

RECOMMENDATIONS

For the education sector to effectively mitigate, adapt, educate, and advance equity to address climate change, federal, state, and local policymakers will need to work together to maximize opportunities for climate action. Business, philanthropy, advocacy organizations, and the media can also play an important role as a catalyst for action. We outline opportunities for each of these stakeholders to support America's nearly 100,000 public schools in becoming models for climate action and America's 50 million children and youth in these schools to succeed in the clean economy and lead a more healthy, sustainable, adaptable, resilient, and equitable society. Central to this work is the local development and implementation of K-12 climate action plans with support, resources, funding, policies, and leadership from the state and federal level.

Opportunities at the Local Level

Although they must work within the framework of state and federal policy, local school districts have significant authority and responsibility to determine how schools operate and support teaching and learning. Local policies frequently come from school boards or school district leadership and respond to community needs and challenges. Districts can be key leaders in supporting climate action in schools. We recommend local leaders:

Recommendation 1: Acknowledge and prioritize the opportunity for the education sector to advance climate solutions. Local school boards and superintendents can elevate the opportunity for the education sector to address climate change through local K-12 climate action plans. Mayors and other local policymakers can also partner with local school districts to include schools in local climate mitigation and resilience planning and strategies.

Recommendation 2: Develop and implement comprehensive local K-12 climate action plans to consider the needs and opportunities to mitigate, adapt, educate, and advance equity to address climate change. Considering these issues comprehensively can help communities leverage the greatest benefit by integrating mitigation and adaptation efforts with teaching and learning in schools.



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School districts should focus on assessing community needs and assets to support comprehensive and localized community action. These climate action plans should be developed in collaboration with students, families, educators, school leaders, facility managers, school board members, Tribal leaders and Indigenous community members, community-based organizations, and out-of-school educators and with input from business, early learning, and post-secondary programs. School districts can follow models from other school districts, cities and towns and build on existing sustainability, emergency management, and environmental education efforts. Specifically, these plans should:

2.1. Support mitigation strategies to transition to clean energy, clean transportation, sustainable food use, and building electrification and to promote healthy learning environments with improved air quality and safe drinking water that are free of environmental toxins. 100% clean energy resolutions, sustainability directors, and existing sustainability plans can be pivotal in shaping mitigation strategies for school districts. Specifically, local districts should:

2.1.A: Assess school infrastructure needs and create plans to ensure all students have access to healthy sustainable learning environments. School districts should assess infrastructure needs for their school buildings and grounds to develop a plan that supports lasting change toward healthy sustainable learning environments for students. New buildings, retrofits, and renovations can be designed to optimize health and sustainability and utilize energy-efficient clean technology. School districts should consider opportunities to leverage state, federal, and other resources to support sustainable school infrastructure investments.

2.1.B: Utilize renewable energy. Many existing schools have the potential to adopt renewable energy which has economic, environmental, health, and learning benefits. School districts should support their schools in considering options to install solar, geothermal heating and cooling, and other renewable energy options. Leveraging options like power purchase agreements or state and federal funding may help schools utilize renewable energy with little or no additional upfront cost.

2.1.C: Transition school bus fleets to electric. Developing plans to electrify school bus fleets and school vehicles and build charging stations can help schools reduce their environmental footprint and ensure cleaner air for students. Public-private partnerships and state and federal funding can be leveraged to support districts in this transition.

2.1.D: Support healthy sustainable food use. School districts should include in their plans opportunities to increase access to locally-grown sustainable food, support students in making healthy food choices, and incorporate food donation, rescue, and composting to reduce waste.

2.1.E: Use replacements to support clean energy, transportation, and building electrification. As schools need to replace building systems (including HVACs), repair or install new roofs, and replace school buses and vehicles, districts should require replacements utilize energy-efficient clean technology and support electrification.

2.1.F: Provide workforce development and training for school support staff to maximize benefits and success for transition to sustainable operations. School districts should ensure workforce development and training opportunities are available for school support staff and facilities managers to learn about clean energy, clean transportation, and new school district policies and systems to support sustainable operations.

