

DOCKETED

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Project Title:	Public Comment on California Energy Commission Business Meetings
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Submission Date:	12/9/2020 9:41:56 AM
Docketed Date:	12/9/2020



**California Energy Commission
Business Meeting
December 9, 2020
10:00 a.m.**



Pledge of Allegiance





Join us Dec. 10, 2020 at 2 p.m.

YOU'RE INVITED TO



December 10, 2020
2:00 p.m. – 3:30 p.m.
Join via Zoom

ID: 957 4084 7914

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Go to: www.energy.ca.gov



Keep California Healthy



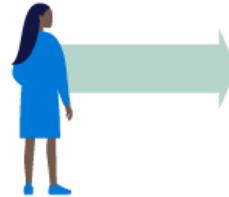
Wash



Clean



Cover



6 Feet



[covid19.ca.gov](https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/COVID-19/COVID-19-Resources.aspx)



Remote Compliance

Business Meeting held remotely, consistent with **Executive Orders N-25-20 and N-29-20** and the recommendations from **California Department of Public Health** to encourage physical distancing to slow spread of COVID-19.

For remote participation instructions go to **CEC's Business Meetings webpage:**

<https://www.energy.ca.gov/proceedings/business-meetings>

If Zoom's toll-free phone numbers don't work:

- **Call: 669-900-6833**
- **Meeting ID: 938-6923-0237**

If Zoom shuts down, Business Meeting will continue via Verizon.

- **Call: 888-823-5065**
- **Passcode: business meeting**



Public Comment Instructions

- Pursuant to **California Code of Regulations Title 20 §1104(e)**, any person may make oral comment on any agenda item.
- Comments may be **limited to 3 minutes or less** per person and **1 person per organization**.
- Any person wishing to comment on information items or reports (non-voting items) shall reserve their comment for the general public comment portion of the meeting agenda.

Two ways to provide comments:

1) Email PublicAdvisor@energy.ca.gov to have the CEC's Public Advisor verbally relate comments during the meeting.

OR

2) Call 888-823-5065. Passcode: business meeting

- 1) Tell Operator: name, organization and item number.
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Item 1: Consent Calendar

December 9, 2020 Business Meeting



Item 1 Consent Calendar

- a. **OTAY MESA ENERGY CENTER (99-AFC-05C).**
- b. **CUMMINS ELECTRIFIED POWER NA INC.** Amendment #4 to Agreement ARV-15-001
- c. **CUMMINS ELECTRIFIED POWER NA INC.** Amendment #4 to Agreement ARV-15-002
- e. **NEW SOLAR HOMES PARTNERSHIP (NSHP) (16-NSHP-01).**



Item 1 Consent Calendar - Public Comment

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Item 1 Consent Calendar

d. NATIONAL ASSOCIATION OF STATE ENERGY OFFICIALS.



Item 1d Consent Calendar - Public Comment

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Item 1 Consent Calendar

f. VELOZ.



Item 1f Consent Calendar - Public Comment

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Item 2: Discussion of Energy Commission Progress on Joint Agency Report, Charting a Path to a 100 Percent Clean Electricity Future, Senate Bill 100 (2018)

December 9, 2020 Business Meeting

Terra Weeks, Sr. Advisor
Office of Chair Hochschild



Benefits to California

- Under Senate Bill 100, renewable energy and zero-carbon resources shall supply 100 percent of electric retail sales and 100 percent of electricity procured to serve state agencies by December 31, 2045.
- Implementation of this policy provides public and environmental health benefits by reducing greenhouse gas emissions and air pollution from the electricity sector.
- The development of additional clean energy resources needed to meet the goal also provides a substantial economic and workforce opportunity.



Report Timeline

On December 3, 2020 the CEC, CPUC, and CARB released the **Draft 2021 Joint-Agency SB 100 Report**

Activity	Date
Kickoff Workshop (Sacramento)	September 2019
Scoping Workshop 1: Central Valley (Fresno)	September 2019
Scoping Workshop 2: Northern California (Redding)	October 2019
Scoping Workshop 3: Southern California (Diamond Bar)	October 2019
Technical Workshop (San Francisco)	November 2019
Modeling Inputs & Assumptions Workshop (Sacramento)	February 2020
Draft Modeling Results Workshop (Remote Only)	September 2020
Draft Report Workshop (Remote Only)	December 4, 2020
Final Report Release and Presentation	Early 2021



Recommendations

Three Groups:

- A. Areas for Further Study in the 2025 SB 100 Report
- B. Process and Engagement for SB 100 Reports
- C. Supporting Achievement of the 100 Percent Target



Areas for Further Study in 2025 Report

1. Perform a comprehensive **reliability assessment** as the next step in the modeling process.
2. Continue to assess the role and impacts of **emerging technologies** and non-generation resources.
3. Analyze projected **land-use impacts** of scenarios and opportunities to mitigate environmental impacts.
4. Define and include **social costs and non-energy benefits** (NEBs) in future analyses.
5. Continue to study opportunities and impacts related to achieving the 100 percent clean electricity target **prior to 2045**.



