

Regional Air Quality Council and Colorado Energy Office Electric Vehicle and Charging Station Grant Application

Response ID:203 Data

3. Section II. Contact Information and Background Information

Please provide the following information for the primary contact on your application

First Name

Virgil

Last Name

Turner

Title

Director of Innovation and Citizen Engagement

Organization Name

City of Montrose

Street Address

433 S. First Street

Apt/Suite/Office

N/A

City

Montrose

Zip

81401

Email Address

vturner@ci.montrose.co.us

Phone Number

(970) 240-1471

Organization or Company Website

www.cityofmontrose.org

Organization Type*

Local government

Please indicate the county in which the proposed electric vehicle will be registered and/or the electric charging station will be installed. Note the restrictions on eligibility provided in the previous question.

MONTROSE

Of which of the following are you applying for funding?

Funding for electric vehicles is only available to projects in Adams, Arapahoe, Boulder, Broomfield, Denver, Douglas and/or Jefferson Counties

Electric Vehicle Charging

Number of EVSE Requested

1

Number of EV Requested

0

Total Funding Requested

Depending on funding availability, the RAQC can pay 80% of the incremental cost differential between a gasoline/diesel vehicle and the comparable EV up to \$8,260 per vehicle. The RAQC and CEO can pay 80% of the cost of EVSE up to \$6,260 per station.

6260

5. Section IV. Mandatory Criteria

As the project applicant, I hereby certify and agree to the aforementioned mandatory criteria.

Please check the following box and enter your name

I agree

Name

Virgil Turner

6. Section V. Scope and Project Justification

1. Please describe why your organization is implementing this project and how your project addresses the nine goals listed on page 1 of the application and the 15 criteria listed on page 2. This should include the types of petroleum based vehicles being replaced and/or displaced (please describe), fuel savings and vehicle miles travelled (VMT) that will be changed from petroleum based mileage to electric mileage. [*Click here to download the full application](#)

Since 2008, when the City of Montrose began its SustainMontrose effort to foster efficiency, innovation, conservation, and cost-effective practices to enhance and protect Montrose's quality of life, the City of Montrose has implemented numerous projects to improve the efficiency and sustainability of the City organization and community. Since the base year of 2007-2008, the City has realized combined savings of over \$366,000 through reduced utility bills for the City's largest facilities (utility bills lowered by over 20 percent each year compared to the baseline) by employing conservation practices and performance contracts using projected savings to finance energy-saving improvements. The proposed electric vehicle supply equipment (EVSE) project is an extension of the City's sustainability and innovation efforts.

By installing one, Level II (208-240 volt AC) EVSE charging station on City-owned property in downtown Montrose to charge up to two vehicles simultaneously (see site and parking plans in Exhibit A), this project joins the State of Colorado's efforts to improve air quality and encourage deployment of electric vehicles across the State of Colorado. This project also dovetails with the State's goal 2 to incentivize the development of geographically dispersed EVSE charging infrastructure by placing the free (at least for the initial three years, a high State priority, criteria 7), public, two-space (one handicapped accessible) EVSE in a visible and easily-accessible downtown Montrose location. (The proposed charging station is the only known station between Grand Junction (about 60 miles north) and Durango (about 107 miles south).) Grand Junction's charging station is located at Jim Fuoco Motor Co., 748 N. 1st, and Durango's three, dual-cord stations are located at Durango's Transit Center, 250 W. 8th Street.

City of Montrose goals and public benefits (criteria 2 and 3) of locating the proposed EVSE in downtown Montrose include:

1. Electric vehicle owners will be able to conduct their business (working, eating, shopping) while their vehicle is charging;
2. Electric vehicle owners will be able to access public transportation to other areas of town or the region while their vehicle is charging;
3. The charging station will ease range anxiety of electric vehicle owners; and
4. The project will reduce harmful air pollutants; reduce greenhouse gas emissions; and promote energy security (goals 3, 4 and 5) by encouraging local commuters and visitors to use cleaner, reliable alternative transportation (electric vehicles) while reducing conventional, petroleum usage in Western Colorado.

The City also hopes to purchase electricity (through Delta-Montrose Electric Association) for the charging station from renewable, photovoltaic (solar) sources that do not generate air or water emissions or produce hazardous waste. Finally, the smart electric meter serving Montrose's charging station will meet goal 7 and criterion 12 by gathering electricity usage data in 30-minute increments, and the City may retrofit the proposed charging station to collect data and point of sale information at a later date.

