

Advancing Transportation Electrification in Underserved Communities Through Utility Grant Programs

Resource Innovations, Pacific Power & SEEA

A decorative graphic at the bottom left of the slide featuring two overlapping circles. The circle on the left is a muted blue-grey, and the circle on the right is a vibrant coral red. They overlap in the bottom left corner, with the red circle partially obscuring the blue one.



SEEA
SOUTHEAST ENERGY EFFICIENCY ALLIANCE



**resource
innovations**

OUR MISSION

To optimize the use and impact of energy to enhance the quality of life in the Southeast.

OUR VISION

All people in the Southeast live and work in healthy and resilient buildings, utilize clean and affordable transportation, and thrive in a robust and equitable economy.

OUR VALUES



Take Initiative

We take responsibility for realizing a better quality of life in the Southeast.



Earn Trust

We pursue our work with benevolence, competence, and reliability.



Value Others

We seek, respect, and promote diverse perspectives.



Pursue Equitable Solutions

We recognize, acknowledge, and account for a history of prejudice and inequality in Southeastern communities.

Introductions



Kelly Helfrich
Vice President, EV Practice



Stephanie Starr
Solutions Delivery and Program
Manager

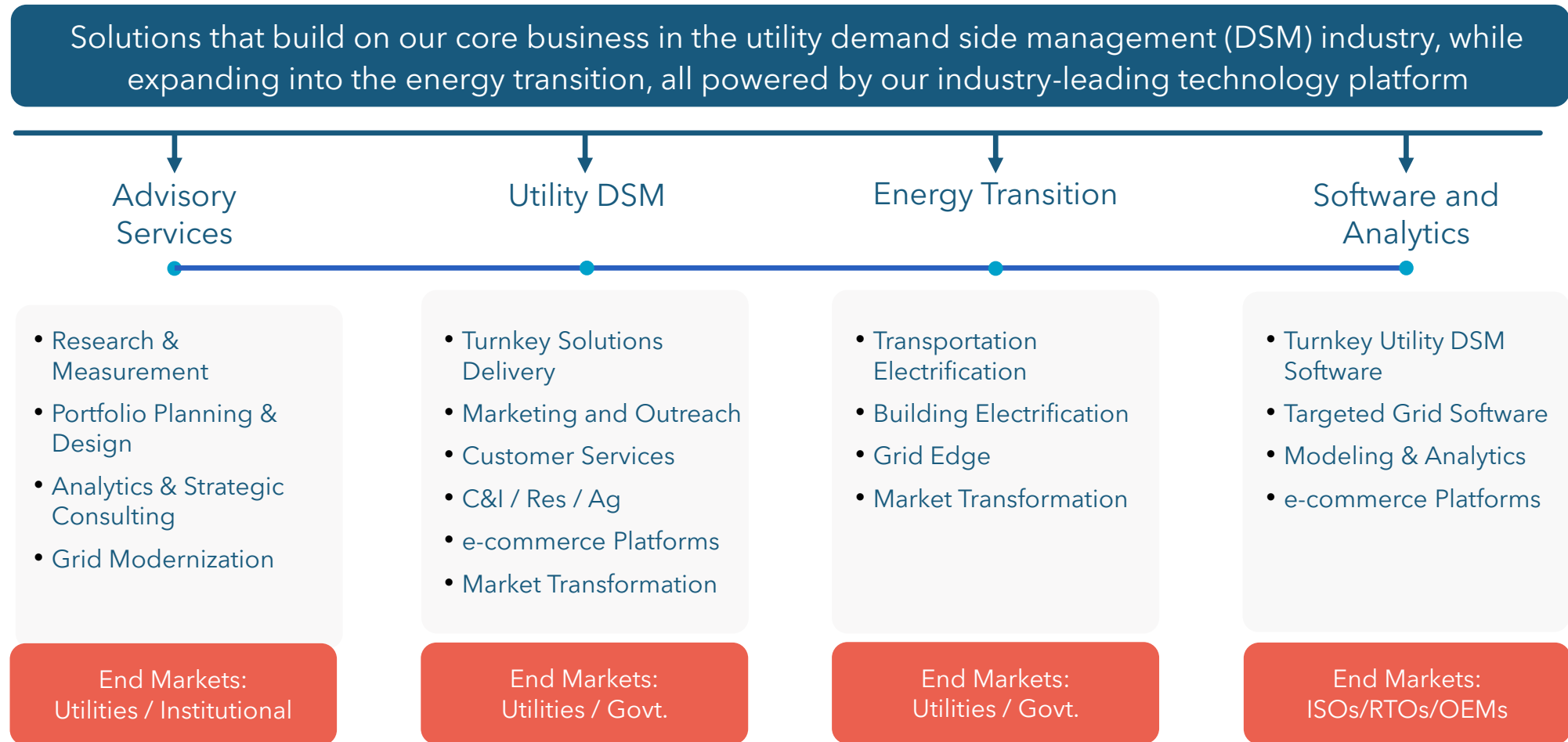


Vanessa Perkins
Program Manager



Berit Kling
Grant Program Manager

RI offers a full suite of best-in-class solutions for the grid, utilities and their end customers



Broad geographic reach combined with deep client relationships

Advisory Services

- 25+ US and Canada customers
- Highly skilled team of experts
- End-to-end utility services

Utility DSM

- 90+ Utility Customers
- Geographically diversified customer base
- 99% Customer retention rate

Energy Transition

- Utility & Institutional Customers
- Key Strategic Partnerships Ecosystem
- Large strategic IOU / MUD clients

Software & Analytics

- 70+ Software Clients & Partners
- Strong Partner Channel deployed worldwide
- >95% Customer Retention



International Grid Software & Analytics Customers