Process and Engagement for SB 100 Reports

6. Convene an **annual joint agency SB 100 workshop** in years between reports.
7. Align future SB 100 planning with findings and outcomes from **relevant state efforts**.
8. Consult with **advisory groups** to guide equitable planning and implementation.
9. Retain and expand upon best practices for **community outreach and accessibility**.



Supporting Achievement of the 100% Target

10. Continue state support for **research and innovation** in clean energy technologies.
11. Continue to prioritize **energy efficiency and load flexibility** to minimize resource build requirements and total implementation costs.
12. Identify and **address bottlenecks** in project permitting and development.
13. Promote **workforce development** programs that focus on high-quality job creation.



Written Comments

**Please submit comments to the
SB 100 Docket (19-SB-100)**

Filing deadline December 18, 2020

<https://efiling.energy.ca.gov/Ecomment/Ecomment.aspx?docketnumber=19-SB-100>



Next Steps

- Staff will review written comments submitted by Dec 18, 2020 and make necessary changes for the final report
- Final report will be released in early 2021



Item 3: Proposed Resolution Approving Lithium Valley Commission Members (20-LITHIUM-01).

December 9, 2020 Business Meeting

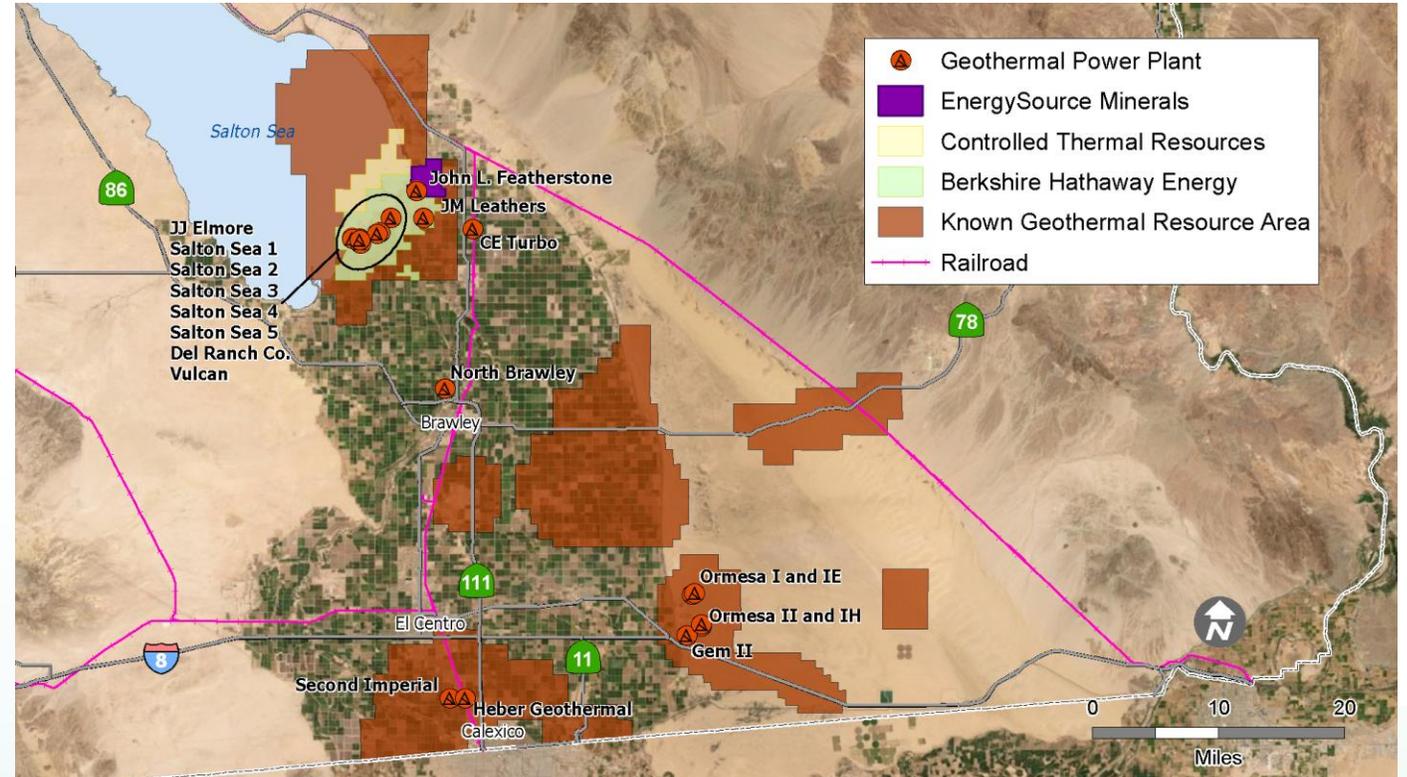
Elisabeth de Jong, EGSS 1
Renewable Energy Division
Geothermal Grant and Loan Program



California's Lithium Valley

California's Lithium Recovery Initiative to date:

- Sacramento in November 2018
- El Centro in May 2019
- Stanford for California's Lithium Recovery Initiative – Symposium in February 2020





Benefits to California

The proposed commission will support California in meeting its clean energy goals. More specifically, the Lithium Valley has the potential to:

- Stimulate the economy of a disadvantaged community
- Support the state in reaching its emissions reductions and renewable energy goals
- Support geothermal development and reliance on a baseload renewable energy source
- Supply a critical mineral in which we are seeing increasing dependency for the electrification of transportation

Overview

Lithium Valley Commission

AB 1657 State Energy Resources Conservation and Development Commission:
Blue Ribbon Commission on Lithium Extraction in California: report.

