

Like all other sectors, higher education must adjust to navigate the realities of a changing climate. This sector offers tremendous and unique potential to expand its impact beyond itself and to build our societal capacity to address climate change. All aspects of higher education-institutions, systems, faculty, students, and statewide networks-will drive this response, but they cannot do it alone. State and federal policymakers must work collaboratively with higher education in maximizing opportunities to spur climate action. Business, philanthropy, and community-based organizations also play critical roles in catalyzing action. We outline opportunities for these stakeholders to accelerate solutions across America's 4,000 institutions of higher education and engage diverse stakeholders to drive public and private commitment to addressing climate change.

Opportunities for Higher Education

The higher education sector comprises a diverse array of public systems, institutions, and constituencies pursuing goals from workforce training to professional education, from advanced research and development to community engagement. Higher education institutions bring together diverse communities of students, faculty and staff, administrators, governing boards and system leaders. Higher education must engage all of its stakeholders in collaborative work to pursue common strategies, harnessing varied institutional and system strengths, to achieve its full potential for advancing climate solutions. Success will depend on marshaling higher education's capacity to drive change in education, research, and physical infrastructure, and influence people and institutions throughout society.

Higher education institutions of all types, from private research universities to two-year community colleges, and from regional open-access colleges to technical schools, are the core drivers for action in this sector. Connecting the charge to develop knowledge with immense social capital, higher education can model and advance effective climate solutions across sectors. Colleges and universities can demonstrate both the benefits of action and the costs of inaction through interdisciplinary research, teaching, and outreach. They can also effectively reflect the concerns of future generations, who will be most impacted by the long-term consequences of our changing climate.

Faculty, institutions, and higher education systems will need to support and prepare students for our changing climate, engage local communities, model climate solutions, and communicate to the broader society about how we can address climate change. The roadmap below is intended to guide actions across the higher education sector and is followed by specific moments to engage higher education institutions, faculty, students, and state systems. All these steps should begin with adoption of a comprehensive climate action plan at both institutional and system levels.

Prioritize the development and implementation of a plan for equitable climate action and ensure accountability across systems and institutions. Higher education exists in a changing climate and must adjust to remain effective, relevant, successful, and, in some cases, safe. Rather than an isolated issue to be tackled by a single department or research center, the changing climate affects all aspects of the world students will enter and thus requires every part of an institution to respond. Through climate action planning, state systems and institutions—both public and private—can prioritize climate action, educate, engage, and support students, engage and support communities, model, research, and develop solutions, communicate action and knowledge, and identify metrics to gauge success. Comprehensive institutional or system action plans should be tailored to and leverage unique institutional or system-wide strengths and missions. In advancing comprehensive plans for action, higher education can advance equity by prioritizing support for students and communities who are impacted the most by climate change and educational inequities. Institutions should also consult with local Tribal nations and adopt ecological practices of the land's original stewards to increase climate resilience.

RECOMMENDATION

Educate, engage, and support all students to ensure success in a changing climate and economy. Leveraging its immense human capital and talent, higher education has a responsibility to ensure that people are prepared and empowered to lead in a climate-changed world. Higher education must provide every student with a baseline understanding of climate change, consider the cross-disciplinary, holistic impacts of this global shift, and support workforce development and training for jobs in a clean economy. To increase relevance, higher education can ensure learning is connected to students' communities, culture, and language. In addition, institutions must continue to ensure all students, regardless of race, place, language, or economic circumstances, have adequate support, including provision of basic needs, to navigate and complete their education in a changing climate.

- 2.1: Engage students in building climate literacy and baseline understanding of climate change, its causes, consequences, and solutions. Higher education should provide opportunities for all students, regardless of their discipline or professional track, to learn about climate challenges and solutions. Central to this is building an understanding that all people and all disciplines are connected to our climate and environment and must adapt to its changes.
 - 2.1.A: Infuse climate literacy across the curriculum. All institutions from community colleges and technical schools, to liberal arts and research institutions should ensure that all undergraduate and graduate students have an opportunity to learn about the ways in which their discipline is impacted by and can respond to climate change.
 - 2.1.B: Support faculty and staff to consider how climate change impacts their work and to identify opportunities for curricular integration. Provide learning opportunities for all faculty and staff to engage with climate literacy and understand how they can support students and one another in exploring the centrality of climate change to all fields. Provide faculty with time and resources to convene, share best practices, and implement cross-disciplinary courses and projects. Incentive structures should recognize opportunities for tenure-track professors to explore intersections of climate change in education, research, and service activities.

