



Regional Science Council Education and Outreach **Climate Change 101**

USING SCIENCE TO MAKE A DIFFERENCE IN U.S. EPA REGION 9, THE PACIFIC SOUTHWEST REGION

Climate Change 101

This series of classes was created by the Regional Science Council in response to the Region 9 Energy and Climate Change Strategy. The half-day class, taught by Region 9 Scientists, is designed to help expand regional staff knowledge of the relevant science, policies, and programs related to climate change. The intent is to inform and inspire staff to meet the challenges of climate change at work and at home.

Topics Covered

***Too Hot Not To Handle* - HBO video**

Each class starts with a viewing of the first half of this video. In this movie, scientists explain what global warming is and what the consequences may be. Potential solutions are discussed, as well as what is currently being done in several US states. It explains that global warming is a global average, but in different parts of the World we may see extremes in the weather, either very hot or cooler than usual.

Ecosystems

This module covers some of the ecological effects of climate change, such as the loss of ecosystems, reduced biodiversity, and the extinction of populations and species

Instructors: Charlotte Ely, Eugenia McNaughton

Health Impacts

Health effects related to heat, extreme weather events, air pollution, water- and food-borne diseases, and vector- and rodent-borne diseases are discussed in this module.

Instructors: Meredith Kurpius

Greenhouse Gases

Which are the greenhouse gases? Where do they come from? How we account for them?

Instructors: Ben Machol, Asia Yeary, Nancy Levin, Meredith Kurpius

Life Cycle Assessment

The four stages of a life cycle assessment (LCA) and how a LCA can be used in everyday situations to make smarter and "greener" decisions are presented in this module.

Instructors: Gail Morison, Matt Small

Energy

How do we use energy? Where do we get our energy? How has our energy consumption changed over the years? What are the greenhouse gases attributable to energy consumption? What are the other impacts of energy consumption (other than GHG emissions)?

Instructors: Ben Machol, Saskia VanGendt

Policy

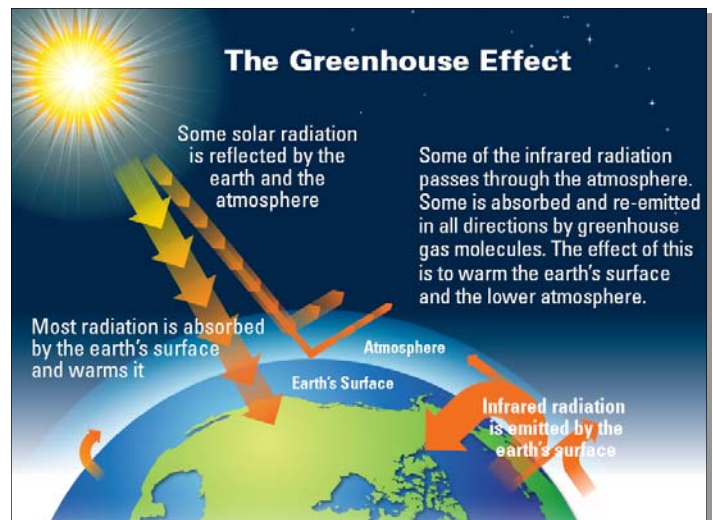
National, State, Regional, and International policies are discussed, as well as cap and trade and upcoming legislation.

Instructors: Ben Machol, Ray Saracino

What You Can Do

A class exercise is used to estimate your carbon footprint and find ways to make changes and live smarter.

Instructor: Matt Small



www.epa.gov/climatechange/downloads/Climate_Basics.pdf