ENERGY OFFICE

Energy Office Competitive Demonstration Project Mini-Grants

Technical Project Details

Competitive Demonstration Project Mini-Grants may include installation, replacement, and retrofit of various components. Additional component-specific information is needed for the SCEO to adequately review and consider each application. This document includes worksheet(s), with fillable tables, and relevant questions applicable to some, but not all, types of Project components.

Applicants may use applicable Worksheet(s) as a guide to identify, gather, and provide the details, calculations, and other supplemental information relevant to the proposed Project. The Worksheets are not required for an application nor an exhaustive list but may inform the types of information that the SCEO uses in its technical review.

Separate worksheets are available for each of the following Project components:

- Alternative Fuel Vehicles (includes Electric Vehicles (EV)) – Worksheet #1
- Electric Vehicle Supply Equipment (EVSE) – Worksheet #2
- Lighting – Worksheet #3
- Heating, Ventilation, and Air Conditioning (HVAC) – Worksheet #4
- Smart Thermostat Installation – Worksheet #5
- Building Envelope (windows, doors, insulations, etc.) – Worksheets #6, 7, 8, 9
- Solar Installation – Worksheet #10

Document Instructions:

1) Determine whether the proposed Project(s) include(s) any of the listed Project components.
2) Select and complete only the Worksheet(s), table(s), and associated questions applicable to the relevant components for the proposed Project(s). *For example, an application for a Project to install Smart Thermostats should complete and include the Worksheet for Smart Thermostats.*
3) Complete the existing equipment Worksheets only for replacement or retrofit Projects.
4) Applicants may consult with potential vendors or quote providers to include relevant details for applicable Worksheet(s).
5) Submit completed, applicable Worksheet(s) along with the application. *Include additional pages as necessary.*
6) Provide documentation of the electric and/or gas rate for a proposed Project's organization.

Worksheet #1: Alternative Fuel Vehicle (includes Electric Vehicle (EV))

Worksheet Instructions:

1) Projects for Replacement of an Existing Vehicle, please complete Section 1A and Section 1B.
2) Projects for Proposed Alternative Fuel Vehicle(s), please complete Section 1B and Section 1C.

Section 1A.

Existing Vehicle(s)		
Make and Model of Vehicle	Annual Miles for Vehicle	Vehicle Miles per Gallon (MPG)

Section 1B.

Proposed Alternative Fuel Vehicle(s)			
Make and Model of Vehicle	Annual Miles for Vehicle	Cost (MSRP) $	EV kWh/100miles

Section 1C.

Comparable Gas or Diesel Vehicle(s)*			
Make and Model of Vehicle	Annual Miles for Vehicle	Cost (MSRP) $	MPG

**Comparable vehicle(s) are gas or diesel vehicle(s) that would be purchased if SC EECBG funds were unavailable. This information provides a baseline for cost and efficiency comparison between the vehicles.*

Worksheet #2: Electric Vehicle Supply Equipment (EVSE)

Worksheet Instructions:

For installation of Electric Vehicle Charger(s), complete Sections 2A and 2B.

Section 2A. Number of chargers (individual ports): _____

Electric Vehicle Charger(s)			
Location of Charger	Level of Charger	Charger Output (kW)	Cost per Charge to Customer (e.g., free, flat rate, cost of electricity)

Section 2B. Describe plans for operation and maintenance of EV chargers:

Worksheet #3: Lighting

Worksheet Instructions:

1) For Projects to replace existing light fixtures and/or lamps (bulbs), complete Sections 3A and 3B.

2) For Projects to install new fixtures and/or lamps (bulbs), ONLY complete Section 3B.

Section 3A.

Existing Lighting			
Type of Light Fixtures (e.g., T12, T8, metal halide, incandescent, etc.)	Number of Light Fixtures	Lamp Wattages	Number of Lamps per Fixture for any fluorescent fixtures (typically 2, 3, or 4 lamps)

Section 3B.

Proposed Lighting			
Type of Light Fixtures	Number of Light Fixtures	Lamp Wattages	Number of Lamps per Fixture for any fluorescent fixture (typically 2, 3, or 4 lamps)

Worksheet #4: Heating, Ventilation, and Air Conditioning (HVAC)

Worksheet Instructions:

1) For Project(s) to replace an existing HVAC unit, complete BOTH Sections 4A and 4B.
2) For Project(s) to install a new HVAC unit **and** not replacing, complete ONLY Section 4B.

Section 4A.

Existing Units					
Type of Facility/Facility Use*	Brand/Model of HVAC Unit	Type of HVAC Unit	Size of HVAC Unit	Age of HVAC Unit	Rated Heating and Cooling Capacities of HVAC Unit

**"Type of Facility/Facility Use" may include 'k-12 educational building,' 'office building,' etc.*

Section 4B.

