

# **Climate, Energy, and Resilience Solutions for the City of Boise, Idaho**

## **Workplan**

### **1. OVERALL PROJECT SUMMARY AND APPROACH**

#### **a. Description of GHG Reduction Measures**

The City of Boise seeks funding to implement GHG reduction measures included in the Gem State Air Quality Initiative's Priority Plan (PCAP). Boise is requesting \$9,137,657.47 to implement the following measures, which will result in significant GHG reductions by 2030 and beyond. The measures for which we are requesting funding align with the EPA Goal 1, "Tackle the Climate Crisis"; Objective 1.1, "Reduce Emissions that Cause Climate Change.

1. Municipal Building Electrification
2. Geothermal Heating Expansion
3. Shade Tree Planting for Energy Savings
4. Solar Energy Deployment
5. EV Municipal Fleet

All GHG reduction measures included in this application meet EPA's evaluation criteria. In the description of the individual GHG reduction measures below, the City demonstrates: GHG reductions, co-benefits of reduced HAP emissions, robust risk mitigation strategies, reasonable timelines, clear milestones, and direct implementation experience.

#### **1. Municipal Building Electrification**

The City of Boise will reduce natural gas consumption at municipal facilities through comprehensive building electrification retrofit projects. The City proposes to electrify at least 5 facilities, avoiding more than 8,700 MT GHGe through 2050. This GHG reduction measure is aligned with the IDEQ GSAQI Priority Plan (PCAP) Measure 4.2.1 increasing energy efficiency through building electrification. This measure is also aligned with the city's operational GHG emissions with more than a third of the City's GHG emissions coming from energy used across its building portfolio. The proposed building electrification work ties directly to EPA's CPRG goals. The City will prioritize buildings with high natural gas use for electrification retrofits with high-efficiency heat pumps and other all-electric technologies, significantly reducing GHG, NOx, CO, and SO2 emissions, and demonstrating a replicable, scalable building decarbonization program for other governments and building operators. The City will also prioritize municipal building electrification in EPA identified low-income and disadvantaged census tracts.

The first year of measure implementation will focus on facility prioritization, identification of electrical service needs in partnership with our electric utility, and detailed design work. The key milestone in year one will be 100% completed design documents for electrification retrofit projects. Years two – five will focus on project delivery and implementation. Contractors will be selected through competitive procurement

processes to complete electrification measures. Any required electrical service upgrades will be coordinated with and carried out by our electric utility and are included in this measure's budget. Where feasible, necessary HVAC equipment and electrical service infrastructure will be procured as early as possible to mitigate the potential impact of supply chain disruptions or equipment availability. The City will mitigate risk through detailed design and cost estimating but the measure scope could be impacted by unpredictable changes in the HVAC or general construction markets. Additionally, emissions reduction potential for this measure relies on continued reductions in electricity grid emissions intensity. The City will evaluate opportunities to procure clean electricity to mitigate this risk and potentially increase associated emission reductions.

The City proposes to complete the municipal building electrification measure independently, outside of a coalition. The City Facilities Project Management and Facilities Service Operations teams will lead measure delivery, supported by the Climate Action Division, Department of Finance and Administration, and Planning and Development Services.

## 2. Geothermal Heating Expansion

The City of Boise owns and operates the nation's largest geothermal heating district utility (geothermal system). The geothermal system, which has been operating since 1983, provides clean, affordable, zero-emission heating to 96 buildings and more than 6.5 million square feet of space in the heart of the city. Boise geothermal customers include the Downtown Boise YMCA, Boise High School, Boise State University, St. Lukes Health Care System, and dozens of locally owned businesses. The geothermal system serves downtown Boise, including Climate and Economic Justice Screening Tool (CEJST) identified disadvantaged census tracts 160010010021 and 160010009022.

The City proposes to increase the capacity of its geothermal system and connect additional buildings to the geothermal system, providing zero-emissions heating and hot water heating, avoiding more than 15,000 MT GHGe emissions. The City will prioritize deployment of geothermal heating in a new multi-family affordable housing project in an EPA-identified disadvantaged census tract. This measure is aligned with the IDEQ GSAQI Priority Plan (PCAP) measure 4.4.2 support the adoption of geothermal as a heat source. Eliminating emissions from natural gas space and water heating aligns with EPA's CPRG goals, significantly reducing GHG, NOx, CO, and SO2 emissions, and demonstrating a replicable, scalable building decarbonization program for other local governments and building operators in communities with or considering networked geothermal systems.