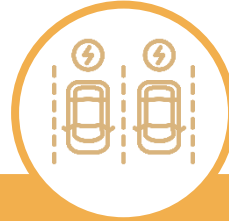


Three core TE business verticals to ensure intelligent ecosystem design and implementation



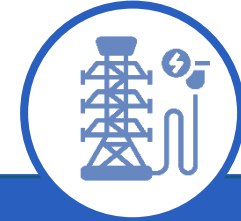
Community Electrification

The **Community Electrification** vertical involves building & managing relationships and programs with utilities, site hosts, communities, local and state government agencies, & transportation authorities with the end goal of intelligent transportation electrification policies & programs.



Fleet Electrification

The **Fleet Electrification** product is a one-stop shop for utilities looking to engage with & support commercial fleet owners who are:
(1) considering going electric, (2) slowly implementing EVs, or (3) already managing electric fleets.



Grid Optimization & Planning

The **Grid Optimization & Planning** vertical engages w/ utilities & ISOs to deploy intelligence & management software needed to implement planning practices + dedicated EV & DER programs to optimize the growing EV population on the grid.

Transportation Electrification Solutions

Community Electrification

eMobility Community Funding

- Design & Administration for:
 - Grants
 - LCFS funds

Turnkey Rebate Programs

- New and Used Electric Vehicles
- Public, Fleet, and Residential Charging
- eBikes

E-Commerce & Installation Solutions

- E-Commerce for EV chargers (can be paired with VGI program)
- Product Advisor Plus

Education, Outreach & Awareness

- Benefication Lab
- Education / Marketing Support / TCO

Fleet Electrification

Turnkey Fleet Electrification

Customizable Solutions include but not limited to:

- Self Service Educational & Planning Tools
- Full Operational Analyses & Electrification Roadmaps
- EVSE & Charging Location Evaluation
- Engineering Drawings & Assessments
- Optional Additional Services

Grid Optimization & Planning

Vehicle Grid Integration (VGI) Programs

- Enrollment & Program Marketing
- Incentive Management, Customer Support
- Reporting / EM&V

Software & Data Platforms

- Grid Optimization Operations (Grid360)
- EV Charging Data Aggregation Platform (Geneva)

