



# Climate Literacy and Energy Awareness Network (CLEAN)

Building a foundation of support for climate and energy educators

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## CLEAN SUPPORTS TEACHERS WITH CLIMATE EDUCATION

**CLEAN Collection:** Contains 750+ peer-reviewed educational resources such as activities, lab demos, visualizations, and videos for grades K-16.



## Guidance for Teaching Climate and Energy Science:

Pedagogical support for teaching climate and energy topics, including background knowledge, best classroom practices, NGSS alignment, professional development support, and reference materials.

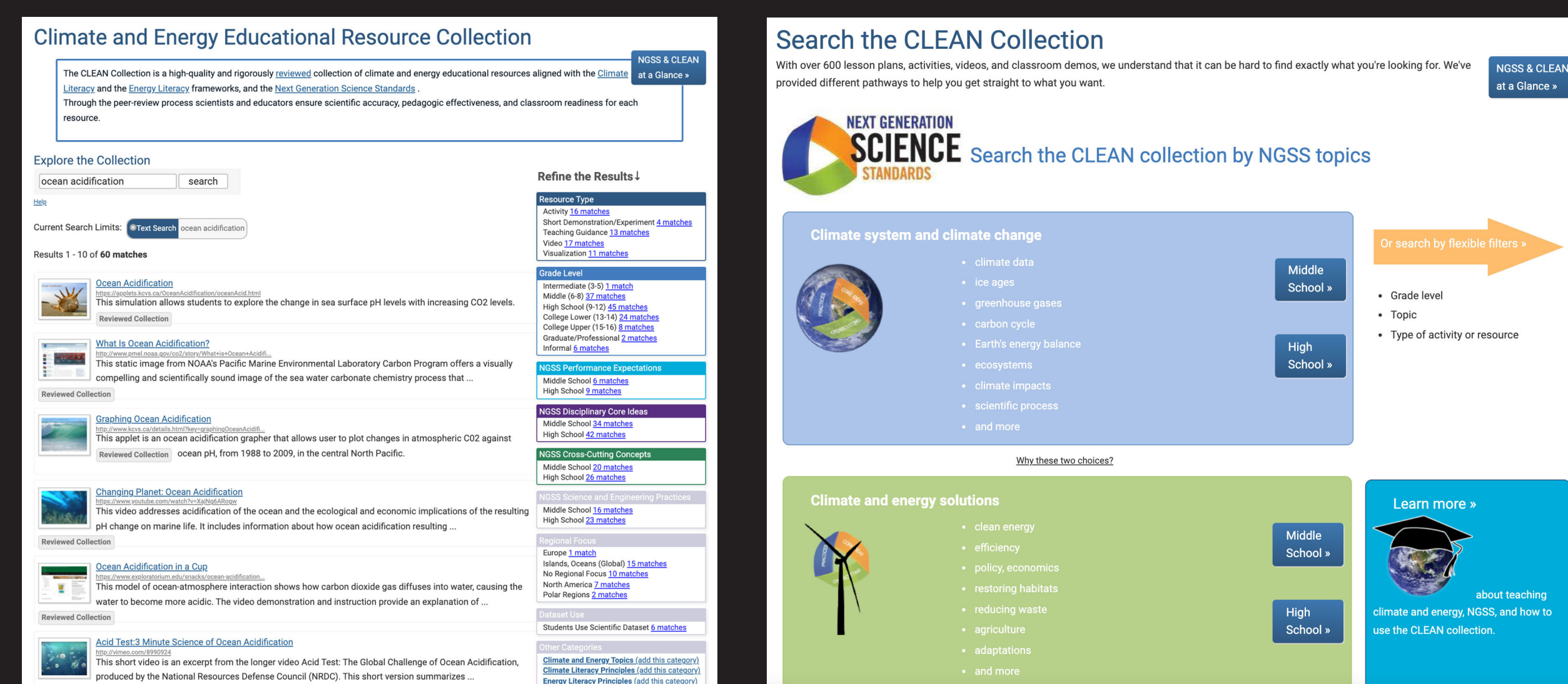
**CLEAN Network:** A professionally diverse community of climate and energy literacy stakeholders.

