| **DOCKETED** |
|-----------------|-----------------|
| **Docket Number:** | 21-BUSMTG-01 |
| **Project Title:** | Business Meeting Agendas, Transcripts, Minutes, and Public Comments |
| **TN #:** | 237781 |
| **Document Title:** | May 12 2021 Business Meeting Presentation |
| **Description:** | N/A |
| **Filer:** | Dorothy Murimi |
| **Organization:** | California Energy Commission |
| **Submitter Role:** | Public Advisor |
| **Submission Date:** | 5/12/2021 9:23:18 AM |
| **Docketed Date:** | 5/12/2021 |
California Energy Commission
Business Meeting
May 12, 2021
10:00 a.m.
Pledge of Allegiance
CALIFORNIA IS SET TO FULLY REOPEN

JUNE 15

- WEAR A MASK
- GET VACCINATED
Sign up to get notified when it's your turn to get the COVID-19 vaccine.
California Energy Commission’s

SAVE THE DATE
December 2021

Nominations due by:
June 25
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 visit CEC’s Business Meetings webpage:
https://www.energy.ca.gov/proceedings/business-meetings

If Zoom’s toll-free phone numbers don’t work:
• Dial: (669) 900-6833
• Meeting ID: 938-6923-0237

If Zoom shuts down, Business Meeting will continue via Verizon.
• Dial: (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
  - 1 representative 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.

To comment, dial (888) 823-5065. Passcode: business meeting

1) Tell Operator: name, organization and item number.
2) Tell Operator if you represent:
   • federal or state legislature;
   • tribal nation or California tribal government;
   • state agency; or
   • county/city government.
3) Spell your first and last name.
4) Do not use speaker phone when talking.
5) Mute Zoom while calling to comment.

b. Subpoena for Provision of Data. Contact: Christopher McLean

c. Reappoint Two Members to the Disadvantaged Communities Advisory Group (DACAG). Contact: Noemí Gallardo

d. Electricity Demand Forecasts. Contact: Kelvin Ke

e. Electricity Resource Plans. Contact: Robert Kennedy
Item 2: 2020 Diversity Report

May 12, 2021 Business Meeting

Noemí Otilia Osuna Gallardo, Public Advisor
Benefits to All Californians

California Moves to 100% Clean Energy by 2045

- **Today**: 34%
- **2030**: 60%
- **2045**: 100%
"...to optimize fair and equal opportunities for

- small businesses, and women-, disabled veteran-, minority-and LGBT-owned businesses,
- as well as economically disadvantaged and underserved communities,

...to participate in and benefit from [CEC] programs...”

2015 Resolution
Investment Highlights as of 12/31/20

$458 Million Loan Program

$23 Million Tribal Projects
Grant Program Investments

$996 Million
Spent in Disadvantaged Communities
(as of 12/31/20)

- 9 programs
- Active last 5 years
- Started 1980-2018
- Per CalEnviroScreen 3.0
# Investments in Disadvantaged Communities

## Percentage of Funds Spent in Projects Located in DACs

<table>
<thead>
<tr>
<th>Program</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Geothermal Grant &amp; Loan Program</td>
<td>8%</td>
</tr>
<tr>
<td>New Solar Homes Partnership (NSHP)</td>
<td>15%</td>
</tr>
<tr>
<td>Clean Energy Jobs Act, K-12 (Prop 39)</td>
<td>28%</td>
</tr>
<tr>
<td>Renewable Energy for Agriculture Program (REAP)</td>
<td>31%</td>
</tr>
<tr>
<td>Clean Transportation Program (CTP)</td>
<td>32%</td>
</tr>
<tr>
<td>Electric Program Investment Charge Program (EPIC)</td>
<td>33%</td>
</tr>
<tr>
<td>Natural Gas Research &amp; Development Program</td>
<td>40%</td>
</tr>
<tr>
<td>Food Production Investment Program (FP/IP)</td>
<td>72%</td>
</tr>
<tr>
<td>Local Government Challenge (LGC)</td>
<td>77%</td>
</tr>
</tbody>
</table>
Investments Across California

