



YOUTH CLIMATE ACTION TOOLKIT

We can make a difference by changing how we live, building community, and caring for each other and our world.



Table of Contents

We designed this toolkit with young leaders from across the country to share climate solutions that students can advocate for in schools. It also provides talking points, highlights advocacy strategies, and includes bright spots of students taking action around the country.

- Introduction** 03
- Climate Solutions in Schools** 08
 - Mitigation** 09
 - Adaptation** 11
 - Education** 13
 - Equity** 16
- Federal Funding** 18
- Strategies for Action** 21
- Messaging Guide** 25
- Glossary of Terms** 27
- Additional Resources** 28

ABOUT US

K12 Climate Action is part of This Is Planet Ed at the Aspen Institute, an initiative that intends to unlock the power of education as a force for climate action, climate solutions, and environmental justice to empower the rising generation to lead a sustainable, resilient, and equitable future. This Is Planet Ed works across early childhood, children’s media, K-12 schools, and higher education to build our societal capacity to advance climate solutions. www.ThisIsPlanetEd.org

The Nature Conservancy is a global conservation organization dedicated to conserving the lands and waters on which all life depends. Guided by science, we create innovative, on-the-ground solutions to our world’s toughest challenges so that nature and people can thrive together. We are tackling climate change, conserving lands, waters and oceans at an unprecedented scale, providing food and water sustainably and helping make cities more sustainable. Working in more than 70 countries and territories, we use a collaborative approach that engages local communities, governments, the private sector, and other partners. www.nature.org

INTRODUCTION

The year 2023 was the **hottest on record**. Students and schools across the country felt the effects—from flooding in Kentucky to wildfire smoke in the Northeast to extreme heat in Colorado. It is clear that the impacts of climate change are happening now, and many students are concerned about what the future will hold. Climate change threatens to disrupt learning, cause physical and emotional harm to young people and their families, and widen inequities in schools.



WHAT IS CLIMATE CHANGE?

Earth is surrounded by an invisible blanket of heat-trapping gasses that hold the right amount of heat to keep our atmosphere the perfect temperature for us to live—it's not too hot, it's not too cold. **It's just right.** These gasses include carbon dioxide, methane, and water vapor.

Just like a sheet is different from a heavy blanket, how thick our blanket is matters. For decades, human activity has been **adding more heat-trapping gasses** to the atmosphere, making it thicker. This extra carbon pollution comes **from burning fossil fuels, industry, electricity, transportation, manufacturing, food, buildings, and land-use.**

When these gasses build up in Earth's atmosphere, the planet heats up, causing extreme weather. Heatwaves, wildfires, storms, and floods are becoming more intense and more dangerous.

THERE ARE SEVERAL KEY IDEAS THAT STUDENTS SHOULD KNOW ABOUT CLIMATE CHANGE:

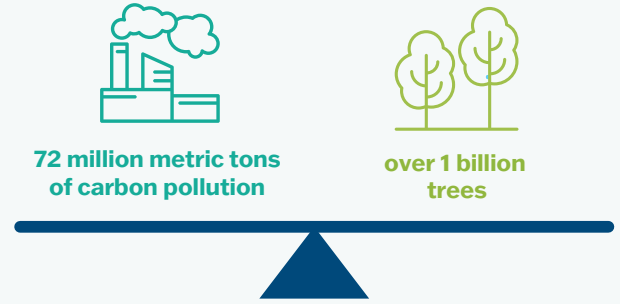
Earth is our home. It's getting hotter because of us. It's changing now, and it's impacting us.

We can make a difference by changing how we live, building community, and caring for each other and our world.

And schools are a great place to start.



Students and schools can play an important role in addressing climate change. From buses to lunches, schools are key producers of carbon pollution. They produce about **72 million metric tons of carbon pollution a year—an amount that would take over 1 billion trees growing for 10 years to absorb.** But with nearly 100,000 schools and over 50 million students across the country, **schools can also become beacons of sustainability and climate action.**



IMAGINE

We envision a school where students have safe spaces to learn outside and interact with nature and are empowered to lead solutions in their schools and communities. Where:

TRANSPORT



Diesel school buses



Electric school buses

LUNCHES



Highly processed



Locally & sustainably produced

BUILDINGS



Fossil fuel powered schools



Renewable energy powered schools

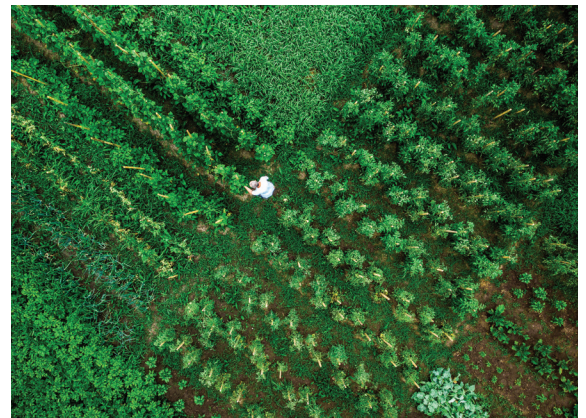
EDUCATION



Limited information



Climate solutions across all classes & grades



TAKING THE FIRST STEP:

Taking climate action can be overwhelming. But you can start small. We recommend taking the following steps to get started:

Read a Book: Learn more about climate solutions through literature. Our students recommend [Nature's Best Hope: A New Approach to Conservation That Starts in Your Yard](#) by Douglas W. Tallamy.

Join a Club: Check to see if your school has an environmental or climate-focused club or community group. If not, consider approaching a teacher to start one.