2.2: Support adaptation and resilience strategies by assessing local climate risks and determining school needs to prepare, adapt, and build resilience to climate change.

Districts should develop plans based on local context to:

2.2.A: Provide professional development for educators and school leaders on trauma-informed practices and increase access to student mental health support. Providing educators with tools to support students who have experienced trauma can help students cope with experiencing climate impacts and eco-anxiety. Increasing access to mental health care by identifying partnerships with departments of mental health, community-based organizations, and institutions of higher education can help schools provide integrated support to address students' social, emotional, and learning needs.

2.2.B: Develop plans for virtual learning for climate-related learning disruptions. With potential learning disruptions related to increased heat, extreme weather, and flooding, school districts can support continued learning for students by maintaining virtual learning plans and continuing support for educators and families to utilize virtual learning when education in the building is not feasible.

2.2.C: Transition to green sustainable schoolyards. Transitioning schoolyards from heat-trapping asphalt to green sustainable schoolyards helps to create healthy spaces for students to learn and play, increases community access to green space, and helps to build resilience by reducing community heat and flooding.

2.2.D: Utilize schools as hubs for community resilience. Equipping schools with climate resilient infrastructure as well as reliable power with strategies like solar microgrids with battery storage can help the broader community prepare for extreme heat, weather, and power outages.

2.3: Support teaching and learning on climate change, climate solutions, and sustainability to further integrate teaching and learning about climate change across the curriculum and prepare students for the clean economy. School districts should assess existing curriculum to determine how climate change, climate solutions, and sustainability can be further integrated across grades and subject areas. Working with existing curriculum coordinators and environmental literacy plans can be pivotal in determining education strategies for districts. Specifically, school districts should identify opportunities to:

2.3.A: Provide high-quality professional development for educators and school leaders to support teaching and learning on climate change, climate solutions, and sustainability. High-quality, embedded, and ongoing professional development for educators and school leaders will be essential to support teaching and learning. Importantly, this work should be grounded in existing teaching practices and enhance existing curricula to build support for educators without creating additional burdens or barriers.

2.3.B: Provide resources and professional development for place-based learning. Tying climate education to local climate impacts and solutions, including actions at the school itself (solar, electric school buses, and schoolyards), can help provide opportunities for youth to understand climate change in an accessible and authentic way and increase student engagement and understanding.

2.3.C: Engage students and community members in developing educational strategies and curriculum planning. Connecting curriculum to students' lived experiences will empower youth to be part of the solution and help students develop agency. Students, families, and community members can contribute to educational planning to ensure community buy-in, intergenerational learning, and continued education in the home and community.



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2.3.D: Develop career and technical education opportunities to prepare students for jobs in the clean economy and integrate environmental sustainability across all pathways.

Today's youth will need to be prepared with the knowledge and skills needed to succeed in jobs in the clean economy to advance a sustainable future. Partnering with community colleges, local business, and other community organizations can help districts identify opportunities (including apprenticeships) and build pathways to high-skill, high-wage, and in-demand jobs.

2.3.E: Collaborate with out-of-school education providers including afterschool programs, museums, and community-based organizations. Collaborating with organizations supporting informal learning can help increase student engagement and provide a well-rounded understanding of climate change, climate solutions, and sustainability. It can also help leverage limited resources to communicate the opportunity to address climate change locally.

2.3.F: Partner with local Indigenous communities, Tribal organizations and Indian centers to integrate Indigenous knowledge into teaching and learning. Developing partnerships with local Indigenous communities can help educators incorporate holistic approaches to caring for the land, air, and water and reinforce local community-based solutions to advance a sustainable future.

2.4: Advance equity while developing local K-12 climate action plans by engaging and prioritizing students, families, and communities most impacted by climate change. School districts should prioritize support for students of color, Indigenous students, students with disabilities, and low-income rural and urban students — whose communities are disproportionately impacted by climate change — when creating and implementing climate action plans. Districts must authentically engage these communities and incorporate their input in decision-making. Specifically, school districts should:

2.4.A: Ensure voices of communities most impacted by climate change are centered in decision-making, including students. To advance equity and environmental justice, districts must develop and implement their action plans in a way that prioritizes and lifts up students and communities who face the greatest challenges due to climate change.

