

## **Attachment 1: Description of Emission Reduction Measure Form**

Please fill out one form for each emission reduction measure. See instructions in Attachment 2.

**Title: Climate Solutions for Communities (CSC) Program**

**Type of Measure (check all that apply):**

- |   |  |
|---|--|
| <input type="checkbox"/> Direct Regulation  | <input checked="" type="checkbox"/> Market-Based Compliance          |
| <input checked="" type="checkbox"/> Monetary Incentive  | <input type="checkbox"/> Non-Monetary Incentive                      |
| <input checked="" type="checkbox"/> Voluntary   | <input checked="" type="checkbox"/> Alternative Compliance Mechanism |
| <input checked="" type="checkbox"/> Other Describe: <b>Allowance set-aside / Auction Revenue Offtaker</b> |  |

**Responsible Agency: California Air Resources Board, CA State Treasurer's Office, Public Utilities Commission, and California Energy Commission**

**Sector:**

- |   |   |
|---|---|
| <input type="checkbox"/> Transportation   | <input checked="" type="checkbox"/> Electricity Generation  |
| <input type="checkbox"/> Other Industrial | <input type="checkbox"/> Refineries   |
| <input type="checkbox"/> Agriculture      | <input type="checkbox"/> Cement   |
| <input type="checkbox"/> Sequestration    | <input checked="" type="checkbox"/> Other Describe: <b>Commercial / Residential Building Energy Efficiency and Renewable Energy</b> |

**2020 Baseline Emissions Assumed (MMT CO<sub>2</sub>E): Calculated based on Avg 150 Mwh assuming 50,000 square foot building institutional building with 2004 e-grid MMT CO<sub>2</sub>e / year**

**Percent Reduction in 2020: 8 percent**

**Cost-Effectiveness (\$/metric ton CO<sub>2</sub>E) in 2020: \$940 / MMT CO<sub>2</sub>e**

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**Description:** This preliminary analysis assessed the energy and associated emission reductions from reduced energy demand of a 50,000 square foot commercial / multi-family residential building in the state of California. This calculation assumes the installation of efficient air conditioning split systems to address building hotspots, one type of energy efficiency project that could be funded by through public or private investment.

### **Emission Reduction Calculations and Assumptions:**

Baseline energy consumption for a 50,000 square foot building: 150 MWh/year

Percent energy savings from splits: 8%

Cost: \$0.07/square foot

CO<sub>2</sub> emission factor for California (EPA's EGRID database): 0.3175 MT/MWh

**Cost-Effectiveness Calculation and Assumptions:**

10 split units at \$350 / unit

**Implementation Barriers and Ways to Overcome Them:** The effectiveness of using splits will vary greatly with building location, construction, and existing HVAC system. It can be assumed that similar HVAC efficiency retrofits will present similar costs and emission reductions.

**Potential Impact on Criteria and Toxic Pollutants:**

Estimated additional multi-pollutant savings associated with this project are as follows:

SO<sub>2</sub>: 1.5 ton SO<sub>2</sub> / year

NO<sub>x</sub>: 4.0 ton NO<sub>x</sub> / year

Hg: 0.015 lb Hg / year

Name:

For more information on the Climate Solutions for Communities Program, please contact Mary Luévano, Policy and Legislative Affairs Director for Global Green USA, [mluevano@globalgreen.org](mailto:mluevano@globalgreen.org), (310) 581-2700.

For more information on the Pilot Project, contact our regulatory and technical experts, Chris Berendt, [chris.berendt@paceglobal.com](mailto:chris.berendt@paceglobal.com) (703) 818-9100 or, Melissa Ritter, [melissa.ritter@paceglobal.com](mailto:melissa.ritter@paceglobal.com).

For more information on our outreach, education and advocacy efforts please contact our Sacramento representatives, Rafael Aguilera, [Rafael@TheVerdeGroup.org](mailto:Rafael@TheVerdeGroup.org), (916) 752-2929.

Organization: Global Green USA

Phone/e-mail: see above