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# 2023 Annual Report

Forth Mobility Fund, Backstop Aggregator for the Oregon  
Clean Fuels Program



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Produced by Forth, April 2024  
[www.forthmobility.org](http://www.forthmobility.org)







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# TABLE OF CONTENTS

<b>Executive Summary</b>	<b>2</b>
<b>Introduction</b>	<b>3</b>
<b>Statewide Consumer Engagement</b>	<b>5</b>
<b>Utility Engagement</b>	<b>9</b>

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## Executive Summary

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Oregon's Clean Fuels Program is designed to reduce the carbon intensity of transportation fuels through an efficient, market-based mechanism based on the exchange of credits. Generally, these credits are generated or purchased by large market actors, such as oil companies, biofuel producers or electric vehicle charging networks. Credits are also generated when electricity is used as a transportation fuel by people charging cars at home. Because it is not efficient to try to have thousands of individual households manage these small numbers of credits, Oregon's program provides that these credits be aggregated and awarded to the electric utility, if it chooses to opt into the program. If the local utility chooses not to opt in, those credits are awarded to a Backstop Aggregator chosen through a competitive RFP process by Oregon DEQ. The Forth Mobility Fund was chosen by DEQ as Backstop Aggregator in 2017. The Forth Mobility Fund is a nonprofit 501(c)(3) organization with a mission to electrify transportation by bringing people together to create solutions that reduce pollution and barriers to access. The Forth Mobility Fund is closely affiliated with a 501(c)(6) organization, Forth, that shares this mission, and we are in the process of transferring all assets and programs of Forth to the Forth Mobility Fund. We refer to the collective enterprise here as Forth.

**Impact.** This report summarizes Forth's work in 2023 as the Backstop Aggregator. As in previous years, this work was divided into the following areas: 1) Statewide Consumer Engagement, 2) Utility Engagement and 3) Program Administration. As more utilities have opted into the Clean Fuels program, the Backstop Aggregator's role has reduced significantly as the generated credits and resulting revenue have instead been allocated to utilities across Oregon. In 2023, revenue from these credits was roughly one-eighth of what it was in the initial years of the program, but Forth continues to seek ways to maximize the impact of those dollars. Throughout 2023, Forth utilized its Clean Fuels revenue to support four programs that we felt would have the maximum impact for Oregonians, despite the more limited resources. We engaged with stakeholders from across the industry, from utilities, municipalities and employers to consumers both in-person and virtually.

**Leverage.** Forth is constantly seeking other opportunities and funds to advance transportation electrification and manages a variety of projects that leverage Clean Fuels funds including contracts with Oregon utilities, U.S. Department of Energy projects and partnerships with regional environmental groups. In 2023, Forth leveraged over \$300,000 in additional investments into electric vehicle awareness programs for Oregonians, enabling nearly four times the impact of Clean Fuels funds. (See Table 2)





# Introduction

Forth Mobility Fund, hereafter referred to as Forth, entered a contract with the Oregon Department of Environmental Quality in August 2018. This report summarizes the activities carried out by Forth and any approved subcontractors in 2022. That work is based on a workplan based on the aggregation of credits generated in 2020 from the following utilities: Canby Utility Board, City of Bandon, City of Drain, City of Monmouth Power and Light, Columbia Basin Electric Cooperative, Columbia Power Cooperative, Columbia Rural Electric, Harney Electric Cooperative, Idaho Power, Surprise Valley Electric Cooperative, Umpqua Indian Utility Cooperative and Wasco Electric Cooperative. The programs described in this report are included to provide a complete picture of the activities for which Forth has leveraged Clean Fuels Program revenue.

In the time that Forth has been the Backstop Aggregator for the Oregon Clean Fuels Program, most utilities have opted into the program, leaving fewer credits to the Backstop Aggregator. Forth works closely with DEQ, when creating its workplan and throughout the year, to ensure the revenue from these credits is spent in a way that best reflects the goals of the Clean Fuels Program. As in previous years, Forth's 2023 workplan featured a broad set of programs being served by the revenue generated as Backstop Aggregator. Given that Forth did not receive enough credits from any one utility to signal a clear need for focused work as dictated by our contract with DEQ, this categorization of programs and spending is not captured in this report. Instead, programs are classified as either Statewide Consumer Engagement or Utility Engagement. We still see an important role for utilities in transportation electrification efforts in Oregon and seek to support those efforts. Forth leverages additional funding sources to complement the revenue as Backstop Aggregator to create greater impact.