CEC Investments in Disadvantaged Communities

- Investments through December 2020
  - Clean Transportation Program
  - Renewable Energy for Agriculture Program
  - Food Production Investment Program
  - Tribal Government Challenge Planning Grant Program
  - Proposition 39 Program

- Investments through December 2019
  - Geothermal Grant and Loan Program
  - Local Government Challenge Grant
Daniel Johnson
Associate Energy Specialist
Efficiency Division
Local Government Challenge

Investment in DACs

- 77% of funds
- $7.9 Million
- 7 projects
LGC Project Sites

CEC Investments in Disadvantaged Communities

CalEnviroScreen 3.0 Disadvantaged Communities
Investments through December 2019

Local Government Challenge Grant
- Non-DAC
- DAC

[Map showing investments in disadvantaged communities]
LGC Impact

Climate Action Planning Framework

RESOURCES

DATA
- Gateway Cities GHG Inventories and Forecasts
- GHG Emissions Tracker
- Gateway Cities Climate Action Tracking Tool

TOOLKITS
- GHG Reduction Measure Toolkit
- Climate Change Adaptation Toolkit
- Public Engagement Toolkit

GUIDANCE
- CAP Framework User Guide
- Model Climate Action Plan
- CEQA and Target Setting
- Implementation Funding and Financing

Legend
- Gateway Cities Council of Governments
- Gateway Cities Jurisdictions
- Cities
- Unincorporated LA County
For More Details

energy.ca.gov/programs-and-topics/programs/local-government-challenge
Katrina Leni-Konig

Supervisor, Technology Scale-up and Outreach
Energy Research and Development Division, Assistant Tribal Liaison

Food Production Investment Program (FPIP)
Natural Gas Research and Development Program
Electric Program Investment Charge (EPIC)
Tribal Funding
Investment in DACs

• 72% of funds
• $80 Million
• 36 project sites
FPIP Project Sites

CEC Investments in Disadvantaged Communities

CalEnviroScreen 3.0 Disadvantaged Communities
Investments through December 2020
Food Production Investment Program

- Non-DAC
- DAC
FPIP Impact

• Fire destroyed facility in 2016, requiring reconstruction
• Fire left 120 employees without jobs
• Modernizing with energy efficiency upgrades

GHG Reduction
4,966 MT
CO2e/yr

1080 Passenger Vehicles

Third largest baby food manufacturer in the United States—putting your needs first.
Natural Gas Research & Development Program

Investment in DACs

• 40% of demonstration, deployment, and manufacturing funding
• $19 Million for demonstration, deployment, and manufacturing grants
• 27 demonstration sites
Natural Gas R&D Program Impact

Transitioning from Natural Gas Engines to Zero Emissions for Medium to Heavy-Duty Vehicles

Current Project: Assessing On-Road, In-Use Emissions and Fuel Usage

- Provide real-world emissions data
- Ensure NG engines operate as clean as possible during transition
- Inform placement of charging infrastructure and hydrogen fueling stations

The Washington Post

Climate and Environment

Deadly air pollutant ‘disproportionately and systematically’ harms Americans of color, study finds

Black, Latino and Asian Americans face higher levels of exposure to fine particulate matter from traffic, construction and other sources

By Juliet Eilperin and Darryl Fears

April 28, 2021 at 11:00 a.m. PDT
Electric Program Investment Charge (EPIC)

Investments in DACs

- 33% of demonstration funding
- $112 Million for demonstration grants
- 136 demonstration sites
Kim McDermott earned $13,400 in 4 years through energy savings and referrals

“That is life changing and it came at a time when we really needed it” - Kim McDermott
Tribal Funding

Tribal Government Challenge
• $1.9 Million invested
• 8 projects funded

EPIC Tribal Grants
• $21 Million invested
• 7 projects funded
Tribal Government Challenge Grants and EPIC Project Sites
Energy Planning for Kashia Tribal Facilities

