

# SoCalGas AB 793 Implementation

## Coordinating Committee Presentation

7/13/2016



A  Sempra Energy utility

# AB 793 Overview

- » The IOUs have been directed to develop a program no later than January 1, 2017 that provide incentives for customers to acquire energy management technologies. For the following targeted segments:
  - Residential
  - Small and Medium Commercial
  
- » In addition, the IOUs must also develop a plan by September 30, 2016 that would educate these customers about the incentive programs developed

## AB 793 Reference Directives:

717. (a) The commission shall require an electrical or gas corporation to do all of the following:

(1) **Develop a program no later than January 1, 2017, within the electrical or gas corporation's demand-side management programs authorized by the commission, to provide incentives to a residential or small or medium business customer to acquire energy management technology for use in the customer's home or place of business.** The electrical or gas corporation may allow third parties or local governments to apply for incentives on behalf of customers. The electrical or gas corporation shall work with third parties, local governments, and other interested parties in developing the program. The electrical or gas corporation shall establish incentive amounts based on savings estimation and baseline policies adopted by the commission.

717. (a) The commission shall require an electrical or gas corporation to do :

(2) **Develop a plan by September 30, 2016, to educate residential customers and small and medium business customers about the incentive program developed pursuant to paragraph (1).** The commission may require that the plan be integrated into, or coordinated with, any education campaign required by the commission.:

# SoCalGas Approach to AB 793 Implementation

- » SoCalGas recognizes that SB 350 and AB 793 has amplified the need for new and innovative energy efficiency efforts across California. Senate Bill 350 clearly outlines a plan for the state to aggressively incorporate dramatic reductions in greenhouse gases and transition to resources less dependent on carbon emitting resources.
- » SoCalGas believes that energy efficiency in its varied range of applications has the ability to meet tasks outlined by these essential state legislative measures. At the same time we see new demands and requirements from customers for more efficient systems and environmentally friendly solutions.
- » SoCalGas recognizes a paradigm shift is required in the approach to EE programs in order to reach the volume of energy savings contemplated and to meet customer needs. Fulfilling the requirements and meeting customers needs will require innovative approaches, and possibly alterations to existing programs and measures to incorporate more advance technology.

# SoCalGas Key Strategies for Increasing the Participation and Deployment of Current EMT Offerings



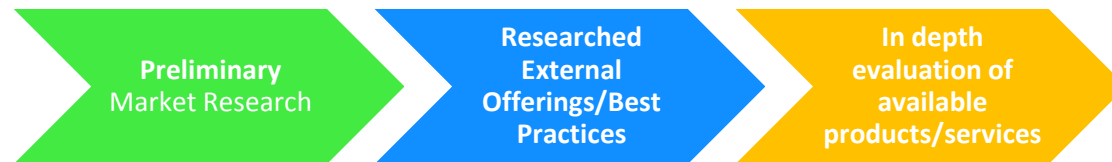
# Existing AB 793 Offerings

- » SoCalGas partnered with SoCal Edison to initiate an AB 793 preliminary offering that would offer incentives for Smart Thermostats
- » In addition, Smart Thermostat Measure amended to the PLA program

Program Name		SCE "Save Power Days" Demand Response
Program Description	Downstream incentive program that provides a deemed rebate amount for customers who install a qualifying smart thermostat.	
Qualifying Products Under SCE "Save Power Days" DR Program	Nest Learning Thermostat WeatherBug Energy Hub	
Incentive process:	Co-fund with SCE. SCG provides a portion of the rebate.	
Marketing Channels	Marketing materials are co-branded with SCE, Nest, WeatherBug and Energy Hub. Both utilities co-develop content. Primary marketing done by SCE to SCE customers. Additional marketing channels include: SCG web site Social media: Facebook/Twitter (sponsored ads) Possible additional marketing support in-store from product manufacturers is considered	
Program Duration	July 6, 2016 through December 31, 2017	