2.4.B: Ensure community input in climate plans. As school districts develop climate action plans, they should actively involve students, families, and other community members in the planning process. District climate action plans should represent the needs and strengths of local communities.

Opportunities at the State Level

State governments increasingly share responsibilities for decisions in schools with local school districts. In addition to providing funding and resources to schools, states often make decisions about state standards, educator certification, and career and technical education pathways in addition to establishing policies on buildings, transportation, food, and emergency management.

At the state level, we recommend Governors, state-level policymakers, and state education leaders take the following actions to demonstrate leadership and support comprehensive climate action in schools:

Recommendation 1: Take a whole-of-state approach to address climate change and include education. With the impacts of climate change being felt across sectors and issues, states should set ambitious whole-of-state approaches to address climate change and support coordinated climate action. An interagency position, or coordinating agency, could help the Governor identify cross-agency opportunities and opportunities to leverage state, local, and federal funding to address cross-cutting priorities. This whole-of-state approach should:

1.1: Integrate education in plans to address climate change. By recognizing and including education in their plans to address climate change, Governors and state policymakers can elevate the opportunity for the education sector to advance climate solutions.

1.2: Establish targets for transitioning schools to clean energy, building electrification, and electric buses. Clear targets to decarbonize the public school system can help the state and local districts recognize the importance of transitioning schools to clean energy, electrification, and clean transportation. These goals can also enable states to develop implementation plans to achieve the objectives and create incentives for communities meeting decarbonization targets.

1.3: Prioritize communities most impacted by climate change and education inequities. States can play a key role in advancing equity by targeting resources and support to urban and rural communities with high populations of students from low-income families that will be most impacted by pollution, heat, extreme weather, and other negative impacts of climate change.

1.4: Center student voice in developing plans to support the education sector in taking climate action. Youth are key stakeholders in schools and in conversations about climate change. Policymakers should listen to, support, and integrate the perspectives of youth, in particular youth of color, youth from low-income rural and urban communities, Indigenous youth, and youth with disabilities, in decision-making about climate action in schools.

Recommendation 2: Support school districts in developing and implementing comprehensive local K-12 climate action plans. States can play a critical role in supporting local K-12 climate action plans by providing guidance, technical assistance, funding, and resources to school districts to assess local needs and assets and support implementation of local K-12 climate action plans. Advancing state-level policies on mitigation, adaptation, and education outlined below can help support implementation of local K-12 climate action plans.



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Recommendation 3: Advance state-level programs and policies to support mitigation, adaptation, and resilience. We recommend states establish programs or policies to:

3.1: Ensure funding for school infrastructure and school building codes support clean, efficient, sustainable, resilient, and healthy learning environments for children. Currently, state funding, along with local funding, is used to build and retrofit school buildings and grounds. States can ensure funding and school building codes help schools make decisions to utilize clean and energy-efficient technology that also promote health, well-being, and climate resilience. Even though these systems and infrastructure improvements may have additional upfront costs, the longer-term economic, health, learning, and environmental benefits should be prioritized.

3.2: Support the transition to electric school bus fleets. States can support districts in transitioning to electric school buses by helping to fund the upfront costs of buses and charging infrastructure, including by building financing partnerships with state-regulated utilities. States can also prioritize workforce development programs that provide training on electric bus maintenance and operations to ensure districts can access support locally.

3.2.A: Enforce idling reduction policies during the transition to electric buses. State laws and regulations can create limits on school bus idling to reduce air pollution from diesel or other non-electric buses. Establishing and enforcing idle reduction policies before and during the process of transitioning to electric buses can help mitigate climate change and protect student and community health as an interim measure.

