



## 2018-19 CE Renewable Energy Leadership Lab Application

This Online Application Must Be Submitted by 11:59 pm, Wednesday, May 28th

To download a copy of this application, go to [www.cebrightfutures.org/RELL](http://www.cebrightfutures.org/RELL)

CE prepares the next generation to lead a clean energy future through career-connected education programs training educators to bring clean energy science and technology skills to life in their classrooms. For more insight into previous units developed by Renewable Energy Leadership Lab participants, check out CE's online Educator Library.

Together with schools, educators and industry, CE strives to build a clean energy future to ensure that our communities and the environment are thriving and resilient. We work to expand access to opportunities for all students regardless of their geography, gender, ethnicity, or socioeconomic status.

Our mission is to inspire a new generation of clean energy leaders with the skills and innovative thinking needed to solve the world's biggest energy challenges.

### About the Renewable Energy Leadership Lab

CE, a program administered by the Bonneville Environmental Foundation (BEF), is inviting interested Pacific Northwest K-12 teachers to submit applications to participate in the Renewable Energy Leadership Lab. The Leadership Lab is a year-long professional development and curriculum design opportunity where teachers create innovative, hands-on, inquiry-based renewable energy lessons for the classroom in a peer-supported environment alongside content experts.

The Renewable Energy Leadership Lab is designed to create engaging and relevant renewable energy lessons accessible to teachers in the Pacific Northwest and nationwide. Participating teachers will be part of a small group of educators collaborating throughout the year designing, testing and implementing exciting new classroom units while diving deeper into the renewable energy sciences. "Units" are typically multi-day or multi-week investigations of larger concepts, broken into separate lesson plans.

Leadership Lab participants develop either brand new units and lessons anchored in engineering design principles, or adapt existing inquiry projects into their unique classroom setting in alignment with Next Generation Science Standards. By the end of the Leadership Lab year, teachers will develop strong foundations in renewable energy while creating peer-reviewed, classroom-tested curricula published in CE's online Educator Library.

### To support this curriculum development portion of this experience, participating teachers will receive:

- Access to and collaboration with renewable energy content specialists
- In-person discussion of effective pedagogy and supportive content development strategies
- Remote check-ins as well as thoughtful peer-to-peer review and feedback
- A \$5,000 stipend to develop and test lessons (milestone-based, two installments)
- Up to \$500 in materials for summer testing phase
- Up to \$1,000 in materials for implementing their lessons in the classroom
- Up to \$2,000 in materials for testing and implementing up to two additional lessons (@\$1,000 per additional lesson/unit)

Part of CE's Renewable Energy Leadership Lab mission is to increase renewable energy, STEM, and CTE themed education nationwide. Therefore, participating teachers will also investigate pedagogical methods to share what they gain from this experience with peers and students in order to make the greatest impact in their home communities.

### To support leadership development, participating teachers will receive:

- Opportunities to present at conferences and/or regional PD events to share products and takeaways from CE's Renewable Energy Leadership Lab with fellow educators in the Pacific Northwest and/or nation-wide
- Support for travel and additional fees associated with leadership opportunities
- In-person support and guidance to organize effective leadership plans introducing renewable energy concepts to local, professional learning communities
- Ongoing remote support throughout the Renewable Energy Leadership Lab year and beyond as leadership roles evolve within home districts over time

### Application Process

#### Important Dates

March 23, 2018 Application becomes available  
 May 28, 2018 Application closes  
 May 31, 2018 BEF announces decisions

The Leadership Lab's meetings include a combination of in-person and remote (webinar) sessions. In person meetings are full day experiences, taking place at BEF's headquarters in downtown Portland, OR. Remote meetings are 2-3 hours in length. Each meeting's date, after the kick off, will be chosen by the group of teachers to accommodate participant schedules within the noted date ranges.

#### In-person Meetings (Required)

- June 28, 2018: Kick-off Meeting
- September/October 2018: Pedagogy Lab
- March/April 2019: Leadership and Pedagogy Lab
- June 2019: Closing Celebration

#### Remote Meetings (Teachers present their work in two meetings, however attendance for all four is required)

- August/September 2018: Outline Presentation Meeting 1
- October/November 2018: Outline Presentation Meeting 2
- February/March 2019: Lesson Draft Presentation Meeting 1
- April/May 2019: Lesson Draft Presentation Meeting 2

#### Eligibility

This opportunity is open to all Pacific Northwest K-12 teachers with the ability to attend the season's set meeting times. Participants are responsible for coordinating all initial travel and lodging for all in-person group meetings, with some past participants using a portion of their stipends to cover associated costs. CE strongly encourages applicants to secure buy-in and support from their local administration to support leadership development opportunities as they arise in their respective Districts/regions.