The first year of measure implementation will focus on prioritizing and selecting building connections and detailed design work. The key milestone in year one will be 100% completed design documents for geothermal line extension and building HVAC systems. Years two – five will focus on project delivery and implementation. Contractors will be selected through competitive procurement processes to complete proposed geothermal measures. Where feasible, necessary HVAC equipment and geothermal

line materials will be procured as early as possible to mitigate the potential impact of supply chain disruptions or equipment availability. The City will also mitigate cost risks through detailed design and cost estimating but the measure scope could be impacted by unpredictable changes in the HVAC or general construction markets.

### 3. Shade Tree Planting for Energy Savings

The proposed project will expand the capacity of the City of Boise to broaden community engagement in urban forest planning, increase equitable access to urban tree canopy, and improve the resilience of the local urban forest to the effects of climate change. This GHG reduction measure is aligned with the IDEQ GSAQI Priority Plan (PCAP) measure 4.3.3 as it provides a vehicle for carbon sequestration, GHG emission avoidance, and reduction of harmful air pollutants such as NO<sub>x</sub>, O<sub>3</sub>, SO<sub>2</sub>, and particulates. All activities performed under this measure will be completed through an environmental justice lens. Using recent data gathered through a local Tree Canopy Assessment, targeted outreach will be performed to engage regions of Boise most in need of increased tree canopy.

To accomplish the primary objectives of this measure the City will i.) contract the development of an updated City-wide Urban Forest Master Plan, ii.) provide a subaward to the Treasure Valley Canopy Network (TVCN), who will partner with neighborhoods across the city to increase the pace, scale and impact of residential and commercial tree planting and maintenance programs in Boise, and iii.) augment existing programs for planting and maintenance of publicly owned trees. Because programmatic routes and community partnerships already exist in Boise for public and private tree planting and maintenance through our existing partnership with TVCN, these actions will be implemented throughout all five funding years. For the updated urban forest master plan, year one of funding will focus on developing an outreach strategy, stakeholder recruitment, and contracting. Years two through five will focus on stakeholder engagement and completion of the master plan.

### 4. Solar Energy Deployment

To reduce emissions from building electricity consumption at municipal facilities and in community buildings, the City proposes to use CPRG funding to develop 550kW of distributed solar energy, resulting in a reduction of 2,270 MT GHGe reduction. At municipal facilities, the City will prioritize solar deployment at city-owned affordable housing and facilities in EPA-identified disadvantaged census tracts, increasing community resilience to heat-related climate risks. The City also proposes to fund 70% of the cost of solar deployment at community-based organizations, reducing energy costs, increasing resilience, and creating workforce development opportunities through a participant support cost model. Funding provided to community-based organizations to install solar at their facilities will be allocated using a competitive process, prioritizing organizations located and/or serving EPA-identified disadvantaged census. In both approaches, this measure is aligned with the IDEQ GSAQI Priority Plan (PCAP) measure 4.4.1 support the adoption of solar energy. This measure, in alignment with EPA CPRG goals, will achieve significant cumulative GHG reductions by 2030 and 2050, is scalable within and beyond our community.

The first year of measure implementation at municipal government facilities will focus on final selection of municipal facilities, detailed design work, and solar deployment. The key milestones in year one will be 100% completed design documents for solar projects, permit approval, and solar capacity installed. Years two – five will focus on project delivery and implementation. Contractors will be selected through competitive procurement processes to complete electrification measures. Where feasible, necessary electrical equipment will be procured as early as possible to mitigate the potential impact of supply chain disruptions or equipment availability. The City will mitigate risk through detailed design and cost estimating but the measure scope and GHG reductions could be impacted by unpredictable changes in solar panel availability or general construction markets.

The first year of measure implementation for community-based organization solar incentives will focus on community engagement and outreach, formalizing an application process for the participant support cost incentive, and solar installer engagement. The key milestone in year one will be the availability of the incentive application and selected community-based organization solar projects. Years two - five will focus on project delivery, implementation and continued community engagement. The key milestone for this measure will be solar capacity installed.

#### 5. Municipal Fleet Electrification

The City will reduce emissions from its fleet by replacing existing gasoline fueled vehicles with CPRG funded electric vehicles. The City proposes to replace 32 of its highest fuel-use fleet vehicles with zero-tailpipe emission electric vehicles. This measure is estimated to reduce 180 MT GHGe by 2030 and 2,189 MT GHGe by 2050. Our on-road fleet vehicles travel throughout the city presenting an opportunity to reduce negative impacts on air quality in EPA-identified low-income and disadvantaged communities. Vehicle electrification is also scalable within our own fleet, replicable by other community fleet owners, and reduces CAP/HAPs within LIDAC communities, in alignment with EPA CPRG goals. The municipal fleet electrification measure is consistent with IDEQ PCAP measure 4.5.2; support the transition to sustainable cleaner fuels. This measure was also included as a priority measure because transportation emissions are the second largest source of GHGs in our community.

