FY 2020 Aug. 1 EIAF Tier I/Tier II/Renewable Energy Planning Grant Application

Renewable and Clean Energy Challenge Planning Grants

Planning activities may be undertaken by individual local governments, multijurisdictional collaboration, or on a regional basis to identify opportunities, infrastructure needs, and to identify potential partnerships among public and private entities to achieve this renewable energy goal. Local governments applying for planning grants must contribute a minimum of 25% match. Request amount is limited to the Tier I cap of $200,000.

A. APPLICANT/CONTACT INFORMATION

1. Local Government/Organization:
In the case of a multi-jurisdictional application, select the other participating eligible organizations:

City of Colorado Springs

C. PROJECT DESCRIPTION AND DEMOGRAPHIC INFORMATION

a. Project Title
Begin the project name with your community name. Example: "Oak Creek Project Name", "Gunnison County Project Name"

City of Colorado Springs Electric Vehicle Readiness Plan

b. Amount of grant funds requested

$200,000

c. Matching Funds ($ amount)

$50,000

d. Description of the project scope of work
Description of the various tasks involved in the project including specific data such as quantities, mileage, square feet, linear ft. etc. as well as specific project location within city and/or county etc. (word limit: 4,000 characters)

The City of Colorado Springs (“City”) proposes to support Governor Polis's executive order supporting a transition to zero emission vehicles and advance the adoption of electric vehicles in Colorado Springs through the development of an Electric Vehicle Readiness Plan for the

community. This strategic, collaborative plan will provide an analysis of the city's needs, opportunities, and challenges regarding electric vehicle (EV) adoption, as well as a thorough exploration and prioritization of implementation options. The project will involve significant partnership with Colorado Springs Utilities (a city-owned enterprise) and other partners including the Colorado Energy Office, area stakeholders, and community members. The completed Plan will present an action-ready roadmap that will make significant immediate, short-term, and long-term impacts toward renewable energy goals.

To develop the Plan, the City will issue a Request for Proposals to obtain the services of a subject matter expert professional consulting firm. After contract award, anticipated Plan development steps include:

1) Project kick-off, to coordinate project goals, stakeholders, timeline, and evaluation criteria;
2) Research and data collection, including City and Colorado Springs Utilities fleet telematics, inventory, existing Electric Vehicle Supply Equipment (EVSE), electric capacity, relevant regional studies, regional data regarding current EV use from a public perspective, and public and stakeholder engagement;
3) Creation of a trends summary, needs assessment, and gap analysis; and finally
4) Creation of a phased master plan.

With an estimated project budget of $250,000, major Plan components will include:

1) a roadmap for conversion of City and Colorado Springs Utilities fleet to electric vehicles (40% of project budget);
2) public education and EV adoption incentives (30% of project budget);
3) policy adoption, including rate structure, infrastructure ownership, and land use and building code recommendations to support EVs (10% of project budget); and
4) identification of ideal EV charging station locations, including needed utility infrastructure upgrades (20% of project budget).

e. Describe the problem, opportunity or challenge that resulted in the request. (word limit: 4,000 characters)

Colorado Springs is the state's largest city by square mileage, with nearly 6,000 lane miles of paved roads, and second largest city by population, with nearly a half million residents. The State Demography Office predicts that El Paso County will gain more than 400,000 residents by the year 2050, a 59% increase, and that Colorado Springs will become Colorado's most populous city within the next 15 years.

Ozone levels in Colorado Springs are of increasing concern—already, the City is near non-compliance with EPA standards. July 25, 2019, marked the area's 16th Ozone Action Day Alert, issued by the Colorado Department of Public Health and Environment. Additional high alerts are anticipated. The alerts indicate that ozone concentrations are expected to exceed 70 parts per billion, which according to the EPA causes concern for active children and adults with lung disease such as asthma. If ozone levels continue to worsen, it is likely that residents will be required to submit to vehicle emissions testing, causing strain on their daily lives and potential economic harm to those unable to bring their vehicles into compliance.