3.3: Expand access to locally-grown, healthy, sustainable food and increase opportunities for food donation, food rescue, and composting. States can help schools source food locally through farm to school programs and policies that incentivize districts to procure food from local farms and producers. School garden programs and policies that allow schools to serve the produce grown in school gardens can also increase access to healthy food. States can support schools in reducing food waste through policies that encourage schools to donate surplus food to families or non-profit organizations and compost food scraps.

3.4: Develop financial incentives or opportunities to support schools in transitioning to clean energy, transportation, and sustainable food. State level policies including power purchase agreements, revolving loan funds, tax incentives, local food reimbursement incentives, and other public-private partnership incentives can be utilized to help reduce or even eliminate upfront costs for school districts. Removing the barrier of upfront cost can help many school districts reap the health and learning benefits from the transition to clean energy, transportation, and food and reduce long-term operational costs.



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3.5: Ensure plans for virtual learning can be effective and provide access to all students.

As a critical tool to support learning disruptions related to climate change, states can help ensure that all students have access to broadband and digital devices and that educators and families have support to understand and utilize virtual learning options. States can also establish policies that support virtual learning as an option for climate-related learning disruptions.

3.6: Support school districts in assessing their vulnerability to climate change and equipping schools as hubs for community resilience.

States can utilize emergency management teams to help assist school districts in assessing their vulnerability to climate change, support planning related to extreme weather, and determine needs for health, learning and other continued support. State funding can be used to equip schools as hubs of resilience with strategies such as solar microgrids or electric buses with vehicle-to-grid technology. Additionally, states can provide guidance and potential flexibility to school districts in addressing enrollment changes related to extreme weather including creating partnerships across districts to support student and family needs.

3.7: Support districts in creating green sustainable schoolyards. States can leverage funding, including funding for parks, to establish green sustainable schoolyards that are open to the public outside of school hours. These schoolyards increase access to healthy outdoor spaces for communities and build community resilience to heat and flooding. States should prioritize funding for schools in communities that are currently subject to heat island effects and lack sufficient access to parks.

Recommendation 4: Advance state-level programs and policies to support education:

We recommend states establish programs or policies to:

4.1: Integrate climate change, climate solutions, and sustainability in standards across grades and subjects.

Climate change will impact all facets of society from earth science and weather to economics and health. While several states have integrated the teaching of climate science in science standards, considering ways to integrate lessons on climate change across the curriculum can provide students with deeper opportunities to engage and seek solutions. Standards developed in a developmentally appropriate way can help students build an understanding of our relationship to our environment and climate and how that, in turn, impacts our society. Additionally, tying these standards to climate solutions and civics can empower students to develop agency, understand how they can make a difference, and help address climate change.

4.1.A. Develop curriculum frameworks and guides tied to the standards. To ensure successful implementation of the state standards, states can provide curriculum frameworks and guides to support teaching and learning. These guides help draw connections between the standards and curriculum by identifying lessons that can support students' understanding of the different standards.

4.1.B. Provide professional development tied to the standards for educators and school leaders. To build the capacity of educators and school leaders to effectively support teaching and learning, the state has the opportunity to support high-quality professional development related to climate change, climate solutions, and sustainability.

4.1.C. Leverage teacher certification to ensure teachers are prepared to teach these cross-curricular standards. Teacher certification and licensure provides an opportunity for states to support new educators in being prepared to engage students in learning about climate change, climate solutions, and sustainability.

4.2: Develop career and technical education opportunities to prepare students for jobs in the clean economy and integrate environmental sustainability across all career pathways.

Building on existing state plans for career and technical education, states can seek opportunities to establish career pathways in industries such as clean energy, emergency management, and sustainable agriculture, and ensure credentials are aligned with high-skill, high-wage jobs in the clean economy. States can also provide guidance about ways to integrate environmental sustainability across career pathways. To build collaboration, states can support dual-enrollment programs between K-12 schools and post-secondary institutions and engage clean economy industry partners to ensure CTE standards and opportunities align with the needs of industry, business, higher education, and the community.