Year one of measure implementation will focus on final selection of vehicles to be replaced, ensuring sufficient charging infrastructure is available at all facilities hosting vehicles, and scheduling vehicle ordering from qualified manufactures. We anticipate placing orders for vehicles in year one – three, taking delivery in years one – five, to ensure any risk of delays or supply chain disruptions are mitigated to the extent practicable. Estimated GHG reductions rely on the vehicles being driven by City staff in the same situations as the replaced gasoline powered vehicles. The City will leverage its recent experience deploying electric vehicles in its fleet to ensure end-users are trained on the operation of electric vehicles, the vehicles are appropriate for the use case, ideally enhancing operational functionality, and that the vehicles are well-maintained to ensure GHG reduction savings are achieved.

## **b. Demonstration of Funding Need**

### **1. Municipal Building Electrification**

The City owns and operates more than 100 facilities that use natural gas and does not currently have the funding in our capital budget to reduce building emissions at the pace or scale necessary to meet the GHG reductions necessary in the built environment. The current cost premium compared to like-for-like natural gas fired equipment can be 200-300% when including the electrical upgrades and higher equipment costs needed to complete electrification retrofits. The City is also constrained in its ability to borrow or enter multi-year energy performance savings contracts that have been leveraged in other communities to accelerate building electrification. The City will continue to seek local, federal, and private funding to support this measure implementation to electrify additional facilities.

### **2. Geothermal Heating Expansion**

The City's geothermal system is self-funded through affordable rates paid by its utility customers (buildings that use geothermal). It is challenging for the City to use this limited funding for system expansion with the high level of necessary maintenance and replacement expenses annually. Federal funding has been crucial in the past to Boise's geothermal system, both to fund initial creation of the geothermal system in the early 1980's and to support geothermal system expansion to Boise State University through Department of Energy (DOE) Funding Agreement DE-EE0000318 in the amount of \$2.4M. The City recently applied for the Community Geothermal Heating and Cooling Design and Deployment Program but was not selected by DOE and continues to seek federal funding to support the geothermal system.

### **3. Shade Trees for Energy Savings**

The City manages over 40,000 public trees with a 10-person crew and a budget of approximately \$600,000 in annual contracting for tree care. It is estimated that, to fully meet the maintenance needs of Boise's public trees alone, an additional \$600,000 in contracting would be required, or an equivalent increase in staffing. There is no current funding source for updating the existing Urban Forestry Management Plan, and despite annual funding contribution to programs promoting tree planting on private property there remain significant disparity in tree equity across the city. In 2023 the City participated in a regional grant application to the U.S. Forest Service to support many of these needs, however, that proposal was not selected for funding. To build capacity of the urban forest to provide energy saving benefits to Boise residents, a significant investment will need to be made, to not only plant trees but ensure planning and maintenance to ensure their long-term health.

### **4. Solar Energy Deployment**

Costs for distributed solar energy have declined significantly in recent years but the City is still typically unable to fund solar deployment with current resources. Adding solar to existing municipal facilities and community-based organizations, as proposed here,

remains cost-prohibitive due to high up-front costs and the city's limited capital funding, despite the long-term energy savings and GHG reduction benefits. There are currently no utility or state-funded incentives or grant programs in Idaho that can support this measure at for the City of Boise or community-based organizations. The City proposes to incorporate the elective pay provision of the Section 48 Investment Tax Credit when evaluating solar installations at community-based organization facilities to ensure CPRG funds go as far as possible. The City also provided a letter of support for a coalition application in EPA's Solar for All Funding program that would, if funded, focus primarily on a different sector, deploying residential solar in Idaho.

#### 5. Municipal Fleet Electrification

The City owns and operates more than 700 fleet vehicles that use gas and does not currently have the funding in our capital budget to reduce vehicle emissions at the pace or scale necessary to achieve GHG reductions in the transportation sector. The current cost premium compared to electric vehicles can be significant, particularly when including the electrical upgrades and charging infrastructure to deploy electric vehicles. The City continues to optimize our fleet, ensuring we only have the required number of vehicles to complete our work while also serving a growing city. We plan to fund 100% of vehicle costs in this measure but will also identify any available City funding that would allow use of the Commercial Clean Vehicle Tax credit, increasing the number of vehicles purchased and impact of the GHG reduction measure.