- Weekly teleconferences and presentations
- Vibrant email list
- Workshops and networking opportunities at events and conferences

**The CLEAN Network is free to join and is open to anyone.**

**THE CLEAN COLLECTION ([cleanet.org](https://cleanet.org))** is syndicated to the NOAA Teaching Climate portal: [climate.gov/teaching](https://climate.gov/teaching)

## Search the CLEAN Collection



## Collection Search Option:

Open text search – Grade level – Resource type – Climate literacy principles  
Energy literacy principles – Use of scientific data – Regional focus  
Content topic areas – Next Generation Science Standards (NGSS)

## CLEAN REVIEW PROCESS

A rigorous and transparent peer-review process is used for the **CLEAN collection**. Resources that are relevant to one of the climate and energy literacy principles and useful for grade levels K-16 are reviewed. A rigorous review process developed by the Climate Literacy and Energy Awareness Network (CLEAN) by A. Gold et al., *Journal of Geoscience Education* 2012.

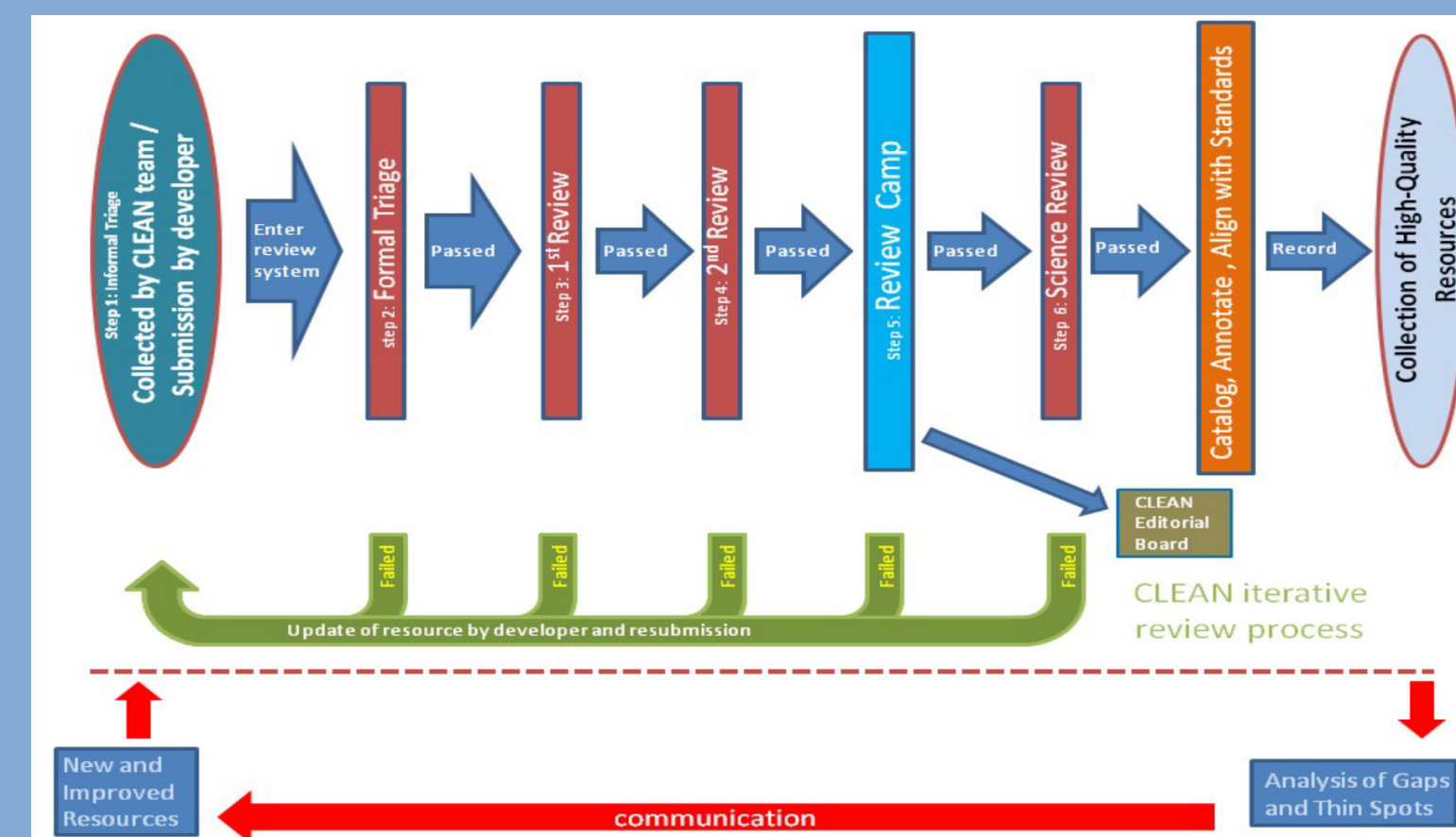
### Review Process

Review for: a) scientific accuracy, b) pedagogic effectiveness, c) technical quality/ease of use.