Opportunities at the Federal Level

The federal government can play a critical role in helping to support schools in moving toward climate action, solutions, and environmental justice. With much of the federal role in education focused on advancing equity by targeting resources to communities with high populations of low-income students, the federal government can leverage resources, in particular for communities most impacted by climate change. The federal government can also play a critical role in producing research, disseminating best practices, and elevating the role education can play in climate solutions.

Recommendation 1: Elevate and amplify the role education can play in climate solutions.

Policymakers at the federal level can utilize leadership and communications to advance climate action, climate solutions, and environmental justice in schools. The White House, Department of Education, and other agencies can use their platforms and convening power to help build awareness about the need and opportunity for the education sector to contribute to climate solutions. We recommend that the federal government take the following actions to demonstrate leadership to support climate action in schools:

1.1: Build cross-agency collaboration to support the education sector in taking climate action.

The federal government should develop cross-agency collaboration to support the education sector in taking climate action. Given the following agencies' responsibilities include:

- The U.S. Department of Education supporting many equity initiatives in schools,
- The Environmental Protection Agency supporting healthy learning environments, clean school buses, and environmental education,
- The U.S. Department of Agriculture supporting school meals,
- The Department of Interior supporting the Bureau of Indian Education,
- The U.S. Department of Energy supporting research and technical assistance on clean energy in schools,
- The National Oceanic and Atmospheric Administration supporting climate education,
- The White House Office of Domestic Climate Policy establishing government-wide leadership, and
- Other federal agencies with interest and jurisdiction,

cross-agency collaboration can advance a comprehensive approach to support education in moving toward climate action, solutions, and environmental justice. Establishing a position or lead office within the White House can help support the cross-agency priorities for education, including early and post-secondary education and workforce development to build the capacity for our society to address climate change and succeed in the clean economy.

1.2: Establish climate change as a U.S. Department of Education priority. Schools, school districts, and states look to the Department of Education for leadership. The U.S. Department of Education can include climate action, climate solutions, and sustainability as a priority across grant programs and establish a position within the Secretary's office to elevate solutions and address climate change. As the Department of Education establishes agency-wide priorities, the elevation of climate change as a priority will send a strong message to the field and provide an opportunity for grantees to support work on climate action in schools.

1.3: Center student voice in developing plans to support the education sector in taking climate action. Youth are key stakeholders in schools and in conversations about climate change. Policymakers should listen to, support, and integrate the perspectives of youth, in particular youth of color, youth from low-income rural and urban communities, Indigenous youth, and youth with disabilities in decision-making about climate action in schools.

1.4 Research, recognize, and effectively disseminate best practices gathered across federal agencies to provide states, districts, and schools with easy access to information, research, and strategies to support the sector in moving to climate action. Several programs currently highlight best practices in schools. For instance, the Department of Education's Green Ribbon Schools annually recognizes successful green schools across the country. The Department of Energy's Better Buildings Challenge has featured schools transitioning to net-zero energy. NOAA's Bay Watershed Education and Training helps schools provide indoor and outdoor watershed education. USDA's Farm to School grant program supports schools in accessing locally-grown healthy food. The federal government should work to coordinate and effectively disseminate research and best practices across federal agencies to provide states, districts, and schools with easy access to information, research, and strategies to support the sector in moving to climate action, solutions, and environmental justice.

Recommendation 2: Support the development and implementation of local K-12 climate action plans. Grants from the federal government can be used to help school districts develop and implement comprehensive climate action plans to mitigate, adapt, educate, and advance equity to address climate change. These grants can support planning based on local needs, assets, interests, and collaborative development with the community. They can prioritize community efforts to leverage existing federal, state, and local funding to support the plan's implementation and to coordinate with local climate action plans at the town, city, or county level.