- 2.2: Develop pathways to clean economy jobs in a sustainable, resilient, and equitable society. Higher education can leverage partnerships with K-12 school systems and employers to build bridges from high school levels to climate and clean economy careers. Working with local and regional employers, state systems and institutions of all types should develop certificate and degree programs and adapt existing pathways to prepare students for clean economy jobs. Pathways should exist for a wide variety of students from recent high school graduates, transfer students between higher education, and returning adult learners seeking to garner additional clean economy skills. Sufficient mentorship and financial support are essential to enable students to pursue clean economy career pathways.
- 2.3: Support student needs and well-being in a changing climate. Adopt policies, programs, and practices to flexibly meet student needs and accommodate the unique challenges students may face in a changing climate.
 - 2.3.A: Understand how climate change will impact students. Impacts that affect learning may include risks related to extreme weather, like hurricanes or persistent heat, or fears related to change and uncertainty. Recognizing the intersecting identities of their student body, institutions should observe and prepare for any disproportionate impact of climate change students may face and adjust educational delivery as needed. They should offer a variety of student voices regular opportunities to provide input and feedback through channels such as listening sessions, surveys, and meetings between students and administrators.
 - 2.3.B: Support student well-being and mental health. Ensure robust physical and mental health resources are available for students to build their resilience to future climate impacts. This includes support for students who are physically on campus, as well as those who attend remotely.
 - 2.3.C: Ensure wraparound services and financial supports account for the impacts of a changing climate. Climate change further complicates efforts to support student success for low-income students, for instance, by making food and housing more expensive. Higher education should anticipate how a changing climate affects students' basic needs and respond flexibly to assist students.



Engage and support communities, particularly the communities most affected by our changing climate and the transition to a clean economy, in advancing meaningful solutions. As anchors in their communities, colleges and universities have the ability to empower and support not only students but also community members in navigating a changing climate. Each institution has unique relationships with its communities, and all institutions have levers to engage these relationships to advance solutions. Connecting to communities—their cultures, values, and language—can ensure meaningful partnership.

- 3.1: Bring together community leaders to solve local climate challenges. As major local employers with resources and social capital, institutions often have significant influence with other local stakeholders. Colleges can leverage these relationships to convene local community leaders, policymakers, businesses, early childhood and K-12 education leaders, and others to tackle local climate challenges. In rural areas with fewer potential partners, colleges can look to other anchor institutions such as local hospitals, public agencies, or networks of rural institutions such as the Rural Community College Alliance.
- 3.2: Provide technical assistance to community members. Higher education should support a wide range of community members adjusting to a climatechanged world. From helping farmers understand and respond to new weather patterns to assisting community-based organizations applying for federal funding opportunities, institutions have valuable knowledge and expertise to provide in service to community. They need to ensure they have the cultural competency to be able to deliver effective technical assistance.
- 3.3: Advance research efforts tied to communities' needs and meaningfully include community members in project design. Higher education can prioritize climate research that responds to specific community needs. For instance, a coastal campus can focus on a range of interdisciplinary research tied to sea-level rise, from modeling in the physical sciences to actuarial research in the business department. Institutions should regularly engage community members to identify applied research projects of particular concern in the campus's immediate locale. Colleges and universities can learn from the experience of communities that can inform anything from future academic initiatives to institutional operations.
- 3.4: Center equity in efforts to engage and support communities. Institutions should intentionally pursue partnerships with historically marginalized communities disproportionately impacted by climate change, including Black, Latino, Indigenous, and other communities of color, people with disabilities, LGBTQ+, as well as low-income rural and urban communities, to ensure their voices are heard as part of comprehensive community engagement efforts related to climate work.



Model, research, and develop solutions to reduce carbon pollution, adapt to a changing climate, and advance sustainability goals. Like other sectors, higher education must reduce greenhouse gas emissions, prepare for a changing climate, and respond to short- and long-term impacts. Entering into formal commitments, such as Second Nature's Climate Leadership Commitment and the Association for the Advancement of Higher Education Sustainability (AASHE)'s Sustainability Tracking, Assessment & Rating System (STARS), is a strong first step. While campuses naturally start by looking at carbon pollution from their own physical plants, energy, food, waste, transportation, and procurement systems, they should think beyond operations. Rooted in their education, training, and research missions, higher education can serve as living laboratories to experiment with new approaches, pilot successful solutions, and demonstrate to other members of society that climate mitigation and adaptation are achievable and desirable.

4.1: Model mitigation solutions to reduce carbon pollution. Higher education institutions and state systems should assess their existing carbon pollution across energy usage, infrastructure, transportation, purchasing, food, and land use and take steps to reduce their emissions.



4.1.A: Assess infrastructure needs and create plans to support lasting change toward healthy, sustainable learning environments. New buildings, retrofits, and renovations should be designed to optimize health and sustainability and utilize energy-efficient clean technology. On-campus supports, such as housing, should also be assessed for sustainability and livability in a changing climate. As repairs or replacements become necessary for building systems, including heating, cooling (HVAC), insulation, and roofing, institutions should require the use of energy-efficient, clean technology and prioritize electrification.

4.1.B: Transition to renewable energy. Institutions and systems should consider installing renewable energy options such as solar, wind, geothermal heating and cooling, and more, particularly when underused land is available. Off-campus options such as power purchase agreements can guarantee renewable energy providers that institutions will buy power for a set period of time and may also save money. To the extent that state laws and regulations complicate adoption, these concerns should be raised with policymakers.

