

2021 EWEB GREENPOWER GRANT APPLICATION

Contact Information:

Lane County - Fleet Services Division
NAME OF ORGANIZATION

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Lanecounty.org
WEBSITE

Advancing Lane County's EV Charging
Infrastructure with Solar Power
PROPOSAL TITLE

GRANT AMOUNT REQUESTED

\$47,000



Signature

6/4/2021

June 4, 2021

Email completed application and proposal to:
Cheryl Froehlich
Cheryl.Froehlich@eweb.org

Application deadline:
Must be submitted **no later than**
MONDAY, MAY 31, 2021

Questions?

Contact Cheryl Froehlich
cheryl.froehlich@eweb.org
541-685-7676

Proposal: Please write a proposal containing the following elements. Submit the proposal as a PDF with your application.

1. Background:

- Mission of the organization
- The needs your organization addresses
- The population your organization serves
- A brief description of your current programs and operating budget

2. Project Description

- Statement of the primary purpose of the project and its relationship to EWEB's mission
- The population you plan to serve and how they will benefit from the project
- Strategies you will employ to implement the project

3. Project Evaluation

- Your criteria for a successful project
- The results you hope to achieve by the end of the funding period
- The method by which you will measure effectiveness

4. Budget and Timeline

- A budget for the project for which funds are requested, **including any additional funding which has been secured at the time of application.**
- Timeline of the project

5. Attachments

- Proof of nonprofit status (copy of IRS letter)*
- List of board of directors*
- One-paragraph resumes of key staff working on the project
- Amount and source of any other funding support previously received from EWEB (if applicable)
- Proof of ownership or authority to install equipment at or otherwise modify building, if request for facility construction project

*Optional or not needed for public and academic institutions.



LANE COUNTY FLEET SERVICES

Advancing Lane County's EV Charging
Infrastructure

2021 EWEB
GREENPOWER
GRANT APPLICATION

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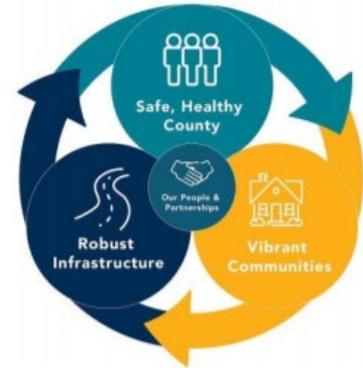
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1. Background

Mission of Lane County Government

Lane County Government's mission is **to be recognized as the best county in which to live, work and play**. In pursuit of this vision, Lane County's mission is **to responsibly manage available resources to deliver vital, community-centered services with passion, drive and focus**. The County places people and partnerships at the center their strategic priorities, which are:

- Safe, Healthy County
- Vibrant Communities
- Robust Infrastructure



This grant application is submitted by the Fleet Services Division of Lane County government. Fleet Services is responsible for providing a modern, well-equipped vehicle and equipment fleet that is maintained and utilized at the lowest reasonable cost while minimizing environmental impacts. Fleet Services owns and manages **390** light-duty vehicles that are either assigned to a pool or, to specific personnel for carrying out their duties. The Division's Electric Vehicle policy calls for continued efficiency and greater reduction of its greenhouse gas emissions in alignment with the Board of County Commissioner's Climate Action Plan. To that end, the County aims replace **200** of these vehicles with fully electric vehicles by the year **2030**.

This grant application seeks EWEB Greenpower Grant funding to help offset the cost of a solar powered charging station to support the County's transition away from gas-powered vehicles to electric vehicles.

Needs Addressed

Considering the breadth of County Government services - which at a high level include but, are not limited to: *Assessment & Taxation, District Attorney's Office, Emergency Management, Health & Human Services, Public Works, Waste Management and, the Sheriff's Office* - this grant application zooms-in on the needs addressed by the **Fleet Services Division** embedded in the Public Works department as the primary applicant. Fleet Services' electric vehicle policy applies to the following government functions, that are carried out by various County departments and, by employees who drive county-owned vehicles to ensure smooth functioning operations.

Parks (various locations) - provide quality of life, encourage health of families and youth and, support economic well-being through increased values for private properties close to parks.