In accordance with Goal 4 of the City's 2016-2020 Strategic Plan, the City would prefer to devote its resources toward the prevention of nonattainment status, rather than using taxpayer dollars to return to compliance. The most popular approaches to mitigating unhealthy ozone levels include regulating emissions and engaging the public through education and incentives to lessen their impact. As a community known for its topographical beauty, outdoor recreation options, and active lifestyle, the City prioritizes the preservation of our air quality for the health of current and future generations. Additionally, as a city that has been nationally recognized as one of the country's best places to live, we believe it is our economic duty to ensure the vitality and appeal of our region through a healthy environment.

The City of Colorado Springs embraces Governor Polis's goal to reach 100% renewable electricity by 2040 and his executive order supporting a transition to zero emission vehicles. Development of an EV Readiness Plan will allow the City to systematically create the infrastructure and policy support needed to reduce greenhouse gases through the channel of transportation, and address concerns and challenges surrounding transitioning to EVs, such as the lack of public charging availability.

Creation of an EV Readiness Plan offers numerous opportunities and potential benefits. The lower cost of ownership for electric vehicles provides an incentive for the City and its principal partner, Colorado Springs Utilities, to more efficiently use taxpayer dollars and other funds for the conversion of their respective fleets. The economic cost benefit applies to residents as well. To increase public adoption, the City will exemplify the benefits of EV transition and play a crucial role in the provision of infrastructure to allow individual owners to transition to EVs with minimal financial and charging accessibility barriers. An EV Readiness Plan also provides an opportunity for the City to adopt smart, forward-thinking polices that encourage private development, affect infrastructure ownership and rate structures, and engage and educate the public.

City and Colorado Springs Utilities efforts to transition to, adopt, and encourage EVs have been sporadic up until this point, lessening the collective impact, and the City has no allocated budget to transition its fleet. Given the City's large geographic area, increasing population, automobile-dependent commuting workforce, and low use of public transportation,

community-wide adoption of EV policies and incentives will make a tremendous impact. And considering the status of air quality and ozone levels, transition to EVs is not just important, but critical.

D. DEMONSTRATION OF NEED

The statutory purpose of the Energy and Mineral Impact Assistance program is to provide financial assistance to "political subdivisions socially or economically impacted by the development, processing or energy conversion of minerals and mineral fuels."

a. Demonstration of need

Why is the project needed at this time? (word limit: 4,000 characters)

Colorado Springs is the largest geographical city in the state and second largest city by population. With limited public transportation options and a widespread geography, the community is heavily dependent on individual automobile use. As the city's ozone levels increase with contaminants, rapidly approaching EPA-designated nonattainment status, the City must take action to decrease greenhouse gases and increase the health of its air quality. In support of effective economic policy and infrastructure decisions, an EV Readiness Plan will be a first and crucial step to achieve these goals.

The Plan will align with statewide, regional, and organizational plans and goals. Adoption of the Plan will enable the City to make significant contributions toward achieving Governor Polis' 2040 renewable energy goals and his goal to transition Colorado to zero emission vehicles. Due to the controllable nature of electric vehicle charging, EVs provide loads that are supportive of increased renewable energy generation. The Plan will additionally leverage the goals of the ALT Fuels Colorado Corridor Investment Plan, which has allocated funding to build fast-charging stations along Interstate 25, a Tier I Major Transportation Corridor, which runs through the city.

The EV Readiness Plan will also contribute to the goals of the Pikes Peak Regional Sustainability Plan. It will directly address Energy Goal 1 of making considerable progress toward 100% sustainable energy usage by 2030, via Energy Strategy 1.5: Encourage the development of electric vehicle policies and programs; as well as Transportation Goal 3 that by 2030, half of all transportation-related fuels are renewable/sustainable and transportation-related fossil fuel use is reduced by 40%, via Transportation Strategy 3.1- Facilitate the development, manufacturing, and deployment of fuel cell technology for fuel cell electric vehicles.

The Plan will also align with the new Energy Vision adopted by Colorado Springs Utilities: "Provide resilient, reliable and cost-effective energy that is environmentally sustainable, reduces our carbon footprint and uses proven state-of-the-art technologies to enhance our quality of life for generations to come." Electrification of transportation provides opportunities to meet the goals of all four strategic pillars of the Energy Vision: economic, environment,

resiliency, and innovation. The increase in energy sales will put downward pressure on utility rates, keeping energy cost-effective for consumers.

b. Project implementation
How does the implementation of this project address the need? (word limit: 4,000 characters)

The City of Colorado Springs and Colorado Springs Utilities currently lack the expertise to develop an Electric Vehicle Readiness Plan in-house, as well as adequate funding for such efforts. Due to the rapidly changing technology in this field, as well as the relative infancy of electric vehicles, a subject matter expert is required to help develop the roadmap for the adoption of this technology and the creation of the appropriate infrastructure, policies, and incentives.

