

## Navigating Through a New Administration to Achieve California's Clean Energy Goals

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### California Energy Commission

- California's primary energy policy and planning agency
  - 5 Commissioners appointed by Governor to 5-year staggered terms
- Core Responsibilities:
  - Advance state energy policy
  - Achieve energy efficiency in appliances and buildings
  - License thermal power plants
  - Invest in energy innovation and research
  - Transform transportation
  - Develop renewable energy
  - Prepare for energy emergencies





## California's Clean Energy Goals

- Greenhouse gas emissions:
  - > Reduce to 40% below 1990 levels by 2030
  - > Reduce to 80% below 1990 levels by 2050

- Senate Bill 350 (DeLeón, Chapter 547, Section 2, Statutes of 2015)
  - > Establish targets for statewide energy efficiency savings and demand reduction to achieve doubling of energy efficiency by 2030.



### **Efficiency Division Activities**

- Building Standards
- Appliance Standards
- Energy Efficiency in Existing Buildings
  - Action Plan (AB 758)
- Local Financing & Assistance
  - Clean Energy Jobs Act (Prop 39)
  - Energy Conservation Assistance Act (ECAA)



### **Building Standards**

- All new residential construction in California to be ZNE by 2020.
- All new commercial construction in California to be ZNE by 2030.
- 50% of existing commercial buildings will be retrofit to ZNE by 2030







## 2019 Building Standards

- Beginning workshops on proposals for 2019 standards
- Address lighting, envelope, HVAC, waterheating, and solar
- Minimally affected by federal policies



### **Appliance Efficiency Standards**

### **Development**

- Minimum efficiency levels for both energy and water consumption
- > Other States Often Adopt California's Standards
  - •CA Standards often become de-facto National/International Standards
- Regulations Cover Most Major Residential and Commercial Appliances Sold in CA
- Establishing federal standards as state standards as a backstop in case of federal repeal



## **Appliance Certification, Compliance,** & Enforcement

#### Certification

- Manufacturers certify to the Commission using the online Appliance Efficiency Database System
- 65 unique appliance types; Over 300,000 active listings
- Includes state and federally regulated products

#### > Compliance & Outreach

 Energy Commission conducts webinars and outreach to help manufacturers and retailers attain compliance

#### **Enforcement**

- Identify Violators through Market Surveys, Independent Testing, and Individual Reporting
- Decertify appliances or levy administrative penalty (up to \$2,500 per unit per day)



## Federal Preemption

- States preempted from setting standards for products with federal standards
- States can pick up where DOE left off (e.g., fans & blowers)
- Use incentive programs, Energy Star, etc. to drive sales of products "above code"
- Proliferate state adoption of federal standards
- Work with other entities (CSA, EU) to move forward test procedure & standard development for federally regulated products.
- Require federally covered products to be in California database to help ensure compliance



## **Upcoming Appliance Efficiency Activities**

- > Standards Development:
  - ➤ Pool pump motors, portable electric spas, and test procedures for commercial clothes dryers
  - > Commercial & industrial fans & blowers
  - ➤ General service lamps (expanded scope)
  - > Irrigation equipment (emitters & controllers)
- ➤ Roadmap Development New Approach!
  - > Set-top boxes
  - ➤ Low power modes and power factor
  - > Solar inverters



## AB 802 Whole-Building Data Access, Benchmarking, and Public Disclosure Program



### Statute Requires:

- Utilities to maintain energy use data for all buildings to which they provide service.
  - Utilities to provide energy usage data to a building owner, owner's agent, or operator on request.
    - Energy Commission to create a program to benchmark and publicly disclose energy usage information for certain buildings.



### **Tentative Program Timeline**

Jan. 1, 2016

Utilities begin to maintain records

June 1, 2018\* ➤ Commercial reporting to CEC begins Sep. 1, 2020\*
► Multi-family data publicly disclosed

2017\* Regulations in effect

Jan. 1, 2017

Utilities begin to provide data upon request

Sep. 1, 2019\*

Commercial data publicly disclosed

June 1, 2019\* ► Multi-family reporting to CEC begins

**Bold: Statutory requirements** 

\* Tentative projections



### Approximate Buildings, California

### Commercial

Buildings	382,274
Covered Buildings	382,274
Disclosable Buildings	18,504

### Multi-Family

Properties with >= 5 units	117,259
Properties with >= 17	20,810
units and > 50,000 sf	



### Federal-State Interaction

- ENERGY STAR & WaterSense (U.S. EPA)
  - Portfolio Manager for Benchmarking
  - Basis for Utility Incentive Programs
  - Starting Point for Standards Development

- Data Collection and Analysis
  - Energy Information Administration
  - Lighting Facts, CCMS



### Federal-State Interaction

- Research and Development
  - ARPA-E
  - Buildings Technologies Office
  - Software
- State Energy Program
  - California receives ~\$2.5 million/year for appliance and building standards development and implementation



### California Clean Energy Jobs Act (Proposition 39)



- Provides state grant funding for energy projects in California's Public and Charter Schools and Community Colleges
- Goal is to create clean energy jobs, improve energy efficiency, and expand clean energy generation



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