<table>
<thead>
<tr>
<th><strong>Docket Number:</strong></th>
<th>16-EBP-01</th>
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<tbody>
<tr>
<td><strong>Project Title:</strong></td>
<td>2016 Existing Buildings Energy Efficiency Action Plan</td>
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<tr>
<td><strong>TN #:</strong></td>
<td>214008</td>
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<tr>
<td><strong>Document Title:</strong></td>
<td>2016 Action Plan Update</td>
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<tr>
<td><strong>Description:</strong></td>
<td>Presentation for Action Plan update workshop</td>
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<tr>
<td><strong>Filer:</strong></td>
<td>Cathy Hickman</td>
</tr>
<tr>
<td><strong>Organization:</strong></td>
<td>California Energy Commission</td>
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<tr>
<td><strong>Submitter Role:</strong></td>
<td>Commission Staff</td>
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<tr>
<td><strong>Submission Date:</strong></td>
<td>10/14/2016 1:05:45 PM</td>
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<td><strong>Docketed Date:</strong></td>
<td>10/14/2016</td>
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2016 Action Plan Update

October 17, 2016
California Energy Commission
Housekeeping

- Emergency Exits
- Restrooms
- Snack Bar
- WebEx and Telephone Protocol
<table>
<thead>
<tr>
<th>Agenda</th>
<th>Time</th>
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<tbody>
<tr>
<td>Action Plan Overview and Policy Updates</td>
<td>9:30 AM</td>
</tr>
<tr>
<td>Goal 1 - Government Leadership Changes</td>
<td>10:00 AM</td>
</tr>
<tr>
<td>Public Comment</td>
<td>10:30 AM</td>
</tr>
<tr>
<td>Goal 2 - Data-Driven Decision Making Changes</td>
<td>10:45 AM</td>
</tr>
<tr>
<td>Public Comment</td>
<td>11:00 AM</td>
</tr>
<tr>
<td>Goal 3 - Efficiency Industry Changes</td>
<td>11:15 AM</td>
</tr>
<tr>
<td>Public Comment</td>
<td>11:30 AM</td>
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<tr>
<td>Goal 4 - Consumer Value Changes</td>
<td>11:45 AM</td>
</tr>
<tr>
<td>Public Comment</td>
<td>12:00 PM</td>
</tr>
<tr>
<td>Goal 5 - Efficiency Financing Changes</td>
<td>12:15 PM</td>
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<tr>
<td>Public Comment</td>
<td>12:30 PM</td>
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<tr>
<td>Wrap Up</td>
<td>12:45 PM</td>
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Comment Deadline

- New comment deadline in revised workshop notice:

  5 p.m. on Tuesday, November 1, 2016.
What is the Action Plan?

• Assembly Bill 758 (Skinner, Chapter 470, Statutes 2009) requires the Energy Commission, in collaboration with the California Public Utilities Commission and stakeholders, to develop a comprehensive program to achieve greater energy efficiency in the state’s existing buildings.

• The California Energy Commission adopted the *Existing Buildings Energy Efficiency Action Plan* (EBEE Action Plan) in September 2015. The plan provides a 10-year roadmap to activate market forces and transform California’s existing residential, commercial, and public building stock into high-performing and energy-efficient buildings.
What has Changed?

• The 2016 EBEE Action Plan Update summarizes actions taken over the last year to implement the *Existing Buildings Energy Efficiency Action Plan* (EBEE Action Plan).

• The 2016 EBEE Action Plan Update also summarizes forward-looking changes to energy efficiency strategies in line with new statutory mandates.

• This document does not replace the EBEE Action Plan, which continues to be the principal reference document for the state’s existing building energy efficiency policies, objectives and ongoing initiatives.
Policy Updates

• SB 350 – Requires that by or before January 1, 2017, the Energy Commission adopt an update to the program to achieve a cumulative doubling of statewide energy efficiency savings.

• AB 802 - Establishes a new building energy use benchmarking and public disclosure program for nonresidential and multifamily buildings. It also mandates that “existing conditions baselines” be used where appropriate to determine levels of ratepayer-funded assistance to utility customers.
Policy Updates

• AB 793 - Directs the CPUC to require the IOUs to provide incentives to residential and small to medium business customers for energy management technologies.

• CPUC Amended Decision R.13-11-005 - High opportunity programs or projects, pursuant to AB 802; remaining “Rolling Portfolio Cycle” implementation issues; and interpretation and implementation of AB 802 generally and support for implementation of SB 350.
### Action Plan Implementation Timeline

