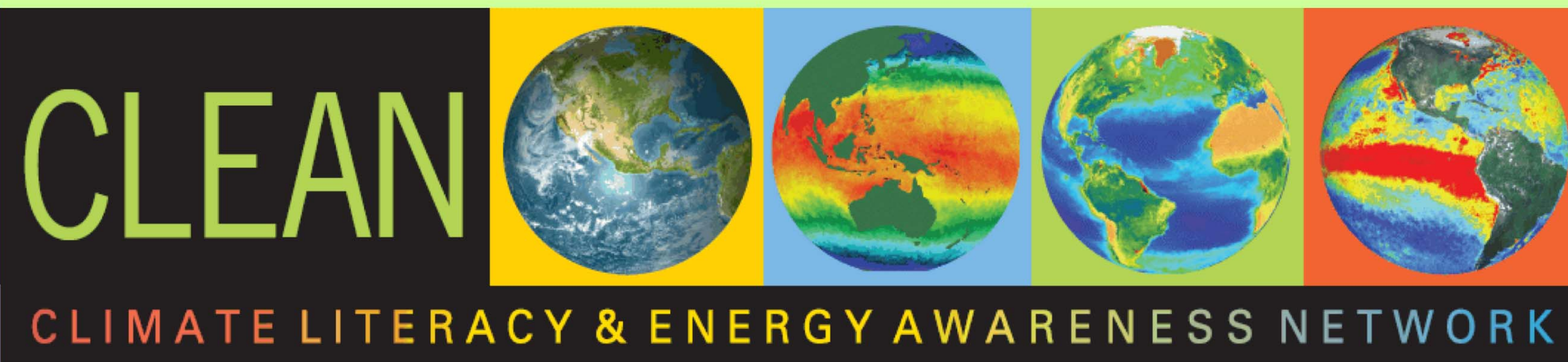


Climate Literacy and Energy Awareness Network (CLEAN) Pathway

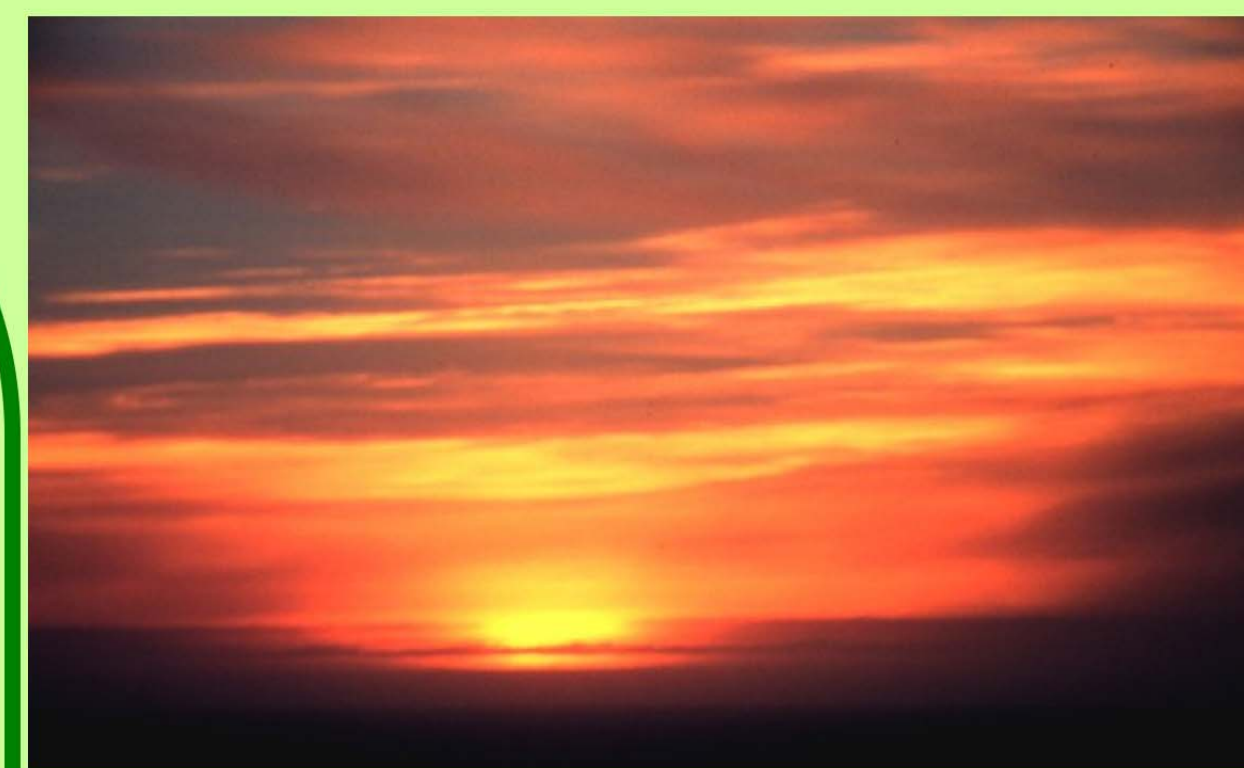


Tamara Shapiro Ledley, TERC; Mark McCaffrey and Susan Buhr, CIRES University of Colorado; Frank Niepold, NOAA; Cathryn Manduca and Sean Fox, SERC Carleton College; Cynthia Howell, National Renewable Energy Laboratory

CLEAN Project Goals

Provide a collection of excellent educational resources so educators, students, and citizens can increase their climate literacy and their ability to make informed decisions concerning energy use and planetary stewardship. CLEAN Pathway will:

1. Steward a collection of about 500 educational resources that:
 - Support the Climate Literacy: The Essential Principles of Climate Science
 - Are ranked using pedagogical and scientific review process, and
 - Are aligned with AAAS Project 2061 Benchmarks of Science Literacy, National Science Education Standards, and the Excellence in Environmental Education Guidelines for Learning;
2. Develop a web interface to this collection that allows users to easily find and quickly determine if specific resources are relevant to their needs, using the NSDL Strand Maps and SERC Faceted Search and Browse as discovery tools; and
3. Provide professional development opportunities to help educators and citizens effectively use the collection's resources and to develop an online community to support its use and dissemination.