Talk to a Friend: Climate emotions are real! Climate change impacts the mental health of two out of three young people. [Talk to a friend, family member, or trusted adult](#) about what you are seeing and feeling.

Get Outside: Explore and connect with the ecosystems around you. Take time to go outside for a walk or [visit a nearby park, forest or even a local nature preserve](#).

Learn More: Learn more about climate impacts and solutions in your community. We recommend [NOAA's Maps and Data](#) and [GreenPeace](#).

As the most important stakeholders in schools, students have the ability to drive tremendous change! Students can work with their communities—including other students, educators, parents, and community members—to develop K-12 climate action plans for their school districts. Just like [climate action plans](#) are used by cities, school climate action plans connect community needs and strengths to **reduce** carbon pollution, **prepare** for climate impacts, and **educate** young people about climate change and climate solutions. The national [K12 Climate Action Plan](#) is a helpful tool in understanding what this can look like in different communities and contexts. Although this framework is national, it is important to note that each community experiences climate change in different ways and will need unique solutions—so it's crucial to understand how climate change impacts your [community](#) or [region](#).



STUDENTS IN ACTION

Salt Lake City, Utah: Andie Madsen and Mahider Tadesse

were among student leaders who pushed their school board to develop a [sustainability action plan](#) for the district. The primary goals of the plan were to 1) Get the district to use 100 percent clean, renewable energy by 2030 and 2) Become carbon neutral by 2040.

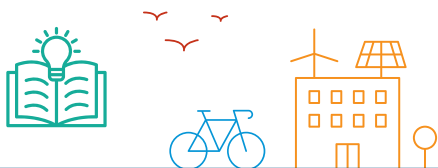


HOW CAN YOU HELP LEAD CLIMATE ACTION IN SCHOOLS?

Students play a crucial role in driving climate action in their schools. You can:

LEARN.

Learn how climate change is impacting your school and community and about solutions that other students are implementing across the country.



ENGAGE.

Engage others—including other students, family members, and community members—in talking about climate change and participating in climate and environmental activities.



VOICE.

Voice your opinions, concerns, and priorities to other students as well as parents, guardians, teachers, and elected officials such as school board members.



ORGANIZE.

Organize your fellow students and community around shared climate goals.



EDUCATE.

Educate others about what you learn and share your success stories.



ADVOCATE.

Advocate for the changes you want to see in your school and community.



Meet Our Team



Ethan Bledsoe

Ethan Bledsoe is from West Lafayette, Indiana, and is currently a student at Northwestern University studying Environmental Science and Economics. Passionate about addressing climate change, he co-founded the West Lafayette ClimateClub and the statewide campaign, Confront the Climate Crisis. Ethan advocated for climate change solutions in Indiana, operating on personal, local, and statewide levels through educational initiatives and policy advocacy. He has recently transitioned from activism to research, contributing to climate solutions through his work in a climate modeling lab at his university.

Bernice Deng is a student passionate about environmentalism, sustainability, education, and creating change. She started her passion for environmentalism in a 6th-grade climate change unit; the drive only accelerated after she witnessed the horrific effects of climate change. Through her youth advocacy work, she aims to impact and create change in her community. She is part of Inspirate Earth, which aims to re-imagine climate education. Bernice is also involved with Climate Cardinals, an organization aiming to translate climate change materials, where she serves as Director of People Operations. Bernice also has a fond passion for geology, minerals, and building wooden planes.



Bernice Deng



*Gianna Hutton
González*

Gianna Hutton González is a climate justice organizer and rising junior Posse Scholar at Pomona College studying Environmental Analysis with a concentration in Race, Class, and Gender and a minor in Chicano/a/e-Latino/a/e Studies. Her commitment to climate organizing began during her sophomore year of high school upon witnessing the lack of climate education in schools despite the stark climate impacts her hometown of Miami, Florida faces. Her upbringing in a predominantly Latine and frontline community inspires her to center social responsibility and participatory engagement in her organizing.

Matsu Hikida was born and raised in New York City, where he grew up going to climate marches and prison abolition teach-ins. In 2018, Matt moved to Maine to study education at Bowdoin College, where he co-founded the first Maine hub of the Sunrise Movement and developed an interest in outdoor education and regenerative agriculture. After graduating, he began working as a MOFGA Apprentice at Erickson Fields, an educational farm and Maine coast Heritage Trust preserve in Rockport. In 2023, he managed the farm's Teen Ag crew, their 3.5 acre garden, and the distribution of produce to 22 hunger relief sites across Knox County. Matt recently moved to Lincolnville, where you can find him working at a local vegetable farm, maintaining coastal soil health, building a rural queer community, and exploring local trails and ponds.



MATSU HIKIDA



Charmayne Planter

Charmayne Planter is a rising senior at Sarah Lawrence College studying environmental studies and geography. In her academics, Charmayne has pursued independent research opportunities with a focus on conservation efforts in rural coastal communities and Indigenous landscapes. In her research, she has incorporated perspectives from her own Gullah-Geechee ancestry and engaged with other Western Indigenous communities in the U.S. Her academic and personal experiences have led her to focus on the intersectionality between the environment and economy, which she has been able to broadcast through the support from National Geographic, the Nature Conservancy, and the Mississippi-Alabama Sea Grant Consortium. Charmayne was honored with the National Wildlife Federation's National Conservation Young Leader Award in 2021.

Climate Solutions in Schools:

MITIGATION, ADAPTATION, EDUCATION, AND EQUITY

—and How to Fund Them

This section of the toolkit outlines climate solutions that can be implemented in schools. There are many solutions on this list, and not all of them might be right for you and your school. We advise finding one that you are passionate about and working with your fellow students and schools to take action!