A grant from the Department of Local Affairs and the contracted services of a subject matter expert consulting firm will enable the City to coordinate efforts toward and expedite its stated goal of transitioning to electric vehicles for its local government, City-owned enterprises, and the wider community. Through the creation and implementation of an EV Readiness Plan, the City will also address Statewide and regional renewable energy goals and air quality standards.

c. Does this project, as identified in this application, completely address the stated need? If not, please describe additional work or phases and the estimated time frame. Do you anticipate requesting Energy and Mineral Impact Assistance funds for future phases? (word limit: 4,000 characters)

Development of an Electric Vehicle Readiness Plan is the first step in addressing our city's need for a large-scale transition toward zero emission vehicles. The Plan will enable and inform the next steps in achieving a successful transition, which include phased implementation of the Plan over the next several years, along with measurement and evaluation of implementation efforts. We anticipate requesting Energy and Mineral Impact Assistance funds for the implementation of plan recommendations, as available, as well as pursuing other funding options.

d. What other implementation options have been considered?
(word limit: 4,000 characters)

The City and Colorado Springs Utilities have made numerous efforts to support a transition to EVs for our community. The City's Transit Services Division, the primary provider of public transportation in the Pikes Peak region, operates Mountain Metro Transit (MMT), which has developed an Electric Bus Assessment and Plan. MMT has received grant funding for three electric buses and infrastructure as replacement for existing diesel powered vehicles, and has pending applications for eight additional electric buses to expand their fleet. The City's Office of

Innovation and Sustainability has partnered with local car dealers to provide incentives for residents to purchase electric vehicles, a project developed through a robust citizen engagement process during the development of SmartCOS, the City's smart city vision, which identified EV use as a priority.

Colorado Springs Utilities has developed a white paper describing the benefits and costs of electric vehicles, documenting the current state of the industry, and identifying and evaluating opportunities to support the increased use of EVs in the Utilities' service area. The paper details pursuit of multiple pilot projects and continued outreach and education. Further implementation is dependent on the maturity of the industry.

Additionally, the City's Parking Enterprise has installed several EV charging stations in City parking garages, available to both government employees and the public, and Colorado Springs Utilities has installed several EV chargers for use by their fleet, employees, and the public.

e. What are the consequences if the project is not awarded funds?
(word limit: 4,000 characters)

Thus far, efforts to support a transition to EVs have been limited by the lack of a comprehensive and overarching plan. With only the resources and knowledge available internally within the City and Colorado Springs Utilities, and without an allocated budget and a plan to guide implementation efforts, the likelihood of EV adoption by the City and the public will remain low. Additionally, due to competing needs and a limited budget, finding adequate funds within the City budget to develop an EV Readiness Plan is unlikely.

If this project is not funded, the City will continue to make small strides to transition to EVs. Projects implemented would likely be on a small and relatively less effective scale, with the intent to learn as we go along. The adoption of electrified transportation in our community would be driven by the private sector with unknown timelines. With grant funding from the Department of Local Affairs, we will be able to make strategic and effective changes, resulting in quicker and more extensive EV adoption, with an ultimately far greater impact on achieving renewable energy goals.

F. PROJECT BUDGET

Expenditures
List Budget Line Items and Costs.

$100,000 for a roadmap for conversion of City and Colorado Springs Utilities fleet to electric vehicles;
$75,000 for public education and EV adoption incentives;

$25,000 for policy adoption, including rate structure, infrastructure ownership, and land use and building code recommendations to support EVs; and
$50,000 for identification of ideal EV charging station locations, including needed utility infrastructure upgrades.