# New EMT Offerings *to be launched by January 1, 2017*

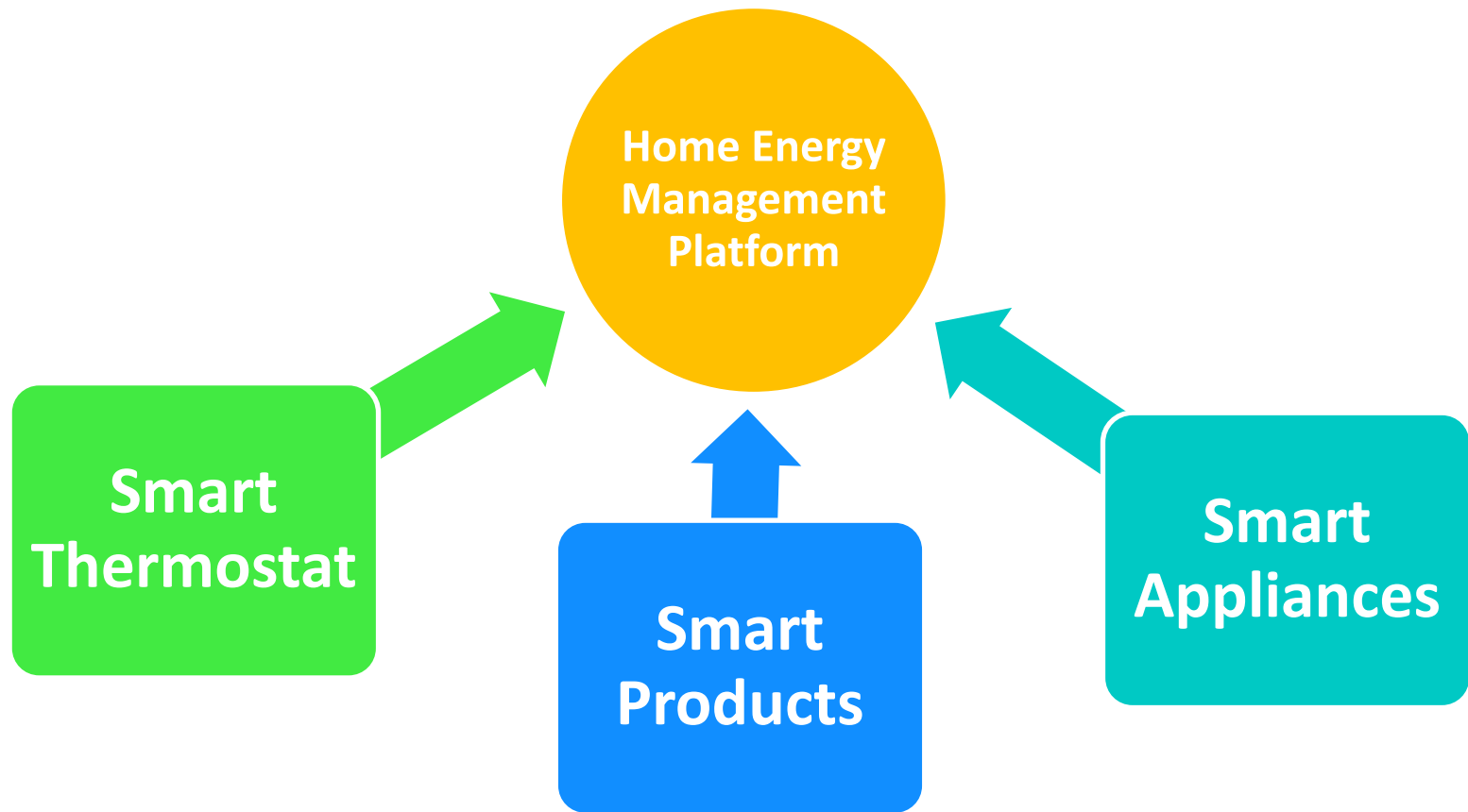
- » Conducted preliminary secondary research on attitudes toward and adoption of energy management system technologies. Identified:
  - Our customers are connected
  - Our customers trust us with their information
  - Our customers are interested in Energy Management Systems
- » Two new programs identified based on an in-depth process analysis:



- » Proposal Benefits
  - Comprehensive Energy Management solutions
  - Encourages multi-measure
  - Encompasses deeper savings incentives

**The goal is to influence our customers to incorporate new innovative Energy Efficiency technologies and to engage customers to manage their energy use**