#### Expectations

To complete the Renewable Energy Leadership Lab and receive the full stipend as well as materials budgets, teachers are expected to:

- Participate in all meetings (8 total: 4 in-person and 4 remote)
- Provide curriculum development materials as new content is developed
- Complete and submit Lesson Outline and present during one of first two remote meetings
- Complete and submit Lesson Draft and present during one of the last two remote meetings
- Complete and submit Final Lesson Plan turned in at the closing in-person meeting
- Complete pedagogical analysis concerning the alignment of their curriculum to Next Generation Science Standards
- Determine methods and complete a leadership plan in which they can share what they've created during this experience to benefit teacher peers and students outside of the program
- Consider and potentially present at conferences and other thought leadership opportunities to share their units and experience to other teachers in the region and nationally

## 2018-19 CE Renewable Energy Leadership Lab Application (RELL)

### Part I. Personal Information

#### Name

First Name \_\_\_\_\_ Last Name \_\_\_\_\_

#### E-mail

\_\_\_\_\_

#### Phone Number

Area Code \_\_\_\_\_ Phone Number \_\_\_\_\_

#### School District

\_\_\_\_\_

#### School Address

School Name \_\_\_\_\_

Street Address \_\_\_\_\_

City \_\_\_\_\_ State / Province \_\_\_\_\_

Postal / Zip Code \_\_\_\_\_ Country \_\_\_\_\_

#### Subject Area(s) Taught

- All
- General Science
- Physical Science
- Life Science
- Biology
- Chemistry
- Physics
- Environmental Science
- Computer Science
- Math
- STEM
- Career Technical Education (CTE)

#### Grade Level(s) Taught

- Pre-K
- K
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12

Anticipated Student Reach: Over the course of the 2018-2019 school year, please indicate:

#### Total number of individual students you expect to teach with this new unit (total across all classes, clubs, etc.)

\_\_\_\_\_ Please enter a single number. If necessary, provide an estimate.

#### Number of unique classes you expect to teach

\_\_\_\_\_

#### Number of colleagues in your school district that you intend to train/mentor with these new resources

\_\_\_\_\_ Please enter a single number. If necessary, provide an estimate.

### Administrative Support

#### Please select all that apply

- I am empowered and authorized to take on a leadership role in my district
- I have notified my administration of my application and how it may impact my school/district community
- I have support from my administration to act in a leadership for renewable energy education
- I am working on gaining permission from my administration to implement new lesson plans

### Administrator Contact Information

Name \_\_\_\_\_ Title \_\_\_\_\_

i.e. Principal, Science Coach, etc.

#### Email

\_\_\_\_\_

### Part II. Applicant Vision

#### Applicant's Statement

\_\_\_\_\_

Please state your interest in the Renewable Energy Leadership Lab and how it fits into your professional goals as well as goals for your students. Include what types of support and/or collaboration you aim to receive, as well as and what particular skills and/or expertise you aim to provide others.

#### Unit Concept Statement

\_\_\_\_\_

See details below for Unit Concept Statement

Describe your Unit Plan Concept and include the following:

- Unit overview
  - Procedural outline - timeline estimate, preferred settings (indoor, outdoor, lab, etc.), student/classroom management, etc.
  - How it meets NGSS, inquiry and/or engineering design process pedagogy
  - A description of how this Unit will promote STEM/CTE, and energy literacy
- Target grade levels
- Specific student learning goals
- Required background information for teachers and students
- Statement describing your interest in:
  - Developing this unit and associated lessons
  - Collaborating with other teachers
  - Sharing published work with the larger CE community
- Any additional information you wish to share to help illustrate this project

#### Relevant NGSS and Common Core Standards

\_\_\_\_\_

Outline relevant national and state standards that proposed Unit satisfies. Strong proposals meet multiple standards simultaneously and exhibit cross-disciplinary linkages. Be specific when outlining how standards are met, highlighting specific alignment components such as Crosscutting Concepts and Scientific and Engineering Practices.

#### Materials and Budget

\_\_\_\_\_

List required materials and cost estimates for the Summer Testing Phase (\$500 total) and the Classroom Implementation Phase (\$1,000 total). We understand that you have not yet tested materials, but would like to understand the scope of your anticipated materials budget.

### Part III. Leadership and Impact

#### Diversity, Equity and Inclusion

\_\_\_\_\_

CE is devoted to inclusivity, providing tools and resources that illuminate pathways to science and engineering education for all students - regardless of gender, race, ethnicity, geography, or socioeconomic status. How will your project ensure that the needs of more vulnerable student populations (e.g. immigrants, communities of color, rural, low-income, and special needs youth) are considered during the implementation of this curricula? Examples could be strategies to engage English language learners, attention to cultural competence and relevancy, being more gender-inclusive, and inclusion of place-based techniques and linking to local phenomena/examples/resources.

#### Leadership

\_\_\_\_\_

CE believes that the highest impact comes through investing in regional teacher leaders that act as a critical peer-to-peer resource for guidance in developing progressive content and pedagogy. Please discuss past leadership roles or achievements within your local teaching community. This may include delivering professional development workshops, mentorship program participation, conference presentations, data coaching, departmental supervision, or any other examples that demonstrate your capability to leverage this experience for teachers outside of the Leadership Lab.

#### Replicability

\_\_\_\_\_

In what ways can this proposed Unit be replicated across different grade levels and/or in schools/districts/regions with contrasting resources?

#### Accountability

\_\_\_\_\_

CE's Renewable Energy Leadership Lab's overall success depends on the participation of each and every selected teacher throughout the program year. Please include a brief statement assessing your ability to commit to this program and schedule as outlined/described above.

Parts II and III of the application will be considered using the following rubric:

Proposal Component	Percentage
Proposed Unit Plan Content	40%
Alignment to Educational Standards	20%
Equity and Inclusion	15%
Replicability and Leadership Potential	15%
Applicant Commitment and Goals	10%

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