EXECUTIVE SUMMARY

K-12 CLIMATE ACTION
THE ASPEN INSTITUTE

Education is one of the largest public sectors in America, serving over 50 million elementary and secondary students each year—nearly one in every six Americans.[1] In supporting students, families, and communities, schools have a large environmental impact. Additionally, as an integral part of communities, schools have already faced the damaging effects of climate change.

Schools also provide a unique opportunity. As they transition to more sustainable practices and adapt to increase resilience to climate change, educators can help equip the next generation to tackle the environmental challenges of the future. Today's students will help lead the fight against climate change, advance climate solutions, and create a more sustainable, resilient, and equitable future.

Why Education and Climate Change?

The nation's 98,000 K-12 public schools are among the largest energy consumers across public sector buildings, and energy costs account for the second-highest expense for school districts.[2] Schools serve over 7 billion meals annually, producing an estimated 530,000 tons of food waste each year.[3,4] School buses are the largest mass transit fleet in the country, with nearly 480,000 buses driving a total of nearly 3.45 billion miles annually.[5,6]

Extreme weather events—including flooding, hurricanes, wildfires, and heatwaves—have forced school closures, meaning students have lost learning time, supports, and services. Extreme weather events and the related trauma can cause lasting mental and physical health concerns for students.[7] Children are also particularly susceptible to the effects of air pollution, which continues to worsen. These negative effects of climate change fall disproportionally on communities of color and under-resourced urban and rural communities.[8]

As public entities, schools need the support of policy to mitigate their environmental impact and adapt to the negative impacts of climate change. Yet, few school systems have acted systemically to address climate change, and few large-scale climate proposals consider the role education can play.

Schools that take steps to lower energy consumption, use electric school buses, incorporate sustainable food use, and prepare for climate impacts can offer hands-on opportunities for students. These learning experiences can help students better prepare for the green economy, better understand human impact on the environment, and become equipped to advance sustainability.

POLICY LANDSCAPE

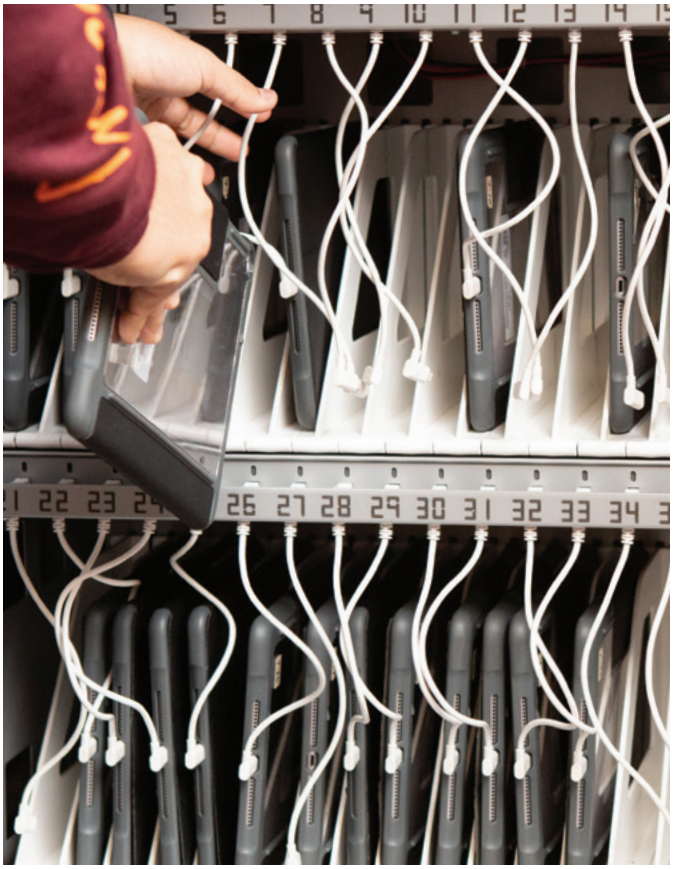
This report summarizes current state policies and programs that support sustainable practices to address climate change. We compiled state policies on six topics across the following three focus areas: mitigation, adaptation, and education. We focus specifically on policies related to schools and acknowledge alternative policies and solutions not covered in this report can also help schools address climate change.