Sources of Revenue
List the sources of matching funds and indicate either cash or documentable in-kind contribution

$200,000 from Energy and Renewables Challenge grant funds
$25,000 cash match from City of Colorado Springs Office of Innovation and Sustainability budget
$25,000 cash match from Colorado Springs Utilities

Energy/Mineral Impact Fund Grant Request
$200,000

G. MEASURABLE OUTCOMES

a. Describe the expected measurable outcomes
How will the project enhance the livability* of your region, county, city, town or community (e.g. constructing a new water plant will eliminate an unsafe drinking water system and provide safe and reliable drinking water; the construction of a new community center will provide expanded community services, or projects achieving goals regarding energy conservation, community heritage, economic development/diversification, traffic congestion, etc.)? *(Livability means increasing the value and/or benefit in the areas that are commonly linked in community development such as jobs, housing, transportation, education, emergency mitigation, health and environment) (word limit: 4,000 characters)

Colorado Springs is known for its natural beauty and the active character of its residents. The availability of world-class natural landscapes and outdoor recreation options is one of our most prominent livability factors and is directly dependent upon clean, breathable air. Access to nature positively impacts the mental, emotional, and physical health of citizens and supports a happier, healthier community.

Development of the proposed Plan will enable immediate and strategic implementation of the Plan's defined steps. With the subsequent transition to EVs, we expect to see positive measurable outcomes through reduced tailpipe emissions, resulting in decreased contaminants, a better ozone rating, and continued access to outdoor activities. Adoption of EVs will also support increased renewable energy usage, due to EV controlled charging behavior. Increased use of renewable energy will lead to reduced ozone and cleaner air.

Economic benefits of this project include the downward pressure on utility rates due to increased energy sales, cost savings for the City and Colorado Springs Utilities fleets and budgets, and cost savings and long-term ownership benefits for private EV owners. Additionally, as previously mentioned, the citizen engagement process that informed development of the SmartCOS program identified EVs as a priority for residents. Adoption of the proposed Plan will help enable Colorado Springs to meet the needs and preferences of its citizens, resulting in continued attraction and retention of residents and accompanying economic investment.

b. Historic structure preservation

Does this project preserve and protect a registered state historic building, facility or structure? If yes, please describe, including year of construction. (word limit: 2,500 characters)

No

c. Energy efficiency

Will this project implement an energy efficiency/strategy that could result in less carbon footprint or conserve energy use or capitalize on renewable energy technology? If yes, please describe. (word limit: 2,500 characters)

Yes

While electric vehicles are not in themselves an energy efficiency strategy, they are a fuel switching strategy that can result in a smaller carbon footprint. Due to the controllable nature of electric vehicle charging, EVs provide loads that are supportive of increased renewable energy generation. An EV Readiness Plan will provide the framework to reduce the City's carbon footprint by the implementation of the Plan's recommendations.

d. Resiliency framework

Will the project increase the community's long-term resilience and ability to anticipate, withstand, and/or rebound from a natural or manmade hazard event? For example, will the project factor in natural design concepts and will construction utilize sustainable materials? If yes, please describe. (word limit: 4,000 characters)

Currently, electric vehicles do not offer any vehicle-to-grid (V2G) or vehicle-to-home (V2H) capabilities. However, as this technology becomes available in the future, electric vehicles will be considered critical energy storage assets that will greatly contribute to the resilience of both the home and the grid. The significant size of electric vehicle batteries allows them to offer a much longer-term backup than current residential battery products.

H. LOCAL EFFORT

a. Relationship to Community Goals
Is the project identified in the applicant's budget or a jurisdictionally approved plan (e.g. capital improvement plan, equipment replacement plan, comprehensive plan, utility plan, road maintenance and improvement plan or other local or regional strategic management or planning document)? What is its ranking? (word limit: 4,000 characters)

PlanCOS, the Colorado Springs Citywide Comprehensive Plan, states that our programs, services and initiatives must lead us toward a better future. Our guiding goal of investing in infrastructure to ensure the City of Colorado Springs is the gem of the Rockies speaks to the City's need for an EV Readiness Plan.

This project is identified in PlanCOS Strategy SC-1.E-5: Create and implement a long-term Electric Vehicle (EV) Plan in collaboration with Colorado Springs Utilities and other stakeholders. EV Readiness Plan goals are addressed in Strategy ML-4.C-2: Evaluate and align investments in long-term multimodal transportation solutions such as mass transit, self-driving car technologies, electric vehicle charging stations, and bicycle and walking trails.

