



CE is seeking educator leaders from across the Pacific Northwest to participate in a rigorous, hands-on process to envision the energy workforce of the future, incorporating electric vehicles as a critical tool for resiliency and decarbonization

About CE

CE is a national clean energy, career connected education program from Bonneville Environmental Foundation. Together with schools, educators and industry, we strive to build a clean energy future to ensure that our communities and the environment are thriving and resilient. We focus on solutions-oriented energy education that engages industry, is driven by equity, and seeks to amplify local leadership. We work to expand access to opportunities for all students regardless of their geography, gender, race, ethnicity, or socioeconomic status.

CE is funded by corporations, regional utilities, and philanthropic organizations. To date, our funders have impacted more than 250,000 students nationwide through CE programming.

CE's Clean Energy Fellows

CE is committed to transforming education for the next ten years through self-sustaining cycles of local engagement centered around educator leadership. A successful transition to an equitable and clean energy economy requires that all



students be set up for success, which necessitates a centering of both educator and student genius. CE's Clean Energy Fellows models are explicitly designed to harness this genius and facilitate the delivery of justice-centered, career-connected programming that eliminates barriers for students that are unrelated to their actual potential for success.

Each of these Fellows cohorts are focused on aligning the needs of CE partners and communities to deliver the highest impact with the highest likelihood for longevity. These cohorts can be categorized by the scope of their intended impact and focus, whether it be deep regional engagement or nationwide engagement around a specific industry area. Both CE's Pacific Northwest Clean Energy Fellows as well as its Water Power and EV Clean Energy Fellows programs operate as part of a broader national collaborative of energy education leaders. EV Fellows collaborate with a small cohort of teacher leaders and subject matter experts to develop rigorous, replicable electric vehicle curriculum. Fellows test and refine programming, sharing insights nationwide as recognized leaders in this space.

CE Justice Statement

CE is committed to ensuring all students have access to opportunities in energy. As such, we have developed a [Justice Statement](#) that highlights our approach and actions in our equity and justice work in this program.

Water Power Clean Energy Fellows Cohort

This cohort consisting leaders from across the Pacific Northwest (BPA territory) is tasked with building innovative and equitable tools for engaging students in the rapidly innovating electric vehicle sector. Primarily taking the form of curriculum development, this process will leverage the expertise of regional industry leaders as well as the localized educational knowledge of Fellows to broaden public understanding of the future of transportation, and how this shift toward electrification impacts the broader power grid and societal behaviors. Fellows will explore concepts of power grid resiliency, microgrids, vehicle-to-grid potential, load balancing, battery science, vehicle physics, and other area with a focus on identifying issues of justice and equity.

Curriculum Development: Following training within the broader Fellows Leadership Network and attending the Institute, Fellows will work in a small cohort to collaboratively plan classroom activities and school programming that builds connections between students, the electric vehicle workforce, and the advanced grid. Fellows will utilize a K-12 storyline developed in the Institute, with essential questions and learning goals, to serve as a foundation for replicable activities to be shared broadly to educators with a variety of needs. Educators will align with CE's [Pedagogical Foundations](#), incorporating place-based issues of justice in their final product.

Amplifying Impact: Fellows will complete this experience equipped with the capacity to share findings and products they developed with national educator and industry audiences. Starting with professional development in their home districts, Fellows will continue to expand the reach of the program and tools through additional trainings and conversations in educational conferences, industry circles, CE trainings, and Fellow mentorship opportunities.

Electric Vehicle Clean Energy Fellows Outcomes

This Clean Energy Fellows model, committed to a deep investigation of a specific technology area, intends to achieve the following outcomes:

1. National educator networks have access to justice-centered, industry-informed, and flexible curriculum that engages their students in exploration of electric vehicles' role within the broader power grid structure.
2. Clean Energy Fellows are identified as leaders both by educational institutions as well as industry groups, participating in opportunities to develop more educators into experts and communicators of advanced energy technologies.
3. Industry groups have the opportunity to house and showcase best practices in electric vehicle education have inroads to inform career pathways and workforce development opportunities in the field.
4. A broader national understanding of our grid infrastructure is developed as students and their broader communities explore the role that unique technologies like EV's play within the local and national energy ecosystem.

PNW Clean Energy Fellows Details

In this engagement, Clean Energy Fellows will:

- Complete an initial draft Unit Concept and complete pre-work to build initial background prior to Institute
- Participate in a four-day Leadership Institute with broader Fellows cohort
- Complete an Electric Vehicle K-12 Storyline with the help of peers event
- Undergo multiple synchronous curriculum development sessions to build alignment between grade levels in writing cohesive, classroom-ready curriculum
- Test curriculum in the classroom, sharing results with peers and incorporating learnings into updates in the activities.
- Co-develop training with CE staff to ensure that regional educators are equipped to implement new electric vehicle curriculum in their own classroom and make connections to the future PNW grid.

Fellows Support

In participating as an EV Fellow, educators will receive:

- A \$3,000 stipend
- A \$2,000 materials budget to procure classroom resources
- Compensation for additional training, presenting at conferences, and travel as opportunities arise
- Access to leading subject matter experts in the region, as well coaching from CE staff

Fellows Eligibility and Selection Process

Electric Vehicle Clean Energy Fellows must be an **employed educator (classroom or out-of-school time) or district support staff** that serves students within customer-owned utility territory (BPA service area) in Washington, Oregon, Idaho, or Montana.

The ideal Fellow will have:

- a role serving students from minoritized identities in STEM or rural populations
- experience in curriculum design and educational leadership
- demonstrated knowledge of career-connected learning strategies
- strong knowledge of and some experience in teaching three-dimensional STEM as modeled by the Next Generation Science Standards
- experience and training in pedagogical approaches that support equitable learning
- awareness of successful approaches to PD in their district

Fellows will be selected by CE staff, with partner input. Questions around eligibility and the application process can be directed to Parker Mullins, Program Director for CE (pmullins@b-e-f.org) or Jonathan Strunin, Curriculum Design and Training Manager for CE (jstrunin@b-e-f.org).

Proposed Engagement Timeline

Activity	Dates/Timeline
CE Outreach and Recruitment	January-May 2021
Application Window	February 1 - May 31, 2021
Cohort Decisions Communicated	July 1, 2021
Leadership Institute	August 9, 10, 16, & 17, 2021
EV Story Line Completed	Fall 2021
Curriculum Development	Fall2021 - Winter 2022
Curriculum Testing and Refinement	Winter/Spring 2022
Regional Training	Spring/Summer 2022
Summative Event	June 2022

CE's Pedagogy Philosophy

CE's [Pedagogical Foundations document](#) highlights CE's approach to curriculum development in more depth. CE strives to embody the best practice and most equitable pedagogies to ensure that all students have access to future energy careers and leadership opportunities. CE engages with the following approaches:

- Three-Dimensional Learning (as modeled by Next Generation Science Standards)
- Justice-Centered & Culturally-Sustaining
- Culturally-Sustaining
- Critical Skills Development
- Real World Context
- Locally-Relevant Phenomena and Problems
- Industry-Informed and Career-Connected learning