- Assemblymember Eduardo Garcia
- Approved in September 2020
- Convene Lithium Valley Commission in March 2021
- Submit report in October 2022

The 14 members are appointed by the following entities:

- 9 - CEC
- 1 - California Public Utilities Commission
- 1 - Secretary of the California Natural Resources Agency
- 1 - Senate Committee on Rules
- 1 - Speaker of the Assembly
- 1 - Governor



Staff Recommendation

- Approval of the Resolution and Appointments of the following 9 membership seats:
 - General member
 - Represents the lithium extraction industry
 - Represents a national vehicle manufacturer organization
 - Represents a local environmental organization
 - Represents a local city or county government in the Salton Sea geothermal resource area
 - Represents a local public electric utility
 - Represents disadvantaged and low-income communities in the Salton Sea geothermal resource area
 - Represents a local tribal community
 - Member with knowledge of economics and the effectiveness of local, state, and federal incentives.



Item 3 - Public Comment

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Item 4: Proposed Amendments for Computers and Computer Monitors Title 20 Efficiency Regulations

December 9, 2020 Business Meeting

Soheila Pasha, Ph.D.
Appliances Office
Efficiency Division



Benefits to California

- Consumers realize energy savings for new computer and computer monitor technologies
- Manufacturers continue to innovate cost-effective features in computers and monitors
- Californians continue to have access to new and innovative technologies



Overview of Rulemaking

- CEC adopted original computer standards in 2016
 - CEC required to amend standards within 6 months upon request of industry for new technologies, interfaces, features
- Computer standards amended in 2017 for new technologies
- Today's proposed amendments address new technologies
 - 45-day written public comment period from October 2 to November 16
 - Public hearing on November 18
 - Proposed amendments are exempt under CEQA