# SoCalGas Residential/Low Income Recommended Offerings



# AB 793 Residential/Low Income Proposal

Proposal	
Whole Building Residential Energy Management Solution	
<b>Target Market</b>	Single Family Residential and Low Income
<b>Description</b>	A multi-measure that requires the home owner to incorporate at the minimum three categories of smart energy management technologies that encourage both electric/gas savings as well as water savings. In addition, they will need to download a mobile/web application that will allow them to track and monitor their usage. This will assist single family residential customers to incorporate energy management technology while also improving their overall energy usage and awareness thus optimizing their energy and water usage.
<b>Partners</b>	Electric Utilities and Water Districts
<b>EM&amp;V Plan</b>	Yes
<b>Claimed Savings</b>	Deemed
<b>Incentive</b>	<ul style="list-style-type: none"> <li>• Direct Install – Low Income</li> <li>• Deemed Rebate – Residential</li> </ul>
<b>Qualifying Measures</b>	<p><b>ELIGIBLE MEASURES: ( 1 from each category must be chosen + Monitoring app)</b></p> <p><b>Gas</b> Smart Thermostat (Savings Source: Work Paper 2016); Ecovent – HVAC Vents (Savings Source: Work paper mid 2017)</p> <p><b>Water</b> Shower feedback (Savings Source: Work Paper 2016)</p> <p><b>Electric</b> Smart Thermostat (Savings Source: Work Paper 2016) Smart Strips [Savings Source: Work Paper]</p> <p><b>*Energy Monitoring</b> Mobile Application or Web Application - TBD</p>



# SoCalGas Commercial Recommended Offerings

## Small Commercial

Smart Thermostat

Boiler Controller

## Medium Commercial

Energy Management System  
with Key Components

Smart Thermostat

Equipment Controllers

# AB 793 Commercial Proposal

Proposal	
Commercial Energy Management Lodging Program (CEMLP)	
<b>Target Market</b>	Hotels and Motels
<b>Description</b>	A program that will encourage and assist small and medium commercial customers to incorporate energy management technology while also improving their overall building performance with existing measures and optimizing their energy usage.
<b>Partners</b>	Electric Utilities
<b>EM&amp;V Plan</b>	Yes
<b>Claimed Savings</b>	Deemed - Small Commercial (<25k) Metered-Based Approach – Medium Commercial (25k – 50k therms)
<b>Incentive</b>	<u>Small Commercial</u> <ul style="list-style-type: none"> <li>• Direct Install</li> </ul> <u>Medium Commercial</u> <ul style="list-style-type: none"> <li>• % Co-Pay– Energy Management System</li> <li>• Pay for performance: Audit the building, then use the either EMT or EMS system (control set points) to capture savings and incent the customer after 1 year of post.</li> </ul>
<b>Qualifying Measures</b>	1. Energy Management System (Savings Claim Source: No Work Paper but Ex-Post calculation could be utilized based on monthly normalized metered data) 2. Smart Thermostat (Savings Claim Source : Work Paper will exist by Jan 2017) 3. Boiler Controller (Savings Claim Source: Work Paper development in process will be in place Q1 2017)

# SoCalGas Future EMT Offerings

planned for launch after January 1, 2017

## Home Energy Management Platform Technology Integration (Mobile/Web)

- SCG is also looking into mobile-cloud based technology offerings that will help customers make informed decisions about energy usage powered by behind-the-meter data.
  - **Benefits:** capture additional savings, persistence in savings and engages customer to monitor/manage usage

## Three Phased approach in integrating an innovative Energy Management



# AB 793 JOINT IOU MARKETING PLAN

# AB 793 Joint IOU Marketing Plan

## » Goals

- The overarching goal of the AB 793 local ME&O plan is the following:
  - Deliver an optimized, consistent and compelling campaign that focuses on increasing awareness and understanding of the Energy Management System (EMS) technology.
  - To foster engagement and encouraging consideration and adoption through an integrated (owned, earned and paid) approach among key target audiences.

## » Objectives

**Generate Awareness**  
and customer understanding of  
EMS technology and its benefits.

**Communicate**  
EMS benefits in a concise and  
compelling format.

**Foster**  
customer engagement and pique  
interest

# AB 793 Joint IOU Marketing Plan cont.

## » Target Segments

- Residential
- Low Income
- Small and Medium Commercial

## » Timeline

- September 2016 – December 2018

## » Metrics

- EE Measure dependent
- Measure areas such as ease of participation, adoption, influence

## » Partnerships

- Vendors
- Manufactures
- Retail Networks
- Community Based Organizations
- External EE Stakeholders

