

# Climate & Energy Resources—for Students

The following websites offer games, activities, and videos for students to access at home, or for after-school activities for your Green Team. The Climate and Energy Resources for Teachers (pg. 2) has activities and lesson plans that can be implemented into your classroom.



**NASA's Climate Kids** website brings climate science to life with fun games, interactive features and exciting articles. **(K-8)** Visit <https://climatekids.nasa.gov/>



**PBS Kids, Meet the Greens**, is a site for kids about looking after the planet. It's great for students K-8 who want to use a Carbon Calculator, play games, and watch episodes about sustainability. **(K-8)** Visit <http://meetthegreens.pbskids.org/>



**U.S. Energy Information Administration (EIA) Energy Kids** website is a great resource for kid friendly energy definitions, energy sources, games & activities, and more. **(K-8)** Visit <https://www.eia.gov/kids/>



**National Geographic Kids' Climate Change** website has interactive games on animals, climate change, and videos. **(K-8)** Visit <https://kids.nationalgeographic.com/explore/science/climate-change/>



**ACE—Alliance for Climate Education's** mission is to educate young people on the science of climate change and empower them to take action. High School Students can get educated on climate change issues through a series of award-winning videos. **(9-12)** Visit <https://ourclimateourfuture.org/> OR, visit the ACE website to learn how to take action now. Visit <https://acespace.org/>



The **US Environmental Protection Agency (EPA) Student's Guide to Global Climate Change** has tools and information for students to learn about current and past climate, the impacts, and how to be part of the solution. **(3-12)** Visit <http://saveourepa.com/climatechange/kids/index.html>

## Climate Time Machine

This series of visualizations shows how some of Earth's key climate indicators are changing over time.

## Global Ice Viewer

Sentinels of Climate Change

Ice, which covers 10 percent of Earth's surface, is disappearing rapidly. Select a topic below to see how climate change has affected glaciers, sea ice, and continental ice sheets worldwide.

**NASA's Climate Time Machine & Global Ice Viewer** shows beautiful, and data driven, series of visualizations that show how some of Earth's key climate indicators are changing over time. Great for High School students. **(7-12)** For the Time Machine, visit <https://climate.nasa.gov/interactives/climate-time-machine> For the Global Ice Viewer, visit <https://climate.nasa.gov/interactives/global-ice-viewer/#/>



**U.S. DEPARTMENT OF ENERGY**

**Energy Efficiency & Renewable Energy**

**U.S. Department of Energy, Office of Energy Efficiency & Renewable Energy** has a terrific Energy Video Series about renewable energy sources and emerging energy technologies. **(9-12)** Visit <https://www.energy.gov/eere/education/eere-energy-101-video-series> OR, videos on energy principles. **(9-12)** Visit <https://www.energy.gov/eere/education/downloads/energy-literacy-videos>

## Climate & Energy Resources—for Teachers



### GLOBAL CLIMATE CHANGE Vital Signs of the Planet

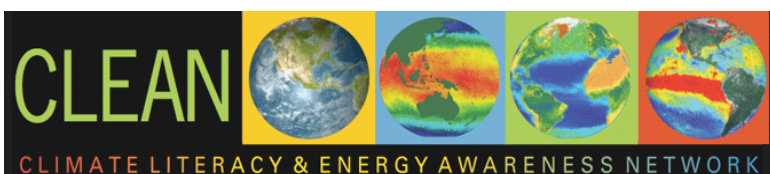
NASA's **Global Climate Change** website has an abundance of interactive resources and graphics for students. **(MS & HS)** Visit <https://climate.nasa.gov/>

The **NASA Innovations in Climate Education (NICE)** project includes a portfolio of 71 climate education initiatives that span across the nation and contribute to the development of a climate-literate public and a climate-related STEM workforce. Visit <http://nice.larc.nasa.gov>



Jet Propulsion Laboratory  
California Institute of Technology

**JPL Education** provides a collection of climate change lessons and activities that is aligned with Next Generation Science and Common Core Math Standards, and incorporates NASA missions and science along with current events and research. **(All Grades)** Visit <https://www.jpl.nasa.gov/edu/teach/tag/search/Climate+Change>



**CLEAN** has a robust collection of ~700 free, ready-to-use resources rigorously reviewed by educators and scientists. Suitable for secondary through higher education classrooms. **(MS & HS)** Visit <https://cleanet.org/index.html>



**NOAA's Toolbox for Teaching Climate & Energy**—The Toolbox for Teaching Climate & Energy has been created to organize and highlight resources from numerous educational and science partners and programs all working toward the supporting teachers and education systems. **(All Grades)** Visit <https://www.climate.gov/teaching>



**U.S. EIA Energy Kids—Teachers Guide** provides energy lessons that use this website as a resource. The guide provides Language Arts, Math, Performing Arts, Science and Social Studies extension activities by age level. **(K-5)** Visit [https://www.eia.gov/kids/energy.cfm?page=teacher\\_guide](https://www.eia.gov/kids/energy.cfm?page=teacher_guide)



U.S. DEPARTMENT OF  
**ENERGY**

Energy Efficiency &  
Renewable Energy

**U.S. Department of Energy's Lesson Plans and Activities** provide a collection of energy-related lesson plans, labs, projects and other activities for all grades on energy-related topics, searchable by topic and grade level. **(All Grades)** Visit <https://www.energy.gov/eere/education/teach-and-learn>



**Pulitzer Center 'Losing Earth': A Climate Change Curriculum** provides reading comprehension tools, activities, and other resources to bring "Losing Earth," *The New York Times Magazine's* special issue on climate change, into the classroom. **(all grades)** Visit <http://pulitzercenter.org/nytclimate>

**YaleEnvironment360**

Published at the Yale School of Forestry & Environmental Studies

**Yale Environment 360** created an informative video visualization of a Century of Global Warming in Just 35 Seconds. **(7-12)** Visit <https://e360.yale.edu/digest/new-video-visualizes-a-century-of-global-warming-in-just-35-seconds>