4.1.C: Transition to electric transportation. Higher education systems and institutions should develop and implement plans to electrify bus and vehicle fleets. They should also install vehicle charging stations that can serve both campus users and surrounding communities. Institutions can also develop infrastructure to support walking, biking, and taking public transit, encouraging students to make sustainable transportation choices.

4.1.D: Identify resources, including from the Inflation Reduction Act and the Infrastructure Investment and Jobs Act, to support the clean energy transition. Higher education can use federal and state funding opportunities such as the tax credits, grants, and financing mechanisms established by the Inflation Reduction Act to support on-campus mitigation projects. As institutions reduce energy costs through mitigation strategies, they should consider investing savings in a green revolving fund to support future green infrastructure investments or for student research and projects related to climate transition.

4.1.E: Provide sustainable food services. Higher education should ensure that on-campus food services prepare onsite and serve fresh, locally sourced, and minimally processed or packaged produce. Underutilized land can be repurposed to host gardens that both teach students basic horticultural practices and produce food for the dining halls. Implementing composting programs on campus and in student housing, providing sustainable foodware options, and partnering with community organizations to donate unused food will reduce food waste and support the well-being of surrounding communities.



4.1.F: Incorporate sustainability and climate goals into procurement processes and policies. Many core functions of colleges and universities, from providing meals to constructing new buildings, rely on goods and services supplied by the private sector. Institutions and systems can provide business opportunities to suppliers who practice sustainability and climate awareness, focusing on vendor inputs as well as outcomes to spur innovation. Institutional and state procurement services teams can consider vendors' production, transportation, and packaging processes, along with supplier diversity and commitments to sustainability, as part of the Request for Proposals process. Higher education institutions can also leverage their purchasing power to encourage current vendors to adopt sustainable and climate-friendly practices.



4.2: Model adaptation solutions to build resilience in a changing climate. Higher education can assess anticipated climate risks and take steps to adapt and build resilience into operations, infrastructure, and land use.

4.2.A: Adapt campus infrastructure to the anticipated regional climate. Higher education should holistically review infrastructure and land use for potential climate risks and vulnerabilities and adapt systems to be resilient. This can include implementing water conservation techniques to anticipate more frequent droughts or building permeable landscapes to absorb increased precipitation.



4.2.B: Prepare for extreme weather events like hurricanes and flooding as well as ongoing risks like persistent heat and drought. Institutions and systems should collaborate with emergency agencies in their local communities, regions, and states to establish emergency plans for extreme weather events. These plans should identify ways to communicate risks to students, faculty and staff, support students in accessing transportation and safe housing, and ensure continued learning and support services. Based on the plan, the institution should dedicate resources to ensure readiness to respond to anticipated events.

4.2.C: Consider and develop operational solutions for any outdoor activities impacted by climate change. Any campus activity can be impacted by changing weather patterns. For instance, more frequent extreme heat days may make commuting to campus hazardous, while flooding could render buildings inaccessible. Institutions of higher education should establish policies and practices to promote the safety and well-being of students, faculty, staff, and visitors in extreme conditions.





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- 4.3: Model mission-aligned investment decisions to promote a more sustainable future. Institutions with permanently endowed funds should explore adopting investment practices that promote sustainability, resilience, and climate awareness. Networks including the Intentional Endowments Network can support institutions in making investment decisions consistent with these priorities.
- 4.4: Test and develop innovative climate solutions. While many solutions already exist, institutions can play a critical role in considering improvements, advances, new technologies, and additional questions—such as how to elevate Indigenous Knowledge Systems to shift public understanding or how to decarbonize hard-to-abate sectors. Institutions are clear leaders in driving social, applied, and basic research to develop innovative solutions.
- 4.5: Involve students in creating and implementing climate action plans. Encourage students to participate directly in learning how to measure, recommend, and implement climate/sustainability-oriented changes at their colleges. The opportunity can provide technical training for students that they can apply later in their careers. Beyond the concrete skills and knowledge, students can also learn to drive organizational change—a critical skill in moving other institutions to take bold climate action.

RECOMMENDATION

Communicate higher education's knowledge more effectively and model solutions to spur broad, equitable climate action. Leveraging their brand recognition and credibility, higher education institutions can share information about climate change, build awareness of issues and solutions, and make the case for other entities to participate in or lead climate action.

- 5.1: Develop a robust communications strategy. Institutions and systems can inspire action by showcasing their successes through narratives of climate concerns and solutions, as well as by providing platforms for powerful student voices. Institutions should consider building messages into public events that attract wide audiences, such as graduations and sporting events, and engaging stakeholders such as alumni or policymakers to contribute their ideas and influence.
- 5.2: Make climate expertise available to policymakers, community leaders, industry, and others. Policymakers seek support, evidence, and data to make effective decisions. Institutions are essential partners in this work, connecting policymakers and community leaders with students and faculty who can provide the latest research, data, and testimony on topics related to climate impacts and solutions. Many higher education institutions are already providing technical assistance to a wide range of industries and community leaders on topics such as agricultural resilience or decarbonizing industrial processes.