New Technologies

1. Multi-Screen Notebooks:

- Definition, Test Procedure

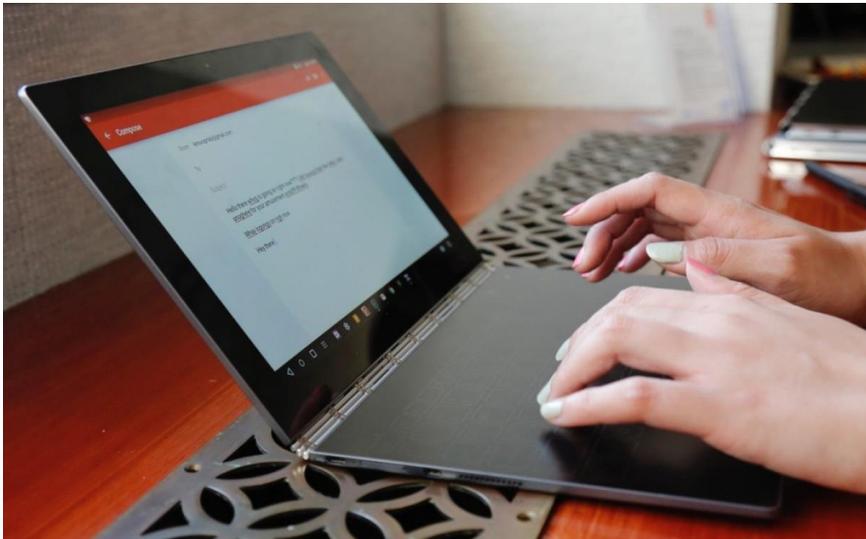


Figure 1: Example of multi-screen notebooks

2. Computers with Cyclical Behavior:

- Definition, Test Procedure

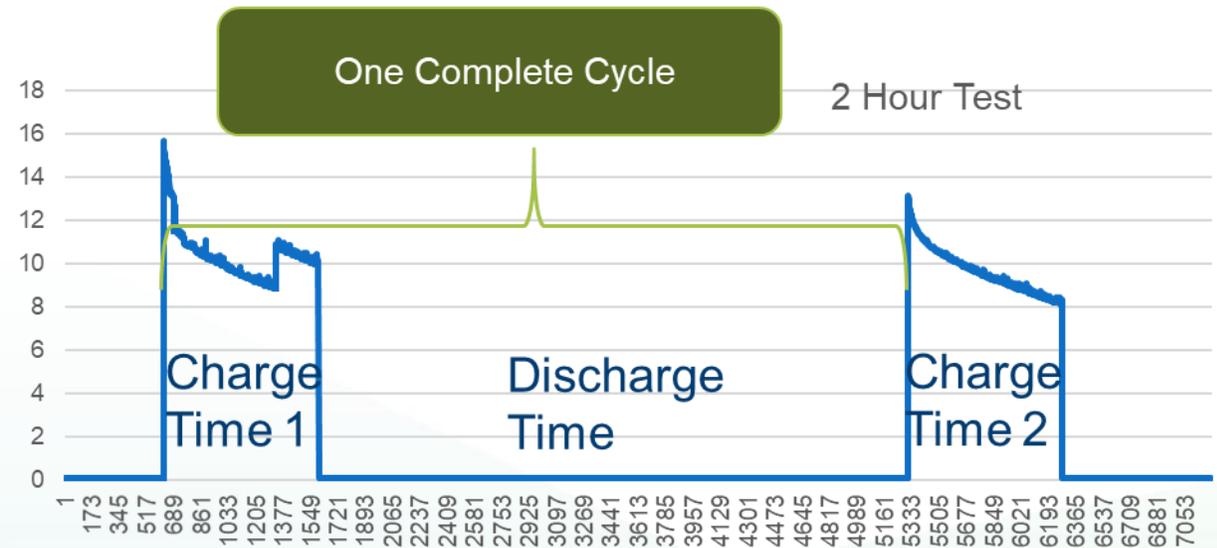


Figure 2: Example of power consumption pattern for computers with cyclical behavior



New Technologies (Continued)

3. Ethernet Ports with data transfer rates between 1 and 10 Gb/s
 - Energy adder for wired Ethernet Ports
4. Computer Monitors with Fast Refresh Rates
 - Applies to specific gaming monitors
 - Energy adder proportional to refresh rates and caps at 480 Hz



Staff Recommendation

- Adopt amendments to Title 20 Appliance Efficiency Regulations for computers and computer monitors
- Support finding of CEQA exemption for this rulemaking



Item 4 - Public Comment

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Item 5: 2020 Repeal of Self-Contained Lighting Controls and Other Amendments (20-AAER-01)

December 9, 2020 Business Meeting

Carlos Baez, Energy Commission Specialist
Appliances Office
Efficiency Division



Benefits to California

- Removes duplicative requirements for self-contained lighting controls
- Eases compliance for manufacturers by making minor, clarifying changes to Title 20
- Manufacturer compliance increases energy/water savings for California households





Rulemaking Overview

- Non-substantive, clarifying changes to Title 20
- Changes to Sections 1601 through 1607
- Clean-up changes do NOT include:
 - New energy/water efficiency standards
 - New testing or marking requirements
 - Modifications to general certification process (“MAEDbS” appliance database)



Self-Contained Lighting Controls

Proposal repeals:

- Definitions
- Energy performance/design standards
- Testing, marking, and certification requirements

Rationale:

- Lighting controls are regulated under 2019 Energy Code (Title 24)

Outcome:

- No longer required to comply with Title 20 to be sold or offered for sale in CA, but must comply with 2019 Energy Code



Portable Luminaires

Proposal repeals:

- Minimum “light output” requirement for LED luminaires

Rationale:

- Current requirement is obsolete as light output must be 200 lumens or greater

Outcome:

- Products will no longer produce more light than necessary (increased energy use) in some applications where less light is appropriate





Other Changes



- Updates Title 20 to align with US DOE regulations
- Updates data certification requirements for specific appliances
- Other “Clean-up” changes:
 - Clarifying edits
 - Numbering/cross-reference updates



Staff Recommendation

- Adopt rulemaking 20-AAER-01 regarding amendments to Title 20 Appliance Efficiency Regulations
- Adopt staff's determination that action is exempt from CEQA



Item 5 - Public Comment

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Item Number 6: Expanding the Clean Mobility Voucher Pilot Program

December 9, 2020 Business Meeting

Shaun Ransom, Associate Energy Specialist
Fuels and Transportation Division, Electric Vehicle Infrastructure Office