The City of Montrose also meets the funding criteria by assisting the State in stretching grant dollars by requesting funds for one charging station that will serve up to two vehicles simultaneously (criteria 1 and 12) and providing a 53 percent cash match to the project (criterion 6).

The City of Montrose is a local government (the highest priority for funding, criteria 4). The City has been planning and implementing sustainability practices since 2008, through its SustainMontrose efforts and 2011 Greenhouse Gas Emissions Inventory that seek increased energy efficiency and

use of renewable energy while minimizing carbon emissions. In its January 2011 SustainMontrose Action Plan (see attached in Exhibit B), the City of Montrose wishes to make cost effective fuel choices for City vehicles that reduce negative impacts on the environment and evaluate the feasibility of using hybrid vehicles and battery-powered electric vehicles for short distances (criterion 5). The City recently added two hybrid (Ford C-Max) vehicles to its fleet and plans to purchase additional alternative fuel vehicles. The SustainMontrose Action Plan also encourages City employees to use sustainable transportation alternatives to commute to work.

The City of Montrose projects charging station usage of up to two vehicles per day, five days a week (a monthly occupancy of about 43 vehicles, 1,560 vehicles over the initial 3 years of the project, criterion 11). According to Cabell Hodge of the Colorado Energy Office, criteria 8, 9 and 10 requesting information about the types of vehicles being replaced, fuel savings and estimated EV annual mileage are primarily for applications requesting funds to purchase EVs (electric vehicles).

2. Please describe major phases of the project and the estimated completion date of each phase.

The major phases of the project include:

- Meet with state staff to review procurement processes/Enter into Purchase Order with State of Colorado (Responsibility – Virgil Turner, City of Montrose)

Completion by May 1, 2014

- Submit competitive bid documents (request for quote for ESVE equipment) to Colorado Energy Office (CEO) for approval prior to bid (Virgil Turner, City of Montrose)

Completion by May 1, 2014

- Issue request for quote according to City of Montrose and other required procurement policies (Virgil Turner, City of Montrose)

Completion by May 15, 2014

- Excavate and patch asphalt; complete pedestal formwork; and install concrete base for EVSE charger and bollards (City of Montrose Public Works Labor)

Completion by June 16, 2014

- Install electric smart meter (service drop to a meter base) (Delta-Montrose Electric Association)

Completion by June 16, 2014

- Complete electrical and EVSE installation work/Certify compliance with all federal, state and local permitting, zoning and code requirements (City of Montrose electrical contractor licensed in the State of Colorado and insured)

Completion by August 14, 2014

- Complete Final Report, Summary Invoice/Reimbursement Request and all final documentation (Virgil Turner, City of Montrose)

Completion by September 1, 2014

7. Section VI. Planning Criteria

1. Has your organization received any interest from stakeholders/employees/owners/lessees that own EVs for EVSE installations at your location? Please describe.

Several Montrose electric vehicle owners have expressed enthusiastic support for the City's efforts to install an EVSE charging station in Montrose. (See letters supporting the proposed charging station attached as Exhibit C.) However, because of a dearth of electric vehicle charging resources in Western Colorado, the City of Montrose believes very few local residents have considered purchasing electric vehicles. Development of electric vehicle charging infrastructure in Montrose will make electric vehicle ownership more feasible and likely for local commuters and will improve the ability of electric vehicle owners to travel between Grand Junction and Durango.

Since the City of Montrose also encourages its employees to adopt sustainable transportation, location of the charging station adjacent to City Hall may encourage City employees to consider electric vehicles as a commuting option.

2. Does your organization have specific or general planning documents related to EV or EVSE? For example, fleet implementation plans, Smart Charging plans, or sustainability plans.

Yes

If yes, please upload an electronic copy. After selecting a file, please click the "Upload" button. Please note that you may upload up to 3 files, and the maximum size per file is 10 MB.