# SoCalGas Local ME&O Strategies

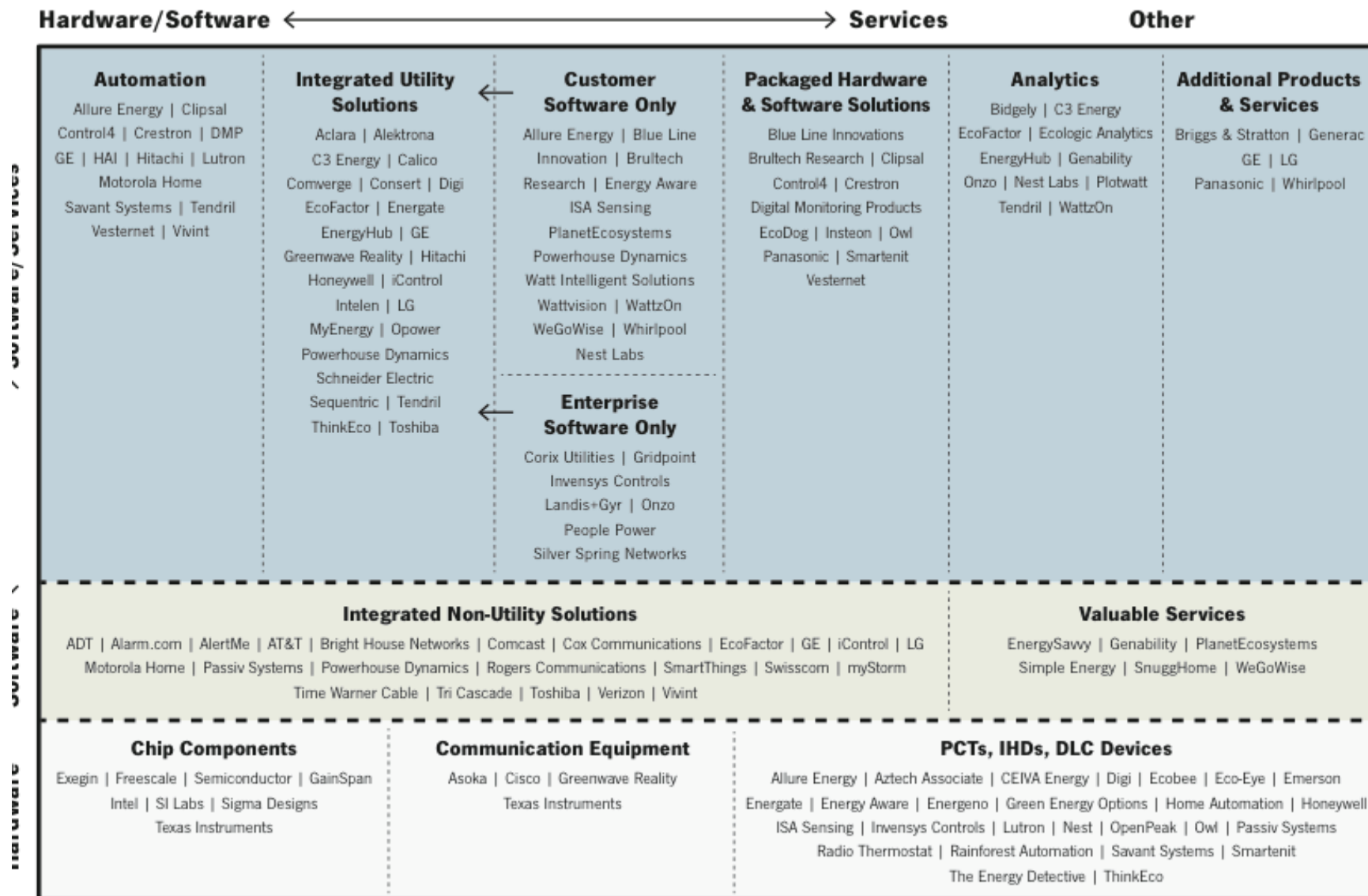
- » Development of a messaging strategy to create an integrated local-level campaign to generate awareness.
- » Development of a Grassroots community outreach strategy for residential and SMB business customers to continue familiarity with EMS and portfolio benefits.
  - Collaboration with Community Based Organizations (CBO)
- » Optimize tactical communications through an integrated owned, earned and paid media approach.
  - Owned media is when you leverage a channel you create and control.
  - Earned media is when customers, the press and the public share your content, speak about your brand via word of mouth, and otherwise discuss your brand.