- Renewable generation and energy efficiency at the "Kashia Abalone Center"
- Biomass fuel supply and energy production
- Renewable generation and energy efficiency at the Stewarts Point Rancheria
- Establish Tribal Energy Utility for energy sovereignty

Solar array and Hydroturbine powering Atlantic Abalone facility (images from https://thefishsite.com/articles/renewables-power-south-african-abalone-boom)
Larry Rillera
Fuels and Transportation Division
Clean Transportation Program

Investment in DACs

• 32% of funds
• $485 million
• 1,338 projects
Clean Transportation Program Project Sites

CEC Investments in Disadvantaged Communities

CalEnviroScreen 3.0 Disadvantaged Communities
Investments through December 2020
Clean Transportation Program
- Non-DAC
- DAC

Calexico Unified School District

Kern Council of Governments

Better Planning. Better Transportation

ECO-SMART
Clean Transportation Program Impact

IDEAL Communities Partnership
Clean Transportation Program Impact

Zero Emissions Vehicle High School Pilot Program

$2 Million Total Funding
(with augmentation)

28
- 28 High Schools Funded

19
- 19 High Schools Reporting...

1,800
- Students/Year Enrolled in Auto Courses with New EV Curriculum

36
- Faculty (High School and Community College) Trained to Date
Clean Transportation Program Impact

9,000+ Jobs

20,000+ Trainees
Hally Cahsssai
Supervisor
Renewable Energy Division

New Solar Homes Program (NSHP)
Geothermal Grant and Loans Program
Renewable Energy for Agriculture Program (REAP)
New Solar Homes Partnership (NSHP)

**Investment in DACs**
- 15% of funds
- $34 Million
- 11,755 projects

* Data as of 12/31/2020
Variable Incentive Types

- Market Rate: $0.75
- Affordable Housing Rate: $1.85

Program Contributions

- Expanding Solar Adoption
- Solar Resources
- Sector Development
Geothermal Grant and Loan Program

Investment in DAC

- 8% of funds
- 1 project

Source: Dr Thomas Borrmann (2019)
Geothermal Grant and Loan Project Sites

**Highlights**

- Salton Sea Geothermal power plant
- $2.5 million Budget and $2.53 Match Budget
- Lithium extraction from geothermal brine
Geothermal Grant & Loan Program Impact

- California has the most geothermal electricity capacity worldwide
- Lithium extraction from geothermal brine efforts in Salton Sea Area

Source: Janet C. Harvey
Renewable Energy for Agriculture Program (REAP)

Investment in DACs
• 39% of funds
• $3.7 Million
• 16 projects
clean energy opportunities in agriculture

- Invested in highly agricultural counties
- Opportunities supporting low-income communities and individuals
- Experience gained for future program designs
David Velazquez
Energy Commission Specialist
Local Assistance and Financing Office

California Clean Energy Jobs Act: Prop39-K-12 Program
Energy Conservation Assistance Act (ECAA)
Energy Conservation Assistance Act-Education Subaccount (ECAA-ED)

Investment in DACs

- 28% of funds
- $419 Million
- 1,684 projects
Prop-39 K-12 Project Sites
$1.7 billion for energy projects in 7,131 sites
Save nearly $105 million in annual energy costs.
Improved learning environment with better lighting and cleaner air.
Energy efficiency and generation projects in all 58 counties.
Energy Conservation Assistance Act (ECAA)

Zero-interest loans for schools
- 56 total loans
- $73 Million in loans
- Provided to schools throughout CA

Low-interest loans
- 922 total loans
- $472 Million loaned to cities, counties, and other public entities.
- Issued throughout CA
ECAA Impact

- Provide much-needed low-interest loans to communities and schools.
- Cities, counties and schools are prime candidates for implementing energy-efficiency measures that can provide significant cost-savings.
2020 Diversity Report Takeaways

Lessons Learned
• Respond well to current context
• Need more standardized metrics
• Intentionality makes bigger impact

Opportunities to Advance Equity
• Transition to in-person engagement
• Collaborate with peers/stakeholders
• Create task forces for gaps and goals
Thank you!

