

**Program
Program Implementation Plan Template**

- 1) **Program Name:** 3P-IDEEA365 - Commercial Sustainable Development Program
- 2) **Program ID number:** SCG3795
- 3) **Type of Program:** Third Party
- 4) **Market sector or segment that this Program is designed to serve:**
 - a. Residential
 - i. Including Low Income? Yes No;
 - ii. Including Moderate Income? Yes No.
 - iii. Including or specifically Multifamily buildings Yes No.
 - iv. Including or specifically Rental units? Yes No.
 - b. Commercial (Applicable NAIC Codes: Health Care (622110, 622210, 622310), Assisted Living (623110, 622310, 622310). Restaurants (722511), Hotels (721110, 721120) Community Center (624120), Office (233320, 531120), Schools (611110, 611310))
 - c. Industrial
 - d. Agricultural
- 5) **Is this Program primarily a:**
 - a. Non-resource program Yes No
 - b. Resource acquisition program Yes No
 - c. Market Transformation Program Yes No
- 6) **Indicate the primary intervention strategies:**
 - a. Upstream Yes No
 - b. Midstream Yes No
 - c. Downstream Yes No
 - d. Direct Install Yes No.
 - e. Non Resource Yes No.
- 7) **Projected Program Total Resource Cost (TRC) and Program Administrator Cost (PAC) TRC ___ PAC ___**
Not applicable for Non-Resource Program
- 8) **Projected Program Budget:** See Table 1, below.

Table 1. Projected Program Budget, by Calendar Year¹

Program (\$)	Program Year		
	2013	2014	Total
SCG3795 Admin		\$82,000	\$82,000
SCG3795u Admin		\$2,546	\$2,546
SCG3795 DI Incentive		\$-	\$-
SCG3795 DI Non-Incentive		\$373,170	\$373,170
SCG3795u DI Non-Incentive		\$ 28,535	\$28,535
SCG3795 Marketing		\$16,400	\$16,400
SCG3795u Marketing		\$1,528	\$1,528
Total Budget		\$504,179	\$504,179

9) Program Description, Objectives and Theory

a) **Program Description and Theory:**

The Innovative Design for Energy Efficiency Activities (IDEAA365) solicitation is the process that all four California Investor Owned Utilities (IOUs) are using to enable third-party contractors to propose and operate new energy efficiency programs. The purpose of the process is to identify innovative, new, cost-effective, and unique programs. The process has two tracks: a solicitation round may be either Targeted, or Innovative. The Commercial Sustainable Development program evolved from a Targeted Request for Proposals (RFP) solicitation issued in the third quarter of 2013. The proposals were scored by a cross-functional team who evaluated criteria such as innovation, experience and results, cost-effectiveness, and supply management considerations. The Commercial Sustainable Development was selected to become the third IDEAA365 sub-program contracted by SoCalGas.

The Commercial Sustainable Development Program is a commercial non-resource program focusing on passive and low energy strategies to assist the non-residential commercial market in achieving sustainability, Zero Net Energy (ZNE), and improved thermal comfort. Passive strategies do not require any active system inputs or the addition of conventional energy to operate (heat, cool, ventilate, or light) the building and the site. This approach only uses nature and climate to provide heating, cooling, ventilation, and lighting; therefore satisfying the thermal comfort of occupants. These strategies transfer heat away or into the

¹ Individual utility specific information to be provided in this table

building and site by nature and low energy strategies use the least energy possible while providing equal or better comfort relative to typical conditioned spaces. Expanding beyond off-the-shelf energy efficiency technologies, the program will help to restore the environment by providing technical support to the increase holistic integration of sustainability concepts into building architecture, landscape, water use, microclimate, and urban design.

The Sustainable Commercial Development program objectives are to:

- 1) Implement passive and low energy strategies through technical design as well as policy and educational assistance to SoCalGas commercial rate customers.
- 2) Create white papers, methodologies, and metrics to support inclusion of passive and low energy strategies into new and existing IOU programs in the upcoming program cycles.
- 3) Deliver six committed comprehensive and "shovel ready" sustainable projects within the SoCalGas territory spanning different climate zones. Three will be retrofit projects and three will be new construction projects. The case studies developed from these projects will inform the creation of white papers, methodologies and metrics supporting a resource-based Commercial Sustainable Development Program in upcoming years.
- 4) Create and deliver three workshops on passive design and low energy strategies to educate students and sustainability professionals about the use of such strategies in commercial retrofit and new construction markets.
- 5) Fund and coordinate a research grant for the University of Southern California (USC) to support a research assistant working to implement passive design and low energy research strategies.
- 6) Work with the appropriate utility energy efficiency resource programs to ensure any measurable therm energy savings are recorded.