Benefits to California

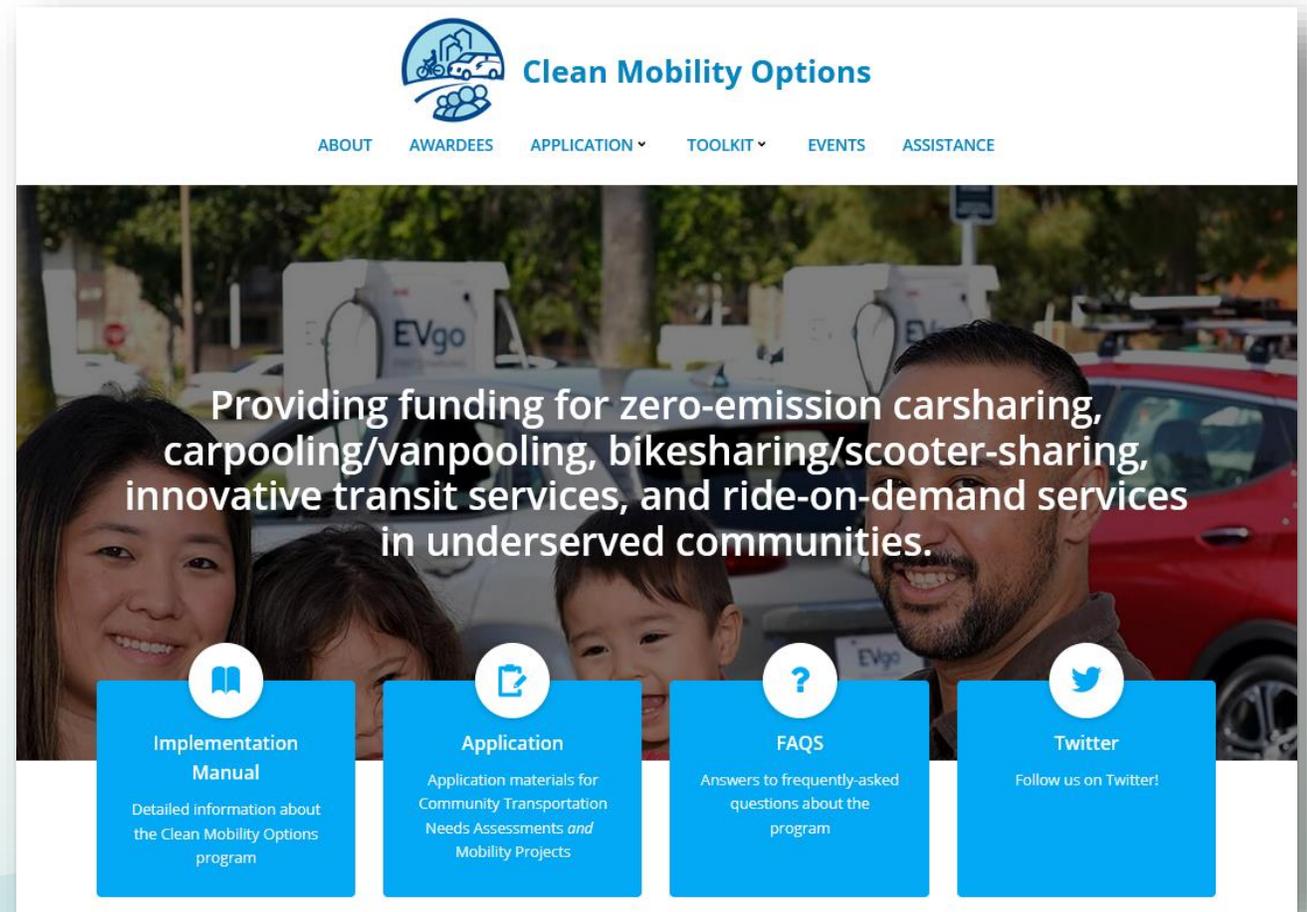
- **Improves** access to clean mobility options that are safe, reliable, convenient and affordable to communities throughout California
- **Reduces** barriers to zero emission transportation
- **Increases** mobility options in disadvantaged communities
- Funds **place-based** and **community-driven** mobility solutions





Overview

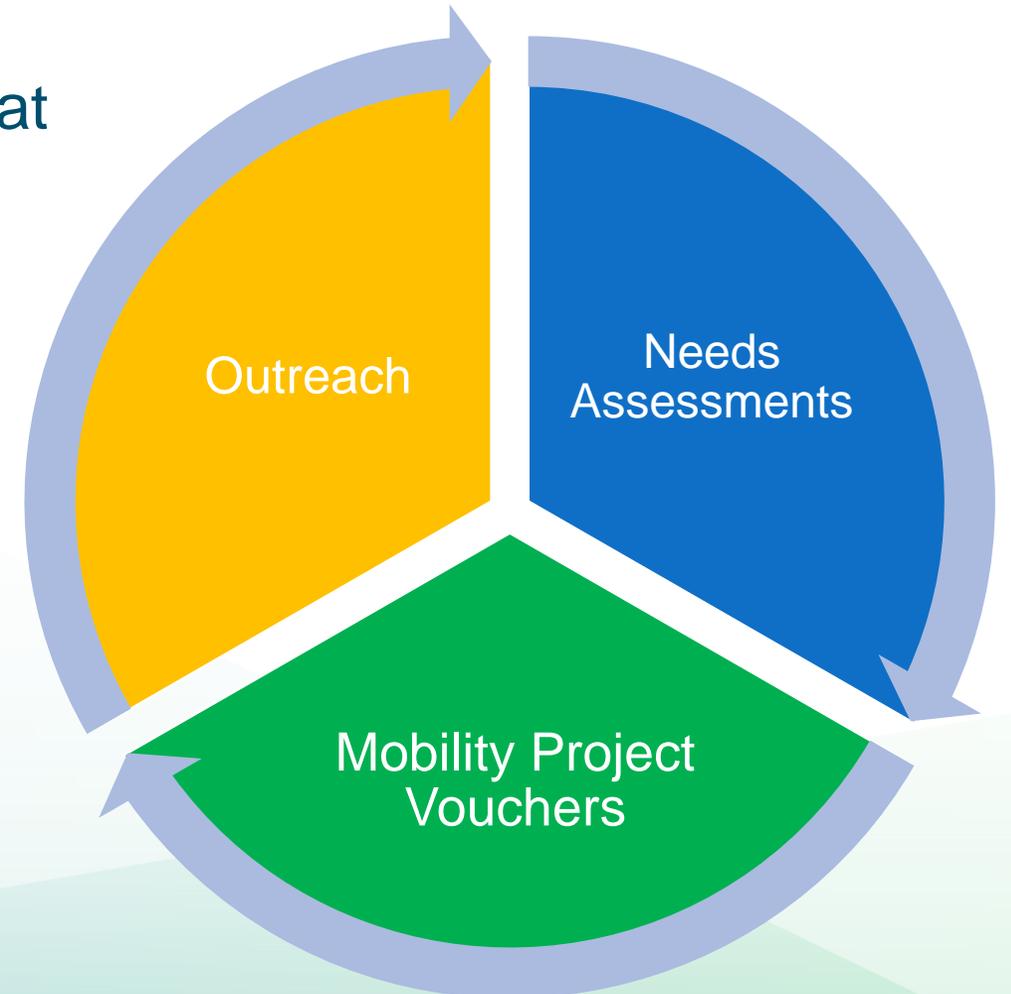
- **\$8 million** interagency agreement to expand and operate the Clean Mobility Voucher Pilot Program
- **First-come, first-serve, web-based** voucher program
- Zero emission shared mobility projects in disadvantaged, low-income, affordable housing and CA Native Tribal Communities
- Car-sharing, ride-sharing and micromobility