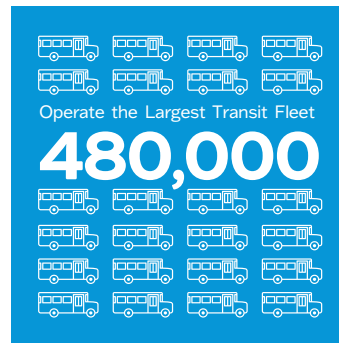
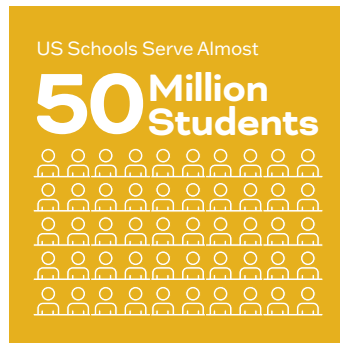
MITIGATION IN SCHOOLS

Key Talking Points

- With nearly 100,000 schools across the country, US schools:
 - Serve almost 50 million students nationwide, one of the largest energy consumers.
 - Operate the largest transit fleet in the country with 480,000 buses.
 - Serve 7 billion meals every year.
- As a result, schools produce a large amount of carbon pollution, which contributes to climate change.
- Students can advocate for mitigation solutions that can improve student health, create opportunities for students to engage with climate solutions first-hand, and reduce operational costs for schools (meaning more funding for teaching and learning).

WHAT IS MITIGATION?

Mitigation: Measures to reduce the amount and rate of future climate change by reducing emissions of heat-trapping gases (primarily carbon dioxide) or removing greenhouse gases from the atmosphere.



Key Solutions



Schools can re-imagine their energy systems by:

- Designing net-zero energy schools that can create enough renewable energy onsite to meet or exceed the energy needs of the school, saving money on energy costs and improving student health.
- Utilizing sustainable infrastructure—including solar panels, electric heating and cooling, and LED lighting—reduces schools' reliance on fossil fuels and improves energy efficiency.
- Using school buildings as tools to help students learn about sustainability and clean energy.



Schools can encourage sustainable transportation by:

- Transitioning to electric school buses that eliminate diesel exhaust, reduce a school's carbon pollution, and improve student health and academic performance.
- Installing charging stations for electric school buses.
- Providing support for students to safely walk and bike to school.



School districts can provide healthy, sustainable school meals by:

- Serving sustainably grown, local food that can reduce carbon emissions and can support child nutrition.
- Allowing schools to donate extra unopened food and to compost food scraps.
- Conducting food waste audits, participating in food waste education, and collaborating with local organizations to compost, recover or donate uneaten foods.

Students in Action

In 2021, [Analyse Humaran](#) and [Gianna Hutton González](#) wanted locals in Miami, especially youth, to understand climate science and connect the dots to climate events occurring in their community. They partnered with a local non-profit, the CLEO Institute, to train fellow peers to give presentations to students about climate change, the local impacts, and how they can be involved in solutions. They also started a podcast that interviewed local leaders driving action on environmental concerns to inspire students to launch their own projects.

At their high school, they spoke to their cafeteria manager and principal to start a Meatless Mondays program to promote planet-friendly vegetarian food options in school. This program was so successful that it expanded to schools within Miami-Dade County Public School District. To reduce the school's food waste, they also launched a composting program that turned food scraps into healthy soil to grow more food and engage students in sustainable practices.

ADAPTATION AND RESILIENCE

Key Talking Points

- Climate change brings more intense, extreme weather, including flooding, wildfires, hurricanes, and heatwaves. Each community experiences climate effects differently based on their region.
- Climate effects and extreme weather can cause schools to close, disrupting student learning and school-based support.
- Students can advocate for solutions to ensure their families, schools, and communities are prepared for climate change.

WHAT IS ADAPTATION?

Adaptation: The process of adjusting to an actual or expected environmental change and its effects in a way that seeks to moderate harm or exploit beneficial opportunities.

School grounds make up



2 million
acres of land

36%

of students attend school on a heat island



Areas in the US are predicted to experience 20-30 more days per year with temperatures 90°F and higher



Key Solutions



Schools can support students and families in adapting to climate impacts by:

- Understanding how climate change will likely impact their students, families, and communities.
- Having plans to continue learning and support when faced with disruption, including virtual learning and ensuring that students have access to devices and WIFI.
- Supporting student mental health to assist with recovery and build resilience to climate impacts.



As cornerstones of communities, schools can support communities by:

- Serving as emergency shelters and distributing food, medical supplies, and resources when extreme weather causes power outages and damages homes and other community infrastructure.
- Using renewable energy such as solar panels coupled with battery storage—also known as solar microgrids—to continue operating during widespread power outages and supplying electricity to local homes.
- Working with local emergency preparedness organizations to help adapt and build climate resilience.



Schools can also reduce community heat and flooding by:

- Transitioning school spaces created with asphalt and cement to green and sustainable spaces.
- Leveraging green infrastructure, such as rain gardens, rain barrels, and trees, to capture water and create shade.

Students in Action

In partnership with the Trust for Public Land, a [group of students worked to design a community playground on the Winthrop School Campus in Brooklyn, New York](#). Students helped to design a turf field to absorb stormwater, plant trees, use porous concrete and pavement, and introduce other green

infrastructure. These features help to capture up to an inch of rainwater during storms and amount to over one million gallons per year. The trees also provide shade, improve air quality, make the city more resilient on hot summer days, and improve residents' health.

CLIMATE EDUCATION IN SCHOOLS

Key Talking Points

- Many students are worried about how climate change will impact their futures.
- Students will have careers and jobs impacted by climate change, and there will be significantly more job openings related to sustainability.
- Teaching and learning about climate change—its causes, its consequences, and its solutions—can help empower young people to lead a sustainable, resilient, and equitable future.