## Monetization of Credits

The credits available to Forth in 2023 were received in multiple tranches. In early 2022, Forth received 248 credits as the Backstop Aggregator which resulted in \$25,950.72 of revenue. Then, in late 2022, Forth received an additional distribution of 1,149 credits which included a mix of credits generated in 2021 (671 credits) and 2022 (478 credits). These credits were bundled together and monetized in early 2023. The aggregated sale resulted in \$132,364.80 of revenue, which Forth Mobility Fund split to be spent across 2023 and 2024, proportional to the number of credits allocated by year. The 2023 workplan was amended to reflect the total revenue for all credits generated in 2021, approximately \$103,250. Revenue from credits generated in 2022 will be spent on the program in 2024. (See Table 1)

**Table 1: Clean Fuels Credits and Respective Revenue**

Credits Tranche	No. of Credits	Year Generated	Forth Received	% Tranche 2+3	\$ Tranche 2+3	2023 Revenue	2021 Credits
1	248	2021	2022 (early)			\$25,950.72	248
2	671	2021	2022 (late)	58%	\$77,298.85	\$77,298.85	671
3	478	2022	2022 (late)	42%	\$55,065.35		
<b>TOTAL</b>	1,397				\$132,364.20	<b>\$103,249.57</b>	<b>919</b>

## Summary of Expenses

The following table summarizes all expenses undertaken for work as the Backstop Aggregator of the Oregon Clean Fuels Program in 2023. Forth Mobility Fund is a 501 (c)(3) nonprofit closely affiliated with Forth, which is a 501 (c)(6) trade association. Forth Mobility Fund, the Backstop Aggregator, receives and then deposits revenues generated from the monetization of the Clean Fuels credits while Forth carries out the scope of work outlined in the workplan and the activities described in the annual report. The funds Forth Mobility Fund receives are recognized as a separate revenue source titled Clean Fuels in our accounting system.

Forth generates expenses relevant to carrying out the Clean Fuels work such as employee salaries and contracts. These expenses are identified in the Forth accounting system as work specific to the Clean Fuels contract. Every month, these Forth expenses are outlined in an invoice to Forth Mobility Fund and a transfer between the two entities is completed. Forth then recognizes the revenue source as Clean Fuels funding. An audited report, consolidated for both organizations, will be provided along with this report. It includes “Clean Fuels Program” revenue listed as a separate revenue source.

**Table 2: Oregon Clean Fuels Revenue and Total Category Program Expense**

<b>Expense Category</b>	<b>CF Credits Expense</b>	<b>Total Category Expense</b>
Statewide Consumer Engagement	\$44,308.02	\$152,754.43
Utility Engagement	\$49,556.37	\$193,471.99
Administration	\$9,386.34	\$58,031.71
<b>Total Expense</b>	<b>\$103,250.73</b>	<b>\$404,258.13</b>

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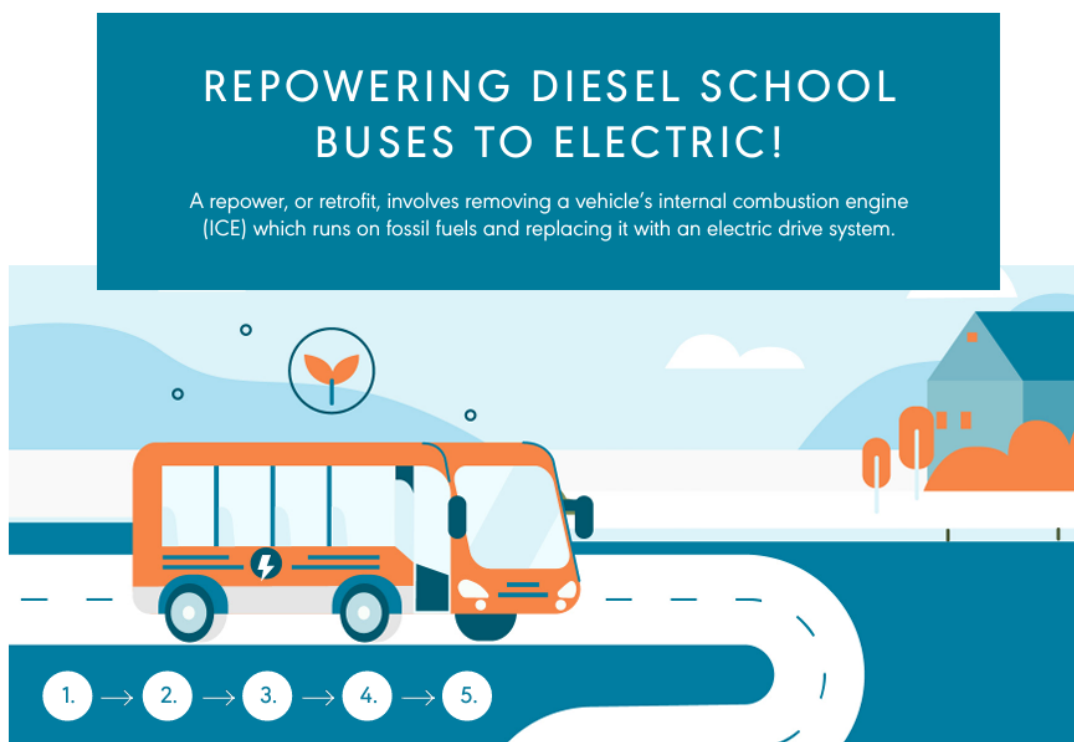
## Statewide Consumer Engagement

