CLEAN ENERGY FELLOWS:
EMBER COHORT

PROGRAM DETAILS

CE - Clean Energy. Bright Futures. is seeking 5 to 6 educator leaders to participate in its Clean Energy Fellows: EMBER cohort, to engage with our partners' ongoing research efforts and implement community science action plans around the climate impacts on wildfire, microbial systems, forest ecology, and modeling efforts.

CE - Clean Energy. Bright Futures.' Clean Energy Fellows

CE is committed to the development of long-lived, self-sustaining cycles of local engagement centered around educator leadership. CE's Clean Energy Fellows models are explicitly designed to harness educator and student genius and facilitate the delivery of place-based, career-connected programming that eliminates barriers for students that are unrelated to their actual potential for success. By building lessons and engagement with a solutions focus, students are set up for success now and in the future.

Each Clean Energy Fellows cohort is 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 in depth regional engagement or engagement around a specific industry area. The Clean Energy Fellows: EMBER Cohort as well as the other Clean Energy Fellow cohorts operate as part of a broader national collaborative of education leaders. However, the Clean Energy Fellows: EMBER Cohort will focus on the impact of their work on community science efforts and learning around EMBER objectives.

University of Idaho's EMBER project

CE is proud to connect educators to ongoing research as a partner with the University of Idaho on their Embedding Molecular Biology in Ecosystem Research (EMBER) project. This project, funded by the National Science Foundation, aims to address climate impacts driving severe wildfires by bringing together the expertise of researchers in molecular biology, ecosystem ecology, physiology, and modeling. The goal is to prepare the next generation of solutions-oriented scientists through exploring the impacts of climate-related stress on the Earth's biosphere at different levels, focusing on addressing critical gaps in understanding fire ecology and forest recovery.

2025-2026 Clean Energy Fellows: EMBER Cohort

This cohort consists of leaders from across the United States who will engage students in community science efforts while building student access to and participation in climate solutions. Each Clean Energy Fellow or Clean Energy Fellows pair will develop unique programming that leverages community relationships, regional natural resources, place-based challenges, and scientific and industry expertise to deeply integrate universally accessible engagements into their educational environments.

Collaboration and Partnership Development:

The Clean Energy Fellows: EMBER Cohort will meet consistently with their broader cohort to provide peer-to-peer feedback, build content knowledge background, and identify pedagogy to guide the development of their new programming. Beginning with the August Leadership Institute, this collaborative approach continues throughout the rest of the cohort's project year. Throughout this process, CE will recruit regional partners and collaborate with EMBER researchers to provide expertise on specific topic areas and support Clean Energy Fellows in their project development and implementation. This partnership development will also take place at a community level, with support in place to build relationships between Clean Energy Fellows and their local natural resource management agencies, related industries, educational networks, and other community partners. After the project year, CE will support Clean Energy Fellows through follow-up consultation, collaborative presentation and promotion efforts, and participation in the Clean Energy Fellows Leadership Network.

Community Science Action Plan and Curriculum Development:

The core intention of this Clean Energy Fellows model is to develop robust Community Science Action Plans and sharable curriculum that intend to facilitate student engagement in local data collection and understanding of scientific efforts to understand climate impacts on wildfires. Each Clean Energy Fellow or pair will apply with an implementation plan for incorporating community science into this school year. Community Science Action Plans should include plans and approaches for field data collection and lesson planning around climate impacts on ecosystems and related EMBER objectives. This Community Science Action Plan is refined over the course of the program, through peer/partner collaboration as well as adjustment during implementation. While a core intention of these Community Science Action Plans is to develop replicable tools and concrete outputs within the year, CE acknowledges that such initiatives often take multiple years to achieve bigger goals, and provides structures to continue consultation and support of Clean Energy Fellows as they move beyond their initial year.

2025-2026 Clean Energy Fellows: EMBER Cohort Outcomes

This Clean Energy Fellows model is aimed at developing localized opportunities for student energy leadership. Each Clean Energy Fellow plans to achieve the following outcomes:

1. Each Fellow develops place-based Community Science Action Plans that align with five Leadership Priorities:
    - **Access**: Ensure that all students have the opportunity to participate in, benefit from, and lead in their local community.
    - **Participation**: Emphasizes that everyone belongs in a process of building community climate impact solutions, lifting up the assets that each student uses to build a resilient future.
    - **Longevity**: Build mechanisms and relationships that ensure a self-sustaining, 10-year impact.
    - **Reach**: Amplify tools and expertise beyond the classroom of individual Clean Energy Fellows, providing access to education networks nationwide.
    - **Partnership**: Develop trusting and symbiotic relationships with industry, researchers, education, and community-based partners.
2. Clean Energy Fellows are positioned as national leaders, operating as part of a broader Clean Energy Fellows network that provides professional development, participates in mentorship opportunities, and consults with CE to continue expanding education leadership.
3. Community Science data is integrated into a shared online data system that can be utilized by researchers and educators to improve access to natural resource information, compare data from a variety of locations, and build better ecosystem models.
4. Clean Energy Fellows participate in and inform a national framework and implementation strategy to align climate solutions education with research, policy goals, and stakeholder visions in the pursuit of climate solutions.

Clean Energy Fellows Support

In participating in the 2025-2026 Clean Energy Fellows: EMBER cohort, educators will receive:

- A $5,000 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
- Access to coaching and support from CE staff

2025-2026 Clean Energy Fellows: EMBER Cohort Details

In this engagement, Clean Energy Fellows will:

- Complete pre-work to build initial background knowledge prior to Leadership Institute
- Participate in a 4-day virtual Leadership Institute with other Clean Energy Fellows cohorts
- Complete a Final Action Plan to present at a Fall Kickoff event
- Complete 3 Phase surveys and check-in interviews to review progress and align objectives spaced out over the course of a year
- Provide and receive collaborative feedback, gain additional professional development, share photos and documentation of project progress, and share completed work and resources
- Identify opportunities to expand their impact across their professional learning communities as the EMBER project continues
- Present Year 1 project results at the Final Showcase event in May 2026

Clean Energy Fellows Eligibility and Selection Process

Clean Energy Fellows in the EMBER Cohort must be an **employed educator (classroom or out-of-school time) or education program staff** that serves students in K-12 educational settings.

The ideal Clean Energy Fellow will have:

- a role serving students from cultural groups that have historically been excluded 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 learning for students from a variety of backgrounds
- awareness of successful approaches to PD in their district

Clean Energy Fellows will be selected by CE staff, with partner input. Questions about eligibility and the application process can be directed to Rosemary Lopez, Program Director for CE (rlopez@b-e-f.org), Laney Sterry, STEM Engagement and Training Manager (lsterry@b-e-f.org), or Loridee Wetzel, Educator Leadership Coordinator (lwetzel@b-e-f.org)

Proposed Engagement Timeline

Activity	Dates/Timeline
CE Outreach and Recruitment	March- June 2025
Application Window	April 1 – June 22, 2025
Cohort Decisions Communicated	July 1, 2025
Virtual Leadership Institute	August 4,5,11,12 8:30am-12:30pm PST
Community Science Action Plan Launch Event	Fall 2025
Milestone 1 Implementation	September 1 – November 30, 2025
Milestone 2 Implementation	December 1 – February 28, 2026
Milestone 3 Implementation	March 1 – April 30, 2026
Final Presentation Event	April 2026

CE's Pedagogy Philosophy

CE strives to embody the best practice and most accessible pedagogies to ensure that all students have access to future careers and leadership opportunities. CE engages with the following approaches:

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

For examples of completed curriculum work, please see the CE Resource Library.