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) is syndicated to the NOAA Teaching Climate portal: **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.
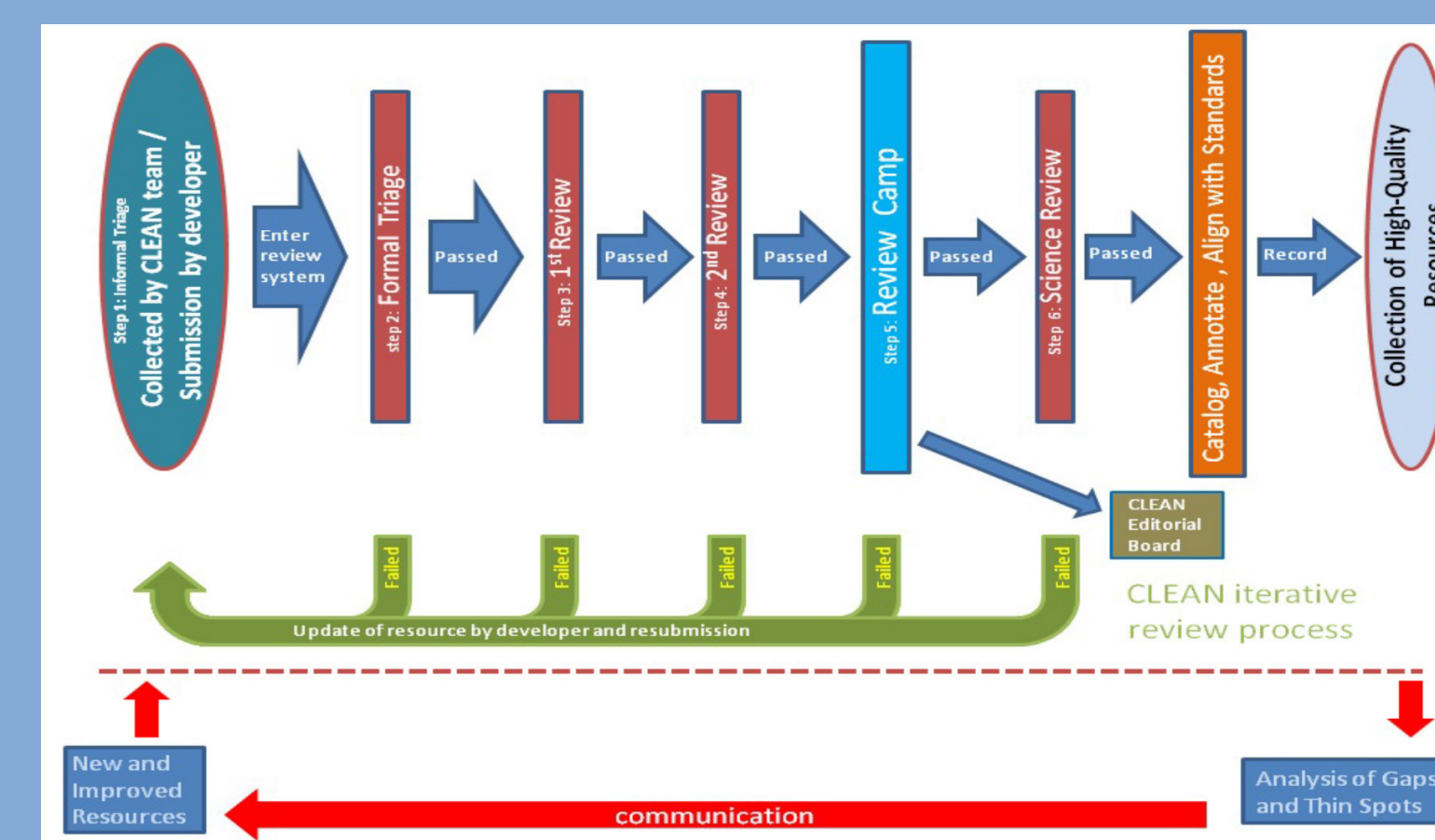
CLEAN FOR EDUCATORS

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

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

Background pages available in Spanish & English including:

- Summaries of scientific concepts
- Teaching strategies
- Relevant teaching resources
- 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
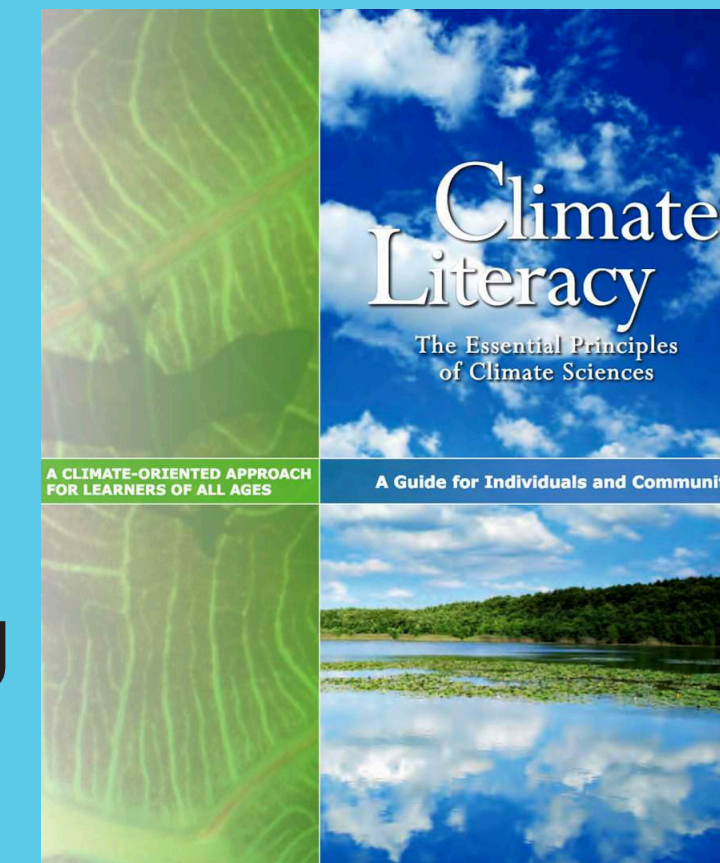
MARKETING CLEAN

