

**CPRG IMPLEMENTATION GRANTS COMPETITION
COVER PAGE FOR APPLICATION**

APPLICANT INFORMATION

Organization: City of Rapid City

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TYPE OF APPLICATION: Individual Applicant

FUNDING REQUESTED: \$48,075,605

APPLICATION TITLE: Resilient Rapid City: City and Community Partnership Efforts for Reducing GHG Emissions

BRIEF DESCRIPTION OF GHG MEASURES: The City of Rapid City will complete the following:

1. **City-Owned Building and Facility Retrofits:** Retrofitting up to 10 City-owned buildings and facilities, with the goal of reducing GHG emissions by 1,030 metric tons of CO₂ by 2030;
2. **City-Wide LED Lighting Conversion:** Installing energy efficient (LED) lighting at the City's event center, throughout city streets, and at 27 sports fields, with the goal of reducing GHG emissions by 1,630 metric tons of CO₂ by 2030;
3. **School Weatherization:** Partnering with the public K-12 school district to install a geothermal HVAC system and energy efficient (LED) lighting at its most disadvantaged school, with the goal of reducing GHG emissions by 1,846 metric tons of CO₂ by 2030;
4. **Non-Profit Organization Energy Efficiency:** Partnering with between 5-10 local non-profits to complete energy efficient retrofits, with the goal of reducing GHG emissions by 1,300 metric tons of CO₂ by 2030;
5. **Water District Net Zero/Low Energy Study:** Partnering with a regional water district to complete a net zero/low energy study, in preparation for constructing a water pipeline that will use renewable energy sources to reduce GHG emissions;
6. **City Water Reclamation Facility Solar PV Pilot:** Establishing a City-led pilot project with a solar energy farm at the City's Water Reclamation Facility, with the goal of reducing GHG emissions by 379 metric tons of CO₂ by 2030;
7. **SD Mines Solar Pilot:** Partnering with SD Mines to initiate two solar electric pilot projects, with the goal of reducing GHG emissions by 248 metric tons of CO₂ by 2030; and
8. **Solid Waste Methane Gas Conversion:** Completing a methane gas heating and energy conversion project at the City's Solid Waste facility, with the goal of reducing GHG emissions by 2,674 metric tons of CO₂ by 2030.

SECTORS: Identify the sector(s) associated with the GHG reduction measures included in the application:

1. Municipal Buildings
2. Electric Power/Electricity Generation
3. Waste Energy Management

EXPECTED TOTAL CUMULATIVE GHG EMISSIONS REDUCTIONS

Estimated cumulative GHG reductions for 2025-2030 (in metric tons): **9,107 metric tons of CO₂**

Estimated cumulative GHG reductions from 2025-2050 (in metric tons): **209,546 metric tons of CO₂**

LOCATIONS: List the primary location(s) where the proposed measures will be implemented:

City: Rapid City

State: South Dakota

APPLICABLE PRIORITY CLIMATE ACTION PLAN(S) ON WHICH MEASURE ARE BASED

PCAP Lead Organization: City of Rapid City

PCAP Title: Rapid City Community Climate Resiliency Plan: A Priority Climate Action Plan for Reducing Greenhouse Gas (GHG) Emissions and Improving Climate Resiliency

PCAP Website Link: [Rapid City's Community Climate Resiliency Plan](#)

LIST OF GHG REDUCTION MEASURES AND PCAP PAGE REFERENCES FOR EACH MEASURE:

1. Low-Emission City Facilities and Schools (Section 6.1, pages 69-75)
 - a. Municipal retrofits
 - b. School weatherization
 - c. Zero-emissions water system pipeline
 - d. Non-profit organization building retrofits
2. Renewable Rapid City (Section 6.2, pages 76-81)
 - a. Solar photovoltaic (PV) pilot projects
3. Low Waste Rapid City (Section 6.3, pages 82-87)
 - a. Landfill gas capture