



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

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# **CleanPowerSF 2022 Integrated Resource Plan**

**June 14, 2022**



# Integrated Resource Planning



- CleanPowerSF is required under state law to develop an **Integrated Resource Plan (IRP)** every two years that evaluates electricity supply and demand and identifies energy resource options that can deliver reliable and cost-effective energy to customers.
- CleanPowerSF's next IRP is due November 1, 2022.



# Key Terms

- **Portfolio**: collection of generation resources used to serve electricity demand.

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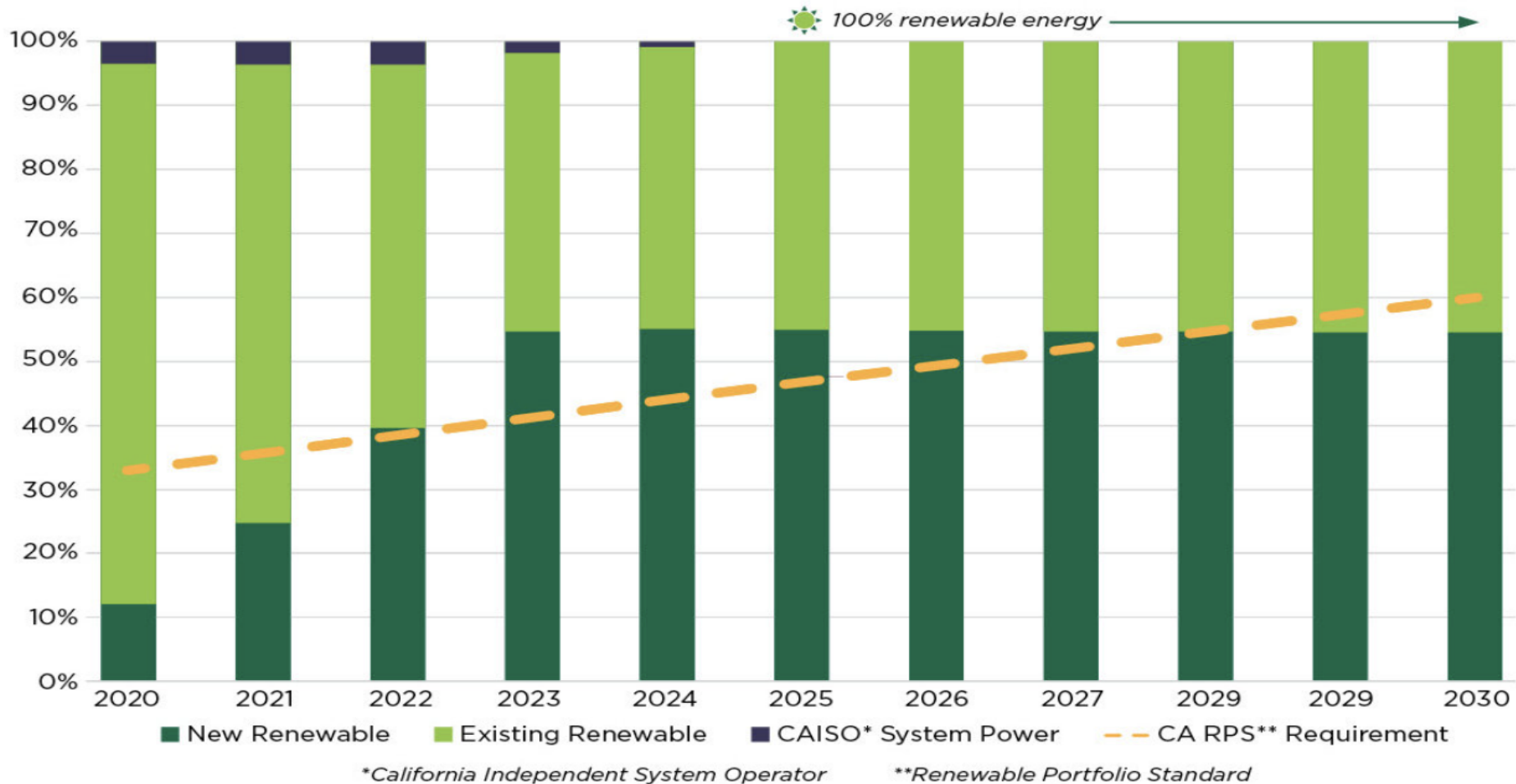
• **Conforming Portfolio**: the specific mix of electric generation resources that meet CPUC requirements.