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Recommendation 3: Advance federal policies and programs to support mitigation, adaptation, and resilience: We recommend the federal government establish policies and programs to:

3.1: Invest in school infrastructure to promote clean energy, clean air, clean water, sustainable schoolyards, sustainable food, and adaptation. School infrastructure investments from the federal government can further ensure the health, safety, and well-being of students and educators, improve learning outcomes and the environmental and fiscal sustainability of schools, and build resilience for communities. Given existing resource inequities, urban, rural, and Indigenous schools with high populations of low-income students often face barriers in making needed infrastructure improvements. The federal government has an opportunity to remove these barriers by providing grants to under-resourced school districts to repair, renovate, and modernize their school buildings and grounds, including schools that receive funding through the federal Bureau of Indian Education. All infrastructure investments should consider student and educator health and learning, include clean and sustainable building systems and technology, and provide opportunities for workforce training in clean energy systems. Specifically, these investments should support:

3.1.A: Repairs and renovations of school buildings to increase energy-efficiency and use of renewable energy. Strategies including solar, geothermal heating and cooling, building design, and adaptive lighting can help schools make progress toward net-zero energy and create learning opportunities for students. Utilizing federal investments to support schools across the country in making progress toward net-zero energy will not only increase the environmental sustainability of our schools but also ensure that, in the future, more local taxpayer dollars can be devoted to teaching and learning.

3.1.B: Improvements to indoor air quality. Poor indoor air quality impacts student health and learning, and climate change can decrease indoor air quality as heat, pollution, and the prevalence of allergens worsen. Federal investments in school infrastructure should help ensure healthy indoor air quality with strategies including improved ventilation, filtration, and pollutant removal.

3.1.C: Access to safe drinking water in schools. Lead testing as well as filtration, repairs, and replacing lead service lines and fittings can help ensure all children have access to safe and healthy drinking water and improve long-term health outcomes for students. Federal investments in school infrastructure should help ensure safe drinking water for students.

3.1.D: Sustainable schoolyards. Transitioning schoolyards from heat-trapping asphalt to green sustainable schoolyards can provide healthy and safe spaces for students to learn and play, reduce community heat and flooding, and increase access to green space for communities. Federal investments in school infrastructure should support green sustainable schoolyards.

3.1.E: Sustainable food. School kitchens with the ability to support cooking from scratch and cleaning reusable dishes can help promote access to healthy sustainable food and reduce waste from food packaging. Federal investments in school infrastructure should support schools in building kitchens with these capabilities.

3.1.F: Climate adaptation and resilience. Schools will need to adapt to worsening climate impacts and can serve as community hubs of resilience where community members can shelter during emergencies and access clean electricity with strategies like solar micro-grids with battery storage. Federal investments in school infrastructure should support schools in assessing local climate risks and building more resilient infrastructure to help schools and communities adapt to climate change.

3.2: Support the transition to electric school bus fleets. Investments from the federal government to help offset the upfront costs of electric school buses and charging infrastructure can help students breathe cleaner air and reduce the sector’s environmental footprint. Investments to support schools in transitioning to electric school buses should be used for buses, charging infrastructure, and training. Based on local needs, this funding could also permit schools to transition their non-bus fleet to electric and build workplace charging infrastructure, ensuring better air quality around the school and reducing the overall environmental impact of the school system.

3.3: Expand access to locally-grown, healthy, sustainable food and increase opportunities for food donation, food rescue, and composting. The federal government should build on existing guidance through the National School Lunch and the School Breakfast Program to support states, districts, and schools with food donation and recovery as well as composting. Additionally, expanding the Farm to School grant program from USDA and supporting states in developing farm to school programs can help increase access to locally-grown food in schools.

3.4: Increase broadband access for schools and families. Investments from the federal government should support efforts to increase high-speed internet access, and in particular, home internet access. Expanding internet access can build resilience for our school systems when faced with potential learning disruptions.

3.5: Establish financing opportunities through tax incentives, bond authority, and revolving loan funds. In addition to providing direct grants, the federal government should consider options to use tax incentives, bond authority, and revolving loan funds to assist schools in transitioning to sustainable operations. For instance, providing a direct-pay option for renewable energy tax credits for schools would allow schools to maximize economic benefits from strategies like solar installation, without needing to rely on third party developers to benefit. Funding school infrastructure bonds or establishing revolving loan funds (where future savings can be reinvested into other infrastructure projects) can also help create funding mechanisms for school infrastructure and clean energy initiatives. As the federal government creates incentives for transitioning to a clean economy, policymakers should ensure schools are able to access and benefit from these incentives.