WHAT IS EDUCATION ON CLIMATE CHANGE?

Education on climate change can help students understand:

- How we depend on our environment and climate to thrive.
- The science related to why and how our climate is shifting.
- How these changes impact our society, health, policies, economies, and more.

Education on climate can also:

- Create space for students to generate and engage with solutions.
- Prepare students for clean economy jobs.
- Help students process climate impacts through language arts or art.
- Empower students to know how to make a difference.

At the district level, education on climate can be integrated in the curriculum. Curricula generally includes lesson plans and other resources for teachers that detail how course content should be taught, and aligns with the state standards for a subject and grade level.



84% of US teens feel moderate to extreme worry on climate change



75%

of adults believe schools should teach about global warming



83 School Board Climate Action Resolutions passed since 2018



Key Solutions



Schools can help students learn about climate change by:

- Supporting students in understanding our relationship with our climate and our environment.
- Integrating climate change, climate solutions, and sustainability into their existing curricula across grades and subject areas.
- Offering opportunities for students to engage in climate projects in their communities.
- Increasing the opportunities for students to routinely be outside and explore nature.
- Providing students with interesting and relevant information, readings, and materials on climate change.



Schools can ensure that students are prepared to address climate change in their careers by:

- Offering career and technical education (CTE) programs that prepare students for jobs in a clean economy.
- Hosting job fairs so that students can learn about clean economy careers.
- Integrating sustainability into the existing CTE programs and curricula to prepare students for success in any career path they choose.

CLIMATE AND ENVIRONMENTAL BOOK CLUB

Read one of our student-recommended books with a friend, family member, or on your own! Consider buying a [second-hand book](#) or shopping at a local bookstore. For more examples, check out [Inspirate Earth's](#) guide for books and other resources.

1. ***The Last Resort*** by Sarah Stoodla
2. ***Nature's Best Hope: A New Approach to Conservation That Starts in Your Yard*** by Douglas W. Tallamy
3. ***The Watcher*** by Jeanette Winter
4. ***Generation Dread*** by Britt Wray
5. ***The Great Kapok Tree: A Tale of the Amazon Rainforest*** by Lynne Cherry
6. ***One Plastic Bag: Isatou Ceesay and the Recycling Women of the Gambia*** by Miranda Paul
7. ***The Water Princess*** by Susan Verde
8. ***Compost Stew: An A to Z Recipe for the Earth*** by Mary McKenna Siddals
9. ***The Boy Who Harnessed the Wind*** by William Kamkwamba and Bryan Mealer
10. ***Flush*** by Carl Hiaasen
11. ***Hoot*** by Carl Hiaasen
12. ***Intersectional Environmentalist*** by Leah Thomas

Students in Action

In 2019, Ethan Bledsoe noticed a lack of opportunities in West Lafayette, Indiana for youth to be involved in the political process and that the city was not taking sufficient action to address climate change and advance solutions. As a result, Ethan organized a climate strike to raise awareness for the issue. The students succeeded by bringing an advanced placement environmental science course to the local high school. Additionally, he constructed free climate resiliency libraries to make climate learning materials more accessible and equitable. The group installed eight little libraries with over 100 books. These libraries are filled with children's books, resources, and information about climate change to engage younger students in the area in climate action efforts.



Ethan organized a strike to raise awareness about climate change. The students succeeded by bringing an advanced placement environmental science course to the high school. Additionally, he constructed free climate resiliency libraries to make climate learning materials more accessible and equitable.



ADVANCING EQUITY WHILE DRIVING CLIMATE SOLUTIONS

Key Talking Points

- Communities of color, low-income communities, people with disabilities, and under-resourced urban and rural communities bear the greatest burdens from negative climate impacts, from greater exposure to pollution to greater vulnerability to extreme weather.
- These communities are also more likely to be impacted by educational inequities—like a shortage of resources and aging infrastructure.
- Climate action that centers both climate and education equity can help ensure a just future for all students.

WHAT IS CLIMATE EQUITY?

We are just beginning the decarbonization of our economy and society required to address climate change. We are at a critical moment where we can advance policies that help support an equitable and just transition. Centering the experiences and perspectives of Black, Latino, Indigenous, Asian American and Pacific Islander, and other communities of color, people with disabilities, low-income communities, and under-resourced urban and rural communities in this transition can help advance a more equitable future.



USE YOUR VOICE



BUILD COMMUNITY



LOCAL SOLUTIONS



EDUCATE



Key Solutions



Schools can include students as key partners.

- As the primary stakeholders in education, schools should include students as key partners in decision-making about climate action.
- Schools should help students develop agency by including their voices on school boards, councils, and other strategic task forces.



Schools can prioritize voices from Black, Latino/a/e, Indigenous, Asian American and Pacific Islander, and other communities of color.

- To advance equity and environmental justice, schools should partner with students, families, and existing environmental justice and community organizations to develop and implement climate solutions.



Schools can prioritize providing resources to students with the highest need.

- Schools and districts that serve primarily low-income students and students of color in both urban and rural settings may face greater challenges accessing resources for sustainable infrastructure or other climate solutions. Leaders should prioritize resources for schools in low-income communities.



Students in Action

In March 2020, the Milwaukee Board of School Directors adopted a Climate Justice Resolution. The resolution created a Climate Justice Committee consisting of students, teachers, and specialists. Students on the committee were able to voice their opinions to expand support for climate initiatives in Milwaukee Public Schools.