TE Advisory Services

- EV Adoption Forecasting & Market Simulation
- EV TOU Rate Analysis
- EM&V

Agenda

- 1 Today's Learning Objectives
- 2 Program Overview
- 3 Program Examples
- 4 Lessons Applied to Program Design
- 5 Pacific Power: 2023 and Onward
- 6 Q&A

Today's Learning Objectives

Learning Objectives

Understand the background/context for Pacific Power's EV Grant Programs

Learn about case studies from e-mobility grant programs and their impacts on communities in Oregon

Identify the benefits to the utility from implementing equity-focused EV Grant Programs

Best practices for program design, informed by stakeholder feedback

Learn about Pacific Power's new grants and programs

Overview

Pacific Power's Oregon Territory

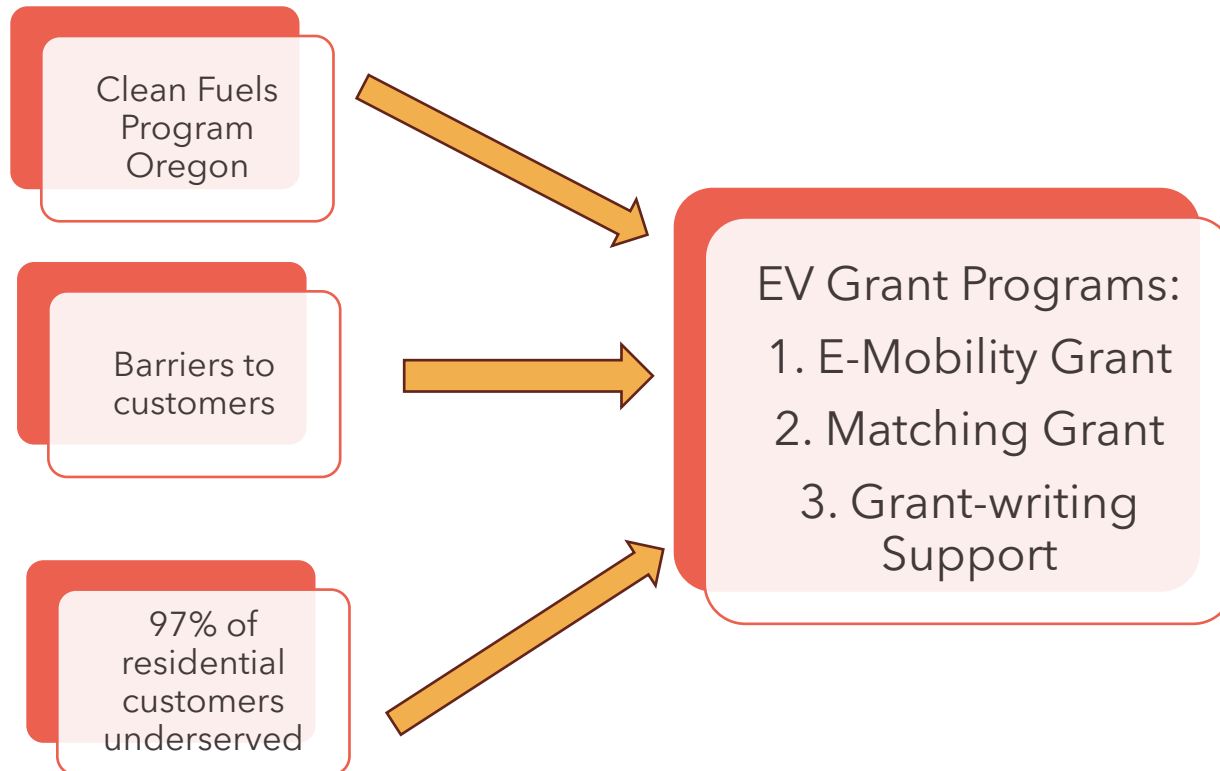
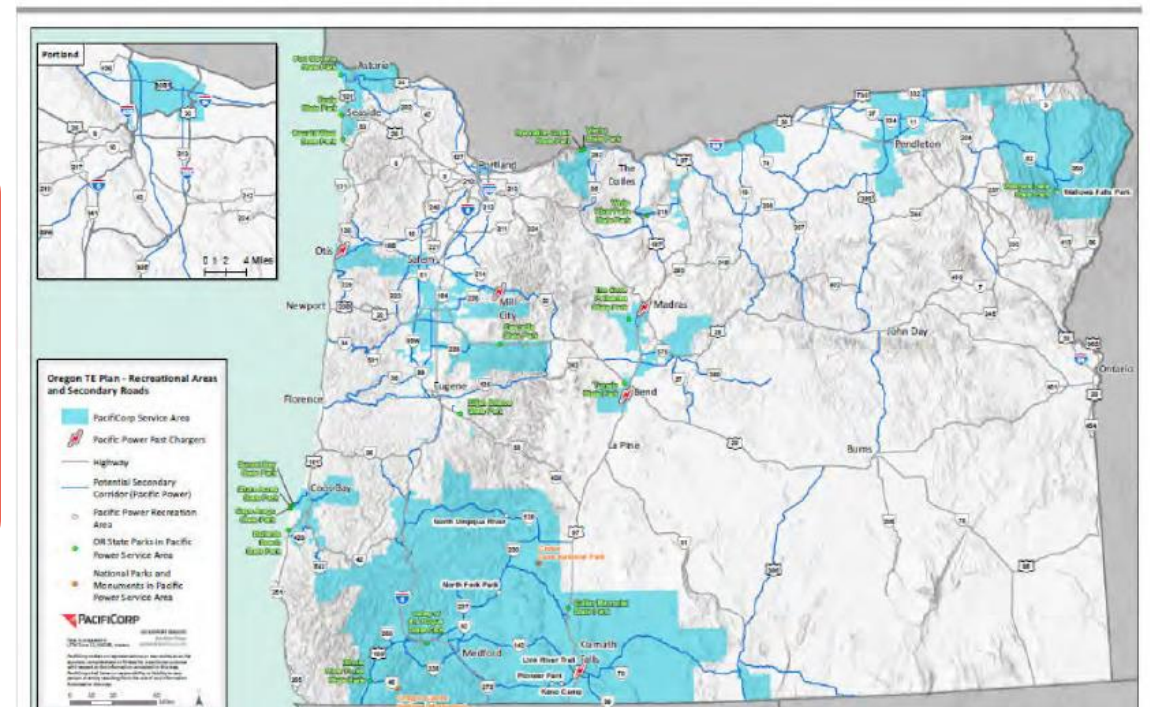