### **c. Transformative Impact**

#### 1. Municipal Building Electrification

The City leading by example in government buildings has the opportunity to spur additional commercial building electrification market transformation in our region. To date, commercial building electrification is still not a common retrofit practice and typically has higher upfront costs when compared to replacement of natural gas fueled equipment. This funding will encourage additional engagement with contractors, designers, and HVAC professionals on the benefits of building electrification. In the City's own building portfolio, CPRG funded building electrification will build knowledge, comfort, and expertise with all-electric building retrofits and operation, allowing the City to electrify additional facilities.

#### 2. Geothermal Heating Expansion

Beyond the proposed building connections to the geothermal system in this application, the increased system capacity and newly extended lines will create opportunities for additional significant GHG reductions with anticipated development in the geothermal heating service area. Direct use geothermal heating is a unique decarbonization solution, avoiding increasing strain on the electrical grid while also promoting local energy resilience. Lessons learned from the City's operation, modernization, and expansion of the geothermal system can support other communities piloting geothermal heating and cooling districts.

#### 3. Shade Trees for Energy Savings

Boise has seen increased investment in urban tree canopy over the past four years. Much of this investment has been focused on tree planting. Funding is now needed to accelerate planting and implement planning and maintenance structures to complement those plantings. With the ability to plan for, plant and grow trees equitably across the city, Boise will enhance the resilience of neighborhoods most vulnerable to climate change while contributing to overall carbon reduction through biological sequestration and avoidance through the shading of structures and the alleviation of heat island effects. Additional benefits include the reduction of common air pollutants such as NOx, SO2, and particulates, as well as reduced stormwater runoff, and myriad social, economic, public health, and biodiversity benefits. With appropriate funding this project will engage the community in urban forest planning, increase equitable access to urban tree canopy, and improve the resilience of the urban forest to climate change effects.

#### 4. Solar Energy Deployment

Increasing solar energy capacity across the community has the potential to increase local climate resilience and increase the awareness of and engagement in local energy issues. Distributed solar resources on high traffic and visible community facilities, both within local government and community-based organizations, will increase awareness of solar and could encourage additional adoption by residents and local businesses. Recent research led by Lawrence Berkley National Lab showed "that non-residential systems exert a continuous, long-term influence on residential adoption decisions". <https://www.frontiersin.org/articles/10.3389/fsuep.2023.1203517/full> .

#### 5. Municipal Fleet Electrification

Current electric vehicle adoption rates in Idaho are among the lowest across the country with less than 0.5% of market share.

<https://afdc.energy.gov/transatlas/#/?view=percent&state=ID> Increasing the number of electric vehicles in the City's fleet provides an opportunity for engagement and education on the benefits of electric vehicles at community events and normalizes their use on roads in our community. The City has in the past wrapped electric vehicles with zero-emission branding to increase visibility of the benefits of electric vehicles. This measure has the potential to be replicated by other public and private fleet owners in Boise and in our broader region. Increasing demand for electric vehicles at our local dealerships can also help encourage continued adoption and sale for fleet-use and residents.

## 2. IMPACT OF GHG REDUCTION MEASURES

### a. Magnitude of GHG Reductions from 2025 through 2030

Measure	Year	CO2e
Building Electrification	By 2030	670 MT
Geothermal	By 2030	5,219 MT
Shade Trees	By 2030	52 MT
Solar	By 2030	671 MT
Vehicle Electrification	By 2030	181 MT
Total	By 2030	6,793 MT

### b. Magnitude of GHG Reductions from 2025 through 2050

Measure	Year	CO2e
Building Electrification	By 2050	8,723 MT
Geothermal	By 2050	15,156 MT
Shade Trees	By 2050	622 MT
Solar	By 2050	2,270 MT
Vehicle Electrification	By 2050	2,189 MT
Total	By 2050	28,960 MT

### c. Cost Effectiveness of GHG Reductions

Cost effectiveness of GHG reductions = Total cost of funding requested (\$9,137,656) / Total GHG reductions 2025-2030 (6,793 MT) = \$1,345/MT

The City has recent experience deploying all identified GHG reduction measures in this application and leveraged this information to develop accurate, reliable measure implementation costs. HVAC equipment and the limited availability of qualified contractors are continued challenges, escalating the anticipated cost of building electrification and the associated GHG emission reductions.