Lane Events Center (aka Fair Grounds) - In addition to the many revenue generating events held year round to provide pleasure for residents and tourists, the Events Center has served in equal measure during times of crisis. To name just a few examples, the buildings and grounds have been used for emergency vaccination clinics, animal evacuation shelters, as a disaster resource center, a warming center and a "shelter-in-place" site for the un-housed and, hosting Lane County Circuit Court proceedings to accommodate social distancing during COVID.

Public Health (various locations) - is responsible for promoting healthy lifestyles, researching disease and injury prevention, and detecting, preventing and responding to infectious diseases.

Parole & Probation (downtown Eugene) - allows offenders to reside in the community rather than in jail or prison and, aims to reintroduce offenders as productive community members.

Public Service Building (downtown Eugene) - The Public Service Building is one of the largest County-owned buildings at 151,325 square feet, and currently houses County Administration Offices, Assessment and Taxation, Developmental Disabilities Services, Technology Services, the County Clerk's Office and, the Circuit Court's jury assembly room.

Behavioral Health (MLK Blvd) - promotes mental health, resilience and wellbeing; provides a broad array of services and programs including include treatment for children, families, and adults through a variety of programs focusing on mental health issues.

Juvenile Justice Center (MLK Blvd) - aims to reduce juvenile crime through coordinated prevention and intervention programs that hold justice-involved youth appropriately accountable; provides restorative, rehabilitative and treatment services for youth and their families using evidence based best practices and data driven decision making; promotes healthy family interactions; prevents, reduces, and resolves family conflict; protects victims' rights during all phases of Court proceedings; and safeguards our communities.

Developmental Disabilities (downtown Eugene) - Developmental disabilities represents limitations in function resulting from disorders of the developing nervous system. These limitations manifest during infancy or childhood as delays in reaching developmental milestones or as lack of function in one or multiple domains, including cognition, motor performance, vision, hearing and speech, and behavior.

Population Served

Lane County is the fourth most populous county in Oregon with a population of approximately 370,000 dispersed throughout twelve cities and thirty five rural areas. It is estimated that over 270,000 people live in cities and over 100,000 people live in rural areas.

Geographically, Lane County spans 4,722 square miles (approximately 50 miles north-south and 115 miles east-west). The primary highways are I-5, Hwy 101, Hwy 126, and Hwy 58 and, those highways traverse a diverse range of terrain including the Pacific Ocean coastline, the Willamette Valley, and the Cascade Range foothills.

Description of Current Programs and Operating Budget

The Fleet Services' budget is in Lane County's Motor and Equipment Pool Fund 619 which is an Internal Service Fund. (The County uses Internal Service Funds to account for its self-insurance and employee benefits activities, motor pool operations, intergovernmental services activities, information services and computer replacement activities.) The Motor and Equipment Pool Fund covers the cost of vehicles and equipment used by County departments. The payments to this fund are for vehicle operation and maintenance, as well as vehicle replacement.

The proposed project for this application is **the purchase and installation of a solar powered electric vehicle charging station to be located in downtown Eugene for use by County personnel and the general public.** As the County transitions to an electric vehicle fleet , the supporting vehicle charging infrastructure requires a substantial up-front investment that is initially more costly than maintaining the status quo of a gas-powered fleet.

The Fleet Services Division has a **budget of \$300,000** to install vehicle charging stations at **8 locations** throughout Lane County. The County commissioned a study by Systems West Engineers to estimate construction costs only for installing the EV charging stations. That information, coupled with additional cost estimates for charging equipment, hardware and software; utility connection costs; permitting; contractor mark ups and; contingencies, depicts a **total cost estimate of \$383,160.** Lane County is using the projected funding gap as motivation to pursue grant opportunities to nonetheless, move the project forward with a focus on innovative solutions with payback assurances. This application **requests \$47,000 from EWEB's Greenpower Grant Program** to help defray the overall project cost The upfront investment will provide payback assurances over time and help Fleet Services accomplish its mission within budget.

