SoCalGas and SCE Metric Framework - Update

Energy Efficiency Business Planning – EE Coordinating Committee
August 9, 2016
Overview

- Identify **guiding principles** to develop business plan metrics
- Design metrics to **link** to sector vision and market effects
- Seek input on proposed metric framework approach and metric hypotheticals
Metrics: Guiding Principles

Compliance with regulatory directives

- Portfolio and sector-level metrics
- Leverage prior principles and frameworks from prior metric approaches
- Obtain input from stakeholders and EM&V experts
- No minimum (above zero) or maximum required number of metrics
- Support the CA Long-Term Energy Efficiency Strategic Plan

Lessons learned from past metrics

- Allow for continuous monitoring of metric
- Used and useful by the PA to manage portfolio
- Inform on the progress to achieving desired market effect(s)
- Rely on data currently collected as part of daily program management
- Simple to understand and clear of any subjectivity
- Outcome metrics preferred, but output metrics have high benefit to cost ratio
- Not all metrics have a readily interpretable meaning, context is needed
- Not a replacement for EM&V
Applying the Framework of Indicators
(CPUC, 2011)
### Metrics: Commercial Sector (Hypothetical)

<table>
<thead>
<tr>
<th>Vision</th>
<th>Goals</th>
<th>Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial buildings will be put on a path to zero net energy by 2030 for all new and a substantial proportion of existing buildings. Innovative technologies and enhanced building design and operation practices (HVAC, lighting) will dramatically grow in use in the coming years through a combination of comprehensive whole building programs, technology development, market pull, professional education, and targeted financing and incentives.</td>
<td>1. New construction will increasingly embrace zero net energy performance (including clean, distributed generation), reaching 100% penetration of new construction starts in 2030.</td>
<td>Increase EE adoption levels for commercial customers with high EE potential through efficient outreach and effective offerings.</td>
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<tr>
<td></td>
<td>2. 50% of existing buildings will be equivalent to zero net energy buildings by 2030 through achievement of deep levels of energy efficiency and clean distributed generation.</td>
<td>Support standardization of ZNE definition &amp; eligibility for new construction and retrofitted buildings and increase the levels of ZNE commercial facilities.</td>
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</table>
### Metrics: Desired Market Effect (Hypothetical)

<table>
<thead>
<tr>
<th>Problem Statement</th>
<th>Market Barriers</th>
<th>Interventions/Strategies</th>
<th>Desired Market Effect (ME)</th>
<th>ME Targets</th>
</tr>
</thead>
</table>
| Customers of varied sizes and segments within the commercial sector have different business demands that affect their prioritization of energy efficiency. | • High first cost  
• Split or displaced incentive  
• Organizational practices  
• Diffused market  
• Information or search costs  
• Asymmetric information and opportunism  
• Performance uncertainties | • Partnering  
• Intelligent Outreach  
• Small Business Outreach  
• Strategic Energy Management  
• Customer Incentives  
• Direct Install  
• Midstream EE Equipment  
• Commercial Financing | ME 1: Adoption of EE solutions by participants in commercial segments with untapped EE potential identified by AMI data analytics. | Increase EE savings in commercial sector participants at 10% over baseline. |
| There is builder confusion on how to achieve ZNE in new construction and retrofitting of commercial buildings. | • High first cost  
• Organizational practices  
• Information or search costs  
• Performance uncertainties | • Partnering  
• Intelligent Outreach  
• Small Commercial Outreach  
• Strategic Energy Management  
• Customer Incentives  
• Direct Install  
• Midstream EE Equipment  
• Commercial Financing | ME 2: (AB 793) Small and Medium-sized Business customers (SMB) increase use of EMTs in their businesses. | 20% increase in number of SMBs that use Business Energy Advisor, using a 2015 baseline. |
|                                                                                  |                                                                        |                                                  | ME 3: Realize a significant increase in ZNE buildings across most commercial segments facilitated, in part, by the creation of clear and consistent ZNE definitions and requirements. | 20% increase in participating commercial building stock attain ZNE level status by 2028. |
# Metrics: Commercial (Hypothetical Example)

<table>
<thead>
<tr>
<th>Desired Market Effect (ME)</th>
<th>ME Metric</th>
<th>Baseline</th>
<th>ME Target</th>
<th>Tracking</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ME 1:</strong> Adoption of EE solutions by participants in commercial segments with untapped EE potential identified by AMI data analytics.</td>
<td>EE savings in commercial sector participants</td>
<td>2015 EE Potential Study, 2015 EE Results</td>
<td>Short-term: 5% increase</td>
<td>Long-term: 10% increase</td>
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<tr>
<td><strong>ME 2:</strong> (AB 793) Small and Medium-sized Business customers (SMB) increase use of EMTs in their businesses.</td>
<td>Number of SMBs that use Business Energy Advisor, using a 2015 baseline</td>
<td>2015 EE Program Tracking Data</td>
<td>Short-term: 10% increase</td>
<td>Long-term: 20% increase</td>
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<tr>
<td><strong>ME 3:</strong> Realize a significant increase in ZNE buildings across most commercial segments facilitated, in part, by the creation of clear and consistent ZNE definitions and requirements.</td>
<td>Number participating commercial building stock attaining ZNE level status</td>
<td>2015 EE Results</td>
<td>Short-term: 10% increase</td>
<td>Long-term: 20% increase</td>
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Metric Framework Overview

- PAs continue to work on achieving common framework and format
- Resolution of remaining differences expected
- Engagement of PA and ED EM&V throughout process

Sector-Level Metrics (Not bound to Programs, Interventions, or Strategies)
- Offers portfolio and sector metrics based on desired market effects
- Relies on current market transformation terms and definitions
- Creates direct linkage between sector vision and metrics
- Relies on current program data collected as part of program delivery
- Defines short-term (progress achieved by 2023) and long-term (by 2028)
  - Relies on market surveys to monitor metric progress
  - Assigns number of years to short and long term time periods

Market Effects Metrics: Program, Intervention and Strategies

- Provides metrics at program intervention strategy
- Proposes new terms and definitions (e.g., common vs. statewide metrics)
Questions?