The Commercial Sustainable Development Program addresses a key gap in the SoCalGas portfolio – sustainability initiatives with a focus on natural gas savings. Sustainability and energy efficiency continue to gain increasing attention in commercial real estate but is still at an early adopter stage. The program will target these early adopters and provide the necessary technical and training resources needed to make their current efforts succeed. Secondly, this program will setup the metrics and procedures necessary for a larger program in upcoming years.

- b) **Program Energy and Demand Objectives:**
Not applicable to this program.

Table 2. Projected Program Net Energy and Demand Impacts, by Calendar Year²: not applicable to this program.

² Individual utility specific information to be provided in this table

	Program Years		
SCG3795 3P- IDEEA365 - Commercial Sustainable Development Program	2013	2014	Total
GWh	NA	NA	NA
Peak MW	NA	NA	NA
Therms (millions)	NA	NA	NA

- c) **Program Non-Energy Objectives:**
Not applicable to this program.
- d) **Cost Effectiveness/Market Need:** This type of program was suggested by the California Public Utilities Commission (CPUC) in Decision 12-05-015. On page 86, in this decision, the CPUC directs the IOUs to redirect additional budget to strategic plan objectives, such as Sustainable Communities programs. The Commercial Sustainable Development Program is one of the programs that will look at sustainability as part of the strategic plan objectives.
- e) **Measure Savings/ Work Papers:**
- Indicate data source for savings estimates for program measures (DEER, custom measures, etc.): Not applicable for this non-resource program.
 - Indicate work paper status for program measures: Not applicable to this non-resource program.

Table 4: **Work paper Status:** not applicable to this program.

#	Workpaper Number/Measure Name	Approved	Pending Approval	Submitted but Awaiting Review
1				
2				
3				
4				
5				
6				

10) Program Implementation Details

- a) **Timelines:** See Table 5, below.

Table 5: **Program Milestones and Timeline**

Milestone	Date
Contract Execution	3/24/2014
Project Kick-off Meeting	4/24/2014
Program Documents Completed	7/1/2014
Implement Marketing	9/1/2014
Provide Design Assistance	9/1/2014 - 11/1/2014
Develop White Papers	11/1/2014 – 12/31/2014
Develop Case Studies	11/1/2014 – 12/31/2014
Develop Workshop Materials	7/1/2014 – 9/30/2014
Deliver Workshops	10/15/2014 – 11/30/2014
Monthly Reports and Invoicing	9/1/2014 – 3/31/2015
CPUC Reporting	9/1/2014 – 3/31/2015
Final Report	12/31/2014

- b) **Geographic Scope:** The program services all of Southern California Gas Company territory. See Table 6 for the geographic regions (e.g., CEC weather zones) where the program will operate.

Table 6: Geographic Regions Where the Program Will Operate

Geographic Region	3P-IDEEA365-Commercial Sustainable Development Program
CEC Climate Zone 1	
CEC Climate Zone 2	
CEC Climate Zone 3	
CEC Climate Zone 4	X
CEC Climate Zone 5	X
CEC Climate Zone 6	X
CEC Climate Zone 7	
CEC Climate Zone 8	X
CEC Climate Zone 9	X
CEC Climate Zone 10	X
CEC Climate Zone 11	
CEC Climate Zone 12	
CEC Climate Zone 13	X
CEC Climate Zone 14	X
CEC Climate Zone 15	X
CEC Climate Zone 16	X

- c) **Program Administration:** For 2013-2014, the program will be implemented by the prime contractor, TRC Energy Services. Subcontractors include, but not be limited to, ASWB Engineering, Brummitt Energy Associates, RNT Architects and Zinner Consultants. See Table 7 below for team roles by program components.