5.3: Open in-person and virtual events to the public. Higher education institutions frequently host convenings from faculty meetings to large academic conferences both in person and online. Institutions should consider making some climate focused events open to the public and designed in an accessible format for non-academic audiences.

Opportunities for Institutional Administrators and Governing Boards

Administrators and governing boards at the institution level have a critical role to play in prioritizing climate action so that all students, faculty, and staff feel empowered to advance the institutional climate action plan. Specifically, administrators can:

- Prioritize climate action. Administrators and governing boards can establish institutionwide priorities for climate action and develop coordinated policies and practices aligned with an institution climate action plan.
- · Partner with faculty, staff, students, and communities. Administrators and governing boards can create opportunities and space for collaboration with faculty, staff, students, and communities on institutional climate action planning and implementation.
- · Support faculty, staff, students, and communities. By listening to and engaging with faculty, staff, students, and communities, administrators and governing boards can advance policies and practices that create supportive conditions across the institution.
- Provide resources for climate action. Administrators and governing boards can secure resources, including from state and federal sources, to support institutional action.
- Hold college presidents and chancellors accountable. Administrators and governing boards can include expectations in the contracts of presidents and chancellors around climate change and review progress on climate action plans as part of scheduled performance reviews.



Opportunities for Faculty

Faculty sit at the heart of higher education's teaching and research missions, and they have a unique responsibility to prepare the next generation for a world in a changing climate and to develop solutions for society. Specifically, faculty can leverage the follow opportunities for action:

- Create subject matter connections to climate across disciplines. Faculty are ultimately responsible for institutional curricula and can take a leadership role in ensuring climate literacy for every student by finding opportunities to integrate climate in their teaching.
- Adapt existing course material and develop new courses to prepare students for clean energy jobs. In addition to developing a broad climate curriculum, faculty can lead efforts to provide students with the specific skills needed to thrive in clean economy jobs.
- Prioritize practical climate research and engage students and communities. Faculty can identify practical challenges related to climate change, partner with local communities, and ensure their research is accessible and helpful in addressing societal challenges beyond the institution.



Opportunities for Students

Students, as enrolled, tuition-paying stakeholders, have a unique opportunity to drive climate action across higher education. They have organizing and mobilizing power, often have access to local communities, and can be effective communicators of urgency and specific demands for action. Students frequently have wide networks across institutions, faculty, and other students, and their capacity to take a collaborative approach can bring cohesive power in building consensus around change. While online students may lack a physical campus, they bring unique resources through the connections and experiences in their own communities as well as the power to more easily "vote with their feet" and choose schools that align with their climate priorities. Specifically, students can leverage the following opportunities for action:

- Evaluate colleges based on their climate track record. Students can decide to attend institutions that have robust climate action plans, offer climate curricula, and strong connections to clean economy jobs.
- · Learn and engage with climate efforts and courses. Students can seek information and engage other students in conversation about climate change—the causes, impacts, and solutions. They can learn about existing institutional efforts and engage with research and student groups to support general and specific actions. Once enrolled in a program, students can send a clear message to faculty about the demand for climate curriculum by enrolling in classes that offer a climate change lens on their particular course of study.
- · Ask for climate focused, work-based learning **opportunities.** Busy, career oriented students may not have time for extracurricular work, but they can ask career centers and workstudy programs to help identify climate-related internships that ideally are paid, offer college credit, and provide an opportunity to build careers.
- Advocate for action. Students can use their knowledge to identify gaps in institutional climate responses and partner with other students, faculty, staff, and administration to advocate for change.



- Collaborate with faculty, staff, administrators, and communities. Students can partner with administrators to establish an open dialogue and identify solutions to ensure institutions develop and make progress towards climate goals. They can also work with faculty to identify topics that they want to see integrated into their courses and encourage them to implement formal cross-disciplinary climate education.
- Use their voice. Students can work with administrators, faculty, and staff along with community and national organizations to be a voice for broad based climate action—within their institutions, across their communities, and beyond.



Opportunities for State Higher Education Systems

In their role as governance, budgeting, and planning entities, state higher education systems and leaders provide opportunities to set priorities and support climate action across multiple institutions. The structure of public higher education governance varies widely by state. In some, a single agency, coordinating body, or governing board is charged with overseeing public higher education institutions, while in others combinations of entities administer different groups of institutions. Regardless of the formal structure, state governing systems serve as a link between individual public institutions and state policymakers.