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Recommendation 4: Advance federal policies and programs to support education.

We recommend the federal government establish policies and programs to:

4.1: Prepare youth for jobs in the clean economy and integrate environmental sustainability across all career pathways through career and technical education. Increased funding from Carl D. Perkins Career and Technical Education Act or other job training programs should be used to support districts in determining opportunities to integrate environmental sustainability across career pathways and create or expand CTE courses and programs that prepare students for high-skill, high-wage jobs and careers in industries such as solar energy, wind energy, environmental engineering, sustainable agriculture, or emergency management. To ensure equity and a just transition, policymakers should prioritize districts with high percentages of students from low-income families and districts most impacted by climate change and the transition to a clean energy economy.

4.1.A: Invest in opportunity youth to ensure an equitable and just transition. To ensure an equitable and just transition and build an economy that works for everyone, opportunity youth must be included. Increasing investments in Job Corps, Youth Build, and National Service, including a Civilian Climate Corps, can include opportunities for apprenticeships and pathways for opportunity youth to access good jobs and careers in industries such as solar energy, wind energy, environmental engineering, sustainable agriculture, or emergency management.

4.2: Enable professional development and teacher preparation programs to support teaching and learning on climate change, climate solutions, and environmental justice.

Several programs within the Department of Education including Supporting Effective Instruction Grants and the Supporting Effective Educator Development Programs may provide opportunities to support educators in teaching climate change, climate solutions, environmental justice, and sustainability. Additionally, programs like Student Support and Academic Enrichment Grants can build educators' capacity to support social emotional learning and build student resilience. To advance this work, the Department of Education can learn from other governmental offices including EPA's Office of Environmental Education or NOAA's Office of Education. The Department of Education, working with other agencies, can provide technical assistance and elevate the opportunity for grantees to integrate educator support for teaching climate change, climate solutions, and environmental justice.

4.3: Emphasize the importance of Indigenous knowledge systems and disseminate best practices to build broader awareness of Indigenous knowledge. Existing programs to support Indian Education, Native Hawaiian Education, and Native Alaskan Education through the Every Student Succeeds Act can continue to emphasize the importance of and support learning about Indigenous knowledge systems and Indigenous culture, language, and food sovereignty to reaffirm the role of holistic approaches toward understanding the relationship between humans and the environment. Dissemination of best practices from these programs can help build broader awareness of Indigenous knowledge as a practice.



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Opportunities for Advocacy

Students, parents, caregivers, families, and educators can play a crucial role in advocating for climate action in their schools and communities. As the primary stakeholders in education, students, parents, and families are critical voices to drive action in their schools and can work with educators to advance school and district-wide policies that meet local needs.

Students can advocate for climate mitigation, adaptation, and education at the school level through clubs, student government, and community-based organizations that support youth leadership. Student representatives on school boards at the local and state level can be leaders in elevating opportunities for local and state school boards to take action. Students can also apply their knowledge of civics and their lived experiences in their schools and communities to share their ideas and stories with educators and school leaders.

Parents, caregivers, families, and educators can work with school PTAs or other parent and family organizations to advocate for climate action in their students' schools. For example, a growing number of school boards are passing 100% clean energy resolutions or planning to transition their school buses to electric as a result of student and family activism.

Recognizing the potential learning, environmental, health, and equity benefits, education, climate, and civil rights advocacy organizations can also play a critical role in supporting local, state, and federal advocacy efforts with students, parents and caregivers, and educators.

Students, parents and caregivers, educators, and advocacy organization should consider opportunities to:

- Recognize the opportunity for cross-sector intergenerational collaboration to advance climate action within their local schools; and
- Advocate that schools and districts comprehensively address climate change by reducing the school systems' environmental footprint, adapting to climate impacts, and engaging students in learning about climate change, climate solutions, and high-skill, high-wage jobs in the clean economy.