2. Project Description

Statement of Project Purpose and Alignment with EWEB's Mission

Lane County proposes a shared purpose project with EWEB to purchase a transportable, grid independent and 100% sustainable EV Charging station to be located in the County-owned parking lot adjacent to the Public Service Building on 7th Avenue and Pearl Street in downtown Eugene. The charging station will be available to both County personnel and the general public.

The proposed project is consistent with EWEB's Greenpower goals and will:

- ✓ Protect the environment through clean power generation
- ✓ Support a local solar energy project by investing in a solar powered EV charging station.
- ✓ Invest in the local economy by making it possible for those who own businesses or work downtown to have convenient access to EV charging.
- ✓ Support a project that advances renewable energy for Lane County's vehicle fleet.



A common concern among consumers and fleet owners considering the purchase of electric vehicles is convenient access to charging stations. For most drivers, this starts with charging at home or at workplace fleet facilities. Lane County believes that providing high-visibility charging stations near workplaces, multi-unit residences (where dwellers do not have access to dedicated garages with their own chargers) and public destinations will demonstrate the local government's support of electric vehicles and the needed charging infrastructure.

The proposed location for the EV charging station to be purchased with this grant is within a short walking distance to numerous attractions and destinations in downtown Eugene. Namely, the popular Farmer's Market, Saturday Market, 5th Street Public Market and, several local businesses and multi-unit residences. An EV charging station in the proposed location is expected to be the most heavily used of all planned locations.

A Greenpower Grant award will help stretch taxpayer dollars to successfully transition the County to an electric vehicle fleet, which is an initiative largely dependent on a shared purpose with local utilities. The cornerstone of policy for building Lane County's EV charging infrastructure is to partner with others who share our commitment to clean power. For example, in October 2020 Lane County received an Emerald People's Utility District (EPUD) grant award for assistance with installing an EV charging station at Howard Buford Recreation Area in the Mt. Pisgah Arboretum parking lot. A strong partnership between the County and EPUD is advancing the project. This grant application seeks similar assistance - but for a more technically advanced and innovative solution - from EWEB's Green Power Grant Program.

How the Population Served Will Benefit from the Project

The benefits of installing electric vehicle charging stations go hand-in-hand with the benefits of EV ownership therefore, the benefits of the proposed project are discussed, in part, in that context.

Enhanced Energy Security: EV's are more energy-efficient than gas-powered vehicles, less reliant on fossil fuels and therefore more resilient to energy price volatility.

Lower Greenhouse Gas Emissions, Improved Air Quality, Enhanced Public Health: EV's have either low (hybrid vehicles) or no (all electric vehicles) tailpipe emissions comprised of carbon monoxide, volatile organic compounds and nitrogen oxides.

Economic Benefits: Fleet Services and, EV owners generally, will have a 50% - 75% reduction in gasoline costs. Further, an Ohio study found that there was a \$1,300 economic benefit per electric vehicle purchased due to the shift away from spending on gas to instead spending in the local economy.

Renewable Energy Source: Investing in a solar powered EV charging station further reduces emissions by charging the vehicles with a renewable energy source.

Decreased Range Anxiety: A publicly-accessible, highly visible and conveniently located charging station in downtown Eugene will provide opportunity for EV charging while engaging in the local economy whether while at work or for leisure.

Project Implementation Strategies

This grant proposal requests funding for procurement of a solar powered charging station through a sole source selection process. The project proposes the EV ARC as described below in their informational materials followed by the four phases of the Fleet Services implementation strategy.

The patented EV ARC™ 2020 is the only 100% renewable, movable, grid-independent EV charging option and it fits in a standard parking space. It will make enough clean, renewable energy to power up to 265 e-miles in a day and charge up to 6 electric vehicles (EVs) at a time. It requires no permits, no construction, no trenching, and can be deployed in minutes by a zero-contact Beam Deployment Expert.

The EV ARC™ 2020 is a versatile energy-infrastructure product with a sleek aesthetic design that can provide power to charge everything from EVs, e-motorcycles and e-bikes, to outdoor digital displays, G radios, CCTVs (closed circuit TVs), lighting and personal electronics.