Beyond the roadmap for the entire higher education sector, state higher system leaders have a unique ability to leverage relationships with campuses and policymakers across the state to build collaboration around common goals, including leveraging the following opportunities for action:

- Convene institutions to share best practices and encourage adoption. State leaders should share an inventory of existing best practices and successes and lead discussions to explore the need for further action and support. State systems can encourage campus action by featuring successful initiatives in the state and region as well as providing financial incentives supporting partnerships and performance.
- Appoint climate champions. State system offices should create a position for a senior leader and champion to build connections and collaborations across all campuses and support the development of institutional climate action plans.
- Build partnerships with other state agencies and policymakers. State higher education leaders are in a unique position to bring together institutions with policymakers, state leaders, and stakeholders to support action and advocate for climate priorities. For instance, partnering with economic and workforce development agencies can help create a comprehensive workforce strategy including pathways for Black, Latino, Indigenous, and other students of color, as well as low-income rural and urban students, to access clean economy jobs.

 Ensure accountability and evaluate performance toward climate action. To increase accountability, state systems should share learning across institutions and include in college presidents' performance evaluations assessments of progress toward systemwide and institutional climate action priorities.



 Leverage advocacy to advance and secure funding for climate priorities at the institution level. State systems leaders should use their advocacy role to advance climate action and support institutional action plans. Governing boards and system leaders can work with the governor's office to select presidents, chancellors, and board members who are supportive of system-wide and institutional climate agendas. Importantly, state systems can also make the case for resources to support both general and targeted climate action and clean economy efforts.

The Public Sector

Policymakers at every level of government have a major role to play in supporting higher education to achieve its full potential in driving society-wide climate action. The federal government allocates billions of dollars each year to institutions of higher education for research and financial aid. State governments run higher education systems that enroll the majority of America's postsecondary students and play significant financial, planning, and governance roles for colleges across the country. Local policymakers frequently partner with higher education institutions that are often major employers in addition to educators for their local communities. Policymakers at every level of government can support higher education in preparing students for a changing climate, engaging communities, and modeling and researching solutions to climate challenges.

Opportunities for Federal Policymakers

In addition to grants, student loans, and other financial aid it supports annually, the federal government also invests in research and development led by higher education. The recent Inflation Reduction Act (IRA), CHIPS and Science Act (CHIPS), and Infrastructure Investment and Jobs Act (IIJA) have provided even more funding opportunities to colleges and universities. With funding and leadership, the federal government plays a critical role in supporting higher education's efforts to advance climate action, solutions, and environmental justice.

RECOMMENDATION

Elevate and amplify the role of higher education in climate solutions.

Policymakers at the federal level should utilize their leadership roles and communication networks to advance climate action, climate solutions, and environmental justice efforts across the national higher education sector. The White House, U.S. Department of Education, and other agencies can use their platforms and convening power to engage the higher education sector with other stakeholders in contributing to climate solutions.

- 1.1: Coordinate cross-agency collaboration to create opportunities for higher education to advance climate solutions. The U.S. Departments of Education, Energy, Interior, and Labor, along with the Environmental Protection Agency, National Oceanic and Atmospheric Administration, White House Climate Policy Office, and other relevant federal agencies, should collaboratively identify priorities and opportunities to leverage the strengths of higher education as part of our societal capacity to address climate change and establish the clean economy.
- 1.2: Establish climate change as a U.S. Department of Education priority. The U.S. Department of Education often signals federal priorities to institutions of higher education across the country. By including climate action, climate solutions, and sustainability as an agency-wide priority across grant programs and establishing a position within the Secretary's office to address climate change and promote solutions, the Department of Education can send a strong message to the field and provide an opportunity for higher education grantees to pursue work on climate action.



- 1.3: Center higher education student voices in developing national plans for climate action. Students enrolled in higher education offer unique and valuable perspectives on climate change and the transition to the clean economy. Federal policymakers should listen to, support, and integrate these views, in particular perspectives from students of color, students from low-income rural and urban communities, Indigenous students, and students with disabilities, as they make decisions about climate action and the role of higher education.
- 1.4: Elevate the role of Tribal Colleges and Universities (TCUs), Historically Black Colleges and Universities (HBCUs), and other Minority Serving Institutions (MSIs) in advancing climate solutions. TCUs are essential partners to the federal government in understanding the nation's view of our climate, environment, and relationships with Indigenous Knowledge Systems and in researching community-based solutions. HBCUs and MSIs create pathways of opportunity for historically marginalized students and can help ensure a just transition to a clean economy. Federal policymakers should elevate and support the work to advance climate solutions at TCUs, HBCUs, and other MSIs.

Support institutions, through federal policies and programs, in preparing students, engaging communities, and modeling solutions. The federal government can examine existing programs to ensure they support the higher education sector in advancing climate solutions.