Program Cycle

1. Outreach - Broad statewide engagement that is comprehensive and inclusive
2. Needs Assessments - Harnesses local knowledge and needs
3. Mobility Vouchers - Deployment of mobility programs





Equity Focus

- Preliminary and ongoing outreach, education and capacity building
- Streamlined application process
- Technical assistance throughout the life of the project
- Service to underrepresented communities, e.g., Disadvantaged, Low-income, Affordable Housing and CA Native Tribal Communities
- Ongoing program refinement through public working groups





Staff Recommendation

- Approve resolution for Agreement 600-20-001



Item 6 - Public Comment

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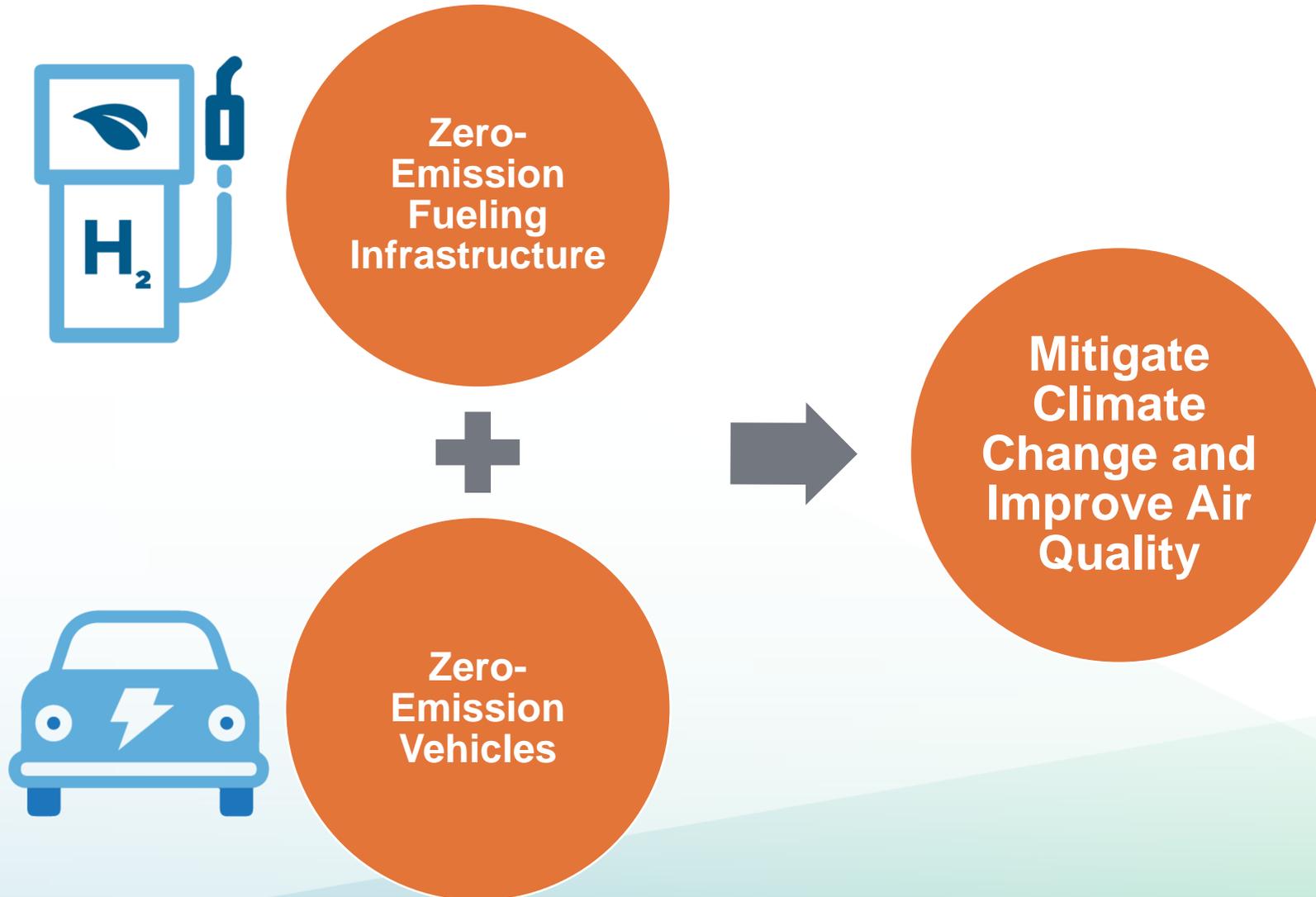
Item 7: Hydrogen Refueling Infrastructure – GFO-19-602

