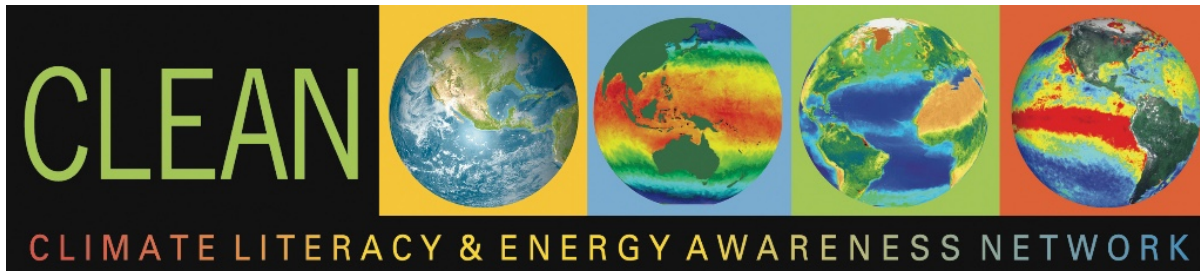
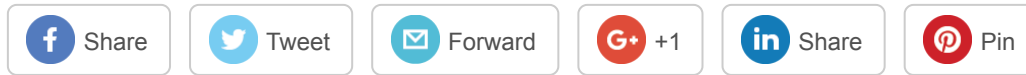


[Subscribe](#)[Past Issues](#)[Translate ▾](#)[View this email in your browser](#)

[Weather Animation](#) | [Principle 3: Biological Processes](#) | [Principle 6: Human Activities](#)

CLEAN STEM Flash

A Timely Climate and Energy E-Learning Series to Use and Share

September 16, 2019

Topic: Our Greatest Website Hits

These three pages have accounted for over 173,000 page views in the past year. Check them out to learn why they're so popular!

CLEAN Resource Feature

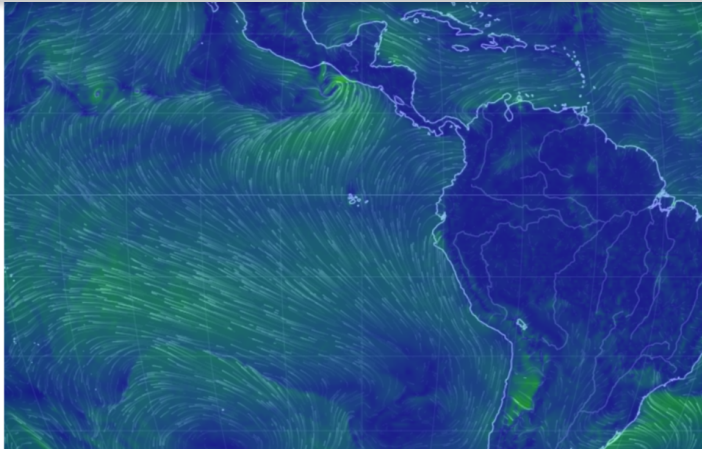
Simulation: [Earth: An Animated Map of Global Wind and Weather](#)

This real-time animation of wind and weather is a great resource for accompanying any lesson on weather patterns, ocean currents, and ocean temperatures.

Audience: Middle School, High School, College, Graduate, Informal

Browse CLEAN for more animations related to [Weather](#).

Use this animation to depict wind direction and speed at varying heights above Earth's surface. Students will be able to visualize how ocean surface currents, ocean surface temperatures, and

[Subscribe](#)[Past Issues](#)[Translate ▼](#)

movement.

Energy Literacy Principle Feature

Energy Literacy Principle 3: [Biological Processes Depend on Energy Flow Through the Earth System](#)

This principle (3 of 7) describes the six fundamental concepts involved in energy flow through biological processes on Earth.

Take a look at the other six [Energy Principles](#).

This energy principle includes six key concepts that delve into different mechanisms of energy in biological processes. This includes energy from the sun, food as a biofuel, the transfer of energy between organisms, energy flows through food webs, the influence of energy on ecosystem change, and human influence on the energy balance of ecosystems.



Climate Literacy Principle Feature

Principle 6: [Human Activities are Impacting the Climate System](#)

This principle (6 of 7) describes the five concepts for teaching about the human impacts on climate.

[Subscribe](#)[Past Issues](#)[Translate](#) ▼

Take a look at the other six [Climate Principles](#).

This climate literacy principle relates to the causes and effects of human-induced climate change. There are five fundamental concepts introduced in this principle, including: the consensus of scientific studies on the cause of warming since the late 1900s; fossil fuel emissions' effects; changes to the land, oceans, and atmosphere; effects of the global warming on Earth systems; and projections for the future.



Professional Development Survey

Tamara Ledley, the former CLEAN chair, has developed a survey about professional development we hope will help us improve climate professional development opportunities. Please consider participating - you can find more information about the survey here: <https://tinyurl.com/PDFundingSurvey>

Explore the CLEAN collection of climate & energy learning resources

CLEAN supports teaching and learning about climate and energy with 700+ free peer-reviewed, scientifically accurate, and classroom-ready resources.

[Browse](#) the CLEAN collection by NGSS topics.

Check out the [CLEAN STEM Flash Library](#) of past issues.

Received this as a forward? [Sign up](#) to get future issues sent to your inbox.



[Subscribe](#)[Past Issues](#)[Translate](#) ▼

ENERGY

TERC

CIRES

Science Education
Resource CenterCarleton
College

Copyright © 2019 CIRES Education Outreach. All rights reserved.

clean@colorado.edu

CLEAN is funded by grants from the [National Oceanic and Atmospheric Administration](#) (NA12OAR4310143, NA12OAR4310142), the [National Science Foundation](#) (DUE-0938051, DUE-0938020, DUE-0937941) and the [Department of Energy](#).

Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the National Science Foundation.

[unsubscribe from this list](#) [update subscription preferences](#)