Table 7: Program Administration of Program Components:

Program Name	Program Component	Implemented by IOU Staff? (X = Yes)	Implemented by contractors to be selected by competitive bid process (if Yes then enter type of contractor/other market actor possibly used)	Implemented by contractors NOT selected by competitive bid process (list prime contractor and sub-contractor names)	Implemented by local government or other entity (X = Yes)
SCG3795 3P-IDEEA365 Commercial Sustainable Development Program	PowerPoint program summary and Q&A document		TRC Energy Services		
	Updated Work Plan		TRC Energy Services		
	Program Documents (Agreements, Surveys, etc.)		TRC Energy Services		
	Program Operations Manual		TRC Energy Services		
	Quality Assurance Plan		TRC Energy Services		
	Address & Resolve All Customer Issues		TRC Energy Services		
	Document Retention		TRC Energy Services		
	Program Reporting: Monthly (10), Quarterly (4), Annual (1)		TRC Energy Services		
	Program Data, Invoicing and Reporting Training		TRC Energy Services		
	Invoice and Reporting Tools Set-Up		TRC Energy Services		
	Invoicing		TRC Energy Services		
	CPUC Reporting		TRC Energy Services		
	Shutdown Plan		TRC Energy Services		

	Program Shutdown		TRC Energy Services		
	Draft Program Report		TRC Energy Services		
	Final Program Report		TRC Energy Services		

d) **Program Eligibility Requirements:**

- i. **Customers:** Customers that receive technical assistance and training through this program must be SoCalGas customers and use some natural gas. The focus of this program will be for sites and buildings that are non-residential commercial buildings owned/operated by SoCalGas customers.

Table 8: Customer Eligibility Requirements (Joint Utility Table)

Customer Eligibility Requirement (list of requirements)	PGE	SCE	SDGE	SCG
Commercial Building				x
Active, valid, non-delinquent account				x
Customer must be on GN10 rate				x

- ii. **Contractors/Participants:** Not applicable to this program.

Table 9: Contractor/Participant Eligibility Requirements (Joint Utility Table): Not applicable to this program.

Contractor Eligibility Requirement (list of requirements)	PGE	SCE	SDGE	SCG

e) **Program Partners:**

- i. **Manufacturer/Retailer/Distributor partners:** The program does not incentivize equipment installation and does not have manufacturer, retailer, or distributor partners.

Table 10: Manufacturer/Retailer/Distributor Partners: Not applicable to this program.

Manufacturer/Retailer/Distributor Partner Information	PGE	SCE	SDGE	SCG

- ii. **Other key program partners:** The USC School of Architecture will receive a \$25,000 research grant to conduct research on low-energy and/or passive energy design solutions. USC was chosen as a result of the strong sustainability and environmental background demonstrated by the faculty leading the grant research team.

- f) **Measures and incentive levels:** This section is not applicable since measures and incentives are not part of this non-resource program.

Table 11: Summary Table of Measures, Incentive Levels and Verification Rates:
Not applicable to this program.

Measure Group	Market Actor Receiving Incentive or Rebate	PGE		SCE		SDGE		SCG	
		Incentive Level	Installation Sampling Rate						

- g) **Additional Services:** None in addition to services previously described in section 9 Program Description, Objectives and Theory.

Table 12: Additional Services: Not applicable to this program.

Additional Services that the Sub-Program Will Provide	To Which Market Actors	PGE	SCE	SDGE	SCG

- h) **Program Specific Marketing and Outreach:** The intent of the marketing and outreach is to identify six projects to receive the integrated design assistance. Three of the projects must be retrofits and three must be new construction projects. The recruited projects must also be on schedule to have site and building plans progressing forward by the end of 2014. An additional requirement is to recruit buildings located in varying climate zones within the SoCalGas service territory. For 2014, the team will employ a two-pronged approach to engage and enroll customers.

Method 1: Employ a targeted outreach to known customers consisting of the following activities:

- Leverage databases containing customer and client contacts in SoCalGas' territory for potential projects.
- Evaluate each of the potential projects against participant screening criteria to identify a pool of qualifying customers that have a high probability of successful project implementation.
- Perform direct outreach to the customer pool based on trusted relationships with these customers.