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
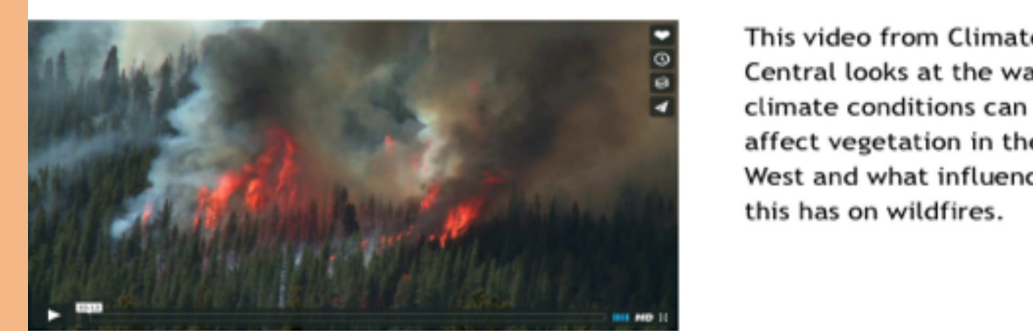- Targeted outreach to states & school districts'

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.
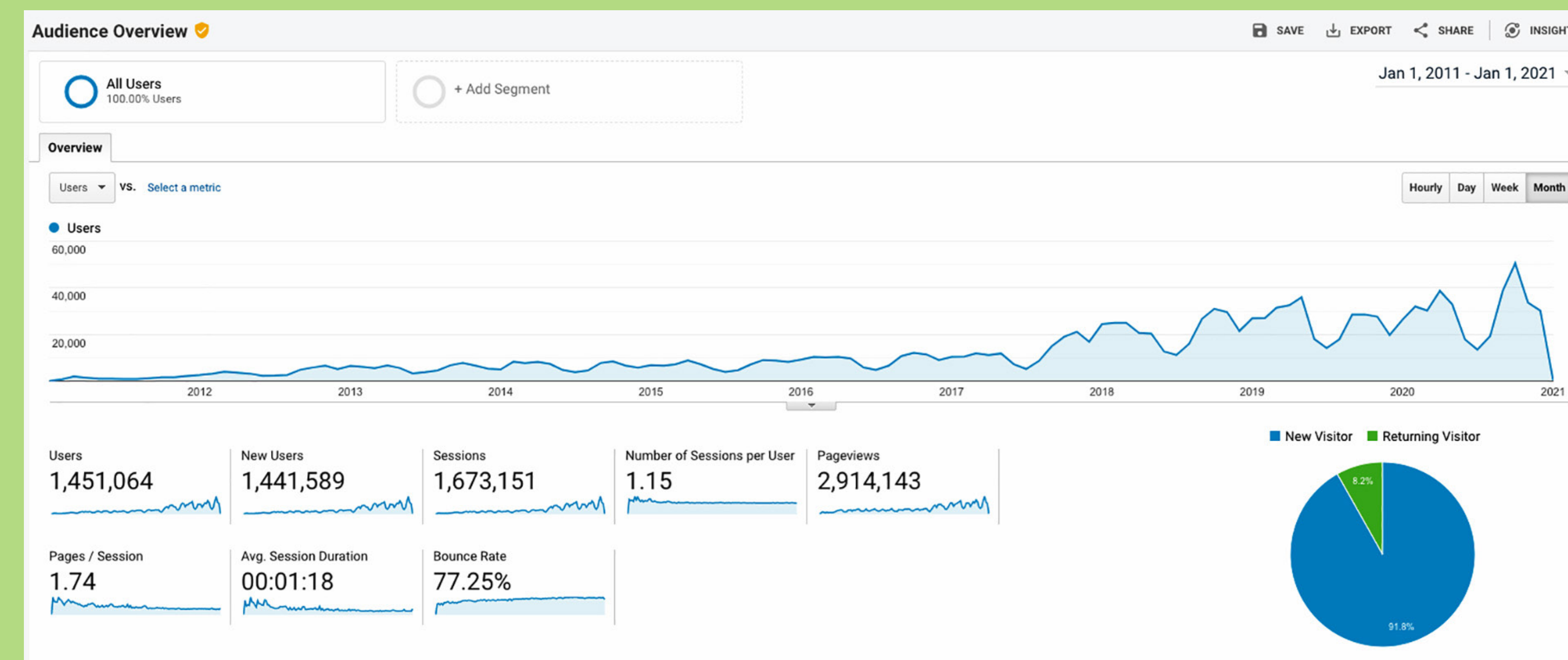
Increase in CLEAN web sessions over project lifetime.

GET INVOLVED!

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

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