

# Call for Application Renewable Energy Alaska Project Weather Education Program

## I. Purpose

Renewable Energy Alaska Project (REAP) is soliciting applications from educators for the purpose of receiving a professional weather monitoring station to conduct a student-led, placed-based project that addresses a local energy concern.

## II. Introduction

Renewable Energy Alaska Project (REAP) is a 501(c)(3) nonprofit dedicated to increasing the development of renewable energy and promoting energy efficiency in Alaska through collaboration, education, training, and advocacy. REAP's education efforts are critical in increasing the energy literacy in Alaskan youth, thereby increasing human capacity building and community resilience.

This year, REAP is purchasing and disseminating 10 [Davis Vantage Pro2 weather stations](#) for loan to schools or communities around the state of Alaska with the purpose of increasing STEM efforts and energy literacy in the state. The weather stations have the capability of measuring wind speed, temperature, humidity, precipitation, and optionally, UV and solar radiation<sup>1</sup>. The weather stations include software for data collection and monitoring, which can be viewed through an online portal. Stations will be lent to recipients for two years, with possible extensions dependent on individual site and project needs. Outstanding projects will be featured in REAP's media campaigns and outreach.

## III. Eligible Applicants

REAP is seeking highly motivated and dedicated educators to develop a project with students using the weather station provided. Educators from all disciplines and K-12 grade levels are encouraged to apply. Eligible applicants also include community groups/organizations that are able to partner with a school to engage students in a project (such as museums, tribal organizations, or non-profits). Availability of a safe and secure location for weather station is required, as well as availability of a reliable internet connection. The essential question that should drive the development of all projects is:

***How can we address an energy issue in our school and/or community using the weather station data?***

## IV. Selection Criteria

- Research question relevance and practicality (20%)
- Degree of student engagement indicated in the project description including (20%):
  - Number of students reached per school population and community population
  - Student involvement in question development and project implementation

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<sup>1</sup> UV and/or solar radiation collector will only be included if data is needed for project

- Energy burden of community<sup>2</sup> (20%)
- Expected level of use, which can include (15%):
  - number of educators interested in using station in the school/community
  - maximal use of station capabilities
- Community and/or partner engagement (15%)
- Educator experience (10%)

## V. Resources

Examples of successful weather station school site installations:

[Watching the weather at Birch Lane](#)

[New weather station transforms elementary school students into mini-meteorologists](#)

[Case study: Maiden Erlegh School, Reading, UK](#)

Additional Resources:

[The GLOBE Program](#)

[Alaska Center for Energy and Power](#)

[National Weather Service Alaska Mesonet Station Map](#)

[Renewable Energy Atlas of Alaska](#)

[Alaska Energy Authority slide deck on Alaskan Energy](#)

## VI. Application submittal

Please submit a completed application to Renewable Energy Alaska Project by September 25, 2020 at 5pm, Alaska Standard Time. Forms can be filled out directly in the PDF file or typed up in a separate file, if additional space is needed. Complete applications should be emailed to [education@realaska.org](mailto:education@realaska.org)

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<sup>2</sup> Energy burden is defined as the percentage of household income spent on home energy bills. This selection criteria will be based partially on this definition and analysis done by Alaska Energy Authority (see slide deck under ‘Resources’), and partially on applicant answers.