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Opportunities for Business

Business can play a critical role in supporting climate action in schools as an opportunity to help the sector prepare youth for jobs in the clean economy. Business advocacy organizations and trade associations can help identify the knowledge and skills needed for the clean economy and advocate for increased teaching and learning opportunities to ensure students are prepared for success. Additionally, ensuring clean economy industries participate in industry advisory councils, partner with career and technical education programs, and provide apprenticeships can help build a pathway for students to high-skill, high-wage clean economy jobs.

Businesses can also partner with schools and districts to finance climate mitigation and adaptation efforts as an investment. These public-private partnerships can help districts avoid upfront costs that may otherwise be prohibitive. For example, Highland Electric Transportation is partnering with Montgomery County Public Schools in Maryland to help the district transition to electric school buses. The company will purchase the buses and provide maintenance and operations support for the district. The district will lease the buses for the same amount they have been paying for diesel buses. This cost is higher than the cost of operating and maintaining electric buses, allowing Highland Electric to repay the upfront costs of the buses and earn a profit through the differential over time. Opening up financing opportunities for schools to transition to sustainable operations can also help businesses in meeting their environmental, social, and governance (ESG) goals.

Business should consider opportunities to:

- Advocate for teaching and learning to support students in developing the knowledge and skills needed for the clean economy; and
- Engage with public-private partnerships to support mitigation and adaptation investments in schools.



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Opportunities for Media

Media can play a critical role in supporting climate action in schools. Young people and families across the country are exposed to media through television, radio, YouTube, apps, social media, and streaming platforms. Given this extensive reach, media can help students and families understand the opportunity to support schools in reducing their environmental footprint, adapting to climate impacts, and teaching climate change, climate solutions, and sustainability. Working in close collaboration with public institutions such as NASA, NOAA, NSF, public broadcasting outlets, and other scientific agencies can help media outlets provide scientific information and resources about climate change and solutions to communities, families and children.

The media can combat potential worries about eco-anxiety by tying information about climate change to climate solutions. Sharing information through the lens of connections to school—for example, how diesel school buses or food waste in the cafeteria impact emissions—connects

learning about climate change to students' lived experiences. Further, learning about ways students can take action within their schools can help them develop agency and learn how they can make a difference in their broader community.

Media should consider opportunities to:

- Support a coordinated campaign across media outlets and platforms to help young people and families better understand climate change and climate solutions;
- Share stories about how young people can take action to advance climate solutions, particularly in their schools and local communities; and
- Encourage young people to create their own content through user-generated platforms such as YouTube, TikTok, and Instagram to further amplify information about climate change and solutions.

Opportunities for Philanthropy

Philanthropic foundations already do extensive work to support the education sector and address climate change, though few are working at the intersection of the two. Addressing climate change through schools and out-of-school education programs can advance many foundations' existing strategic priorities such as health and equity. Every community will experience the impacts of climate change, so both global philanthropies and those engaged in place-based work could impact how communities prepare for climate change. Ultimately, a more sustainable, resilient, and equitable education system increases opportunities and strengthens communities.

Support from philanthropy can help communities that are most impacted by climate change — primarily low-income communities and communities of color — access the resources they need to implement climate solutions and continue to lead on climate action. Philanthropy can also be a catalyst to help communities leverage additional resources, support

intergenerational organizing and collaboration, enable innovation, and develop best practices for taking climate action in schools. This is especially important in communities that may not otherwise have access to the resources and support needed to prioritize climate action on a broad scale.

With philanthropic organizations across the country ranging from large private foundations, to community foundations, to small family foundations, philanthropy can help support cross-sector work by considering:

- Impacts climate change will have on their existing communities and priorities;
- Opportunities to incorporate diverse voices and perspectives, including youth, into strategic priorities; and
- Silos across strategic priorities hindering cross-sector work needed to achieve success across intersectional issues.