FUNDING AVAILABLE TO STUDENTS AND SCHOOLS

Key Talking Points

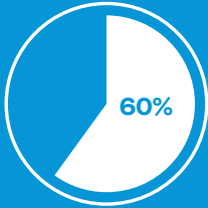
- There are many opportunities in the Inflation Reduction Act and the Infrastructure Investment and Jobs Act, including tax credits and grant programs, that students and schools can use to transition to renewable energy.
- Transitioning to renewable energy and making school buildings energy efficient can also save schools money, allowing them to invest their savings into initiatives such as increasing teacher salaries.
- Students can ensure that their schools are aware of funding opportunities and can help develop some of the climate projects for their schools.

WHY SEEK FEDERAL FUNDING?

Even with broad community support and buy-in about the need to advance climate solutions, financial resources can constrain what schools are able to do. Helping schools understand the opportunity to access resources outside existing school budgets can help make the case for action stronger. Additionally, demonstrating how these solutions can save funding on operational costs down the road can help education leaders understand the financial benefit to taking action.




The IRA includes
\$369 Billion
in climate and energy provisions




Investment tax credits
can cover up to 60% of a
renewable energy project.

Clean School Bus Program



provides \$5 billion for
electric vehicles

Schools can access
\$40k
per electric school bus




Key Solutions



Schools can leverage the following funding opportunities to make investments in healthy, sustainable buildings and learning environments:

- The Inflation Reduction Act (IRA) investment tax credits can help schools reduce the cost of transitioning to renewable energy, like solar panels, geothermal heat pumps, and energy storage systems. This tax credit has the potential to fund up to 60% of a renewable energy project.
- Schools can also take advantage of grants for energy efficiency and renewable energy improvements that will improve indoor air quality, save energy, and reduce energy costs.



To transition to sustainable transportation, schools can explore these funding mechanisms:

- The IRA includes clean transportation tax credits to help schools purchase clean vehicles, including school buses or other vehicles owned and operated by school districts. These credits can reduce the upfront cost of electric vehicles by up to \$40,000 dollars, making electric school buses more affordable and accessible.
- Schools can use the IRA's Clean Heavy Duty Vehicle Grant Program to replace diesel school buses with zero emission vehicles.
- The Infrastructure Investment and Jobs Act (IIJA) includes the Clean School Bus Program, which provides 5 billion dollars in funding to help schools transition to zero-emission school buses.



The federal government also offers grant opportunities that schools can directly apply for, or they can work with community partners to ensure that the projects benefit students.

- Funding to Address Air Pollution at Schools includes grants to monitor and reduce greenhouse gas emissions and other air pollutants at schools in low-income and disadvantaged communities.
- Environmental and Climate Justice Block Grants can be used to address disproportionate environmental and public health harms related to pollution and climate change. Schools can be key partners to ensure that these grants benefit students and families.
- Schools can also investigate grants from other agencies to fund a renewable energy transition. US Federal agencies that offer consistent funding opportunities include:
 - NOAA
 - Department of Education
 - Department of Energy
 - Environmental Protection Agency



SCHOOLS CAN ACCESS TAX CREDITS.

The Inflation Reduction Act includes a new Direct Pay Option, which allows organizations such as schools to receive a direct payment from the IRS for clean energy projects. These dollars are uncapped and non-competitive, and students can help raise awareness about this opportunity. For more details on the various financial incentives available to schools for adopting clean energy, see [K12 Climate Provisions in the Inflation Reduction Act](#).



Students in Action

High school students across the country have joined the Sunrise Movement to organize a [Green New Deal for Schools](#). The Green New Deal for Schools calls on school boards and superintendents to pass district-wide policies for climate action, including safe and clean buildings, pathways to green jobs, and free and healthy lunch. It cites the Inflation Reduction Act as a key mechanism to fund these initiatives.

Students are calling on school boards and superintendents to pass district-wide policies for climate action.

STRATEGIES TO ADVANCE CLIMATE ACTION IN SCHOOLS

Students can take the following actions to advance climate action in schools.

Learn and Connect with Other Students



Learn how climate change is impacting your community and school.

- Ask your Social Studies, Science, Math, English, and other teachers to incorporate climate change in their lesson plans
- Read the local news and check out local organizations, such as local land trusts and conservation organizations, to learn about key issues impacting your community
- Learn more from sources such as:
 - [NOAA's Maps and Data](#).
 - [Classroom-Ready Data Resources](#)
 - [Probable Futures](#)
 - [This Is Cooler](#) (featuring student leader, Gianna!)



Identify a climate- or environmental-focused club or community group to join. We recommend (though there are many, many more that you can connect with):

- [American Conservation Coalition](#)
- [Big Blue and You](#)
- [Fridays for Future](#)
- [GenCLEO](#) (only in FL)
- [Local 4-H Clubs/ Extension Offices](#)
- [The Sierra Club](#)
- [The Sunrise Movement](#)
- [This is Zero Hour](#)
- [YOUNGO](#)
- [Youth Climate Strike](#)



Build relationships with other students, community members, and local organizations.

- Begin talking about these issues at sports games and other school events
- Connect with others through extracurriculars such as art, music, and athletics
- Have face-to-face and/or digital meetings with other students



Develop Your Goals and Timeline



Review resources or attend a training for key tips on grassroots advocacy.

- [Climate Reality](#) offers a series of trainings on climate advocacy
- Connect with volunteer and advocacy opportunities through the [American Conservation Coalition](#)
- Programs such as the National Wildlife Federation's [Earth Tomorrow Program](#) can help students develop leadership and advocacy skills
- The Children's Trust Youth Advisory Committee (YAC) is a leadership development program with a focus on service and advocacy, especially relating to children and families (only in Miami-Dade County)
- The [Sunrise Summer Camp](#) introduces students to the Green New Deal for Schools and provides tools to start a climate campaign in school



Establish goals for getting your school district to develop and implement a K-12 Climate Action Plan.