Climate Literacy and Energy Awareness Network (CLEAN) Resource Collection

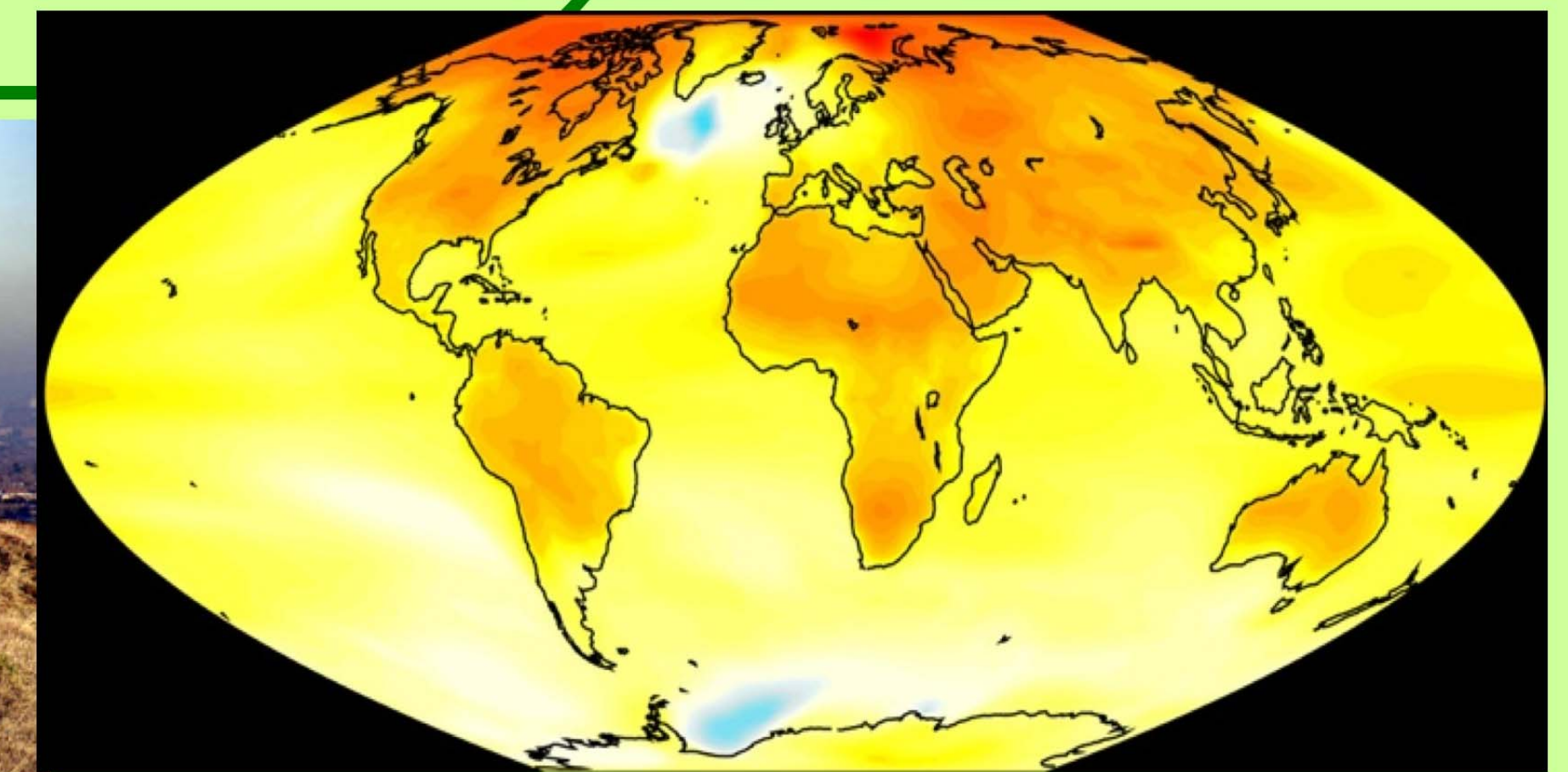
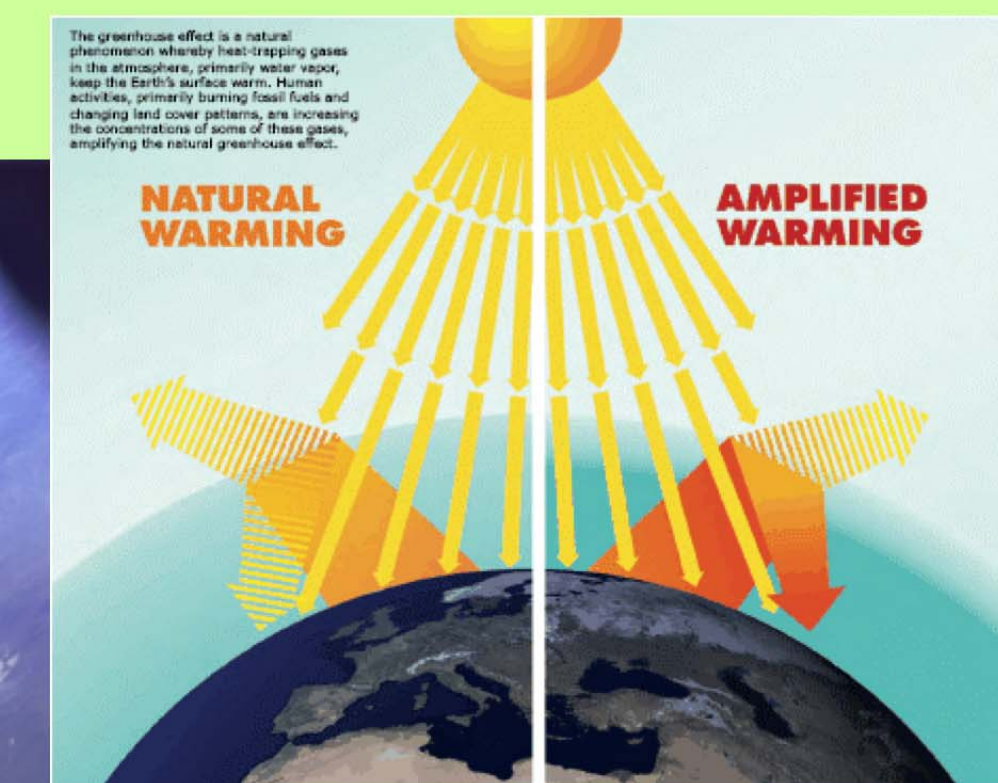
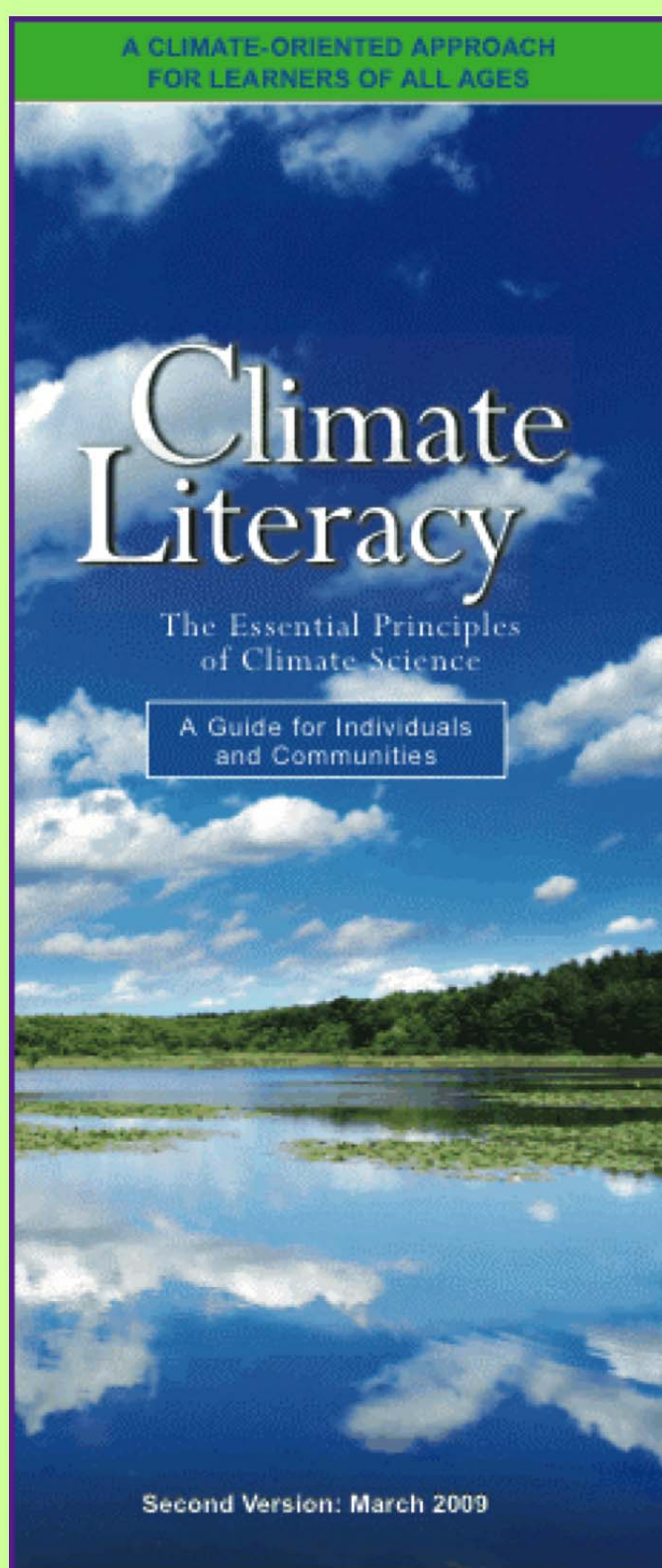
- Resources (grades 6-16) will be identified as the address the Climate Literacy Essential Principles of Climate Science
- Resources will be reviewed both scientifically and pedagogically through review boot camps
- Resources that pass the review process will be aligned (using the NSDL Strand Mapping tool) with
 - AAAS Benchmarks for Science Literacy
 - National Science Education Standards
 - NAAEE Excellence in Environmental Education Guidelines for Learning
- Resources that address cutting edge science will be flagged to be re-reviewed annually