December 9, 2020, Business Meeting

Jane Berner, Air Pollution Specialist
Fuels and Transportation Division, Advanced Vehicle Infrastructure Office



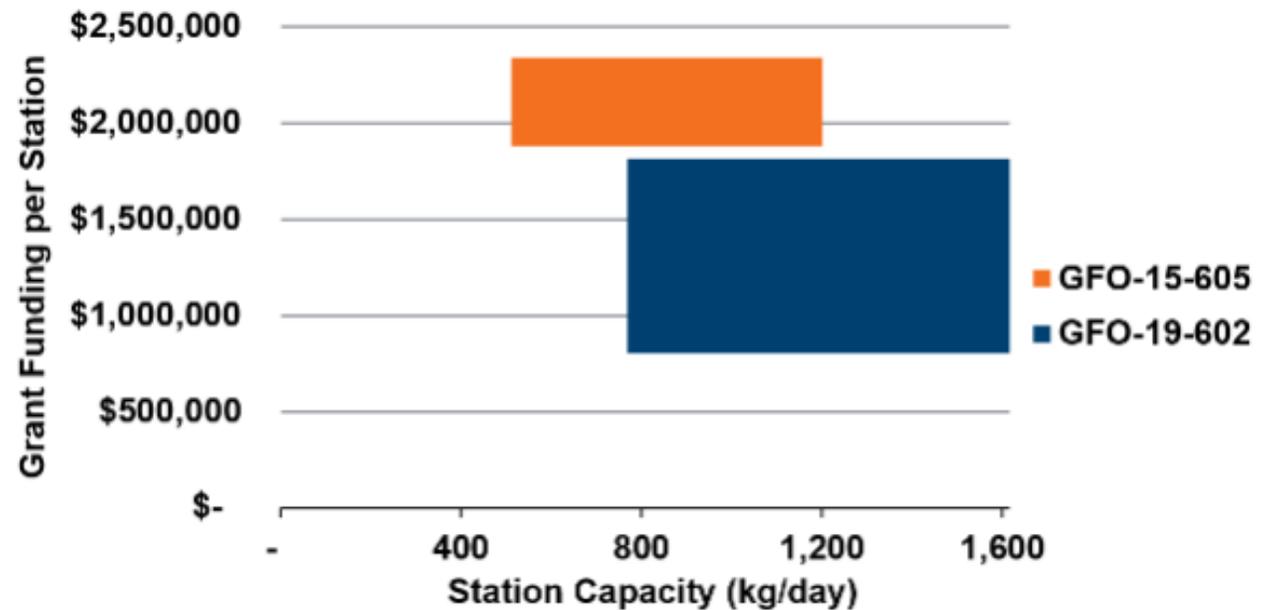
Benefits to California





Overview

- Hydrogen Refueling Station Development Progress
 - 45 have opened
 - 16 in development
 - These 3 agreements provide up to:
 - 111 new stations
 - 3 station upgrades
 - Total: 172 stations
- Positive Trends
 - Reduced station cost
 - More fueling capacity
 - Privately-funded stations





Privately-Funded Stations

- FirstElement Fuel, Inc.
 - 16 stations within the CEC grant agreement
- Iwatani Corporation of America
 - 7 stations outside of the CEC grant agreement
 - **179 stations** result from adding these 7 to the 172 from CEC agreements

A screenshot of the Iwatani website news page. The browser address bar shows "iwatani.com/news". The Iwatani logo is in red, followed by navigation links: "About Us", "Specialties", "News", and "Contact Us". The article title is "Iwatani and Toyota Motor Collaborate to Bring Seven New Hydrogen-Refueling Stations to Southern California", dated "November 12, 2020". The article text states that Iwatani Corporation of America and Toyota Motor North America announced on November 12 that Toyota will support Iwatani's plans to significantly expand the number of open retail hydrogen-fueling stations by nearly 25 percent in Southern California, which represents an increase of 6,300 kilograms per day of hydrogen fuel-dispensing capacity. A "Read More" link is at the bottom.

iwatani.com/news

Iwatani About Us ▾ Specialties ▾ News Contact Us

November 12, 2020

Iwatani and Toyota Motor Collaborate to Bring Seven New Hydrogen-Refueling Stations to Southern California

Iwatani Corporation of America, a wholly owned subsidiary of Iwatani Corporation and Toyota Motor North America jointly announced on November 12 that Toyota will support Iwatani's plans to significantly expand the number of open retail hydrogen-fueling stations by nearly 25 percent in Southern California, which represents an increase of 6,300 kilograms per day of hydrogen fuel-dispensing capacity.