# Questions



# APPENDIX

# Vendor and Products



# Smart Thermostat

Qualifying Product	<i>Smart Thermostat</i>
<b>Description</b>	Home automation thermostat responsible for controlling a home's heating, and sometimes air conditioning. They allow the user to control the temperature of their home throughout the day using a schedule, such as setting a lower temperature at night
<b>Qualifying Requirements</b>	<ul style="list-style-type: none"> <li>• Scheduling and control through web and mobile applications</li> <li>• Providing data on energy consumption or HVAC status</li> <li>• Automatically installing software updates/upgrades</li> <li>• Customer performance reports</li> <li>• Occupancy sensor or geo-fencing</li> </ul>
<b>Market Costs Range</b>	\$100-\$225
<b>Available Vendors/Manufacturers</b>	Nest (generations 1-3) Ecobee (Smart Si and ecobee3) Honeywell Lyric (WINK)

# Smart Products

<b>Qualifying Product(s)</b>	<i>Residential Water Heater Controller</i>
<b>Description</b>	Add-on or integrated modules provide Wi-Fi connectivity to storage or tank less water heaters. The monitoring systems provide feedback to billing occupants on usage, set point schedules, fault alerts, leak detection, and other information. The controllers can improve efficiency by identifying poor performance and communicating high water consumption or optimizing set point schedules.
<b>Qualifying Requirements</b>	<ul style="list-style-type: none"> <li>• Must allow remote monitoring and control</li> <li>• Have fault detection and diagnostics, including water leakage</li> <li>• Ability to set temperature schedules</li> </ul>
<b>Market Costs Range</b>	\$50-\$60
<b>Available Vendors/Manufacturers</b>	Rinnai WiFi Module Rheem Econet (Works with Rheem only water heaters; work with WINK Hub)

# Smart Appliances

<b>Qualifying Products</b>	<i>Smart Natural Gas Clothes Dryers</i> <i>Smart Natural Gas Full Range Stoves</i>
<b>Description</b>	WiFi enabled appliance that offers usage tracking that help customers be smarter about their energy usage; wirelessly delivering the data straight to your computer, phone, or tablet. In addition, these appliances offer advanced troubleshooting guides and self-diagnosis capabilities designed to make even advanced maintenance a breeze for any user.
<b>Qualifying Requirements</b>	<ul style="list-style-type: none"> <li>• Usage tracking</li> <li>• Remote alerts and controls</li> <li>• Smart Maintenance feature</li> </ul>
<b>Market Costs Range</b>	Full range stove: \$2200-\$3500 Clothes Dryer: \$1099 - \$1300
<b>Available Vendors/Manufacturers</b>	LG Samsung GE

# Energy Management Systems

Qualifying Product(s)	Small/Medium Business Energy Management System
<b>Description</b>	Customer can schedule, control and monitor your water heating, space heating, cooling, lighting and other energy loads either on-site or remotely through the internet-enabled Web application, through wireless devices or mobile smartphone apps; Typically includes touchscreen module, smart thermostat, wireless module, and web application
<b>Qualifying Requirements</b>	<ul style="list-style-type: none"> <li>• Fast and easy installation</li> <li>• Short pay back period typically 24 months;</li> <li>• Must be scalable and customized to customer needs</li> </ul>
<b>Market Costs Range</b>	Small Commercial Building Size- \$500 -1,500 Medium Commercial Building size - \$3,700 - \$7,500
<b>Available Vendors/Manufacturers</b>	Echobee EMS Siemens Echoview EMS Dexen Industries

# Equipment Controllers

Qualifying Product(s)	Boiler Controller
<b>Description</b>	Monitors flow and return and varies the threshold settings and firing cycle in order to achieve genuine energy saving. The return temperature is used to determine when to reduce the boiler setting and when to extend the firing cycle, without affecting comfort levels.
<b>Qualifying Requirements</b>	<ul style="list-style-type: none"> <li>• Wi-Fi Enabled</li> <li>• Communicates with EMS protocols</li> </ul>
<b>Market Costs Range</b>	\$200 - \$1700 (depending on size of boiler unit and controller complexity)
<b>Available Vendors/Manufacturers</b>	Honeywell TekMar Concert