The new Energy Vision of Colorado Springs Utilities aims to "Provide resilient, reliable and cost-effective energy that is environmentally sustainable, reduces our carbon footprint and uses proven state-of-the-art technologies to enhance our quality of life for generations to come." The Energy Vision has four pillars, with the community served as its foundation. Electric vehicle adoption supports all four pillars: economic, environmental, resiliency, and innovation, and the foundation community has requested increased electrified transportation, as previously stated.

The City of Colorado Springs and Colorado Springs Utilities acknowledge that the future of our community and region will be shaped by rapid technological innovation and change. By embracing EV adoption, of which the critical first step is development of an EV Readiness Plan, the City is laying the foundation of embracing the technologies that will enhance the quality of life for our citizens.

b. Why can't this project be funded locally?
(word limit: 2,500 characters)

With a limited budget and numerous high priority unfunded needs throughout the City, there is currently no opportunity to fund an EV Readiness Plan within the City's budget. Without such a plan, the City cannot then set aside funding for EV conversion of its fleet or investment in EV infrastructure.

c. Has this project been deferred because of lack of local funding? If so, how long? (word limit: 2,500 characters)

Development of an EV Readiness Plan was identified as a priority project three years ago, and has been deferred since then due to lack of funding. The City is effectively prevented from taking further steps toward electrification, including successfully winning other grant funds for EV transition, without the research, prioritization, and roadmap that a Plan would provide.

d. Explain the origin and status of your local cash match.
Are the local funds committed or pending? If there are pending funds, when will the status of those funds be determined? (word limit: 2,500 characters)

The City of Colorado Springs Office of Innovation & Sustainability has committed $25,000 in matching funds, and Colorado Springs Utilities has committed $25,000 (see attached letter of support and commitment).

e. Community partners
What other community entities, organizations, or stakeholders recognize the value of this project and are collaborating with you to achieve increased livability of the community? Please describe how your partners are contributing to achieve the improvement to the livability of the community through this project. If in-kind contributions are included in the project budget, detailed tracking will be required on project monitoring report. (word limit: 2,500 characters)

This project will involve significant partnership with Colorado Springs Utilities, a City-owned enterprise. Colorado Springs Utilities will contribute:
-Collaboration with community stakeholders and business customers, as well as with other City partners, to maximize project applicability;
-Engineering, rate design, and policy expertise provided as in-kind support (excluded from budget) and potential use of Colorado Springs Utilities facilities for hosting project-related meetings and activities;
-Contribution of $25,000 towards the 25% required match of the $200,000 grant request.

Numerous other partners will be involved in the project. At this stage, other identified partners include the Colorado Energy Office, ChargePoint (the provider of Colorado Springs Utilities charging infrastructure, who has been involved in the implementation of alternative and innovate rates), and Nissan and Chevy (providers of Leafs and Bolts for the Colorado Springs Utilities fleet).

f. Tax rate, usage charges, or fees

Have the applicant's tax rates, user charges or fees been reviewed recently to address funding for the proposed project?
No

g. Has the applicant contacted representatives from local energy or mineral companies to discuss the
(word limit: 2,500 characters)

This project involves extensive collaboration with Colorado Springs Utilities, the community's municipal utility service provider of electricity, natural gas, water, and wastewater services.

I. READINESS TO GO

a. When will the project begin

The project will begin upon notification of grant award, with the issuance of a Request for Proposals for subject matter expert consulting services.

b. What is the time frame for completion (select one)

6-9 months

c. Is planning or design work a component of this project? (Y/N)

Yes

c.1 What additional design work remains?
What percentage of design work is complete? (word count: 2,500 characters)

While an initial EV Readiness Plan scope of work and goals have been identified, design work on the Plan itself has not yet begun.

c.2 How were project cost estimates determined?
(word count: 2,500 characters)

The City worked with a subject matter expert to determine the need for and costs involved in creating the Plan components as described in the scope of work. With the understanding that development of an action-ready plan will require the greatest depth and detail of analysis, and in recognition of the city's population, geographic size, and automobile-dependent culture, budget costs are estimated as follows:

$100,000 for a roadmap for conversion of City and Colorado Springs Utilities fleets to electric vehicles;
$75,000 for public education and EV adoption incentives;
$25,000 for policy adoption, including rate structure, infrastructure ownership, and land use and building code recommendations to support EVs; and
$50,000 for identification of ideal EV charging station locations, including needed utility infrastructure upgrades.

c.3 Is the project supported by bids, professional estimates or other credible information?