Method 2: Coordinated outreach based on the strategic partnerships noted above. The outreach will extend beyond immediate team and projects identified. It is expected that outreach to partners from prior projects and programs will yield strong customer candidates for this program.

- i) **Program Specific Training:** This section is not applicable to the program.
- j) **Program Software and/or Additional Tools:**
 - i. List all eligible software or similar tools required for Program participation.
None required
 - ii. Indicate if pre and/or post implementation audits will be required for the Program.
Pre-implementation audit required ___ Yes No
Post-implementation audit required ___ Yes No
 - iii. As applicable, indicate levels at which such audits shall be rebated or funded, and to whom such rebates/funding will be provided (i.e. to customer or contractor).

Table 13: Post-implementation Audits: Not applicable to this program.

Levels at Which Program Related Audits Are Rebated or Funded	Who Receives the Rebate/Funding (Customer or Contractor)

NOTE: If software tools are required sub-program participation, and if there is a program related audit for the sub-program, this table shows the levels at which the audit is rebated or funded and to whom such rebates/funding will be provided (i.e., customer or contractor)

- k) **Program Quality Assurance Provisions:**
Program quality assurance will be facilitated through an arrangement whereby the team's local Day-to-Day Project Manager will be available for quick access and to

respond to the SoCalGas Program Manager, program participants, and other members of the project team. The process will include the following:

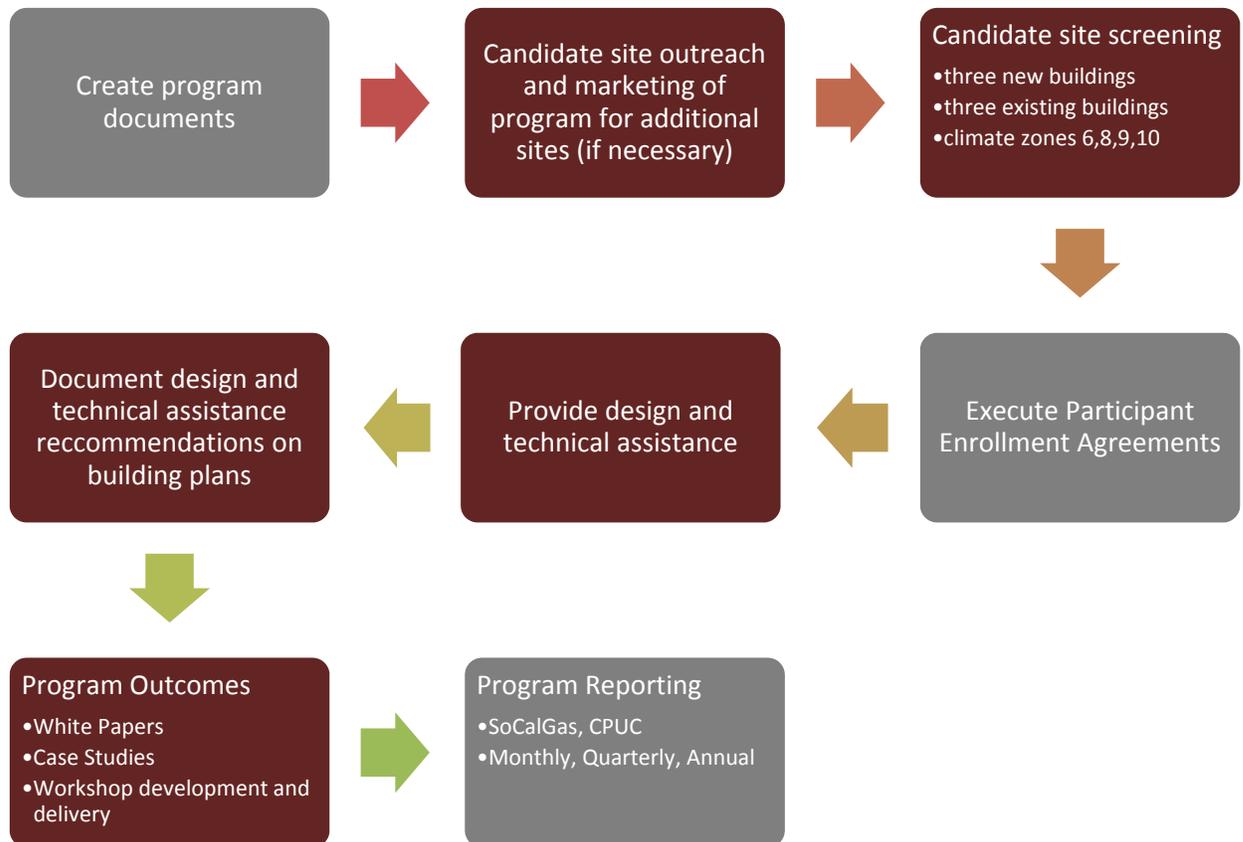
- Key Client Liaison assigned to address problems that cannot be adequately resolved by the Day-to-Day Project Manager
- Multi-Level Technical Reviews by qualified senior team members of all work products and deliverables
- Routine and frequent (minimum monthly) tracking, monitoring, reporting and remedial actions with respect to budgetary and schedule variances
- Establish and maintain protocols for protection of confidential data