### d. Documentation of GHG Reduction Assumptions

See Technical Appendix attachment

## 3. ENVIRONMENTAL RESULTS – OUTPUTS, OUTCOMES, AND PERFORMANCE MEASURES

### a. Expected Outputs and Outcomes

1. Municipal Building Electrification:
  - Outputs:



- Number of buildings electrified: 6 electrification retrofits completed.
- Number of electrified appliances installed. Will be measured across all CPRG funded building electrification projects.
- Outcomes:
  - Reduction in cumulative metric tons of GHG emissions 2025-2030: 670 MT
  - Reduction in cumulative metric tons of GHG emissions 2025-2050: 8,723 MT
  - Reduction in annual amount of CAP and HAP emissions in 2030

Measure	Year	NOx	SO2	PM 2.5	VOC	CO
Municipal Building Electrification	By 2030	4,834 lbs	31 lbs	291 lbs	283 lbs	2057 lbs
Municipal Building Electrification	By 2050	24,448 lbs	156 lbs	1,977 lbs	1,430 lbs	10,404 lbs

## 2. Geothermal Heating Expansion

- Outputs:
  - Number of buildings connected to geothermal system: 1
  - Linear feet of geothermal lines installed: 630'
- Outcomes:
  - Reduction in cumulative metric tons of GHG emissions 2025-2030: 5,219 MT
  - Reduction in cumulative metric tons of GHG emissions 2025-2050: 15,156 MT

## 3. Shade Trees for Energy Savings

- Outputs:
  - Urban Forestry Master Plan
  - Number of trees planted: 1,668 trees
- Outcomes:
  - Reduction in cumulative metric tons of GHG emissions 2025-2030: 52 MT
  - Reduction in cumulative metric tons of GHG emissions 2025-2050: 622 MT
  - Reduction in annual amount of CAP and HAP emissions in 2030

Measure	Year	NOx	SO2	PM 2.5	VOC
Shade Trees	By 2030	26 lbs	65 lbs	21 lbs	3 lbs
Shade Trees	By 2050	304 lbs	495 lbs	176 lbs	24 lbs

- Removal of ammonia from air and water
- Reduced exposure to hazardous air pollution or unhealthy ambient air quality
- Increased community engagement around equitable climate solutions
- Increased climate resilience, especially in coping with extreme heat

#### 4. Solar Energy Deployment

- Outputs:
  - Number of buildings/locations with solar installed: At least 10
  - Cumulative solar capacity (kW) deployed: 550 kW
- Outcomes:
  - Reduction in cumulative metric tons of GHG emissions 2025-2030: 671 MT
  - Reduction in cumulative metric tons of GHG emissions 2025-2050: 2,270 MT
  - Lower grid energy demand and associated electricity bill saving

#### 5. Municipal Vehicle Electrification

- Outputs:
  - Number of electric vehicles purchased: 32
- Outcomes:
  - Reduction in cumulative metric tons of GHG emissions 2025-2030: 181 MT
  - Reduction in cumulative metric tons of GHG emissions 2025-2050: 2,189 MT
  - Reduction in annual amount of CAP and HAP emissions in 2030

Measure	Year	NOx	PM 2.5	CO
Municipal Vehicle Electrification	By 2030	661 lbs	11 lbs	12,566 lbs
Municipal Vehicle Electrification	By 2050	3217 lbs	53 lbs	61,420 lbs

#### b. Performance Measures and Plan

The City of Boise has a multitude of experience with tracking our progress towards community goals. This is done through quarterly internal reporting to our leadership teams, annual GHG emission reporting to the community, and sharing incremental accomplishments through our communication tools. We will track progress on our CPRG implementation through detailed reporting, both internally and through semi-annual progress reports to EPA.

We will evaluate technical progress, accomplishments, and milestones, including consistent tracking of our outputs and outcomes every six months. We will work with our internal financial office and our external partners to accurately report expenditures as they occur. City of Boise will track community engagement through planned community meetings and sharing successes through social media and news releases.

We will prioritize engaging with low-income and disadvantaged communities while continuing to track potential disbenefits and environmental risks. We will continue to offer high job quality through our recruitment, training, and advancement opportunities, and always seek ways to improve our employee experience.

Throughout the five years of this funding opportunity, and beyond, we will continue to document successes, challenges, and lessons learned. This process will move us towards accomplishing our state's pollution reduction goals and may help other communities in Idaho as they encounter similar challenges. All outcomes and outputs will take place in Boise, Idaho with a priority placed on emission reductions in low-income and disadvantaged communities.

### c. Authorities, Implementation Timeline, and Milestones

The City of Boise and all associated contractors, external partners, and sub awardees are authorized to carry out proposed measures and activities in this application.