- Have conversations with your friends, teachers, and other people in your community to share your climate concerns and solutions
 - Use The Nature Conservancy's [Let's Talk Climate Guide](#) and the talking points in the sections above as a place to start
 - Consider sending out a survey to your peers to better understand their demands
- Determine who should be a part of the process, including other students, educators, administrators, staff, and parents
- Using the mitigation, adaptation, education, and equity goals outlined above, collectively decide what climate solutions will be best for your school
 - To establish your goals and timeline, it is helpful to know where your district is starting. [These Key Questions](#) can help guide your understanding of what is already in place locally
- Based on your solutions, develop a budget in partnership with school staff
- Create a timeline that outlines key events and deadlines
 - Consider hosting a regular meeting with key stakeholders to keep everyone up to date

Take Action



Prepare communications.

- Develop a common language for your advocacy efforts grounded in your local needs to help you achieve success.
- Reference the talking points in the sections above as a place to start
- Consider how to use social media to further your efforts



Gather additional support.

- Host a walkout or another public event with students
- Engage local businesses and community organizations in your efforts



Meet with School Board Members to share your goals.

- You can find contact information for your school board members on most school board websites and request a meeting
- You can also testify at local school board meetings to raise the opportunity for school districts to pass resolutions to develop climate action plans
- You can use or modify the following [Template School Board Climate Action Resolution](#) as a place for your school board to start

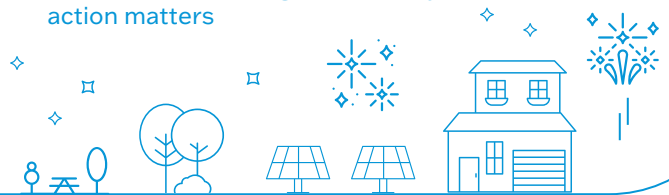


Assess and Celebrate Success



Once your school district develops a climate action plan, be sure to celebrate your success with other students!

- Consider hosting a public “launch” to kick off the work
- Celebrate small victories as well! Climate change will not be solved overnight, and every action matters



Publicize climate accomplishments via local newspapers, website blogs, or school sites.



Engage other students in art, music, and writing about climate issues



Connect with other policymakers (council members, state representatives, etc.) to continue momentum in your region.

Stay Involved



Become part of an advisory board or run for school board.

- Many local government agencies engage young people through committees, councils, and youth commissions. Numerous cities, counties, and states have established youth-led climate-specific commissions, including Los Angeles County, the state of Massachusetts, the City of Portland, the City of Boise, the City of San Antonio, the City of Miami, and the City of Austin. These groups often have a chance to steer policies that make a real impact at the local level.



Volunteer!

- Volunteer in an elementary school to further engage the next generation of climate leaders
- Host a project, such as a community tree planting or nature restoration, with a local organization



Engage more students.

- Host a green career fair in partnership with your school to introduce students to green careers

WHAT ARE SCHOOL BOARDS?

Most school board members are elected by people in their community to represent their values, views, and desires for the public schools in their district. In general, all school boards have three major responsibilities: developing the annual budget to run the school system; setting school policies; and hiring and evaluating the superintendent. School boards often set policies through passing resolutions.



MESSAGING GUIDE

Communicating about climate change can be difficult. We recommend the following methods to support productive and collaborative conversations in your community.



Research: How you approach a conversation will depend on the “climate” of your community. It is important to come with research in hand, not only on the topic but on the person you are connecting with.



Lead with Values: Know someone’s priorities and values before engaging in conversations. Understanding the concerns of people in your school and community and leading with shared values can help build support. For instance, are you a community that cares about a particular natural landscape, food, tradition, or value? Talking about common interests and how climate change impacts those can help to bring people together. [The Yale Program on Climate Change Communication’s Climate Opinion Maps](#) can help you understand the climate stances in your area.



Focus on Solutions: Focusing on positive, optimistic, and solutions-based messaging can engage wider audiences. Consider starting with the climate solutions talking points in the mitigation, adaptation, education, equity, and federal funding sections above.

Stakeholder Engagement Checklist

Consider engaging with the following education stakeholders to strengthen your initiative:

- | | |
|---|--|
| <input type="checkbox"/> Students | <input type="checkbox"/> Community Members |
| <input type="checkbox"/> Teachers | <input type="checkbox"/> Elected Officials |
| <input type="checkbox"/> Parents/Caregivers | <input type="checkbox"/> Small Businesses |
| <input type="checkbox"/> Administrators | <input type="checkbox"/> Other: _____ |

Leveraging Social Media

To captivate the attention of your audience, utilize visual storytelling to create a conversation. Develop infographics and share videos and images that can convey complex concepts in a digestible and engaging manner. There are a multitude of free design tools available such as Canva, Figma, [Unsplash](#) and Shutterstock that can help with pulling together compelling graphics. There are also several sites like Pinterest, [Colors.co](#), and [Toools.design](#) that can spark inspiration. Remember that to amplify climate-related messages, it is important to be authentic and find ways to connect with the community. Hashtags may also help elevate your message to multiple audiences.