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Since becoming Backstop Aggregator, Forth has embraced a targeted universalism approach in the design and implementation of its programs. Put simply, that means that we design our programs centering those who face the most barriers to access, and we believe that doing so helps everyone more effectively secure access to clean electric mobility. In addition to partnering with utilities and municipalities, we seek out partnerships with community-based organizations who know their communities' needs best. The nature of Forth's work and approach to collaboration allows us to be truly statewide in our reach. The programmatic report presented below represents the full spectrum of programs that Forth has implemented while leveraging Clean Fuels revenues as Oregon's Backstop Aggregator.

### Electric School Bus Program

Forth has engaged and consulted with school districts in Oregon who are considering adopting new electric school buses (ESB) into their fleet or are interested in repowers - transitioning the drive train from fossil fuel to electric. These districts often have questions about the range of an electric bus, the charging infrastructure required and available federal grant opportunities.



#### The Steps of a Repower

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Forth and World Resources Institute (WRI): School Bus Repower Education Brochure (cover page)

Forth worked with the World Resources Institute (WRI) to create [an educational brochure](#) for school districts interested in repowering their diesel school buses with electric powertrains. Repowers are still



relatively new to the school bus world, so this resource will be a place to start for districts interested in electrifying their fleet more quickly, at a lower cost and with less material waste than purchasing new ESBs. To create this resource, we interviewed repower vendors, school districts, electric school bus advocates, and OEMs, and collected lessons learned from teams that had completed their own repower projects.

Forth is in the midst of a school bus repower project with Beaverton School District. This is scheduled to be the first repowered school bus in the state of Oregon. We expect the repower to be completed in 2024.

## Mobile EV Showcase and EV Ride & Drive Events

In 2023, with funding from Pacific Power's Clean Fuels-funded grant program and support from the Oregon Clean Fuels Program, Forth conducted ten Ride and Drive events that resulted in a total of 700 consumer engagements and 266 EV test drives. The Forth EV Mobile Showcase is a brand-neutral mobile EV education experience that can be brought directly to communities throughout Oregon, usually as part of EV Ride and Drive events when feasible. The Forth EV Mobile Showcase was displayed at four events in 2023. A summary of each Ride and Drive event can be found below:

(\* indicates mobile showcase was present)

- February 2 - 5, 2023, Portland Auto Show\*
  - Engagements: 90
  - Test Drives: 130
- April 22, 2023, Earth Day - Roseburg Ride and Drive\*
  - Engagements: 65
  - Test Drives: 17
- June 23, 2023, Formula E Ride and Drive, Portland
  - Engagements: 180
  - Test Drives: 29
- September 15, 2023, Mosier Ride and Drive (in partnership with USDA, ODOT & Main Street Mosier)
  - Engagements: 20
  - Test Drives: 21
- September 16, 2023, MLK Dream Run (in partnership with Pacific Power and Flossin' Media)
  - Engagements: 20
  - Test Drives: 10
- September 23, 2023, National Drive Electric Week North Bend Ride and Drive (in partnership with Pacific Power and The Itty Bitty Inn)
  - Engagements: 20
  - Test Drives: 7

- September 26, 2023, National Drive Electric Week Portland Ride and Drive (in partnership with Pacific Power and Cynergy e-Bikes)
  - Engagements: 150
  - Test Drives: 28
- October 1, 2023, National Drive Electric Week Yakima Farmers Market Ride and Drive (in partnership with Pacific Power)
  - Engagements: 10
  - Test Drives: 4
- October 7, 2023, Talent Harvest Festival Ride and Drive (in partnership with Pacific Power, ODOT and the City of Talent)
  - Engagements: 150
  - Test Drives: 10
- October 17, 2023, People's Coast Summit Astoria Ride and Drive (in partnership with Pacific Power, ODOT and the Oregon Coast Visitors Association)
  - Engagements: 15
  - Test Drives: 10

Clean Fuels revenue has lightly supported this program and helped to increase Forth's capacity to staff the events. Forth hopes to scale this program in the future so we can engage nationwide and continue to reduce barriers to electrification for all communities.