Table 14: Quality Assurance Provisions: See above. However, quality assurance is not applicable to measures, since measure installation is not a program outcome.

QA Requirements	QA Sampling Rate (Indicate Pre/Post Sample)	QA Personnel Certification Requirements

- l) **Program Delivery Method and Measure Installation /Marketing or Training:**
The program delivery method is a consultant-based design assistance service provided to participating building design teams. This program does not install energy efficiency measures and does not require measure installation marketing or training.
- m) **Program Process Flow Chart:** See Figure 1 below for the program process flow chart.

Figure 1: Program Process Flow Chart



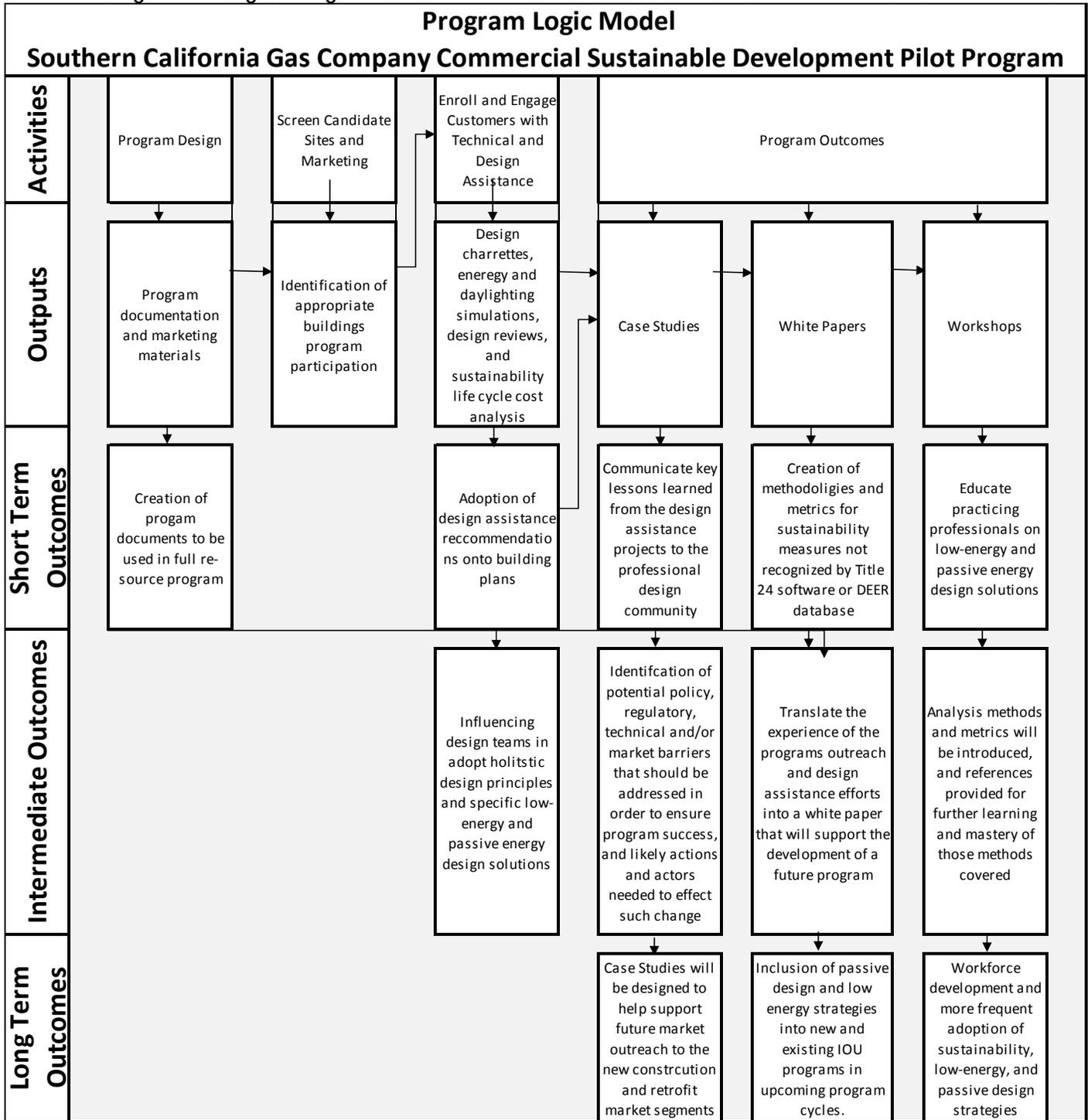
- n) **Cross-cutting Program and Non-IOU Partner Coordination:** The program does not offer incentives directly. Program implementers are anticipated to leverage other SoCalGas incentive programs such as Savings by Design and the Commercial Energy Efficiency Calculated Incentive program.

