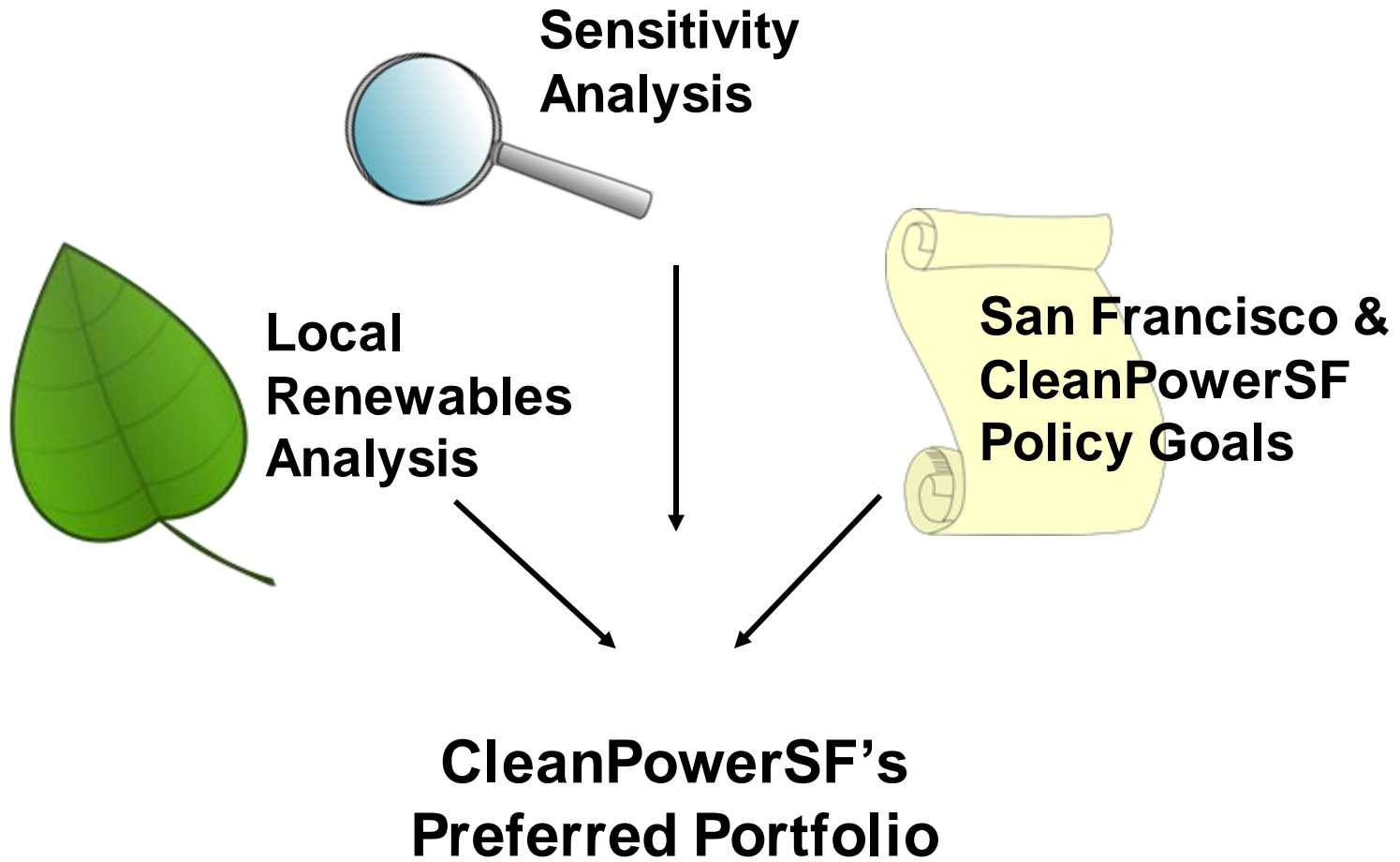


Increased Building Decarbonization

What if all new construction is 100% electric?



CleanPowerSF Preferred Portfolio





Next Steps

Event	Date
Local Agency Formation Commission (LAFCo)	July 17, 2020
SFPUC Commission Meeting	July 28, 2020
Written Comment Period on Draft IRP	August 7 - 17, 2020
SFPUC Commission Approval	August 25, 2020
IRP Submitted to CPUC	September 1, 2020



CleanPowerSF Community Power Updates

Peter Gallotta and Karaline Bridgeford



CleanPowerSF

Community Power Update

Virtual Community Power Updates

Overview

- ✓ 19 attendees from 13 organizations
- ✓ Included two question periods and a breakout room session
- ✓ 30+ questions received via the “chat”

Topics covered

- ✓ Marketing & outreach
- ✓ COVID-19 response
- ✓ Policy & public power
- ✓ Draft Local Renewables Report
- ✓ Integrated resource planning





IRP Feedback & Questions

IRP questions received by topic

- ✓ 5 local energy development
- ✓ 4 electrification / decarbonization
- ✓ 3 local jobs / workforce development
- ✓ 3 resource planning

Next steps for community engagement

- ✓ Written public comment period August 7 - 17th, 2020
- ✓ Public meetings (LAFCo, SFPUC Commission)
- ✓ Future Community Power Update meetings

Questions?



The screenshot shows a Zoom meeting interface with a 3x3 grid of participants. The top-left tile shows Michael Hyams waving. The top-right tile shows Suzanne Merkelson with chat messages from Michael Hyams and Helena Birecki. The bottom-right tile shows gabbyCalle24 with a small inset of another participant. The interface includes a 'Start Rec' button, a lock icon, and various control icons like video, audio, and screen sharing.

Start Rec

Michael Hyams

Suzanne Merkelson

Message from Michael Hyams
Thank you everyone! We...

REPLY

Message from Helena Birecki
Thanks so much for Word...

REPLY

Layhing Reyes

Peter Gallotta

Kiara Hermann

Bruce Wolfe, HANC/SFCEA

paul

gabbyCalle24