Project Initiation Phase 1 (July - August 2021)

Upon grant award, core stakeholders will be convened to create a standardized list of project-planning information — in other words, the details necessary to plan for equipment procurement, installation and deployment. That list will include a detailed scope statement to ensure all aspects of the project are identified and scheduled. Detailed timelines, cost calculations and a list of required personnel will be developed and refined. Most importantly, the expected project outcomes will be documented with detailed success metrics to assess return on investment and reduction in carbon emissions. The initiation phase's implementation criteria will also include an evaluation component for considering whether the new system and software should be considered for additional EV Charging locations.

Installation Phase 2 (October 2021 - March 2022)

Installation will include the equipment, attractive signage and, a public information campaign to draw attention to the new EV Charging station and will include EWEB's logo and a statement of shared purpose and funding for the charging station.

The Fleet Services Division will be responsible for maintenance and oversight of all project management and project implementation plans and actions. The installation phase will also kick off employee training and education efforts to integrate the new EV charging station into daily usage.

Institutionalized phase 3 (March 2022 - June 2022)

The institutionalized phase aims to fully commit the organization to the transition to an electric vehicle fleet. This phase will involve task-coordination, metric-tracking and a communication campaign across all departments. By the conclusion of this stage, the formal project planning checklist is integrated into Fleet Services' new workflows as more EV charging stations and electric vehicles are brought online.

Maintenance and continuation phase 4 (July 22 - ongoing)

The Maintenance and continuation phase represents establishing a culture wherein EV usage is as common place as the former gas-powered vehicle model. The goal of this phase is to optimize EV usage so it works organically and intuitively for all drivers of the County-owned electric vehicles.

3. Project Evaluation

The success of the project itself - purchase and install an EV charging station in downtown Eugene - will be organized using traditional project management best practices that include development of a work breakdown schedule, timeline and detailed budget.

Project Success Criteria

Success of the project will be evaluated based on:

- Schedule adherence - project tasks will be performed pursuant to a prescribed schedule. Key milestones will be defined and the progress will be evaluated based on the timely completion of work.
- Quality - quality checks will be performed periodically to ensure all parties involved in the project are delivering goods and services at an acceptable level of expected quality.
- Cost - Cost estimates will be refined and actual costs incurred will be compared to budget. Deviations from budget will be mitigated as quickly as possible and corrective actions taken when necessary.
- Stakeholder Satisfaction - progress reports will be delivered on a regular, recurring basis and stakeholder satisfaction will be assessed to ensure all parties expectations are being met.
- Lessons Learned will be solicited and documented.

Project Outcomes and Results

- Consistent Station Utilization - station utilization will be tracked and analyzed.
- Reinforced image of the County's commitment to clean technology - that station will be publicized and promoted.
- Ongoing Outreach and Information Program will be used to heighten awareness
- Publicly accessible and ADA Accessible - the station will be accessible to all.

Effectiveness Metrics

- Contribution towards reduced carbon footprint for County operations
- Savings from reduced gasoline purchases
- Market acceptance of usage fees
- Minimum of ten years of station operation
- Low up front and operational costs; payback period of less than 5 years

Budget and Timeline

The total EV Charging Station cost is outlined below. The Fleet Services Division **requests \$47,000** from the EWEB Greenpower Grant program and **Lane County commits** to matching funds in the amount of **\$32,585**.

TOTAL COST OF EV CHARGING STATION AS INSTALLED BY VENDOR	
\$ 59,400	Base Model EV Arc
\$ 5,071	ChargePoint CT-4013-GW1 Single-Port Station
\$ 6,949	ChargePoint CT-4023-GW1 w/CT4000 – PMGMT Dual-Port Station
\$ 1,965	Emergency Power Panel
\$ 1,200	<u>Grid Connect</u>
\$ 74,585	Total Vendor Cost

To illustrate how this project fits with the larger Fleet Services project plan for implementing an EV charging infrastructure, a snapshot of the total project budget is shown below. The grant proposed project is shown on a white background with black font and, all other EV charger locations and their associated costs are shown on gray background with gray font.