**Panel Review:** Team of four educators and scientists discusses each resource and makes decision about inclusion in CLEAN.

**Expert Science Review:** Content expert in the field of the resource reviews for scientific accuracy.

**Maintenance Review:** Ensures ongoing quality of collection.



## CLEAN FOR EDUCATORS

Teaching Guidance: Pedagogical support in alignment with the Climate & Energy Literacy Principles and NGSS including:

- Online resource pages
- Virtual teaching resources
- Webinars
- Culturally relevant teaching resources
- Regular newsletters
- Unit Guides



Background pages available in Spanish & English including:

- Summaries of scientific concepts
- Relevant teaching resources
- Teaching strategies
- Reference materials

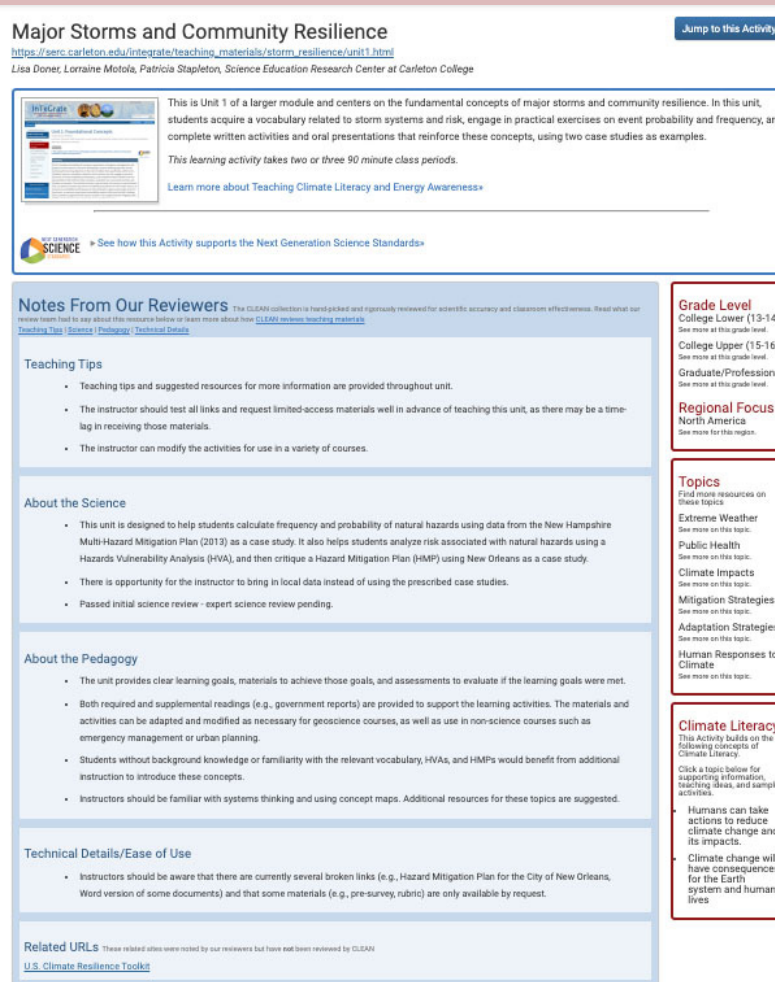
Our Teaching Climate & Energy Toolbox includes many online professional development resources to help you bring climate topics into your classroom.