<table>
<thead>
<tr>
<th>Year</th>
<th>Goal 1</th>
<th>Goal 2</th>
<th>Goal 3</th>
<th>Goal 4</th>
<th>Goal 5</th>
</tr>
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<tbody>
<tr>
<td>2017</td>
<td>Achieve whole-building data access for all nonresidential building owners (S.1.2)</td>
<td>Launch Local Government Challenge grant program (S.1.7)</td>
<td>Establish complementary roles for utility procurement and efficiency program portfolios (S.1.8)</td>
<td>Set targets to double energy efficiency in TA (S.1.9)</td>
<td>Design and launch performance-based efficiency incentive pilots across the state (S.2.1)</td>
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<tr>
<td>2018</td>
<td>Time-certain commercial and multifamily building energy use benchmarking and disclosure program is in place (S.1.2)</td>
<td>Establish standards for smart meter data analytics (S.1.3)</td>
<td>Modify HERS Whole-House assessment protocols (S.1.3)</td>
<td>Establish Benchmarking Data Infrastructure (S.2.1)</td>
<td>Establish existing building energy efficiency baselines at geographic, building type, and vintage levels (S.2.1)</td>
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<td>2019</td>
<td>Simplify and increase compliance with energy efficiency standards for existing buildings (S.1.5)</td>
<td>Establish data collection and forecasting methods to estimate demand and efficiency impacts at more localized levels (S.1.3)</td>
<td>Public-facing energy efficiency savings information is readily available (S.2.1)</td>
<td>Increase energy savings in disadvantaged communities (S.3.1)</td>
<td>Implement industry action plan for workforce inclusion (S.3.3)</td>
</tr>
<tr>
<td>2020</td>
<td>New and enhanced state and national appliance standards provide additional and persistent energy savings (S.1.6)</td>
<td>Utility rate information is available in a standard, electronic format (S.2.1)</td>
<td>Decrease cost of estimating and verifying energy savings (S.3.2)</td>
<td>Statewide public awareness campaign increases demand for energy efficiency (S.4.2)</td>
<td>Robust efficiency financing infrastructure attracts large private capital (S.5.1)</td>
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<tr>
<td>2025</td>
<td>Local governments are demonstrated leaders in energy efficiency and code enforcement (S.1.7)</td>
<td>Behavior programs have expanded scope and market reach (S.2.2)</td>
<td>Make financing widely available for ZNE retrofits (S.3.4)</td>
<td>Energy efficiency in real estate appraisals and green leases are standard practice (S.4.1)</td>
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Goal 1 Government Leadership

- State building leadership to implement the Governor’s energy policy directions
- Division of State Architects’ demonstrations of opportunities to achieve zero net energy (ZNE) in school buildings
- Test beds for AMI data analytics & streamlined audit tools
- Increasing compliance with Building Efficiency Standards
- Advances in Appliance Standards & online appliance marketplaces
Goal 1 Government Leadership (cont.)

- Local government leadership examples
- Local Government Challenge Program
- Energy efficiency procurement
- State policy leadership:
  - Climate change planning
  - Doubling energy efficiency savings
  - CA EE Coordinating Committee
  - CA Technical Forum
  - EE Collaborative
Goal 1 Government Leadership

2018
- Benchmarking and disclosure program
- Standards for smart meter analytics
- HERS Assessment Protocols

2019
- Improve compliance with energy efficiency standards
- Establish data collection and forecasting methods

2017
- Achieve whole-building data access for building owners
- Local Government Challenge grant program
- Establish complementary roles for utility procurement and efficiency programs
- Set targets to double energy efficiency in California

2020
- New and enhanced appliance standards

2025
- Local governments demonstrated leaders in energy efficiency and code enforcement
Government Leadership Discussion
Goal 2 Data-Driven Decision Making

- Actions taken by utilities to provide customers energy usage data and efficiency-related audits and diagnostics
- Kick off work to develop building-specific identifiers for energy use disclosure and other policy-tracking programs
- Kick off work for data collection, organization, and analysis to support energy policy tracking and reporting
Goal 2 Data-Driven Decision Making

2018
- Benchmarking Infrastructure
- Existing building baselines at geographic, building type, and vintage levels

2019
- Public-facing energy efficiency savings information is readily available

2020
- Utility rate information available in a standard format

2025
- Behavior programs have expanded scope and market reach
Data-Driven Decision Making
Discussion
Goal 3 Efficiency Industry

- CPUC decisions to expand the reach of efficiency programs into existing buildings, reduce administrative costs, and spur program innovations
- Efforts to streamline program delivery and expand customer participation
- Normalized metered data to verify realized energy savings
- Workforce alignment
Goal 3 Efficiency Industry

2017
- Design and launch performance-based efficiency incentive pilots
- Skilled and trained workers are engaged in energy efficiency incentive programs

2018
- Reduce transaction costs and increase participation in small and medium commercial building efficiency programs

2019
- Increase energy savings in disadvantaged communities
- Implement industry action plan for workforce inclusion

2020
- Decrease cost of estimating and verifying energy savings

2025
- Make financing widely available for ZNE retrofits
Efficiency Industry Discussion
Goal 4 Consumer Value

- Clean energy-related data in real estate property listings
- Energy Upgrade California
- Statewide public awareness campaign
Goal 4 Consumer Value

2018
- Target ME&O to specific decision makers and leverage all available data and research

2019
- Include energy asset ratings in real estate listings

2020
- Statewide public awareness campaign increases demand for energy efficiency

2025
- Energy efficiency in real estate appraisals and green leases are standard practice
Consumer Value Discussion
Goal 5 Efficiency Financing

- Progress on the California Hub for Energy Efficiency Financing (CHEEF)
- Property Assessed Clean Energy (PACE) financing, and the California Lending for Energy and Environmental Needs (CLEEN) Center
- Plans for an alternative on-bill utility financing program
- Summary of low-income financing programs
Goal 5 Efficiency Financing

2017
- Establish financing priorities and ensure finance products match market trigger points

2019
- Establish efficiency financing through alternative models, such as preferred resource procurements

2020
- Robust efficiency financing infrastructure attracts large private capital
Efficiency Financing Discussion
Written Comment Guidelines

• Provide section and sub-section references.

• Be specific about what is unclear, or what clarification you would like to see.

• Provide an explanation for why you feel specific changes are necessary, referencing sections of the plan update.
Open Comment Period

Submit written comments to Docket No. 16-EBP-01 by 5 p.m. on Tuesday, November 1, 2016.

Go to www.energy.ca.gov/ab758 and click “Submit e-Comment on 16-EBP-01”

For Questions:

Contact
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Laith.younis@energy.ca.gov