Lane County Fleet Services, Budget Snapshot for EV Charging Infrastructure

	Mt. Pisgah (in progress)	Wheeler Pavilion aka Fair Grounds (completed)	Public Health Building	Parole & Probation (3 stations)	Public Service Building	Behavioral Health Building	Juvenile Justice Center (secured parking)	Developmental Disabilities (2 stations)	Public Works Campus (completed)
Estimated Construction Costs	\$ 15,000.00	\$ 7,179.00	\$ 9,500.00	\$ 4,500.00		\$ 9,900.00	\$ 38,900.00	\$ 4,500.00	
Charging Station									
BEAM EV ARC 2020					\$ 74,585.00				
CT4000 Charging Station Hardware	\$ 5,768.00	\$ 5,768.00	\$ 5,768.00	\$ 17,304.00		\$ 5,768.00	\$ 5,768.00	\$ 11,536.00	\$ 17,304.00
Upfront Software Costs	\$ 2,638.00	\$ 2,638.00	\$ 2,638.00	\$ 7,914.00		\$ 2,638.00	\$ 2,638.00	\$ 5,276.00	\$ 18,466.00
5-year Warranty	\$ 2,495.00	\$ 2,495.00	\$ 2,495.00	\$ 7,485.00		\$ 2,495.00	\$ 2,495.00	\$ 4,990.00	\$ 9,980.00
Subtotal	\$ 25,901.00	\$ 18,080.00	\$ 20,401.00	\$ 37,203.00	\$ 74,585.00	\$ 20,801.00	\$ 49,801.00	\$ 26,302.00	\$ 45,750.00
Other Construction Costs									
Utility Connection Work	\$ 5,000.00		\$ 5,000.00	\$ 5,000.00	\$ 5,000.00	\$ 5,000.00	\$ 5,000.00	\$ 5,000.00	\$ 3,000.00
Contractor Mark Up 12%	\$ 1,800.00		\$ 1,140.00	\$ 540.00	\$ -	\$ 1,188.00	\$ 4,668.00	\$ 540.00	
Construction Contingency 20%	\$ 3,000.00		\$ 1,900.00	\$ 900.00	\$ -	\$ 1,980.00	\$ 7,780.00	\$ 900.00	
Subtotal	\$ 9,800.00	\$ -	\$ 8,040.00	\$ 6,440.00	\$ 5,000.00	\$ 8,168.00	\$ 17,448.00	\$ 6,440.00	\$ 3,000.00
Total Project Budget	\$ 35,701.00	\$ 18,080.00	\$ 28,441.00	\$ 43,643.00	\$ 79,585.00	\$ 28,969.00	\$ 67,249.00	\$ 32,742.00	\$ 48,750.00
Grant Funding	\$ (24,000.00)				\$ (47,000.00)				
Net Cost to County	\$ 11,701.00	\$ 18,080.00	\$ 28,441.00	\$ 43,643.00	\$ 32,585.00	\$ 28,969.00	\$ 67,249.00	\$ 32,742.00	\$ 48,750.00
TOTAL ALL SITES	\$ 383,160.00								
GRANT FUNDING	\$ (71,000.00)								
TOTAL COST TO COUNTY	\$ 312,160.00								

The estimated timeline for this project is six to eight months from the date of grant award as depicted in the graph below.

Solar EV Charging Station @ Public Service Building								
	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22
Grant Contract Signed								
Project Initiation								
Convene Stakeholders								
Start Procurement Process								
Installation Phase								
Convene Core user Groups / Departments								
Develop SOP's								
Receive and Install Equipment								
Design and Install Signage								
Launch Public Information Campaign								

Attachment 1. Resumes of Key Staff

Michael Johns / General Services Manager

Michael has been in current position as Lane County General Services Manager since 2009. He is responsible for Fleet and Animal Services. Focus in fleet has been improving county's carbon footprint and other sustainability issues with particular emphasis on alternative fuels. Michael is a retired U.S. Army Transportation Corps Officer with extensive national and international experience in multi-modal transportation operations. He served as the regional acquisition and remarketing manager for the General Services Administration in Atlanta, GA and was later promoted to the GSA fleet manager for Florida. Michael joined the United Nations Department of Peacekeeping Operations and served as the Chief Transport Officer in the peacekeeping missions in Nepal and Timor-Leste. He has BA in History from the University of Oregon and a MS in Environmental Policy and Management from the University of Denver.