[Exhibit B SustainMontrose Action Plan.pdf](#)

Comments: The City of Montrose began the SustainMontrose effort in 2008, and the January 2011 SustainMontrose Action Plan includes a section on Internal Transportation (including goals, tasks and outcomes for the City Fleet and Employee Transportation). See the January 2011 SustainMontrose Action Plan attached as Exhibit B. The SustainMontrose effort encourages energy efficiency and use of renewable energy, while minimizing carbon emissions, and directs the City organization to make City fleet fuel choices that are cost effective and reduce negative impacts on the environment (see page 5 of the SustainMontrose Action Plan). The plan also directs the City to evaluate the feasibility of using hybrid vehicles and, for short distances, battery powered electric vehicles. (The City recently added two hybrid (Ford C-Max) vehicles to its fleet and plans to purchase additional alternative fuel vehicles.) To lead by example and encourage City employees to embrace sustainable transportation, the SustainMontrose Action Plan also seeks to reward with financial incentives employees that use sustainable transportation methods to travel to and from work (see page 6 of the Action Plan). The City of Montrose's March 2008 Comprehensive Plan also encourages the City to develop multi-modal transportation alternatives in Goal 17: "Develop a safe, multimodal transportation system that efficiently serves current needs and provides for future growth."

If no, are you interested in learning more about developing EV/EVSE planning documents?

3. Is your organization partnering with other entities to complete this project? If yes, please provide a list of partners and describe how partners will improve this project. Otherwise, please type "N/A" in the box below.

The City of Montrose is providing \$5,190 in cash match for this project and is partnering with the Delta-Montrose Electric Association, who will provide an electric smart meter (service drop to a meter base), a \$2,000 value, to the project.

4. Please describe any renewable energy or energy efficiency efforts that may reduce the overall environmental impact of your EVSE facility. If there are none, please type "N/A" in the box below.

The City of Montrose is working with Delta-Montrose Electric Association (DMEA) to power the EVSE charging station through photovoltaic (solar) renewable energy. While all energy produced through DMEA's solar array has already been purchased locally, DMEA is considering initiating a program in which DMEA will install solar equipment at its cost behind the customer's meter to power projects such as the EVSE charging station. The

City of Montrose will consider powering the EVSE equipment under this program, once the program becomes available.

5. Has your organization secured the matching funds for this project? Please describe the source and amounts secured for this application. Please note that the applicant must provide a minimum of 20% EV/EVSE matching funds for the project or cash match. These matching funds cannot be direct or indirect federal funds.

Amount

7190

Source

\$5,190 from the City of Montrose and \$2,000 from the Delta-Montrose Electric Association (DMEA) for a service drop to a meter base.

8. EVSE Application Planning Criteria

6. Please provide the address of the EVSE location(s).

	Location Name	Address	City	State	Zip
1	Centennial Plaza (adjacent to Montrose City Hall)	433 S. First Street	Montrose	CO	81401
2					
3					
4					
5					
6					
7					
8					
9					
10					

7. Please provide a description of the site location including nearby amenities (i.e. public facilities, museums, parks, etc.) and hours of access.

The proposed EVSE will be located in a City-owned parking lot adjacent to (and with an accessible path to) City Hall and Centennial Plaza, a focal point for community gatherings and festivals, in the heart of historic downtown Montrose. The site is also adjacent to a public restroom and within walking distance of numerous downtown employers, attractions and facilities, including the All-Points Transit transfer station providing public bus

transportation throughout the community and region (within one block), the downtown Montrose Visitor's Center (located in the Elks Civic Building at 107 S. Cascade within one block) and Main Street (within one block), with its many and varied shops and restaurants. The Montrose Regional Library is located within two blocks, City Market (grocery store) is within three blocks, the Montrose County Historical Museum (Denver & Rio Grande Railroad Depot) is within four blocks, and Montrose Memorial Hospital is located within 5 ½ blocks. The proposed EVSE will be accessible seven days a week, 24 hours a day.

Location of the EVSE charging station will serve the needs of local commuters and visitors.

8. Questions regarding Public Access to EV Infrastructure:

Will all the EVSE be open to the public?

Yes

If not all EVSE, how many individual charging connections will have public access?

9. How will the parking queue be managed? (i.e., will there be a time limit for charging, will there be an attendant that monitors the queue?)

The EVSE charging station, which will be signed for use up to four hours per vehicle, is located across Centennial Plaza from City Hall and will be monitored informally by existing City staff. Repeat offenders will be ticketed by a sworn City of Montrose police officer.

10. Is your organization planning to charge parking/charging fees for users in the next three years?

No

11. If your organization is planning to charge parking/charging fees for users in the next three years, please explain how parking transactions will be handled. Otherwise, please type "N/A" in the box below.