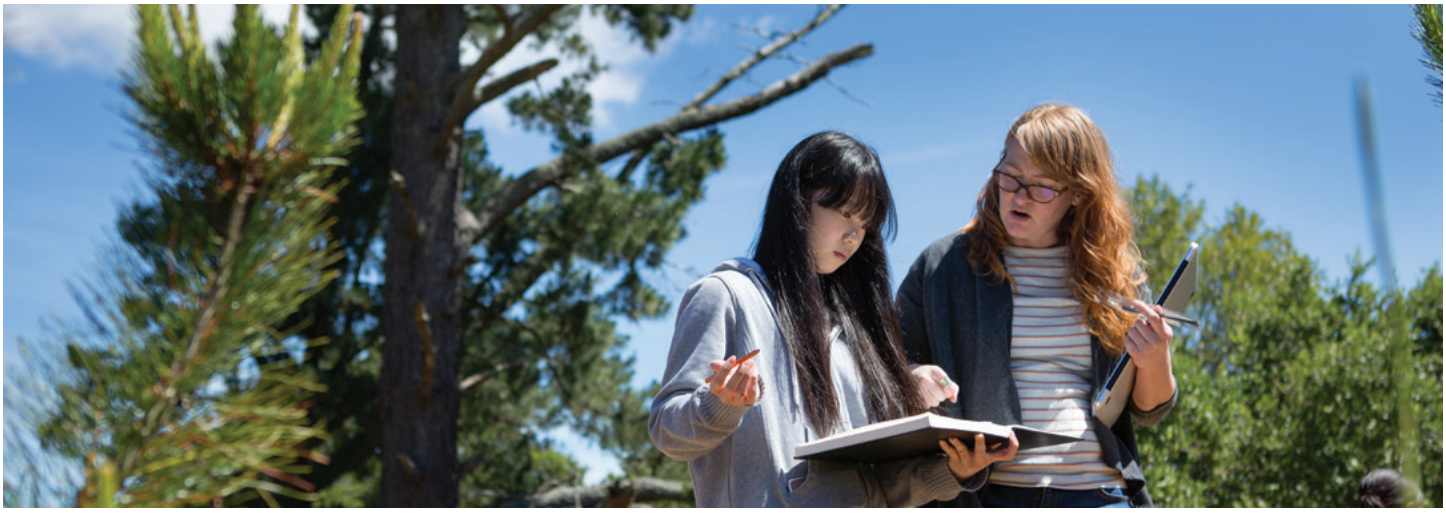
FOCUS AREA	KEY QUESTION	TOPICS
Mitigation	How can schools reduce their carbon footprints?	Energy, Transportation, Food
Adaptation	How can schools become more resilient to climate change threats?	Virtual Learning Days
Education	How can schools prepare students for a more sustainable future?	Career and Technical Education, Science and Social Studies Standards

Findings

To date, there have been few systemic efforts in the education sector to reduce its climate impact and actively equip students to advance a more sustainable future. As a result, policies and programs addressing sustainability and climate change vary widely across states. Some policies are common across states, such as supporting local food procurement in schools and permitting Volkswagen Mitigation Settlement funds to be used for electric school buses. Other topics are only addressed by a few states, such as net-zero energy goals for schools and including climate change in social studies standards.

Though these efforts are making progress, schools still have a long way to go. For instance, only 16% of districts have some schools that use solar energy, and the VW Mitigation Settlement has only purchased a limited number of electric buses.[9] Policymakers, school leaders, and educators can learn from the policy initiatives currently occurring across the country. The variability across states, the need to support schools in transitioning to environmental sustainability, and leadership from youth create an opportunity to further advance policy to support schools in addressing climate change.





Photos by Allison Shelley for American Education: Images of Teachers and Students in Action.

TOPIC	POLICY HIGHLIGHTS
Energy	• **6 states** have policies that target net-zero energy consumption in schools
Transportation	• **45 states**' Volkswagen Mitigation Settlement plans allow funding to be used for electric school buses • **24 states and DC** have policies to reduce school bus idling
Food	• **34 states and DC** have policies or programs to support local food in school meals • **17 states and DC** have policies or programs to support school gardens • **14 states** have policies or programs to encourage schools to divert surplus food waste
Virtual Learning Days	• **13 states** have policies that allow virtual learning days in place of inclement weather days
Career and Technical Education	• **29 states** have career and technical education programs that prepare students for green careers
Science and Social Studies Standards	• **29 states and DC** require teaching climate change as human-caused in science classes • **5 states** require teaching climate change in social studies classes • **16 states** require teaching about sustainability in social studies classes

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