Figure 1: PacifiCorp's Oregon Service Area



600,000 electricity customers in 200 communities across Oregon ~21,000 square miles

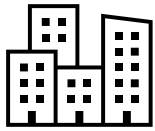
EV Grant Program Evolution

From charger pilots to EV grant programs:

- E-mobility grant programs, grant matching, grant writing support
- Over \$5 million awarded to projects to further electric mobility
- Beyond cars and chargers

Name	Charging Infrastructure	Charging Infrastructure	E-Mobility Grant	E-Mobility Grant	E-Mobility Grant
Category	Pilot	Pilot	Program	Program	Program
Year	2018	2019	2020	2021	2022
Total Funding	\$252K	\$1.73M	\$1.35M	\$800K	\$2.05M
Projects	• Chargers/Infrastructure	• Chargers/Infrastructure	• Chargers • E-tractor • E-bikes • E-school bus	• Chargers • Outreach/edu • Shared-use EVs • Fleet EVs • Workforce dev	• Chargers • E-bikes • Shared-use EVs • Outreach/edu • Workforce dev • Ag EV research (ATV)

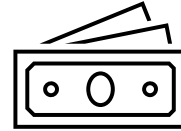
Similarities between Pac Power territory and the Southeast



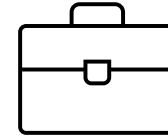
Mix of Urban & Rural



Aging Population



Income Disparities



Mix of Industries



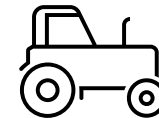
Mountains & Elevation



Coastlines



Climate Variability



Agriculture

Grant programs in place today – SEEA Utilities



Multiple utilities / SEEA members offer Grant Programs today for EVSE in public locations and for eBike programs already