The City of Montrose does not intend to charge parking or charging fees to users within the first three years of use. The City will evaluate this policy after reviewing the charging station's usage in its first three years.

12. Beyond charging, what functionality does the applicant expect the charger to have (i.e. obtain data such as usage, time of day, etc.)? Please explain.

Delta-Montrose Electric Association will install a dedicated electric smart meter to serve the EVSE charging station that will allow the City of Montrose to access and evaluate electricity data gathered in 30-minute increments. Available data will include the time of use, number of vehicles served, and amount of electricity used. The City will also purchase an EVSE charger capable of retrofit for collecting electricity usage data and point of sale information. The proposed charger will also be certified under Underwriters Laboratories (or equivalent); will be compliant with the current version of the National Electrical Code (NEC) Article 625; and will have a minimum one-year warranty.

13. How many vehicles can be charged by each EVSE unit? To what extent does the applicant expect that these stations can be upgraded in the future to charge more vehicles?

Two vehicles may be charged simultaneously with the proposed EVSE charging unit. As demand for charging services increases, space is available

for the City to install additional EVSE units at the same location. Conduit will be installed to allow for additional EVSE units in conjunction with this project.

9. Section VII. EVSE Application

For EVSEs, please indicate the types of EVSE that will be publicly accessible and not publicly accessible with researched costs below. The RAQC and CEO will award 80% of EVSE equipment, labor, construction and permitting cost up to \$6,260. The RAQC will also award 80% of the additional reporting costs* within the \$6,260 per station. No awards will be adjusted upwards based on an underestimation of cost by the applicant. Therefore, it is strongly recommended that applicants perform their due diligence by contacting vendors for estimates. Upon award, RAQC and CEO will meet with program applicants to discuss and review their procurement processes to ensure it meets RAQC and CEO requirements. Do not run your bid processes prior to this meeting. RAQC and CEO must approve all bid documents before the competitive process begins.

	Location Name	Type (Level II or III)	Number of Vehicles this Unit can Charge at once	EVSE Equipment Cost per Unit	EVSE Labor Cost per Unit	EVSE Construction Cost per Unit	EVSE Permitting Cost per Unit	EVSE Additional Reporting Cost per Unit*	Expected Date of Purchase	Proposed Date of Installation	Publicly Accessible (Yes or No)
1	Centennial Plaza (adjacent to Montrose City Hall)	Level II	2	\$4,400	\$300	\$8,550	\$200	\$0	June 30, 2014	August 14, 2014	Yes
2											
3											
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11. Section VII. Funding Request: EV Application

For EVs, please indicate the make, model, type and quantity of all vehicles that you seek to receive grant funding for. Please provide researched estimates for vehicle cost. The RAQC will award 80% of the incremental cost between an EV and its comparable conventionally fueled vehicle up to \$8,260. No awards will be adjusted upwards based on an underestimation of cost by the applicant. Therefore, it is strongly recommended that applicants perform their due diligence by contacting vendors for estimates. Upon award, RAQC will meet with program applicants to discuss and review their procurement processes to ensure it meets RAQC requirements. **Do not run your bid processes prior to this meeting.** RAQC must approve all bid documents before the competitive process begins.

	Quantity	Vehicle Use*	EV Model Year	EV Make	EV Model	EV Cost	Gas/Diesel Fueled Vehicle Model Year	Gas/Diesel Fueled Vehicle Make	Gas/Diesel Fueled Vehicle Model	Gas/Diesel Fueled Vehicle Cost	Incremental Cost per Vehicle
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12. Section VIII. Additional Relevant Information

1. Is there any additional relevant information that will assist the EVIWG in understanding the proposed project?

N/A

2. Are there any additional documents that help support your application? Please attach any additional relevant information. If you are attaching documents, please include a description of the documents attached.

After selecting a file, please click the "Upload" button. Please note that you may upload up to 3 files, and the maximum size per file is 10 MB.

[Exhibit A Site Plan and Parking Plan.pdf](#)

[Exhibit C Support Letters.pdf](#)

Comments:

15. Section IX. Final Documentation Required and Section X. Reporting Requirements

1. Please indicate whether or not you agree to the above terms and conditions.

Please check the following box and enter your name

I agree

Name

Virgil Turner

18. Thank You!

Email Confirmation

Feb 03, 2014 20:20:28 Success: Email Sent to: vturner@ci.montrose.co.us