[Read More](#)



Initial Funding in Agreements

Awardee	# of Initial Stations	Initial Funding Amount
FirstElement Fuel, Inc.	21	\$20,540,000*
Equilon Enterprises LLC	8	\$7,318,398
Iwatani Corporation of America	1	\$1,919,597
Total	30	\$29,777,995

Additional light-duty fuel cell electric vehicles supported: 60,000

*Includes \$5 million from the Volkswagen Environmental Mitigation Trust Fund



“Up To” Awards

Awardee	# of Stations	Funding Amount	Match Funding Amount
FirstElement Fuel, Inc.	49	\$52,076,370	\$55,245,768
Equilon Enterprises LLC	51	\$40,575,712	\$41,210,712
Iwatani Corporation of America	14	\$23,073,184	\$34,609,776
Total	114*	\$115,725,266	\$131,066,256

Additional light-duty fuel cell electric vehicles supported: 200,000

*111 new stations and 3 upgrades to existing stations



Proposed Station Designs



Image Credits (clockwise from right): Iwatani Corporation of America, FirstElement Fuel, Equilon Enterprises



Staff Recommendation

- Approval of the proposed resolutions for the following grant agreements:
 - ARV-20-002 FirstElement Fuel, Inc.
 - ARV-20-003 Equilon Enterprises LLC
 - ARV-20-004 Iwatani Corporation of America



Item 7 - Public Comment

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Item 8: Local Ordinance Applications (19-BSTD-06)

December 9, 2020 Business Meeting

Danuta Drozdowicz, Efficiency Specialist
Efficiency Division, Building Standards Office



Benefits to California

Jurisdictions that adopt local ordinances:

- Are living laboratories for a clean energy future
- Reduce state greenhouse gas emissions
- Lead from the grassroots



Overview: The Local Ordinance Approval Process

For local building efficiency standards to be enforceable:

1. Jurisdiction files application with CEC that shows its standards are cost-effective
2. CEC finds that standards reduce energy consumption levels compared to current statewide Energy Code

Staff reviews application to confirm criteria are met, and makes a recommendation based on findings



2019 Energy Code Approved Local Ordinances To Date:

33 Ordinances from 29 Jurisdictions

1. Berkeley
2. Brisbane
3. Burlingame (3)
4. Cupertino
5. Davis (2)
6. Hayward
7. Healdsburg
8. Los Angeles County
9. Los Gatos
10. Marin County
11. Menlo Park
12. Mill Valley
13. Milpitas
14. Mountain View
15. Pacifica
16. Palo Alto
17. Richmond
18. San Anselmo
19. San Francisco (2)
20. San Jose
21. San Luis Obispo
22. San Mateo
23. San Mateo County
24. Santa Monica
25. San Rafael
26. Santa Rosa
27. Saratoga
28. West Hollywood
29. Windsor





Applications Submitted for Approval Today:

City of San Mateo
City of Redwood City
City of East Palo Alto
Town of Los Altos Hills



The City of San Mateo Local Ordinance No. 2020-17 Requires:



- Newly constructed residential and office use buildings to be all-electric with an exception allowed for new multifamily buildings with 100% affordable units
- Mixed fuel multifamily affordable buildings must meet higher efficiency standards than the 2019 Energy Code



The City of Redwood City Local Ordinance No. 2487 Requires:



- Newly constructed building to be all-electric with exceptions allowed for hospitals, laboratories, commercial kitchen equipment, affordable housing where 100% of the units are affordable, and ACUs
- PV systems on all new buildings



The City of East Palo Alto Local Ordinance No. 07-2020 Requires:



- Newly constructed buildings to be all-electric with exceptions allowed for laboratories, emergency operation centers, commercial kitchens, affordable housing projects, and ACUs
- Prewiring for electric appliances where gas appliances are installed
- PV systems on all new buildings



The Town of Los Altos Hills Local Ordinance No. 589 Requires:



- Newly constructed low-rise residential building install heat pump space heating and water heating systems
- Prewiring for electric appliances if gas appliances are installed for cooking and clothes drying



Staff Recommendation

- Staff reviewed application materials from these local jurisdictions
- Staff found, based on the application materials, that the criteria for approval are met
- Staff recommends that these jurisdictions are approved to enforce its local ordinances



Item 8 - Public Comment

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Item 9 - Public Comment

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Item 13 - Public Comment

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In Closed Session

Pursuant Government Code Section 11126

The December 9, 2020 Business Meeting will resume shortly.

We appreciate your patience.