- 2.1: Support institutions of higher education in accessing federal funds, including from the Inflation Reduction Act. Several federal agencies, including the Internal Revenue Service, the Department of Energy, and the Environmental Protection Agency, provide opportunities through tax credits, grants, and financing mechanisms to support higher education in advancing climate solutions. Developing clear and coordinated guidance from the federal agencies, including related to the opportunity for non-taxable entities to claim tax credits, can assist institutions in accessing resources to support climate mitigation and adaptation efforts. Federal agencies can also write grant programs in an accessible way that broadens opportunities to apply especially for lower-resourced institutions. Additionally, federal agencies should provide direct outreach to institutions of higher education, particularly in disadvantaged communities as identified by the Justice 40 initiative, to ensure all institutions can benefit from these resources.
- 2.2: Ensure ambitious federal efforts to prepare a climate-ready workforce and to research and test innovative solutions. The federal government should expand and coordinate existing programs or establish programs to support ambitious efforts to prepare a climate-ready workforce and to research innovative solutions. The IRA, IIJA, and CHIPS Act have made significant investments to support industry development, and the federal government has the opportunity to match that ambition with workforce development and research to ensure people can succeed in the clean economy and to ensure transformative breakthroughs to help propel a clean economy and sustainable society. Specifically, expansion of state workforce development programs like Perkins Career and Technical Education Program or climaterelated research programs can incentivize and support higher education.
- 2.3: Expand federal opportunities for students to pursue climate careers and climate experience, including through the American Climate Corps. Federal policymakers should expand existing scholarships and provide opportunities for students to earn loan forgiveness by pursuing climate- and sustainabilityrelated careers. They should also ensure that the American Climate Corps includes meaningful partnerships with higher education and creates opportunities for students to earn higher education credit as part of these experiential opportunities.
- 2.4: Allocate research funding for adaptation and mitigation strategies that engage local communities and community leaders in planning and execution. Federal agencies from the U.S. Department of Agriculture to the National Institutes of Health already support climate research at institutions of higher education. Federal policymakers can examine existing programs to encourage and prioritize partnerships that lead to practical communityfocused climate solutions.
- 2.5: Consider opportunities for accrediting agencies to support higher education in taking climate action. As part of routine institutional reviews, accreditors could also evaluate institutional climate action plans and recommend best practices for institutions to further their climate impact.

Partner with higher education to communicate the impacts of a changing climate on communities and the effectiveness of solutions to inspire and build support for broader climate action. Federal policymakers should see higher education institutions as essential partners in solving climate problems and leverage their expertise and resources to develop climate policy solutions. Policymakers can partner with institutions to collect data, research key questions impacting communities across the country, share best practices, and connect with students across different communities. Policymakers can also use their national platforms to elevate stories of climate action occurring at institutions of higher education.

Opportunities for State Policymakers

Outside of institutions, state policymakers are among the most influential supporters of climate action in higher education. Legislators and governors play critical roles in establishing goals for public higher education systems and funding their operation. Consequently, state policymakers have authority to support higher education in prioritizing climate action, preparing students for a clean economy, connecting institutions with local communities, and providing the resources necessary for institutions to model climate solutions. Through such levers as legislation, appropriations, and communications, policymakers can create conditions for institutions to lead climate action in their communities and across states. Collaboration is critical to ensure policy is aligned with priorities for action, so policymakers should work in partnership with students, higher education leaders, community members, businesses, unions, and more.

RECOMMENDATION

Develop a comprehensive statewide plan and policies to address climate change and advance solutions within and beyond higher education. State policymakers should develop comprehensive plans to take action on climate change and leverage the strengths of higher education in their efforts. By including higher education in their climate action, states can benefit from higher education's knowledge and expertise, deep connections to students and communities, and sizable infrastructure footprint to advance progress toward their statewide climate goals. States can further ensure that all policies and programs related to higher education are developed with a climate lens and support institutions with the resources necessary to achieve established goals.



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1.1: Define the role of higher education and leverage higher education partners to develop and implement state climate action plans. State climate action plans coordinate a range of state agencies including higher education institutions to address climate change impacts and identify solutions. States should engage institutions of higher education in both the development and implementation of these plans. Colleges and universities can support state climate goals in a variety of ways: providing data on climate mitigation and adaptation efforts, furnishing technical assistance to state government and business leaders, and anchoring innovation hubs for new clean energy industries. Higher education institutions are key partners, with comprehensive ability to lead efforts to grow educational attainment, communicate the impacts of climate change to multiple audiences, and harness community capacity to advance climate solutions and transition to a clean economy.



- 1.2: Prioritize students and communities most impacted by climate change and education inequities. State policymakers play a key role in advancing equity by targeting resources and support. It is critical that support be focused on minority-serving institutions, institutions serving large populations of students from low-income families, and institutions in urban and rural communities that will be most impacted by pollution, heat, extreme weather, and other negative impacts of climate change.
- **1.3:** Center student voices in developing statewide plans for climate action. Policymakers should listen to, support, and integrate the perspectives of higher education students, in particular students of color, students from lowincome rural and urban communities, Indigenous students, and students with disabilities, in climate action decisions and higher education engagement.
- 1.4: Appoint higher education leaders committed to climate priorities and ensure climate leaders recognize the importance of leveraging education in solutions. Policymakers have extraordinary ability to shape future directions of higher education through hiring and appointment processes. In selecting statewide public leaders, including statewide higher education officers, university, college, and system leaders, statewide climate leaders, and governing board members, policymakers and political leaders should prioritize candidates who understand the critical need to support efforts at the intersection of higher education and climate.