SOCIAL MEDIA ACCOUNTS TO FOLLOW

Our students recommend checking out the following, powerful social media accounts:

- Earth Rise Studio
- Earthly Education
- Environment by Impact
- Black Girl Environmentalist
- Green Girl Leah

Addressing Pushback & Inaccurate Information

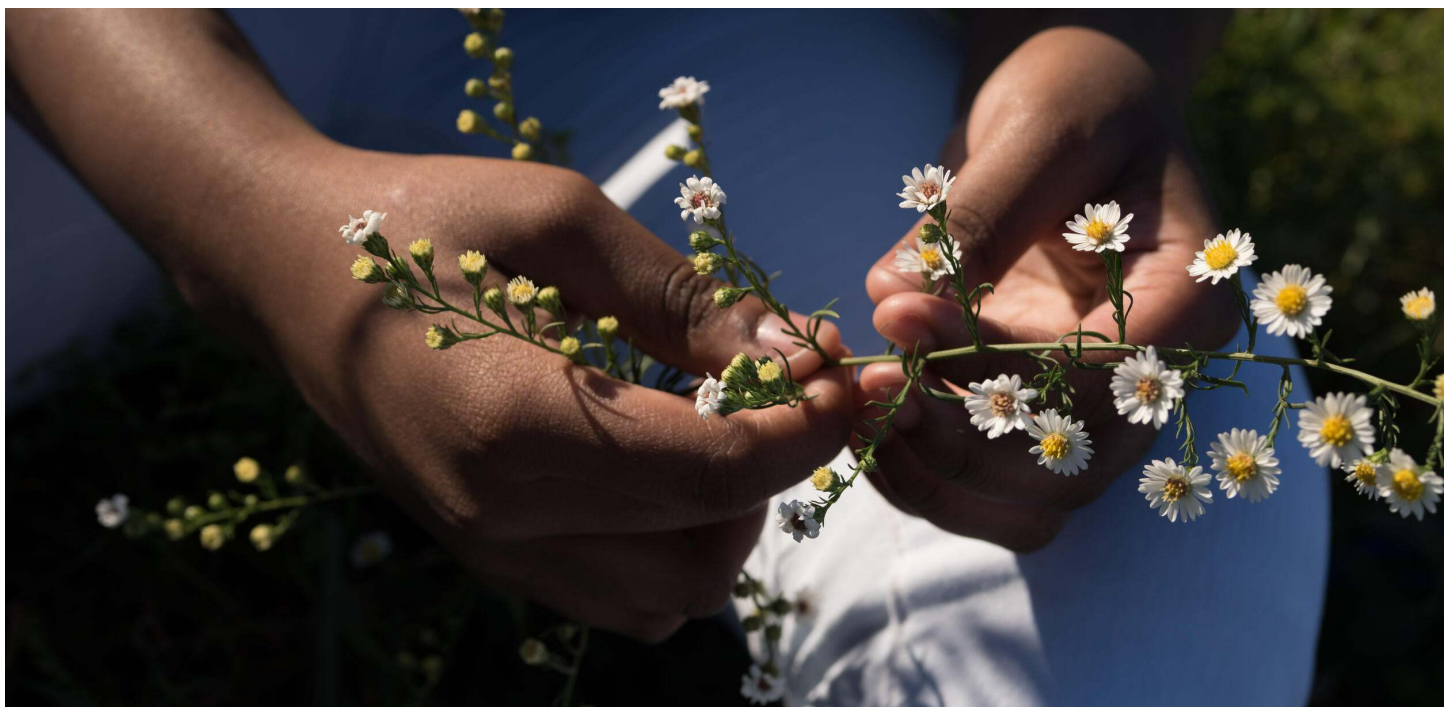
While advocating for climate action in schools, you may receive pushback from other students, school board members, education leaders, or community members that is based on inaccurate information. There are several strategies you can use to build support through advocacy and conversations with people in your schools and communities.

WHAT YOU MIGHT HEAR	HOW YOU CAN RESPOND
Climate change isn't real. Look at places where it's colder!	Climate change is different from daily weather. Weather can change each day and some days will still be cold, but climate change is a trend over time. These trends are also resulting in more extreme weather including many of the floods, droughts, hurricanes, and wildfires that we have seen across the country. These changes will increasingly occur and impact our lives.
Climate change isn't caused by people or human behavior.	While there have been changes in global temperatures throughout history, global temperatures have increased much more rapidly since the Industrial Revolution made burning fossil fuels a widespread practice. The evidence showing that human behavior causes climate change is so strong that 97% of scientists agree that human activity is the driving force behind climate change. We've also seen that advancing climate solutions, like transitioning to electric school buses, can help us all breathe clean air and improve our health.
Climate change doesn't impact schools and doesn't belong in schools.	Climate change is already impacting schools and communities around the country. Research shows that school days over 80 degrees Fahrenheit are increasing in frequency, impacting student health and academic achievement. Additionally, climate change is impacting the mental health and well-being of our students: 37 percent of teenagers feel anxious when they think about climate change, and more than a third feel afraid. <u>An estimated 75 percent of adults across the country believe that schools should teach about the causes, consequences, and potential solutions to global warming. (County-level data available here.)</u> Teaching about climate change in schools, with a solutions-oriented focus, across all subjects and grades, can help students feel prepared to act in their communities and become leaders for a more sustainable future.
Addressing climate change in schools is too expensive. We have other funding priorities.	Funding climate action plans in schools is more affordable and accessible than ever with opportunities in the Inflation Reduction Act and the Infrastructure and Jobs Act. Many of the updates to school buildings and transportation systems also result in long-term cost savings for school districts, allowing them to invest in other priorities. For example, Batesville School District in Arkansas implemented facility upgrades and installed solar energy projects on their campuses. The district used the resulting energy cost savings to increase teacher salaries by up to \$15,000, becoming one of the best-paying districts in the county.