- **Scenario**: variations on a future state or objective that may influence the resources included in a portfolio.
- **Sensitivity Analysis**: an analysis that involves changing one assumption to understand its influence on the portfolio.



# 2020 Integrated Resource Plan Recap

Accelerated CleanPowerSF's renewable energy goals by 5 years → 100% renewable by 2025





# Objectives of the 2022 IRP

1. Identify a Realistic Path to Achieving 100% Renewable Energy Goal

2. Update Local Supply-Side Investment

3. Plan for Electrification

4. Deliver Affordable Service

5. Ensure Reliability



# CleanPowerSF IRP Modeling Portfolios

Portfolio Name	Criteria
1. Current CleanPowerSF Supply Portfolio Goals ("CleanPowerSF Goals")	<ul style="list-style-type: none"><li>✓ 100% renewable by 2025</li><li>✓ Local resource prioritization</li></ul>
2. CleanPowerSF Goals & No Unspecified Grid Purchases Between 5-10 pm	<ul style="list-style-type: none"><li>✓ 100% renewable by 2025</li><li>✓ Local resource prioritization</li><li>✓ Resource generation meets customer usage during peak periods</li></ul>
3. CleanPowerSF Goals & 100% Time Coincidence by 2035	<ul style="list-style-type: none"><li>✓ 100% renewable by 2025</li><li>✓ Local resource prioritization</li><li>✓ Resource generation meets customer usage in real time</li></ul>

# CleanPowerSF IRP Modeling Portfolios Continued

Portfolio Name	Criteria
4. CleanPowerSF Goals & Mayor’s EV and Building Electrification Targets Met	<ul style="list-style-type: none"> <li>✓ 100% renewable by 2025</li> <li>✓ Local resource prioritization</li> <li>✓ Emission-free trips originating in, ending in, or passing through San Francisco by 2040</li> <li>✓ Decarbonization of existing buildings by 2040</li> </ul>
5. CleanPowerSF Goals & 50% of Mayor’s EV and Building Electrification Targets	<ul style="list-style-type: none"> <li>✓ Same as above, but slower pace of electrification</li> </ul>
6. CPUC’s 30 million metric tons (MMT) of Carbon Dioxide Equivalents (CO2e) Case	<ul style="list-style-type: none"> <li>✓ Portfolio that meets the CPUC’s assigned emissions benchmark (Required)</li> </ul>

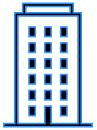


# CleanPowerSF IRP Modeling: Sensitivities



## Electric Vehicle Adoption

- ✓ Accelerated electric vehicle purchases
- ✓ Increased share of electricity-supplied travel in San Francisco



## Building Decarbonization

- ✓ Electrification growth
- ✓ Adoption rates



## Future Climate Scenarios

- ✓ Extreme weather
- ✓ Resiliency







# CleanPowerSF's Preferred Portfolio



# Community Engagement

- Community input is a critical component in the IRP development process to align resource planning with community priorities
- Upcoming engagement opportunities:
  1. Online survey open until July 1st
  2. Community Workshops:  
Tuesday, June 21, 10am-12pm  
Thursday, June 23, 5pm-7pm
  3. Stay updated!  
Visit: [www.cleanpowersf.org/resourceplan](http://www.cleanpowersf.org/resourceplan)  
Email: [cleanpowersf@sfwater.org](mailto:cleanpowersf@sfwater.org)

## June-July Input on Energy Planning

- Digital Survey
- Virtual Workshops
- Presentations



## Aug-Oct IRP Scenario Feedback

- Public Comment Period
- Virtual Feedback Sessions
- Presentations



## November Final 2022 IRP

- Approved by SFPUC Commission
- Submitted to the CPUC



# Schedule

Activities	Timing
Modeling of CleanPowerSF's IRP portfolios	June 2022 – August 2022
Solicit comments from public on results and recommendations and prepare report with staff recommendation identifying preferred portfolio	August 2022 – September 2022
Commission approval of a preferred portfolio and plan on October 25 for submission to CPUC by November 1	October 2022