Forth's Mobile Showcase and Rivian electric pick-up truck displayed at the Roseburg Ride and Drive

## Transportation Electrification Education

Forth is contracted with Metropolitan Family Service (MFS) of the greater Portland area to provide education and technical assistance on topics related to electrifying transportation affordably through 2025. Forth assists MFS in transitioning its pre-existing Ways to Work program into its new Portland Electric Ways to Work program.

We facilitated 12 events with MFS, including an internal MFS training on EVs and e-bikes, as well as several external informational e-cargo bike Ride and Drive events. These external events are meant to inform the public on the benefits of electrified transportation and state and federal incentive programs, with the long-term goal to train MFS staff and AmeriCorps volunteers to perform these outreach goals independently by the end of the program.



Oregon Clean Fuels funding ensured that Forth was able to provide the most effective educational and technical assistance to MFS in the early years and continues to advise the program, allowing MFS to build a strong foundation from which to build the new Portland Electric Ways to Work program.



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## Utility Engagement

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### Self-Service Test Drives and Rural EV Sharing, with APPA

The “Self-Service Ride and Drive (SSRD) and Rural EV Sharing” project tested a model over two-and-a-half years for residents in predominantly rural communities to receive exposure to electric vehicles and have access to increased clean transportation options, in partnership with eight local community-owned utilities. Overall, the project engaged 161 users, driving nearly 64,000 miles with 1,600 unique trips. More than three-quarters of survey respondents reported it was their first time driving an EV, and that they are now more likely to consider one for their personal vehicle.

As an alternative to traditional ride and drive events and car sharing programs, this model was intended to be more cost-effective, accessible and sustainable for utilities that want to introduce their customers to electric vehicles. Getting people behind the wheel is critical to alleviating many EV-related misconceptions. However, in rural regions, ride and drive events and carsharing are rare and residents typically have less access or exposure to EVs than their urban counterparts.

The project team gained critical insights into developing and implementing this service. A key takeaway is that there is widespread support for this service by utilities, host sites and community members. However, expenses associated with delivering these programs can quickly balloon beyond what was planned.



The original project concept was designed to work similarly to other station-based carsharing services, with a few key differences: 1) the program focuses on small communities where commercial carsharing isn't available and has made few inroads, 2) it provides users with access to plug-in electric vehicles, and 3) this program was designed to accelerate EV purchases through exposure to new technologies.

Forth assembled the project team, which included a cohort of eight public utilities across Oregon, including: Northern Wasco County PUD, Eugene Water and Electric Board, Consumers Power Inc, Midstate Electric Coop, Central Electric Coop, Emerald PUD, Ashland Electric and Clatskanie PUD. Northern Wasco County PUD was the lead applicant to the American Public Power Association's DEED grant program. Operational funds were provided by a mix of grant funding from DEED, sponsorship funding from each participating utility, the Bonneville Environmental Foundation, Oregon Clean Fuels and Forth (via other project funds). Forth was the principal project manager and implementer of the project.

## Utility Roundtable Events

Forth continues to support the powerful role utilities must play in the overall adoption of electric vehicles. In 2023, Forth partnered with the Bonneville Environmental Foundation to continue to provide education and resources for public utilities in Oregon, Idaho, Montana and Washington. These efforts helped shape two convenings specifically for utilities to cover different EV projects and topics and reach over 25 utilities. These were as follows:

- April 20, 2023: How Utilities Can Lead The Way
  - Description: This session focused on right-of-way charging, Medium-Duty and Heavy-Duty charging.
  - Recording [here](#)
  - Registration: 44
  
- November 16, 2023: Transportation Decarbonization Opportunities
  - Description: This session explored the transportation decarbonization opportunities afforded to utilities, as well as public agencies and nonprofits in their service territories, in OR and WA, by the cap and invest programs.
  - Recording [here](#)
  - Registration: 50