

## Cover Page

### Applicant Information

- City of Broken Arrow (Oklahoma)
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**Type of Application:** Individual Application

**Funding Requested:** \$23,889,821

**Application Title:** Broken Arrow GHG Reduction Project

### Brief Description of GHG Measures:

#### **Measure 1 – Renewable Energy at the Wastewater and Water Treatment Plants with Microgrid at the**

**Water Treatment Plant:** This comprehensive measure includes installing ground mounted solar PV panels at the wastewater reclamation plant, installing solar PV panels on the surface of one of the city water treatment ponds, and integrating microgrid capabilities for enhanced energy resilience and management at the water treatment plant. This measure aligns with the CPRG's eligible project categories of **Waste, Water, and Sustainable Materials Management Sector:** Installation of renewable energy and energy efficiency measures: Relevant PCAP Citation - State of Oklahoma PCAP Page 12

**Measure 2 – Renewable Energy Implementation on Municipal Buildings:** This measure involves the installation of solar PV panels on various municipal buildings to harness solar energy efficiently. This aligns with the CPRG's eligible project category of **Electric Power Sector:** Installation of renewable energy and energy storage systems on municipal facilities: Relevant PCAP Citation - State of Oklahoma PCAP Page 12

**Measure 3 – City-wide LED Lighting Upgrades:** This measure includes installing efficient LED lighting in municipal buildings including the water and wastewater plants throughout the city. This measure **aligns with the CPRG's eligible project categories of Buildings Sector:** Implementation of a building energy performance management program for government-owned buildings: Relevant PCAP Citation - State of Oklahoma PCAP Page 12

**Measure 4 – Implementation of Building Automation Program:** This comprehensive measure includes installing Building Automation Systems (BAS) in the largest and most energy intensive buildings in the city. This measure **aligns with the CPRG's eligible project categories of Buildings Sector:** Implementation of a building energy performance management program for government-owned buildings, and **Buildings Sector:** Implementation of a new benchmarking and building performance standard.

**Link to the Relevant PCAP Citation** - State of Oklahoma PCAP Page 12 of the page numbers or Page 22 of the PDF: [Oklahoma's Priority Action Plan](#)

**Expected Total Cumulative GHG Emission Reductions:** Overall the combined annual energy savings from the measures are 8,460,876 kWh and 10,699 therms of natural gas; GHG reductions for all measures combined results in reductions of 5968 Metric Tons of CO2 annually.

**Location(s):** All measures would be implemented within the city limits of Broken Arrow, Oklahoma. Water Treatment Plant (Solar and Microgrid); Wastewater Treatment Plant (Solar); ~ Municipal Buildings (LED Upgrades and Building Automation Program)