Yes, the City worked with a subject matter expert to determine the need for and costs involved in creating the Plan components as described in the scope of work**.**

J. ENERGY & MINERAL RELATIONSHIP

a. Community energy or mineral impact
Describe how the applicant is, has been, or will be impacted by the development, production, or conversion of energy and mineral resources (word limit: 4,000 characters).

Historically, the Pikes Peak region has roots tied to the mining sector. The Colorado State Archives reports 413 mines existed in El Paso and Teller counties during the period 1900-1980. Project partner Colorado Springs Utilities purchases 1.5 million tons of coal annually and by 2025 will have over 25% by capacity renewable generation. Increased renewable generation will result in decreased coal and natural gas purchases. Since electric vehicles are supportive of load control, there could be further penetration of renewable resources and a reduction on fossil fuels.

b. Use data
Cite actual use data that documents direct impact as it relates to the need for the project. For example, "heavy truck traffic directly related to energy development activities is impacting County Road X. a traffic count done in May 2015 showed energy related truck traffic increased from 100 trips per day to 300." (word limit: 2,500 characters)

The City and Colorado Springs Utilities fleet contains approximately 300 sedans that could potentially be good candidates for electric vehicle replacements. These sedans have an average age of 11 years and travel an average of 5,100 miles per year. The fact that these light duty vehicles do not travel extended miles on a single trip also make them great candidates for replacement with EVs. In addition, the City has a robust fleet replacement strategy that outlines that at least 100 of these vehicles will be replaced in the next two years, offering an immediate opportunity to implement EV Readiness Plan recommendations for a portion of our internal

fleet. The majority of the City's light duty fleet (sedans, trucks, etc.) have telematics data that we will utilize to identify and prioritize the vehicles that will be replaced with electric vehicles.

K. MANAGEMENT CAPACITY

a. Fund management

How will you separate and track expenditures, maintain funds and reserves for the capital expenditures and improvements as described in this project? (word limit: 2,500 characters)

Expenditures are tracked in the City's accounting system, PeopleSoft, in which grants are separated by Project ID. Activity for each grant is then tracked, including revenue, expenses, assets, and matching funds.

b. Project sustainability

Describe the funding plan in place to address the new operating and maintenance expenses generated from the project? (word limit: 2,000 characters)

Development of the Plan will provide a roadmap for obtaining additional funding to implement action items and recommendations. The Plan will address prioritization, scope, and potential challenges for EV transition, as well as engage numerous stakeholders, generating interest and buy-in. The Plan will help the City define how much funding is required, what is involved in implementing Plan recommendations, and the timeframe, enabling us to apply for future grant funding and seek out new partnerships and sponsors.

c. Expertise

Describe the technical and professional experience/expertise of the person(s) and/or professional firms responsible to manage this project. (word limit: 2,000 characters)

The City will issue a Request for Proposals to obtain the services of subject matter experts to produce the Plan in partnership with key stakeholders in the City and Colorado Springs Utilities. The City Project Manager, Ryan Trujillo, oversees the City's Office of Innovation & Sustainability. He is uniquely positioned to make this project successful because the Office of Innovation & Sustainability not only focuses on emissions reduction efforts and deploying emerging technologies, but fleet management is also within its purview. This will allow for the swift implementation of recommendations from the EV Readiness Plan, as fleet management, implementation of the smart communities program, and implementation of sustainability efforts all fall within the Office's responsibilities.

Colorado Springs Utilities will contribute the input and expertise of the following groups: Rates Personnel, to assist in developing supportive rates; Engineering Design Personnel, to assist in understanding current infrastructure; and Policy Personnel, to work with the appropriate

agencies on drafting policy. All Utilities groups have demonstrated expertise with combined 20+ years of experience and can serve as subject matter experts within their roles.