Pacific Power eMobility Grant Overview

Who: Non-residential applicants

- Preference given to community-focused organizations

What: Transportation electrification-related projects are reviewed using a **scoring rubric**

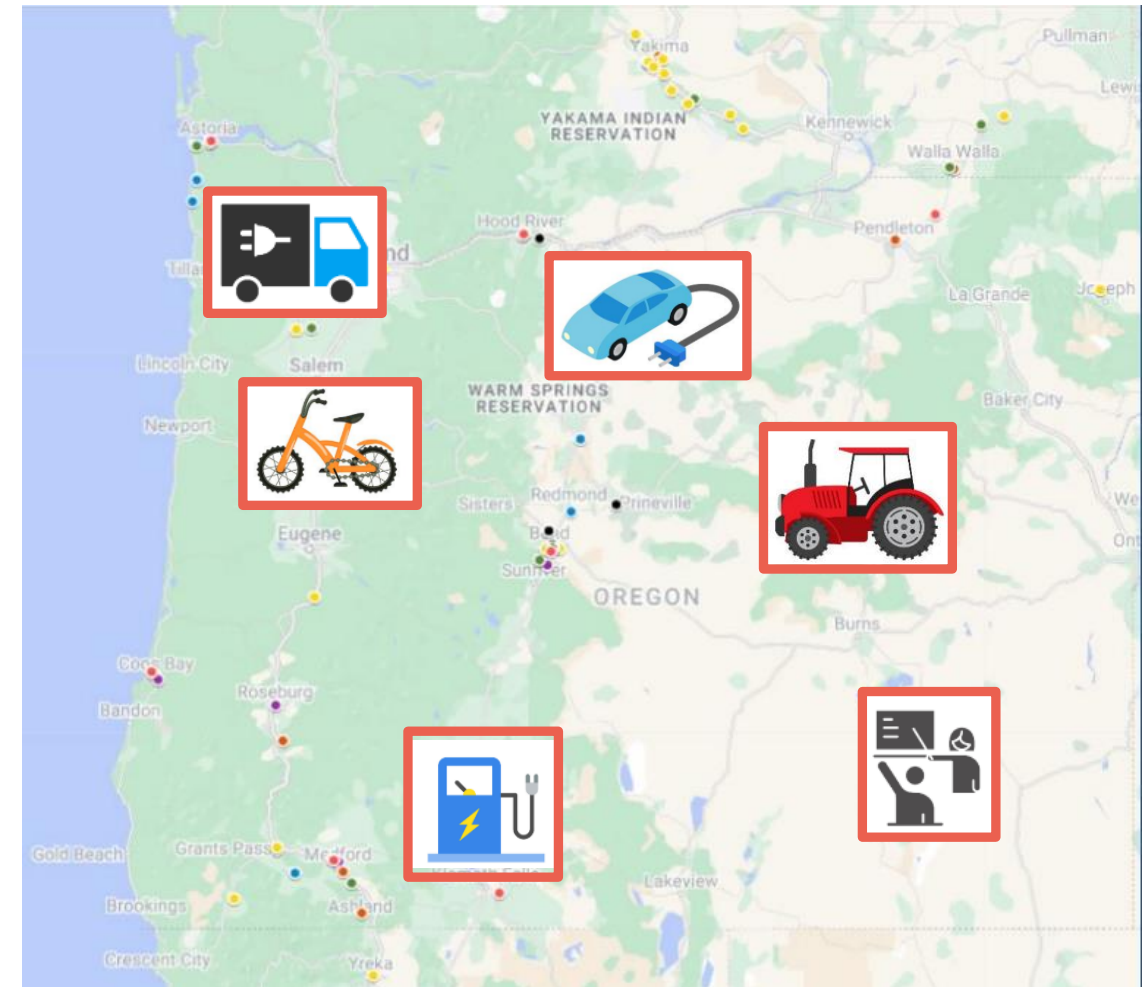
Where: Projects serve residential customers;

- Preference given to projects supporting underserved communities (HB 2165)

When: May-Aug 1X/year.