- Daniel, Katrina, Larry, Hally, David
- Tom Gates
- Travis David, Gabriel Blossom
- Dorothy Murimi, Karina Camacho
- Armand Angulo, Heather Bird
Item 3: Appointment of Committee for CA3 (Vantage) Backup Generating Facility (21-SPPE-01)

May 12, 2021 Business Meeting

Eric Knight, Manager, Siting and Environmental Office
Siting, Transmission, and Environmental Protection Division
CA3 Project Overview

**Data Center:**
1 building (469,482 sq. ft.)

**Backup Generating Facility:**
• 44 2.75-megawatt diesel-fired generators
• 1 generation yard

**Purpose:** Generate 96 megawatts (maximum) of backup electricity *if* prolonged lack of primary electricity supply from Silicon Valley
Power exceeds storage capacity of uninterruptable power supply systems.
Staff Recommendation

Approve proposed order establishing committee to oversee CA3 (Vantage) Backup Generating Facility SPPE proceeding.

May 12, 2021 Business Meeting

RJ Wichert, Mechanical Engineer
Efficiency Division, Building Standards Office
Benefits to Californians

• Expands list of approved nonresidential compliance software
• Simplifies building design and compliance steps
Overview

• Alternative simulation engine

• Meets compliance requirements of ACM manual
Proposed Action

• Approve IES VE Title 24 2019 Version 1.0 as nonresidential alternative calculation method for 2019 Energy Code
Item 5: ECAA Funded Loans for the City of Ferndale and County of Mariposa & One ECAA-Ed Funded Loan for the Ravenswood City School District

May 12, 2021 Business Meeting

Matt Jones
Renewable Energy Division, Local Assistance and Finance Office
Benefits of the ECAA Loans to Californians

- Creates Green Jobs
- Promotes Energy Efficiency & Renewable Generation
- Lowers Utility Bills
City of Ferndale Project Overview

- $203,200 loan
- 1% interest
- LED lighting at 1 city facility
- Rooftop PV at 2 city-owned sites
Mariposa County Project Overview

• $2,838,826 loan
• 1% interest
• LED lighting at 8 county sites
• Carport PV installation at 4 county facilities
Ravenswood Project Overview

- $2,925,948 loan
- 0% interest
- LED at 2 schools
- PV systems at 4 schools
## Project Savings

<table>
<thead>
<tr>
<th>Loan Recipient</th>
<th>Annual Energy Savings</th>
<th>Loan Amount</th>
<th>Annual Cost Savings</th>
</tr>
</thead>
<tbody>
<tr>
<td>City of Ferndale</td>
<td>77,760 kWh</td>
<td>$203,200</td>
<td>$14,827</td>
</tr>
<tr>
<td>County of Mariposa</td>
<td>919,257 kWh</td>
<td>$2,838,826</td>
<td>$190,823</td>
</tr>
<tr>
<td>Ravenswood City School District</td>
<td>823,564 kWh</td>
<td>$2,935,948</td>
<td>$158,279</td>
</tr>
</tbody>
</table>
Staff Recommendation

• Approve agreements
• Adopt staff’s determinations that actions are exempt from CEQA
Item 6: Agreement 600-20-009 with UC Davis for a $125,000 Contract

May 12, 2021 Business Meeting

Miki Crowell, Air Pollution Specialist
Fuels and Transportation Division, Advanced Vehicle Infrastructure Office
Benefits to California

Contribute to Study of Future Hydrogen System

Help Shape Future Policies, Solicitations, and Projects

Advance State towards Air Quality and Climate Change Goals
Overview of Study

- Scope is Role of Vehicles and Infrastructure in a California Hydrogen Transition
  - Vehicle Scenarios
  - Location of Hydrogen Demand and Supply
  - Station Investment Behavior
  - Impact of Demand from Transportation Sector
Staff Recommendation

