

TILclimate Educator Guides

About TILclimate

Climate change is confusing. By now most people understand that the Earth's temperature is rising, and that this poses a real threat to our species and our planet. But how can a change in temperature lead to extreme weather events and sea level rise? Which human activities are contributing to the problem, and how? What solutions are available to us, and how can we predict their effects? And what does this all mean for my country, my hometown, and my future?



To answer these questions and more, the Environmental Solutions Initiative at the Massachusetts Institute of Technology (MIT) created the podcast TILclimate (Today I Learned: Climate). In 10-minute conversations with real scientists, we cut through the jargon to explain key concepts in words anyone can understand, and in bitesize episodes that are easy to listen to. From planes to hurricanes, and from “geoengineering” to just why it’s so hard to pinpoint the future effects of climate change, TILclimate steers you through the basics so you can make informed decisions about your role in our shared planet’s future.

You can listen to TILclimate on our website <https://tilclimate.mit.edu>, or subscribe on iTunes, Spotify, or wherever you get your podcasts.

About the Educator Guides



We want to make it easier for you to teach climate change, earth science, and energy topics in the high school classroom. The short (10-15 minute), science-driven episodes of TILclimate can be used as a substitution for a lecture, a supplemental introduction to a unit, and more. Educator Guides are designed to further student understanding of multiple interlocking aspects of climate change, with a particular focus on solutions.

In each Educator Guide at <https://climate.mit.edu/educators> you will find a series of standards-aligned activities that can be taught individually or all together, including:

- One or more short introductory activities for group learning (10-25 minutes)
- Data-driven deeper dives using trusted visualization and analysis tools (20-45 minutes)
- Activities that invite students to think about how they would share their learning with family and friends
- Teacher pages with setup instructions, discussion questions, background resources, a summary of relevant skills, and adaptation suggestions for science, social science, and ELA teachers

MIT Climate Resources

About MIT ESI



Founded in 2014, the **Environmental Solutions Initiative (ESI)** is the Massachusetts Institute of Technology's institute-wide effort to mobilize the substantial scientific, engineering, policy, and design capacity of our community to contribute to addressing climate change and other environmental challenges of global import. We pursue multidisciplinary research, education, events, and partnerships to help move society toward an environmentally and socially sustainable future.

<https://environmentalsolutions.mit.edu/>

MIT ESI Climate Resources



If you're looking for a deeper dive on the most important lines of evidence for human-caused climate change, see our Webby Award-winning **MIT Climate Primer**. The digital interactive was written by Dr. Kerry Emanuel, a professor at the MIT Department of Earth, Atmospheric and Planetary Sciences, and transposed into a multimedia web experience by ESI. The Primer confronts the stickier questions about uncertainty in our projections, engages in a discussion of risk and risk management, and concludes by presenting different options for taking action. We hope that the facts prepare you for more effective conversations with your community about values, trade-offs, politics, and actions.

<https://climateprimer.mit.edu/>



The **Climate Portal** is MIT's hub for learning and action on climate change. It includes:

- Explainers: general-audience overviews of climate change science, solutions, and related topics, written by scientists and experts.
- Ask MIT Climate: straightforward answers to your questions about climate change.
- TILclimate (Today I Learned: Climate): an award-winning podcast that breaks down the science, technologies, and policies behind climate change, how it's impacting us, and what we can do about it.
- Links to other MIT climate-related resources.

<https://climate.mit.edu/>