Activity number	Results of Activities (Outputs)	Anticipated Impact (Outcomes)	Timeline for Delivery (Date)	Responsible Parties
<b>MEASURE 1: Municipal Building Electrification</b>				
<b>ACTIVITY 1: Project Design</b>				
1.1.1	Prioritized Municipal Buildings	Cost-effective electrification retrofits with high GHG reductions	2025	City of Boise Public Works – Climate Action & Facilities
1.1.2	100% design completed for selected buildings	Clearly defined retrofit scopes, facilitating efficient implementation	2025	City of Boise Facilities Program Management & Contracted
<b>ACTIVITY 2: Project Implementation</b>				
1.2.1	Completed electrification retrofits	Reduced GHG emissions, increased energy efficiency, improved building operations	2025 - 2030	Contractor
<b>MEASURE 2: Geothermal Heating Expansion</b>				
<b>ACTIVITY 1: Project Design</b>				
2.1.1	Completed plans for geothermal line extension	Design completed to support project installation	2026	City of Boise Public Works – Geothermal Program

Activity number	Results of Activities (Outputs)	Anticipated Impact (Outcomes)	Timeline for Delivery (Date)	Responsible Parties
<b>ACTIVITY 2: Project Implementation</b>				
<b>2.2.1</b>	New geothermal pipes installed to serve building	Zero-emissions space and hot water heating ready to serve multi-family development	2027	Contractor
<b>MEASURE 3: Shade Tree Planting for Energy Savings</b>				
<b>ACTIVITY 1: Project Planning</b>				
<b>3.1.1</b>	Community Meeting	Gain community input and engagement around equitable tree planting	2025	City of Boise Climate Action Division  Parks and Recreation
<b>3.1.2</b>	Urban Forest Master Plan	Equitable tree planting based on plan data	2026	Contractor
<b>ACTIVITY 2: Tree Planting</b>				
<b>3.2.1</b>	Municipal Tree Planting		2026-2030	City of Boise Parks and Recreation
<b>3.2.2</b>	Tree Captains Program	Residential tree planting	2026-2030	Treasure Valley Canopy Network
<b>3.2.3</b>	Tree planting for businesses		2026-2030	Treasure Valley Canopy Network
<b>ACTIVITY 3: Tree Maintenance</b>				
<b>3.3.1</b>	Contracted Tree Maintenance	Needs-based community assessment	2026-2030	Treasure Valley Canopy Network and City of Boise Parks & Recreation
<b>MEASURE 4: Solar Energy Deployment</b>				
<b>ACTIVITY 1: Project Planning</b>				

Activity number	Results of Activities (Outputs)	Anticipated Impact (Outcomes)	Timeline for Delivery (Date)	Responsible Parties
4.1.1	Prioritized Municipal Buildings	Solar deployed on facilities cost-effectively with high GHG reductions	2025	City of Boise Public Works – Climate Action Division & Facilities
4.1.2	Conducted outreach to community-based organizations	Increased awareness about distributed solar energy and availability of City CPRG funding	2025	City of Boise – Climate Action Division & Community Engagement Office
<b>ACTIVITY 2: Municipal Solar Energy Deployment</b>				
4.2.1	Solar Installed on Municipal Facilities	Increased amount of on-site energy demand met by solar energy	2026 – 2030	Contractor
<b>ACTIVITY 3: Community Solar Deployment</b>				
4.3.1	Application developed & released for CBO solar	Identified eligible sites for solar development	2026 - 2030	City of Boise – Climate Action Division
4.3.2	Confirm CBO solar installs completed	Solar capacity outcomes and all participant support cost expectations are met.	2026 - 2030	City of Boise – Climate Action Division, Dept. Of Finance & Administration
4.3.3	Payments issued to eligible CBOs for solar installed	Increased solar capacity and community resilience, lower utility bills	2026 – 2030	City of Boise – Climate Action Division, Dept. Of Finance & Administration
<b>MEASURE 5: Municipal Vehicle Electrification</b>				
<b>ACTIVITY 1: Project Planning</b>				

Activity number	Results of Activities (Outputs)	Anticipated Impact (Outcomes)	Timeline for Delivery (Date)	Responsible Parties
5.1.1	Prioritized Vehicles to be replaced	Vehicles with GHG and cost savings identified.	2025	City of Boise – Climate Action Division, Dept. Of Finance & Administration
<b>ACTIVITY 2: Electric Vehicle Deployment</b>				
5.2.1	Electric Vehicles in-service in fleet.	Reduced GHG emissions and local air quality impacts.	2025 – 2030	City of Boise – Dept. Of Finance & Administration

#### 4. LOW-INCOME AND DISADVANTAGED COMMUNITIES

##### a. Community Benefits

As the City of Boise implements the GHG emission reduction measures listed below, our team is using equity and community impact as guiding principles.