• Approve agreement
• Adopt staff's recommendation that action is exempt from CEQA
Item 7: Zero-Emission Transit Fleet Infrastructure Deployment (GFO-20-602)

May 12, 2021 Business Meeting

Esther Odufuwa, Energy Commission Specialist I
Fuels and Transportation Division
Advanced Fuels & Vehicle Technologies Office, Freight & Transit Unit
Benefits to California

Enables:

• Reduced emissions
• Large-scale infrastructure demonstrations
• Lessons learned for replicability
• Accelerated process to meet regulations
Project Overview

North County Transit District (ARV-20-013)

- Construct hydrogen fueling station
- Will support up to 50 fuel cell buses
Project Overview

Sunline Transit (ARV-20-014)

- Construct new stand-alone liquid hydrogen station
- Will support up to 96 fuel cell buses
Staff Recommendation

Approve

• Both agreements

Adopt

• Staff’s determination that action is exempt from CEQA
Item 8: Solar Heating, Cooling and Power for Industrial and Commercial Applications (GFO-20-502)

May 12, 2021 Business Meeting

Baldomero Lasam, Mechanical Engineer
Energy Research and Development Division
Energy Generation Research Office
Benefits to Californians

• Reduce natural gas consumption

• Reduce greenhouse gas emissions

• Inform future deployment strategies
California Natural Gas Consumption By End Use

https://www.eia.gov/dnav/ng/NG_CONS_SUM_DCU_SCA_A.htm
Low Cost, High Concentration System for Industrial Cogeneration

• Develop and demonstrate low-cost, reliable and high efficiency system

• Innovative design increases annual power and heat generation

• Reduces dependence on natural gas and power sourced from grid

Figure: Intelligent Mirror Array collector
Staff Recommendation

- Approve grant agreement
- Adopt staff’s determination that project is exempt from CEQA
Item 9: Load Shifting During Critical Summer Hours via Programmable Irrigation (EPC-20-036)

May 12, 2021 Business Meeting

Anish Gautam
Energy Research and Development Division
Energy Efficiency Research Office
Benefits to California

- Lower electricity costs
- Increase grid reliability
- Reduce greenhouse gas emissions
Project Overview

• Enhance technology demonstrated under previous EPIC grant

• **Permanently shift peak irrigation loads (5-8PM) into non-peak hours**

• Deploy on at least **10,000 acres** (PG&E and SCE)

• Shift **7MW**

• $87,368 in match funds

Source: AgMonitor Inc.
Staff Recommendation

- Approve grant agreement
- Adopt staff’s determination that action is exempt from CEQA
Item 10: Bringing Rapid Innovation Development to Green Energy (BRIDGE) 2020 (GFO-20-301)

May 2021 Business Meeting

Michael Ferreira
Energy Deployment & Market Facilitation Office
Energy Research & Development Division
Benefits to California Ratepayers

• Advances clean energy economy
  • Supports clean energy entrepreneurs
  • Speeds up transition from fossil fuels

• Improves grid resilience and reliability
Stasis Energy Group, LLC

Thermal Energy Storage System for Packaged HVAC Systems

- Bio-based phase change material
- 60-75% reduction peak period energy use
- Demonstrations at 10 commercial buildings
Solid-State DC-DC Power Electronics for Grid-Scale Lithium EV Battery Pack Integration

- 2nd life EV batteries used for grid storage
- Can adapt to increasing number of EV models and volumes
- 1 MW demonstration to show energy savings and potential demand charge cost reduction
Staff Recommendation

Approve and adopt staff’s findings that projects are exempt from CEQA.
Item 11: Evaluating Bi-Directional Energy Transfers and Distributed Energy Resource Integration for Medium- and Heavy-Duty Fleet Electrification