Table 15: Cross-cutting Program and Non-IOU Partner Coordination:

Sub-Program Name		
Other IOU Sub-program Name	Coordination Mechanism	Expected Frequency
Savings by Design (SBD)	Direct conversations and emails with the SBD program manager and incentive program application support	When each CSDP program customer interest form is submitted, to ensure project is not participating in SBD
Commercial Energy Efficiency Calculated Incentive program.	Project referral to the program manager and incentive program application support	When recommended equipment and solutions are eligible for incentives
Coordination Partners Outside CPUC		

- o) **Logic Model:** see Figure 2 below for the program logic model.

Figure 2: Program Logic Model



11) Additional Program Information

a) **Advancing Strategic Plan Goals and Objectives:** A goal of the Commercial Sustainable Development program is to develop methodologies and metrics to quantify energy savings from sustainability, low-energy, and passive energy measures not recognized by Title 24 or Database for Energy Efficient Resources (DEER)/utility work papers. These metrics will facilitate realization of meeting one of the Big Bold Energy Efficiency Strategies for all new commercial buildings Zero Net Energy requirements by 2030.

b) Integration

i. **Integrated/coordinated Demand Side Management:**

This program focuses on sustainability through implementing passive and low energy design. This program also looks at the water energy nexus, transportation, and reducing GHG.

Key metrics to be considered include:

- Passive Design - Program staff will suggest metrics to account for energy savings from passive design strategies currently not accounted for in DEER or utility workpapers.
- Low Energy Strategies – Program staff will suggest metrics to account for energy savings from low-energy strategies currently not accounted for DEER or utility workpapers.
- Sustainability – Program staff will suggest metrics to claim energy savings from all overarching sustainability concepts - landscaping, transportation, water, greenhouse gas (GHG) reductions - incorporated into design development drawings of participating projects, where applicable.
- Thermal Comfort – Program staff will suggest metrics to analyze and report on thermal comfort impacts of the passive design and low-energy strategies.
- ZNE Metrics - Translation of the California Energy Efficiency Strategic Plan ZNE targets into an actionable framework and identified gaps, barriers, and opportunities, recommended pathways to ZNE, and prioritized research, regulatory, and market needs and next steps. This includes holistic account of building, transportation and water energy use.
- Energy Analysis Tools and Metrics - Energy analysis of projects participating in California IOU energy efficiency programs use Title 24 approved software and the time dependent valuation (TDV) kBtu/sf-yr metric for calculating the percent better than Title 24 metric used for new construction projects. Program staff will develop metrics and methodologies to convert project savings to kBtu for ZNE purposes. This methodology will be based on energy use intensity (EUI) metric instead of

the percent better than Title 24 code used for new construction, or percent better than existing conditions metric used for retrofits.