1. Municipal Building Electrification
2. Geothermal Heating Expansion
3. Shade Trees for Energy Savings
4. Solar Energy Deployment
5. EV Municipal Fleet

Municipal Building Electrification, Solar Energy Deployment, and Municipal Fleet Electrification will have benefits for our internal operations, such as lowering our utility costs, but these measures will also have associated community benefits. Through these measures, we will reduce the amount of fossil fuels used to heat buildings and power vehicles and in turn, reduce air pollution in our community through reduced emissions. We will also identify community serving institutions that would benefit from solar installation at their facilities.

Geothermal Heating Expansion and Shade Tree Planting will have direct benefits for low-income and disadvantaged communities. These neighborhoods will be identified by using the EPA CEJST tool. We will provide targeted outreach to these neighborhoods through community meetings and open houses. We will also provide resources in English and Spanish as we implement these projects in Justice 40 census tracts.

We will continue to track potential benefits and disbenefits in our community through annual assessments of these projects and continued community listening sessions.

See attached areas of impact map

## **b. Community Engagement**

The City of Boise will request community input on each step of implementation for the GHG emission reduction measures listed above. We will do this through community listening sessions and open house events. The city will host an open house style informative event for each of the measures listed, five events total in the first two years of implementation. At these events, we will present information in an accessible way and provide opportunities for community members to ask questions and voice their concerns. We will advertise these events to low-income and disadvantaged communities by partnering with local partners. We will provide materials in Spanish and English.

## **5. JOB QUALITY**

The City of Boise is a team of more than 2000 community-serving employees, across 13 departments working together to make Boise a city for everyone. The City of Boise is an equal opportunity employer. The City of Boise is committed to providing equal employment opportunity for all persons without regard to race, color, religion, gender, age, national origin, sexual orientation, gender identity, disability, veteran status, or any other applicable legally protected status.

Additionally, the City, its sub-awardees, and contractors will comply with all prevailing wage requirements for any construction work as determined by the U.S. Department of Labor under the Davis-Bacon Related Acts (42 USC §7614) authority.

## **6. PROGRAMMATIC CAPABILITY AND PAST PERFORMANCE**

### **a. Past Performance**

1. Project title: Coronavirus State and Local Fiscal Recovery Fund (SLFRF) Program
  - i. Funds Assistance agreement number (if applicable): SLFRP1996
  - ii. Federal or non-federal funding agency and assistance listing number: U.S. Department of the Treasury; [Assistance Listing Number \(ALN\) 21.027: Coronavirus State and Local Fiscal Recovery Funds \(CSLFRF\), Coronavirus State Fiscal Recovery Fund \(CSFRF\) and Coronavirus Local Fiscal Recovery Fund \(CLFRF\)](#)
  - iii. Brief description of the agreement (no more than two sentences): The City of Boise was awarded \$36.9 million from the U.S. Department of the Treasury under the American Rescue Plan Act (ARPA). Funds are being used to support or create certain infrastructure (i.e., water, sewer, and broadband), address revenue loss, and meet community needs, specifically as they relate to the impacts of the COVID-19 pandemic.
  - iv. Contact from organization that funded the assistance agreement: Jacob Leibenluft, U.S. Department of the Treasury
  - v. Result: The City is successfully implementing various projects under this agreement, including support for broadband infrastructure, affordable housing, municipal building electrification, geothermal,

childcare workers, small businesses, mental health, and food security.

2. Project title: Home Investments Partnerships Program
  - i. Funds Assistance agreement number (if applicable): M-23-MC-16-0200
  - ii. Federal or non-federal funding agency and assistance listing number: U.S. Department of Housing and Urban Development; Assistance Listing Number (ALN) 14.239: [Home Investment Partnerships Program](#)
  - iii. Brief description of the agreement (no more than two sentences): The City of Boise was awarded \$795k to provide individuals and families with decent, safe, sanitary, and affordable housing and expand the long-term supply of affordable housing.
  - iv. Contact from organization that funded the assistance agreement: Heather Gramp, U.S. Department of Housing and Urban Development
  - v. Result: This program is on-going and objectives are being met. While some projects have been completed, some projects are still in progress.
  