John Roche / Fleet Logistics Supervisor

- LCPW primary fleet acquisitions and disposal specialist – Purchaser of all heavy duty and light duty equipment with 21 year background in automotive and equipment industry, and 4+ years specific experience in government purchasing and contracts. SME in County and State procurement policies, rules, and regulations. Average annual budget management of \$4-5 million in capital expenses.
- Parts procurement supervisor – manage two FTE, an annual parts purchasing budget of \$1+ million as well as standing parts inventory of \$750k+
- Fuel program supervisor – Oversee equipment management, maintenance on LCPW liquid fuel management systems, and annual purchasing budget of \$1.5 million in liquid fuel purchases. Compliance supervisor and current Class A fuel operations certificate holder.
- Fleet project management – numerous departmental improvement projects; Fleet audit review and operational improvement committee member. Fleet OS administration – upgrades, team training, and workflow management. Fleet pool improvements and hardware upgrades (currently underway). Fleet billing program overhaul and OS application implementation (currently underway). Fleet electrification – drafting EV first policy, procurement plan for fleet vehicle electrification, and charging infrastructure phased plan improvements and additions.

Nathan Mitchell-Hooks / Public Works Analyst

Nathan Mitchell-Hooks has served as the Public Works Analyst for the Fleet & General Services division of the Lane County Public Works department for over two years. Nathan's duties include the management of data related to the division's fuel program, coordination and construction of division's service contracts, purchase orders, and bid documents, analysis of current market trends related to electric vehicles and new fuel technologies, and supervision of schedules and duties for division's projects, such as its \$250K, five-year EV infrastructure project. Nathan is actively on the lookout for new opportunities to leverage innovative technology in order to aid Fleet in its goals of implementing and encouraging sustainable practices across Lane County. Nathan is the project manager for Fleet Services' EV charging infrastructure projects.

Attachment 2. Other EWEB Funding



Tue 4/20/2021 10:55 AM

Sarah.Helmerts@EWEB.ORG

Commercial Clean Charge Rebate Program Completion

To MITCHELL-HOOKS Nathan D (PW); ROCHE John M



Project ID# 351464
Electric Vehicles - Commercial
Premise
796 W 13TH AVE
EUGENE OR 97402-4010

Dear LANE EVENTS CENTER,

EWEB's Customer Solutions Department would like to thank you for participating in our Clean Charge – Commercial Level 2 EV Charger Rebate Program. *Rebate offer is subject to availability and offer valid for 90 days.*

Your \$1,000 rebate payment will be processed within 4-6 weeks. If you have any questions, please contact me.

Please tell us about your experience by completing a brief survey here: <https://conta.cc/2FdTrWW>

Thank you,

Sarah Helmers

EWEB Customer Solutions
PO Box 10148
Eugene, OR 97401
541-685-7442
ems.answers@eweb.org
eweb.org/saveenergy



Tue 1/19/2021 3:45 PM

Sarah.Helmerts@EWEB.ORG

Commercial Clean Charge Rebate Program Completion

To ROCHE John M; MITCHELL-HOOKS Nathan D (PW)

You forwarded this message on 1/19/2021 4:07 PM.

[EXTERNAL △]



Project ID# 353352
Electric Vehicles - Commercial
Premise
3040 N DELTA HWY
EUGENE OR 97408-1636

Dear LANE COUNTY PUBLIC WORKS,

EWEB's Customer Solutions Department would like to thank you for participating in our Clean Charge – Commercial Level 2 EV Charger Rebate Program.

Your rebate payment amount of \$4,000 will be processed within 4-6 weeks. If you have any questions, please contact me.

Please tell us about your experience by completing a brief survey here: <https://conta.cc/2FdTrWW>

Thank you,

Sarah Helmers

EWEB Customer Solutions
PO Box 10148
Eugene, OR 97401

Attachment 3. System Requirements

See following pages