Glossary of Key Terms

TERM	DEFINITION
Career and Technical Education (CTE)	Prepares students to enter the workforce or pursue postsecondary education or training after high school. Components can include work-based, project-based or hands-on learning.
Climate Change	Long-term changes in average weather and climate, regionally and globally.
Climate Literacy	An understanding of your influence on climate and climate's influence on you and society. In the late 2000s, scientists and educators collaborated to define climate literacy, identify principles and concepts that should be taught, and justify the teaching of climate science.
Composting	The practice of returning natural food remains back into the earth for the purpose of enriching soil.
Decarbonization	The process of phasing out reliance on carbon emissions across all parts of the economy.
Eco-Anxiety	Persistent worries about the future and the prospects for future generations due to climate change.
Energy Retrofitting	An energy conservation measure in an existing building that aims to improve building performance.
Environmental Literacy	Develops students' understanding of how individual and collective actions impact the environment and prepares students to make environmentally conscious decisions.
Geothermal Energy	Energy derived from the earth's heat that is converted into thermal or electrical energy.
Greenhouse Gasses	Gasses that contribute to global warming by absorbing infrared radiation, such as carbon dioxide and methane.
Heat Island	Areas that have an average temperature 1.25°F higher than the surrounding city or town.
HVAC Systems	Heating, ventilation, and air conditioning commonly used to cool and heat residential and commercial buildings. Legacy HVAC systems burn fossil fuels. Modern HVAC systems run on electricity.
The Inflation Reduction Act (IRA)	The Inflation Reduction Act is federal legislation that includes \$369 billion in climate and energy provisions, signifying the largest climate investment in US history.
The Infrastructure Investment and Jobs Act (IIJA)	The Infrastructure Investment and Jobs Act, also known as the Bipartisan Infrastructure Bill, is federal legislation that includes support for the education sector to advance climate solutions.
LEED Certification	Internationally recognized system for rating sustainable building design, construction, and operations. Each of the four certification tiers requires a minimum number of sustainability strategies.
Local Food Procurement	Sourcing food from local growers or producers to decrease emissions associated with transporting food. Also includes choosing sustainably produced food products.

Local K-12 Climate Action Plan	Comprehensive plan by a school district to reduce carbon emissions, prepare for climate impacts, and educate students about climate change and climate solutions based on the community's local needs and strengths.
Net-Zero Energy School	Produces enough clean, renewable energy to meet its own annual energy consumption requirements, thereby reducing the use of non-renewable energy in the building sector.
Pathway	Program designed to prepare students for a certain industry (e.g. environmental service systems, energy, construction, etc.)
Renewable Energy	Energy produced from resources that are easily replenished and do not have detrimental effects on the health of humans or the environment. Examples include solar, wind, and geothermal energy. Also referred to as clean energy.
Resolution	School boards adopt resolutions to declare the board's sentiment towards an issue and set forth general standards that the board agrees to fulfill.
School Gardens	Gardens on school grounds that provide an interactive opportunity for students to learn the science of sustainable food growing practices outside the classroom.
Solar Energy	Energy derived from sunlight that is converted into thermal or electrical energy.
Solar Microgrids	System of renewable energy that is separate from the main power grid in a given area.
Sustainability	Meeting present needs without risking the health and environmental wellbeing of future generations.
Sustainability Director	A school or district staff member who manages a variety of sustainability efforts.
Sustainable or Green Schoolyards	Redesigning school grounds to replace asphalt with green spaces or other native vegetation. Sustainable schoolyards mitigate flooding and reduce heat islands.



Additional Resources

RESOURCES FROM THIS IS PLANET ED:

- [Education and Climate Provisions in the Infrastructure Investment and Jobs Act](#) (in partnership with the Electric School Bus Initiative at the World Resources Institute)
- [K12 Climate Action Plan](#)
- [K12 Education and Climate Provisions in the Inflation Reduction Act](#). (in partnership with the Electric School Bus Initiative at the World Resources Institute)
- [Menu of Solutions](#)
- [Questions to Get Started](#)

RESOURCES FROM THE NATURE CONSERVANCY:

- [Nature Lab Climate](#) video collection
- [What is Climate Adaptation?](#) video
- [A Natural Solution to Climate Change](#) video
- [Tackle Climate Change](#) video collection
- [Climate Change FAQs](#)
- [Carbon Footprint Calculator](#)
- [Climate Change stories](#) from around the world
- [Climate Change Kahoot!](#)s

ADDITIONAL RESOURCES:

- Alliance for Electric School Buses: [Clean School Bus Program Resources](#)
- EPA: [Climate Change and Children’s Health and Well-Being in the United States Report](#)
- Generation 180: [Solar for All Schools](#)
- Green Schools National Network: [GreenPrint](#)
- Green Schoolyards America: [Schoolyard Forest System — Resource Library](#)
- [Project Green Challenge](#)
- Rewiring America: [Rewiring Schools](#)
- Stanford University: [Climate Change Curriculum](#)
- Subject to Climate: [K12 Climate Change Lesson Plans](#)
- The U.S. Department of Education: [Green Ribbon Schools](#)
- The US Green Building Council: [Webinar Series -Getting Schools to Zero Carbon; Whole-School Sustainability Framework](#)
- The World Resources Institute: [Electric School Bus Program](#)
- The White House Toolkit: [Federal Resources for Addressing School Infrastructure Needs and Direct Pay Through the Inflation Reduction Act](#)
- Trust for Public Lands: [Transforming Schoolyards](#)
- UndauntedK12: [Schools and the Inflation Reduction Act](#)
- UndauntedK12: [Lost Learning Time Map](#)
- Yale Program on Climate Change Communication: [Yale Climate Opinion Maps](#)