May 12, 2021 Business Meeting

Ben Wender
Electric Generation System Specialist
Research and Development Division
Benefits to Californians

• Reduce stress on grid
• Increase use of distributed energy resources
• Reduce charging costs
• Provide site and community resilience
• Maximize emissions reductions
Purpose of Solicitation

EO-N-79-20

100% ZEV sales by 2035

Full transition to ZEV short-haul/drayage trucks by 2035

Full transition to ZEV buses & heavy-duty long-haul trucks by 2045*

Full transition to ZE off-road equipment by 2035* where feasible
MOEV, Inc., Artificial Intelligence Based Heavy-Duty Fleet Charging
Innovative School Bus Charging for Resilient Communities
Staff Recommendation

• Approve grant agreements
• Adopt staff’s determination that projects are exempt from CEQA
Item 12: Food Production Investment Program (GFO-20-307)

May 12, 2021 Business Meeting

Cyrus Ghandi, Electric Generation System Specialist
Energy Research and Development Division
Energy Efficiency Research Office
FPIP Benefits to California

164,000 MT CO2e*
Projected Annual Emissions Reduction

$116M
Awarded

51 Projects
85% in Disadvantaged/ Low-Income Communities

*Preliminary staff estimate – actual results will be quantified during project measurement & verification
<table>
<thead>
<tr>
<th>Government:</th>
<th>Utilities:</th>
<th>Food Producers:</th>
</tr>
</thead>
<tbody>
<tr>
<td>California Air Resources Board</td>
<td>Modesto Irrigation District</td>
<td>Campbell Soup Supply Company</td>
</tr>
<tr>
<td>California Department of Food and</td>
<td>Pacific Gas and Electric</td>
<td>California Dairies</td>
</tr>
<tr>
<td>Agriculture</td>
<td>Sempra Utilities</td>
<td>Foster Farms</td>
</tr>
<tr>
<td>California Energy Commission</td>
<td>Southern California Edison</td>
<td>E&amp;J Gallo</td>
</tr>
<tr>
<td>California Public Utilities</td>
<td>Southern California Gas Company</td>
<td>Hilmar Cheese</td>
</tr>
<tr>
<td>Commission</td>
<td>Turlock Irrigation District</td>
<td>Land O Lakes</td>
</tr>
<tr>
<td>Office of the Governor of California</td>
<td></td>
<td>Morning Star Company</td>
</tr>
<tr>
<td>San Joaquin Valley Air Pollution</td>
<td></td>
<td>Pacific Coast Producers</td>
</tr>
<tr>
<td>Control District</td>
<td></td>
<td>Stanislaus Food Products</td>
</tr>
<tr>
<td>South Coast Air Quality</td>
<td></td>
<td>Company</td>
</tr>
<tr>
<td>Management District</td>
<td></td>
<td>The Wonderful Company</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Researchers:</th>
<th>Trade Organizations:</th>
</tr>
</thead>
<tbody>
<tr>
<td>California Polytechnic State University, San Luis Obispo</td>
<td>California Cotton Ginners and Growers Association</td>
</tr>
<tr>
<td>Lawrence Berkeley National Laboratory</td>
<td>Agricultural Council of California</td>
</tr>
<tr>
<td>University of California, Davis</td>
<td>California League of Food Producers</td>
</tr>
<tr>
<td></td>
<td>West Coast Advisors</td>
</tr>
</tbody>
</table>
14.a Blue Diamond Growers, Sacramento

Install high-efficiency compressed air system upgrades at almond processing facility.
  • Variable frequency drive
  • Advanced controls

Workers inspecting almonds at a Blue Diamond facility.
*Photo credit: Blue Diamond Growers*
14.b Pacific Coast Producers, Woodland

Upgrade compressed air system at tomato processing facility.

- High-efficiency air compressor
- Air dryer
- Receiver tank
- Variable frequency drives
- New control system

Flumes conveying tomatoes at Pacific Coast Producers in Woodland.