3. Project title: Community Development Block Grants (CDBG) Program
  - i. Funds Assistance agreement number (if applicable): B-23-MC-16-0001
  - ii. Federal or non-federal funding agency and assistance listing number: U.S. Department of Housing and Urban Development; Assistance Listing Number (ALN) 14.218: [Community Development Block Grants/Entitlement Grants](#)
  - iii. Brief description of the agreement (no more than two sentences): The City of Boise was awarded \$1.39M to support the development of viable communities through decent housing, suitable living environments, and expanded economic opportunities to persons of low and moderate incomes.
  - iv. Contact from organization that funded the assistance agreement: Heather Gramp, U.S. Department of Housing and Urban Development
  - v. Result: This program is on-going and objectives are being met. While some projects have been completed, some projects are still in progress.
  
4. Project title: Emergency Rental Assistance Program (ERAP)
  - i. Funds Assistance agreement number (if applicable): ERA0190
  - ii. Federal or non-federal funding agency and assistance listing number: U.S. Department of the Treasury; Assistance Listing Number (ALN) 21.023: [Emergency Rental Assistance Program](#)



- iii. Brief description of the agreement (no more than two sentences):  
The City of Boise was awarded \$31.3M to help Boise residents pay rent and utility costs to maintain housing stability.
  - iv. Contact from organization that funded the assistance agreement:  
U.S. Department of the Treasury
  - v. Result: This program is complete and all objectives were successfully met.
  
- 5. Project title: Law Enforcement Mental Health and Wellness Act (LEMHWA) Program
  - i. Funds Assistance agreement number (if applicable): 15JCOPS-22-GG-04069-LEMH
  - ii. Federal or non-federal funding agency and assistance listing number: U.S. Department of Justice, Office of Community Oriented Policing Service (COPS); Assistance Listing Number (ALN) [16.710: Public Safety Partnership and Community Policing Grants](#)
  - iii. Brief description of the agreement (no more than two sentences):  
The City of Boise was awarded \$165k to support Boise Police Department's implementation of a pilot mental health and wellness program. The program delivers dedicated mental health and wellness workshops and educational resources to law enforcement officials, their families, civilian support staff, volunteer chaplains, and retirees.
  - iv. Contact from organization that funded the assistance agreement:  
Bethany Wilson, U.S. Department of Justice
  - v. Result: This program is on-going and objectives are being met. Workshops and trainings have been held for first responders, including sleep recovery training, spousal support training, peer support training, chaplaincy training, yoga for first responders, and financial wellness training.

## **b. Reporting Requirements**

- 1. Project title: Coronavirus State and Local Fiscal Recovery Fund (SLFRF) Program
  - i. Reporting history: The City of Boise has submitted adequate and timely progress reports in accordance with the terms and conditions of this agreement, including an initial interim report followed by quarterly project and expenditure reports that are still ongoing. A final report will be submitted following the period of performance, which ends December 31, 2026.
  
- 2. Project title: Home Investments Partnerships Program
  - ii. Reporting history: The City of Boise has submitted adequate and timely progress reports in accordance with the terms and

conditions of this agreement, including an annual financial report and a Consolidated Annual Performance and Evaluation Report (CAPER).

3. Project title: Community Development Block Grants (CDBG) Program
  - iii. Reporting history: The City of Boise has submitted adequate and timely progress reports in accordance with the terms and conditions of this agreement, including quarterly cash on hand reports, an annual financial report, and a Consolidated Annual Performance and Evaluation Report (CAPER).
4. Project title: Emergency Rental Assistance Program (ERAP)
  - iv. Reporting history: The City of Boise submitted adequate and timely progress reports in accordance with the terms and conditions of this agreement, including all required quarterly reports as well as a final report.
5. Project title: Law Enforcement Mental Health and Wellness Act (LEMHWA) Program
  - v. Reporting history: The City of Boise has submitted adequate and timely progress reports in accordance with the terms and conditions of this agreement, including all interim progress reports and financial reports. Final reports will not be due until the grant expires in August 2024.

### **c. Staff Expertise**

The City of Boise is committed to taking action to address climate change, because our city's prosperity is directly linked to clean energy, clean air and water, and open space. Boise's climate work takes a multidisciplinary team of internal experts and community partners. Our experienced staff is committed to taking immediate government and community action by collaborating with local partners, businesses, and individuals to move the needle on climate change.

See attached CVs:

Municipal Building Electrification- Lindsay Erb

Geothermal Heating Expansion- Jon Gunnerson

Shade trees for energy savings- Daniel Roop

Solar Energy Deployment – Wil Gehl

Climate Action Division Manager- Steve Hubble

Climate Action & Sustainability Coordinator- Alex Brooks

## **7. BUDGET**

See Budget Narrative and Budget Calculations attachments