Support institutions, through state policies and programs, in preparing students, engaging communities, and modeling solutions. State policymakers should utilize policy, regulations, guidance, and leadership to promote comprehensive climate action, including remediation efforts and solutions, across institutions of higher education.

- 2.1: Coordinate state agencies with higher education to prepare students for clean economy jobs. State policymakers can encourage state agencies across a variety of sectors, from workforce to economic development, to partner with higher education institutions in pursuit of state clean economy goals that also support a resilient workforce able to thrive in a climatechanged world.
 - 2.1.A: Ensure state economic development agencies and workforce and labor agencies partner with higher education. Economic development and workforce/labor agencies tasked with growing clean economy sectors often need help producing the skilled workforce, across all job levels, critical to sustaining these industries. Higher education institutions are essential partners, training the people needed to fill these in-demand jobs. Policymakers should prioritize development of deep partnerships of economic development and workforce agencies with higher education to ensure students, especially those in underserved categories, have opportunities in the clean economy and new industries have the talent necessary to succeed.
 - 2.1.B: Align clean economy or climate-related workforce priorities with statewide higher education attainment goals. Policymakers should refine attainment goals to highlight increases in the number of individuals achieving a postsecondary degree in clean economy and climate-related fields, including energy, aligned with the state's economic development goals.



2.2: Support institutions in efforts to model, research, and develop climate mitigation and adaptation solutions by ensuring sufficient resources. States should ensure that institutions have the resources necessary to pursue and model climate solutions. From clearing backlogged maintenance projects totaling billions of dollars to establishing research institutes focused on local climate challenges and addressing climate issues in historically marginalized communities, policymakers can bolster climate action through increased funding.

2.2.A: Support institutions in accessing federal funds to advance climate solutions. State policymakers should work with statewide system offices to distribute information and offer technical assistance to campuses seeking federal funding opportunities, in particular through the Inflation Reduction Act, Infrastructure Investment and Jobs Act, and CHIPS and Science Act.

2.2.B: Ensure sufficient state resources to support higher education in advancing mitigation and adaptation, including through bonds, revolving loan funds, and appropriations. Resources allocated through state bonds, revolving loan funds, and higher education appropriations can help public institutions modernize existing buildings, develop new infrastructure, transition to clean energy, and create hand-on learning opportunities for students. These activities not only directly engage students around climate solutions, but also can demonstrate "proof of concept" of novel climate solutions to other sectors such as businesses, local governments, and community organizations, expanding the benefits of these investments well beyond higher education campuses.

2.2.C: Promote climate action through legislation and regulations. Policymakers can support climate action at higher education institutions through building codes, permitting processes, and permission for power purchase agreements. Policymakers should review existing changes to building codes, consider changes to speed electrification of new and modernized buildings, and allow power purchase agreements to increase production and use of clean energy.

RECOMMENDATION

Ensure higher education is eligible for state capital investments and that those investments prioritize climate mitigation, adaptation, and sustainability. State governments can ensure that capital investment budgets include higher

education institutions and that efforts to modernize state government infrastructure incorporate a climate lens.

RECOMMENDATION

Partner with higher education to communicate the impacts of a changing climate on communities and the effectiveness of solutions to inspire and support broader climate action. State policymakers should see their higher education institutions as partners in solving problems related to climate change and should leverage their expertise and resources to develop policy solutions. Policymakers can engage higher education institutions to collect data, research key questions impacting states, share best practices, and bring together students across different communities. Policymakers can also use their public profiles to raise awareness of climate-related actions occurring in the higher education sector.



Opportunities for Local Policymakers

Local policymakers, such as mayors or county council members, can be key stakeholders in realizing the potential of higher education to drive community climate solutions because they are closest to the climate issues that impact students and community members. Higher education institutions and students can partner with local policymakers to research, design, and implement climate solutions in tandem with community members.



- Incorporate higher education in the development, framing, and implementation of local climate action plans (CAPs). Across the country, students, faculty, and leaders have joined advisory boards that develop local climate action plans or have served as consultants. Cities have also partnered with institutions to conduct rigorous emissions assessments and create comprehensive CAP management and tracking systems. This engagement should continue and increase.
- Submit joint grant applications. Local elected officials can work with higher education institutions to jointly apply for federal grants. such as those in the Inflation Reduction Act. Colleges and universities can provide useful grant writing expertise as well as needed data and regional information to inform a proposal, while policymakers can bring together community partners for joint applications.
- Partner to create accessible public transportation routes to higher education campuses. Ensuring public transportation is accessible for students can remove barriers to enrollment. Transportation time and costs are frequently cited by students as a barrier to enrolling and completing a postsecondary degree. Local elected officials have unique influence over public transportation infrastructure and routes. This can help ensure accessible and efficient access to in-person classes for a wide range of students.
- Create formal coordination roles between local government and higher education institutions. Local policymakers can create official roles tasked with developing relationships with local colleges and serving as a point of contact. Institutions and local governments can use these channels to coordinate around joint funding and research projects. Policymakers can also look to higher education institutions as a source of qualified candidates to fill climate-related city positions.