- GHG Emissions Reduction Calculations - Program staff will use accepted engineering practices, validated protocols, and experienced judgment to review submitted data and complete calculations for anticipated GHG emissions reductions. Methods will include use of tools and resources published by Local Governments for Sustainability (ICLEI) and the Climate Registry, as well as the U.S. EPA's Greenhouse Gas Equivalencies Calculator, as appropriate. Program staff's engineering and climate science experts will review calculations for computing reductions in CO2 equivalents and also to validate the underlying assumptions going into the calculations.
- Water-Energy Nexus Metrics – Program staff will apply knowledge of metrics that convert water savings to embedded energy savings. Program staff will apply awareness of the assumptions behind those conversion metrics and the impact of local water district procurement and distribution practices. Program staff will apply these CPUC developed metrics to the case study projects and to the white paper to be developed.

Table 16: Non-EE Program Information: Not applicable for this is a non-resource program.

Non-EE Sub-Program	Budget	Rationale and General Approach for Integrating Across Resource Types

ii. **Integration across resource types** (energy, water, air quality, etc): The program will develop methodologies for reporting the impact of design assistance on resources such as thermal comfort, water consumption and savings, embedded energy in water use, and emissions reductions.

c) **Leveraging of Resources:**

The program will coordinate with the Savings by Design program and the Commercial Calculated Program for potential owner incentives. Design assistance services will be provided to the customer by either the Commercial Sustainable Development Program or the Savings by Design program, not both. Participants will be able to receive Savings by Design owner incentives if contact with the project team is made first by the Commercial Sustainable Development Program. In this situation, at the conclusion of early design assistance provided to the customer through the Commercial Sustainable Development program, the customer will be transferred to the Savings by Design program for whole building performance based incentives.

d) **Trials/ Pilots:** Not applicable to this program.

- e) **Knowledge Transfer:** Two components of the program will transfer knowledge to market actors; workshops and case studies. The program will fund the creation and delivery of three workshops on passive design and low energy strategies to educate students and sustainability professionals about the use of such strategies in commercial retrofit and new construction markets. Case studies will be developed to communicate key lessons learned from the design assistance projects to the professional design community.

12) **Market Transformation Information:** Not applicable to this program.

13) **Additional information as required by Commission decision or ruling or as needed:**
Not applicable

ATTACHMENT 1

Program Non-Energy Objectives

Not applicable to this program.

For New or Substantially changed programs and sub-programs, provide the following information for Program Non-Energy Objectives and follow the format used for the previous cycle Program Performance Metrics found in Resolution E-4385.

- i. List the primary SMART³ non-energy objectives of the program. These should correspond to key methods identified above to overcome the market barriers, areas of concern or gaps, and to the outputs and short, mid- and long-term non-energy outcomes identified in the logic model requested below.
- ii. For each SMART objective, identify the quantitative targets, direction or percent of change that you hope to achieve during the program cycle.⁴ .
- iii. For each proposed SMART objective, describe any relevant baseline data on current market conditions that you have assembled or plan to assemble and the sources.
- iv. **Quantitative program targets (PPMs):** If not already provided above, indicate estimates of the number of measure units, buildings, etc. projected to be treated by the Program.

Table 3. Quantitative Program Targets (PPMs)

Not applicable to this program

Target	2013	2014

³ A SMART objective is one that is **S**pecific (i.e. quantitative and quantifiable generally, in terms of the results to be achieved), **M**easurable, **A**mbitious, **R**ealistic, and **T**ime-bound. For example, for a vender training component of an innovative commercial program, two SMART mid-term objectives and one long-term objective might be:

- a) During the period 2013-2014, the number of HVAC installers in the SCE service territory who are able to perform quality installations of energy efficient packaged air conditioners will increase by 20%.
- b) During the period 2013-2014, the number of installations of energy efficient packaged air conditions in the SCE service territory that are considered quality installations will increase by 25%.
- c) By 2020, installations of energy efficient packaged air conditions in the SCE service territory that are considered quality installations will increase by 75%.

⁴ Please also add any new program objectives and quantitative targets for statewide programs to the portfolio PPM/MTI reporting template.