- Projects should complete in 18 months

How: Online portal or PDF app



What are some project examples that have resulted from Pacific Power's equity-centered eMobility Grant Program?

Constructing Careers



Organization: Blueprint Foundation - 501C3 that supports BIPOC workforce development green economy

Project: Procure e-cargo van and charger for student pick up and field trips


Community served: BIPOC youth and adults

Project Award Cycle: 2020

Original project timeline: June 2022 completion

CONSTRUCTING CAREERS


BUILDING SCIENCE INTERNSHIP FOR BLACK YOUTH



Make a difference for your community as energy efficiency professional.

Hiring interns ages 16-18 who are interested in construction, solar energy, and energy efficiency in buildings.

Flexible schedule to accommodate school and extracurriculars. Gain up to 120 hours of building science career exploration and on-the-job training.



LEARN

- Project management
- Heat pump installation
- Home energy assessing and estimation
- Weatherization
- Solar panel installation
- Outreach and marketing strategies

JOB SHADOW energy efficiency professionals and solar installers.

ASSIST in making homes more energy efficient.





EDUCATE your community about building science and how to save money on bills while creating a healthier home.

advocates.

EARN \$18/hr as an energy efficiency intern

CONTACT Jason Stroman to apply or request more information.

jason@theblueprintfoundation.org



Constructing Careers



Snapshot:

- Timeline doubled
 - Awarded grant January 2021
 - Supply chain delays – pivot to plug-in hybrid
- Adjusted project completion timeline: March 2023

Impact to date:

- First summer camps for green economy curriculum
- Closes mobility gap for youth participants while letting students engage directly with EV technology
- Information sharing and community engagement – impacts recruitment



Summer Camp

Workforce training for green careers

Circles of Care



Snapshot:

- EV costs rose after grant award (\$15k > MSRP)
 - Vehicle was recalled
- Project administration changed hands
- Adjusted project timeline: April 2023

Impact to date:

- >5k miles transporting seniors since Oct 2022
- Positive feedback from patients - closes mobility gap
- Tracking and sharing data - conferences, foundations, peer orgs
- On-site charger still in progress



Quality of Life

50 patients served since October 2022

Circles of Care



Organization: Hood River Adult Center is a non-profit that enhances the lives of Hood River seniors

Project: Procure EV to enable Circles of Care program to removes mobility barriers for patients' medical needs

Community served: Low-income, senior, disabled, and veteran residents of Hood River

Project Award Cycle: 2021

Original project timeline: May 2022 completion



Crook County Fairgrounds



Organization: Crook County in partnership with various non-profits in central Oregon

Project: E-tractor share program for farmers, study, and awareness campaign

Community served: Farmers borrowing tractor and other rural residents participating in field tours

Cohort: 2020

Original project timeline: June 2021



Crook County Fairgrounds



Snapshot:

- Vehicle cost rose after grant award
~\$8k
 - Changed vendors, delivery delays
- Adjusted project timeline: July 2023

Impact to date:

- Chargers for public (and tractor) used weekly
- Collecting data and tracking to publish
- Educational events and farm field days for hands on engagement



NCAT Small Farm Tools Field Day

E-tractor ride and drive as part of showcase for small farms.

Corvallis E-bike Program



Organization: Corvallis Benton County Economic Development Office in partnership with local bike shops

Project: Instant rebate pilot for low-income families in Benton County – 60 e-bikes

Community served: Low-income residents of Benton County and local small businesses

Cohort: 2020

Initial project timeline: June 2022



Corvallis E-bike Program



Snapshot:

- Multiple rounds with high participation
- Minimal supply chain delays, completed May 2022
- 4 bike shops participated

Impact to date:

- 117 total interested applicants, 2 rounds, 48 instant rebates awarded (lottery)
- Provided economic opportunity - more affordable to own than a car
- Seeking to scale into larger program



Affordable and Healthy

Awardees enjoyed economic and health benefits from new e-bike ownership

Who benefits from EV grant projects?