Private Sector and Other Stakeholders

Beyond government, other organizations and stakeholders have a role to play in supporting higher education to engage the next generation of leaders, connect with local communities, model climate solutions, and communicate with the broader public.

BUSINESS AND INDUSTRY

Employers can be a key partner to advance climate action in the higher education sector, particularly as it relates to preparing students for 21st century jobs. The transition to a clean economy will require more trained workers in fields including electrical work, heat pumps, clean energy construction, advanced manufacturing, and STEM as well as climate-trained workers in fields such as business, architecture, supply chain management, and more. Businesses can partner with the government and institutions of higher education to analyze local workforce needs and to help higher education develop efficiently in the face of a fast-moving energy transition.

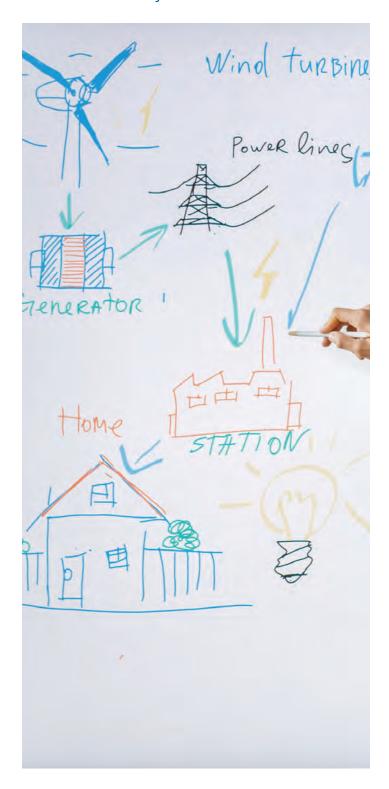
- · Partner with higher education to prepare students for clean economy jobs. Employers can work with institutions of higher education to clarify local clean energy industry needs, develop training pathways that lead to employment, and lend expertise by teaching at local institutions. Employers can advise institutions of higher education on education and training curricula to ensure they are relevant to in-demand skills and jobs.
- Support equitable pathways to clean economy jobs. Partnering with HBCUs, TCUs, and other MSIs and creating opportunities like paid internships can help ensure diverse talent can access pathways to clean economy jobs.
- Hire the next generation of climate leaders. Employers can raise awareness about green employment opportunities by presenting at career fairs at local higher education institutions and advertising job openings through institution and alumni platforms. They can also offer internships and apprenticeships to develop a future workforce that benefits employers and employees.



PHILANTHROPY

Philanthropic organizations can play an important supporting role in accelerating higher education's efforts to develop and scale climate solutions. Timely and targeted catalytic funding can help higher education institutions and students pilot new curriculum models, establish community partnerships, and launch clean energy operations. They can also help to close access gaps for marginalized communities to participate in climate solutions. Philanthropy's potential to support these efforts at the intersection of climate and education can encourage larger investments from government and business. With philanthropic organizations across the country ranging from large private foundations to community foundations and small family foundations, philanthropy can help support cross-sector work by:

- Signaling to the field and grantees the importance of advancing projects at the intersection of climate and higher education. Philanthropy can help be a convener and connector to help those in higher education learn more about the intersection and opportunities for action.
- Investing in efforts that help institutions educate, engage, and support students in a changing climate, engage local communities, model climate solutions, and communicate to the broader society about how we can address climate change. Philanthropy can support catalytic action that other institutions can replicate. Funders are also a strong fit for supporting ongoing and multi-year climaterelated projects in partnership with local communities. Finally, they can provide catalytic opportunities for under-resourced institutions to establish public-private partnerships or access state and federal resources.
- Emphasize equitable investments. Often the most marginalized communities are in need of additional philanthropic support. For instance, Indigenous communities worldwide receive less than 1% of all climate-focused philanthropic dollars.1 In the U.S., rural communities receive just 5% of all philanthropic dollars and Indigenous communities again receive less than 1%. Foundations seeking to support climate action in higher education should work to counteract these inequities.





Climate change can spark heated debate, but we also know there is no better place than higher education to have a productive dialogue that will lead to concrete solutions. Through an open exchange of ideas, practical research, collaboration and our commitment to serve as stewards of place, higher education can provide vital tools and help shape our societal and scientific responses to climate change."



— Higher Ed Task Force co chair, Mildred García, Chancellor, California State University and Kim Hunter Reed, Commissioner of Higher Education, Louisiana.²