Number of potential new units: _____

Proposed Units					
Type of Facility/Facility Use*	Brand/Model of HVAC Unit	Type of HVAC Unit	Size of HVAC Unit	Total Cost ($) of Unit	Rated Heating and Cooling Capacities of HVAC Unit

**"Type of Facility/Facility Use" may include 'k-12 educational building,' 'office building,' etc.*

Worksheet #5: SMART Thermostat Installation

Worksheet Instructions:

1) For Project(s) to replace an existing Thermostat, complete BOTH Sections 5A and 5B.
2) For Project(s) to install new Smart Thermostat(s), but not replacing, complete ONLY Section 5B.

Section 5A.

Existing Thermostat				
Brand/Model of Thermostat	Type of Facility/Facility Use*	Type of HVAC Unit	Size of HVAC Unit	Rated Cooling and Heating Capacities (HVAC Unit)

**"Type of Facility/Facility Use" may include 'k-12 educational building,' 'office building,' etc.*

Section 5B.

Proposed Thermostat				
Brand/Model of Thermostat	Type of Facility/Facility Use*	Type of HVAC Unit	Size of HVAC Unit	Rated Cooling and Heating Capacities (HVAC Unit)

**"Type of Facility/Facility Use" may include 'k-12 educational building,' 'office building,' etc.*

BUILDING ENVELOPE (WINDOWS, DOORS, INSULATION)

Worksheet #6: Windows

Worksheet Instructions:

For Project(s) to replace windows of existing structures, complete BOTH Sections 6A and 6B.

Section 6A.

Existing Window(s)					
Building address	Square Feet of Window	Direction of Window[+]	Thickness of Window	Single or Double Pane Glass	Covered with Louvered Blinds (Yes or No)

[+] *"Direction of Window" is relative to its respective building(s), indicate as: North (NW, NNW, N, NNE, NE), East (ENE, E, ESE), South (SE, SSE, S, SSW, SW) and West (WSW, W, WNW).*

Section 6B.

Proposed Window(s)					
Building address	Square Feet of Window	Direction of Window[+]	Thickness of Window	Single or Double Pane Glass	Covered with Louvered Blinds (Yes or No)

[+] *"Direction of Window" is relative to its respective building(s), indicate as: North (NW, NNW, N, NNE, NE), East (ENE, E, ESE), South (SE, SSE, S, SSW, SW) and West (WSW, W, WNW).*

BUILDING ENVELOPE (WINDOWS, DOORS, INSULATION) (cont.)

Worksheet #7: Door Weatherization

Worksheet Instructions:

For Project(s) to replace doors, please complete Section 7A.

Section 7A.

Number of door replacements: _____

Door Location	Square Feet of Proposed Door(s)	Length and Width of Weather Stripping	Type of HVAC Unit	Size of HVAC Unit	Rated Heating and Cooling Capacities of HVAC Unit

BUILDING ENVELOPE (WINDOWS, DOORS, INSULATION) (cont.)

Worksheet #8: Ceiling, Wall, Or Floor Insulation

Worksheet Instructions:

For Project(s) to replace insulation of the building envelope of existing structures, complete BOTH Sections 8A and 8B.

Section 8A.

Existing Insulation		
Insulation R-Value	Type of Heating System (gas, electric resistance, heat pump, refrigerated air, or evaporated cooling)	Square Feet of Insulation

Section 8B.

Proposed Insulation		
Insulation R-Value	Type of Heating System (gas, electric resistance, heat pump, refrigerated air, or evaporated cooling)	Square Feet of Insulation

BUILDING ENVELOPE (WINDOWS, DOORS, INSULATION) (cont.)

Worksheet #9: Duct Insulation

Worksheet Instructions:

For Project(s) to replace duct insulation of existing structures, complete BOTH Sections 9A and 9B.

Section 9A.

Existing Duct Insulation				
Unconditioned Duct Location*	Square Footage of Exposed Metal Duct in Unconditioned Space	Heating System	Type of Heating System (gas, electric resistance, or heat pump)	Insulation R-value

** Unconditioned duct locations may include areas such as attics or crawlspaces.*

Section 9B.

Proposed Duct Insulation				
Unconditioned Duct Location*	Square Footage of Exposed Metal Duct in Unconditioned Space	Heating System	Type of Heating System (gas, electric resistance, or heat pump)	Insulation R-value

** Unconditioned duct locations may include areas such as attics or crawlspaces.*

Worksheet #10: Solar Installation:

Worksheet Instructions:

For Project(s) to install solar, please complete Section 10A.

NOTE: Information may be listed in the product specifications for either the panel or inverter.

Section 10A.

Solar Installation							
DC System Size (kW)	Module Type (standard, premium, or thin film)	Array Type		Array Tilt (degrees)	Array Azimuth (degrees)	DC to AC size ratio	Inverter Efficiency
		Tracking (fixed, 1-axis, etc.)	Mounting (ground, roof, etc.)				