## CLEAN FOR SCIENTISTS

### CLEAN Expert Science Review

- We recruit volunteer expert scientists to spend 15-30 min each reviewing our resources for scientific accuracy
- Our expert science review boosts CLEAN credibility and gives teachers a reliable collection
- Provides scientists with activities and ideas for sharing their science and broadening their impact

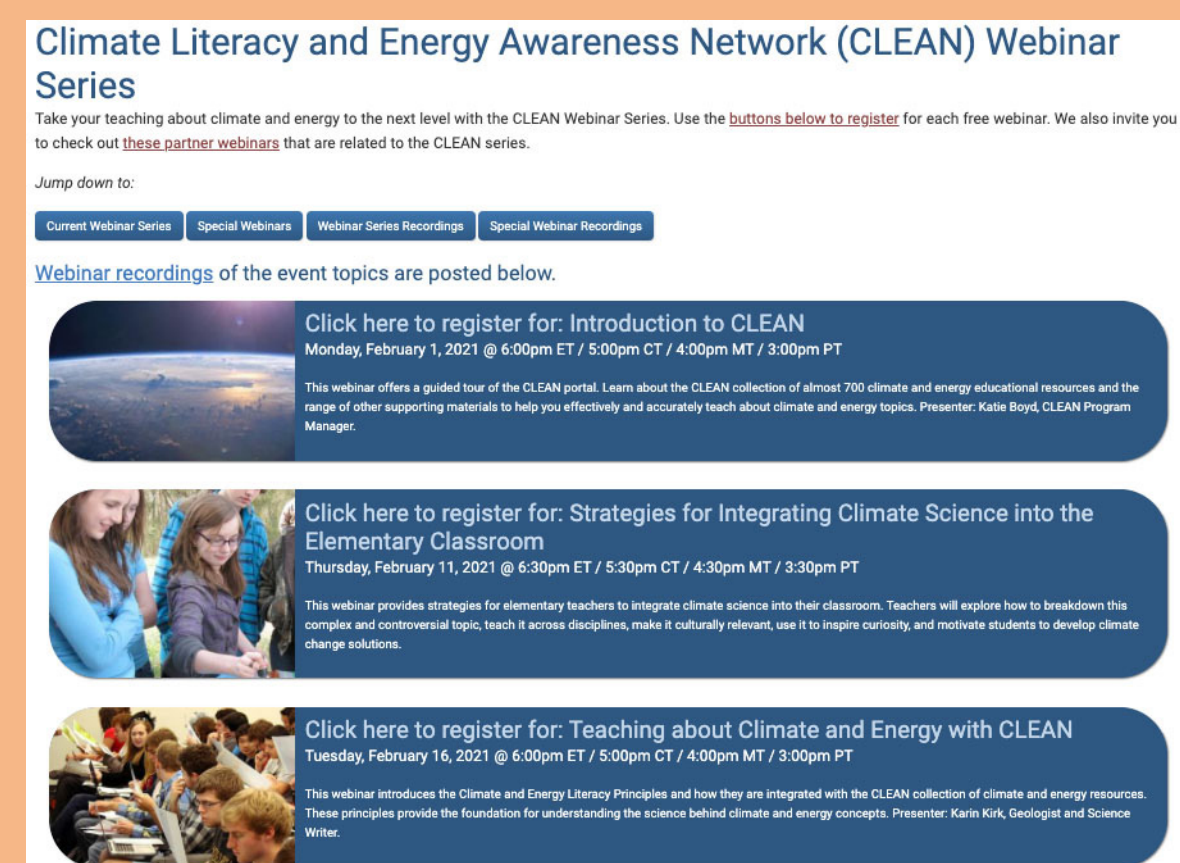
### Catalog Record



## MARKETING CLEAN

CLEAN has been working since 2017 to market the CLEAN collection to educators. The efforts involved are:

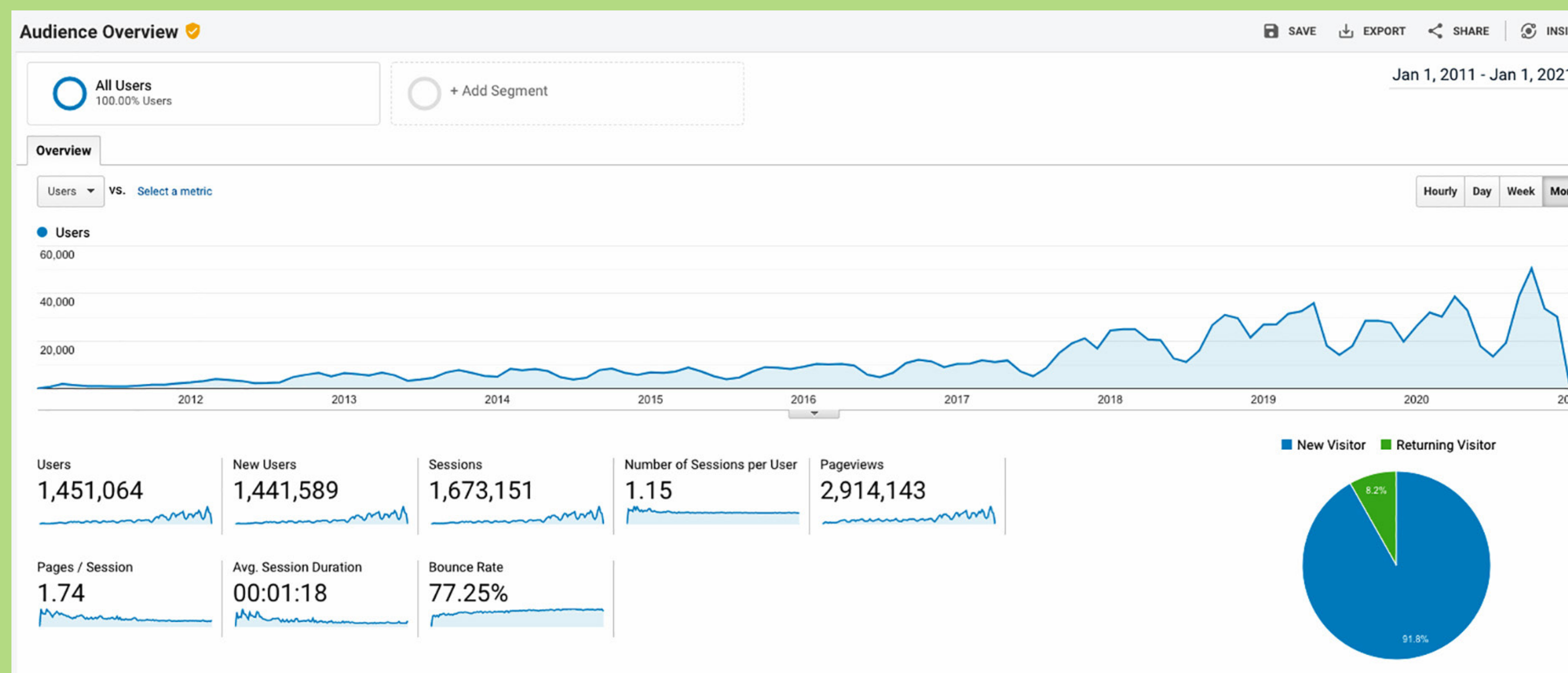
- Social Media Engagement
- Professional Development Webinars
- STEM Flash Newsletter
- Work with developers
  - Syndication with sites like PBS Learning & NSTA
  - CLEAN “Selected By” logo
- Presentations at professional conferences
- Teacher Ambassador program
- Targeted outreach to states & school districts



## WEB ANALYTICS

CLEAN tracks website traffic through Google Analytics. Web analytics data show marketing efforts have been successful.

- The CLEAN website and the syndicated CLEAN collection site at NOAA's Climate.gov have received almost 3 million visitors over the 10 years CLEAN has been active!
- After the 2017 marketing efforts, users, new users, and pageviews increased by about 70% in 2018 compared to 2017.

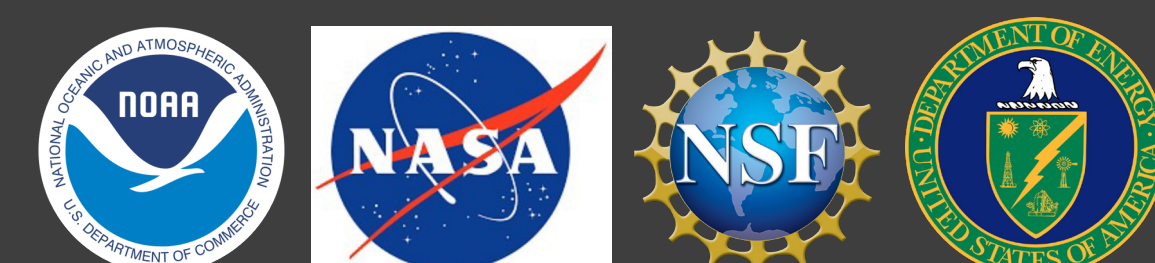


Increase in CLEAN web sessions over project lifetime.

## GET INVOLVED!

- Use teaching resources (collection, guidance, webinars)
- Submit a resource to the collection
- Join the CLEAN Network
- Become a CLEAN Ambassador
- Sign up for the STEM Flash Newsletter
- Become a resource reviewer

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