*Photo credit: Pacific Coast Producers*
14.c Jessie Lord Bakery, Torrance

Install energy efficient equipment at industrial baking facility boiler economizer.

- Steam traps
- Insulation
- New burners and controls for baking oven
- Low-global warming potential refrigeration system

Jessie Lord Bakery produces a variety of fruit, cream, and seasonal pies.  
*Photo credit: Jessie Lord Bakery*
14.d Baker Commodities, Vernon

Install steam system upgrades at animal feed and biofuels production facility.

- High efficiency boilers
- Insulation on 2 large holding tanks to conserve heat

Baker Commodities produces animal feed supplements, fertilizer, and biodiesel

*Photo credit: Baker Commodities, Inc.*
Install over 200 steam traps at dairy processing facility.

- Capture and drain condensate from steam lines
- Vital part of steam distribution network.

WWF Operating Co. produces various dairy and plant-based food and beverage products for Danone

*Photo Credit: Danone North America*
Retrofit double effect to high efficiency triple effect evaporator at tomato processing facility.

- Increase evaporation capacity
- Increase process efficiency

Tomato harvesting operation

Photo credit: Campbell Soup Company
Install energy efficient equipment at two large wineries.

- New compressor system at Livingston winery
- New low-GWP refrigeration system at St. Helena winery
Sun-Maid Time-Lapse Video
Staff Recommendation

- Approve grant agreements
- Adopt staff’s determination that actions are exempt from CEQA.
Item 13: Local Ordinance Applications (19-BSTD-06)

May 12, 2021 Business Meeting

Danuta Drozdowicz, Efficiency Specialist
Efficiency Division, Building Standards Office
Benefits to California

Jurisdictions that adopt local ordinances:

• Are live laboratories for clean energy future
• Reduce greenhouse gas emissions
• Lead from the grassroots

1 in 3 Californians lives in a community with an energy code exceeding state standards
Overview of Local Ordinance Approval Process

1. File application with CEC showing standards are cost-effective
2. CEC finds standards reduce energy consumption compared to current statewide Energy Code
3. Staff confirms criteria are met; makes recommendation based on findings
Local Ordinances Exceeding 2019 Building Energy Efficiency Standards

<table>
<thead>
<tr>
<th>Number</th>
<th>Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>44</td>
<td>Local energy ordinances adopted by 37 jurisdictions</td>
</tr>
<tr>
<td>21</td>
<td>Require all-electric construction*</td>
</tr>
<tr>
<td>19</td>
<td>Require electric preferred construction</td>
</tr>
<tr>
<td>24</td>
<td>Require additional solar photovoltaics</td>
</tr>
<tr>
<td>23</td>
<td>Require additional EV infrastructure or charging</td>
</tr>
</tbody>
</table>

* May not apply to all building types
## Local Ordinances

<table>
<thead>
<tr>
<th>Jurisdiction</th>
<th>Cost Effective</th>
<th>Energy Reduction</th>
<th>Energy Efficiency or All-Electric Provisions</th>
<th>Exceptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>City of Piedmont</td>
<td>yes</td>
<td>yes</td>
<td>Energy efficiency requirements for low-rise residential retrofits; all-electric for new low-rise residential construction</td>
<td>Retrofit projects with a value less than $25,000</td>
</tr>
<tr>
<td>City of Albany</td>
<td>yes</td>
<td>yes</td>
<td>Newly constructed buildings meet or exceed Energy Design Ratings or Compliance Margins more stringent than Energy Code</td>
<td>Accessory Dwelling Units</td>
</tr>
<tr>
<td>City of San Carlos</td>
<td>yes</td>
<td>yes</td>
<td>Requirements for all-electric new construction and for solar on new nonresidential buildings</td>
<td>Accessory Dwelling Units and applications such as cooking and fireplaces</td>
</tr>
</tbody>
</table>
Staff Recommendation

• Approve jurisdictions to enforce local ordinances