Not just the community!

Two-Way Street

Benefits Utility

- Keep a pulse on community needs and tech trends
- Critical stakeholder feedback tool
- Leverage for education/awareness of EV technology and other programs
- Testbed to foresee future program needs, infrastructure needs, pilot new tech, etc. (e.g. Corvallis)
- Low-cost administration (10-12%)



Benefits Customers

- Independent from ratepayer support
- Variety of possible funding sources and project types to allow them to be tailored to community needs
- Reduces risk for trying new clean transportation technology
- Distributes EV tech benefits to underserved communities
- Decarbonizes state transportation sector

So - what did we learn?

Lessons Learned



Lesson 1: Flexibility

- Change requests, extensions, and contingency funds processes in place
- Up-front funding option and rules revisited annually (e.g., add O&M costs, language availability, etc.)
- Consider partial funding awards



Lesson 2: Feedback and networking

- Peer roundtable and annual program review/improvement process
- Participant, applicant, and customer surveys
- Utility account manager in-person project kickoffs



Lesson 3: Rubric and Evaluation Process

- Update annually based on grant winners' project hurdles
- Re-assess weighted categories on rubric annually for equity impact
- Prioritize project readiness while understanding there are many unknowns



Lesson 4: Application support

- Customer service and accessibility
- Easy online application portal with optional downloadable PDF
- Coaching and transparency while remaining unbiased

2023 and Onward

Pacific Power: 2023 and beyond (OR)

	Y1	Y2	Y3
Residential		Residential EVSE Rebate Pilot Program	
		Residential Time-of-Use Rate	
	★	Residential Managed Charging Pilot Program	
Commercial & Multifamily		Commercial & Multifamily Technical Assistance Program	
		Non-residential EVSE Rebate Program	
		Commercial Time-of-Use Rate	
	★	Public Infrastructure Utility-Owned Program	
		★ Support EV Code Ready Enhancement	
Fleet & Medium/ Heavy Duty		Fleet Technical Assistance Program	
	★	Fleet Make-Ready Pilot Program	
	★	Public Infrastructure Utility-Owned Program	
Grant Initiatives		E-Mobility Grant Program	
		Matching Grant Program	
		Grant Writing Microgrants	
		★ Municipal and Community Grant Program	
Outreach		Outreach & Education Pilot Program	

★ New Activity

Time for Questions

An aerial photograph of a two-lane asphalt road winding through a dense forest. A small white car is visible on the road. The trees are mostly evergreens with varying shades of green. The bottom portion of the image is overlaid with a solid blue gradient.

Thank you!

THANK YOU!



We want to hear from you! Please [take the survey](#) before you sign off.



Want to get in on the action? Learn more about SEEA's membership and sponsorship offerings at seealliance.org/membership.



Sign up to receive SEEA news and announcements at seealliance.org/updates. We promise to keep it brief and meaningful.



A special thank you to our partners and members who made today's webinar possible!



Poll / Questions

Questions throughout from beginning to end (insert slide numbers for poll questions)

- What are you most interested in gaining from today? - **after slide 8**
 - Open ended
- Poll: Please tell us what sector you're from - utility, consulting, private sector, non-profit, technology, government, other - **after slide 10**
- How does your organization pursue grants? - **after slide 12**
 - Grantor
 - Grantee
 - Partner
 - Administrator
 - We do not pursue grants at this time
- What topic are you most interested in learning more about regarding RI's TE services? - **After slide 27**
 - Community Electrification - grant administration, ecommerce, rebates
 - Fleet Electrification - turnkey fleet electrification programs
 - Grid Optimization - forecasting, rate analysis, vehicle grid programs

Seeded Questions SEEA can ask:

- Does Pacific Power require any sort of annual uptime reporting for grant projects that include EV charging stations?
- **Can you combine PP grant funding with other grants such as federal or other utility grant funds?**
- What is the pool of money available to grant applicants?
- How do you help underserved communities plan their project or provide the resources to help plan their projects to submit an application? SS