Climate Literacy: Essential Principles of Climate Science

Guiding Principle for Informed Decision: Humans can take actions to reduce climate change and its impacts.

1. The sun is the primary source of energy for Earth's climate system
2. Climate is regulated by complex interactions among components of the Earth system
3. Life on Earth depends on, is shaped by, and affects climate
4. Climate varies over space and time through both natural and man-made processes
5. Our understanding of the climate system is improved through observation, theoretical studies and modeling
6. Human activities are impacting the climate system
7. Climate Change will have consequences for the Earth system and human lives



CLIMATE SCIENCE LITERACY IS AN UNDERSTANDING OF THE CLIMATE'S INFLUENCE ON YOU AND SOCIETY AND YOUR INFLUENCE ON CLIMATE



Professional & Community Development

The project will facilitate the effective use of the resources with teachers, students, and citizens. This will involve a range of activities including:

- Teleconference-online workshops to help educators and citizens use resources in the collection and help teachers integrate them into classrooms. These two-hour workshops that introduce teachers and citizens to software tools, data, inquiry activities, and information, which will be modeled after the successful Earth Exploration Toolbook (EET) Workshops (<http://serc.carleton.edu/eet/workshops.html>).
- Multi-day events for faculty on teaching specific aspects of Climate and Energy modeled after the On the Cutting Edge virtual workshop on Hurricanes and Climate Change. (<http://serc.carleton.edu/NAGTWorkshops/hurricanes/index.html>)
- Building and organizing an online community using Web 2.0 social networking tools to facilitate collaboration, interactivity, and knowledge sharing among users. The tools that may be deployed, based on our planned front-end "landscape studies," include wikis, podcasts, blogs, RSS feeds, and "Ning" software.
- Facilitate and expand the existing Climate Literacy Network to include existing and emerging climate and energy education experts and enthusiasts.