

# Virtual Simulations Facilitated by PAAC

Contact PAAC at [hs@paachawaii.org](mailto:hs@paachawaii.org) to schedule a simulation at your high school. Requirements:

- Computer or laptop with videoconferencing capability (phones are ok but not ideal) for each student
- Internet access for each student
- Minimum 12 students, Maximum 35 students
- Time required: 1.5-3 hrs (longer is better but simulations can be adapted to time constraints)

**Why simulations?** Interactive simulations require students to practice important 21st century skills, including critical thinking and analysis, teamwork, collaboration, and persuasive public speaking.

**About the Simulations:** Both simulations were developed by [Climate Interactive](#) and based on the best scientific understanding of climate change. The computer simulators pictured below are used by top policy makers at the U.N. and around the world to assess the impact of climate policies.

**Subject Standards:** Directly applicable to HCSSS and Next Generation Science Standards, in particular: [SS.WH.8.12.1](#), [SS.US.12.16.2](#), and [HS-ESS3-5](#). Also easily adaptable to a wider range of STEAM and Social Studies standards.

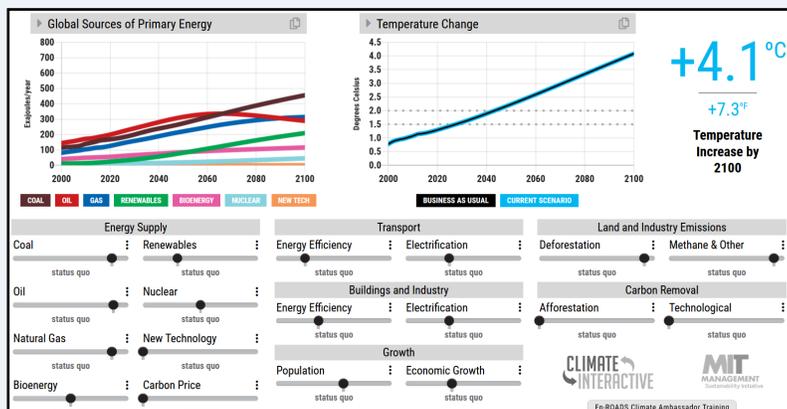


## Climate Action Simulation



In this interactive, role-playing activity, **students representing different interest groups propose solutions to the climate crisis.** The goal is to keep global temperature rise to below 2 degrees Celsius above preindustrial levels, and ideally 1.5 degrees Celsius—the goal of the Paris Agreement.

This simulation uses En-ROADS, a computer simulator that visually represents the impact of proposed climate solutions on global temperature rise in real time.



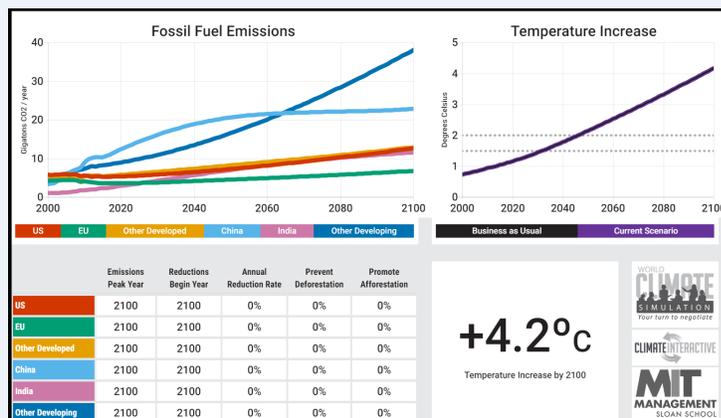
The EN-ROADS computer simulator

Interest groups include: Conventional Energy; Clean Tech; Land, Agriculture, & Forestry; World Governments; and Climate Justice Hawks.

## World Climate Simulation

In this interactive, role-playing activity, **students representing different governments of the world propose target dates for CO2 emissions reductions.** Everyone must work together in their respective roles to reach a global agreement that keeps global temperature rise below 2 degrees Celsius and ideally 1.5 degrees Celsius—the goal of the Paris Agreement.

This simulation utilizes C-ROADS, a computer simulator that visually represents the impacts of policy decisions on global temperature rise in real time.



The C-ROADS computer simulator

Negotiating blocs include: U.S., China, India, European Union, Other Developed Countries, and Other Developing Countries.