

An ACE National Strategic Planning Framework for the United States



Collaborative Contributions from the
Nation's Diverse ACE Community

Action for Climate Empowerment
November 30, 2020

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Financial and Value in Kind Support

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Climate Education, Communication and Outreach Stakeholder Community
Climate Literacy and Energy Awareness Network
National Oceanic and Atmospheric Administration
Spencer Foundation
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The *An ACE National Strategic Planning Framework for the United States* was prepared by the Bowman Change, Inc. under the contract WC-133R-14-BA-0026/1305M319FNRTMT1083 from the Climate Program Office's Communication, Education and Engagement Division of the National Oceanic and Atmospheric Administration (NOAA), U.S. Department of Commerce. The statements, findings, conclusions, and recommendations are those of the author(s), dialog and review participants and do not necessarily reflect the views of NOAA or the U.S. Department of Commerce.

This material is based upon work supported by the Spencer Foundation under Grant No. (202100079). Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the Spencer Foundation.

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Suggested Citation

Bowman, T., Morrison, D. (2020) *An ACE National Strategic Planning Framework for the United States* [Online]. Created in collaborative reflection with the U.S. ACE Community. Available at <http://aceframework.us>.



ACTION FOR CLIMATE EMPOWERMENT
NATIONAL STRATEGIC PLANNING FRAMEWORK
FOR THE UNITED STATES

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Executive Summary

Engaging, informing, and empowering the public to participate in solutions to the climate crisis is essential if humanity is to meet the urgency and scale of the challenge.

- A national strategic plan for public empowerment is needed to catalyze and accelerate a just transition to a low-carbon future. The Action for Climate Empowerment (ACE) agenda—as described by UNFCCC Article 6 and Article 12 of the Paris Agreement—enables all nations to inform, encourage, and empower their publics to design and implement their Nationally Determined Contributions (NDCs) to global climate action.
- With the adoption and implementation of an ACE national strategic plan, the United States would become the first major emitting country to fulfill a commitment to ACE. Such actions would help our nation rebuild its international reputation and become a global leader for rapid, equitable, just, and effective society-wide climate action.
- Moreover, such actions are crucial to ensuring that a post-COVID recovery accelerates climate action and rebuilds the economy in just, equitable, and sustainable ways.

An ACE National Strategic Planning Framework for the United States is intended to guide the completion of a national strategic plan in time for delivery at the 26th UNFCCC Conference of the Parties in November 2021.

- This Strategic Framework was co-created by the U.S. ACE community through multi-decade efforts, which culminated in a series of participatory dialogues during August 2020 (see Appendix A and B). This document compiles the key principles, specific recommendations, and collective wisdom expressed by more than 150 participants who are affiliated with roughly 120 different organizations and networks. The participants represented a broad swath of the nation's ACE landscape and its tremendous diversity, experience, and geographic reach.
- While the ACE community's efforts have been invaluable to the nation, those efforts have been fragmented, and they have never been strategically aligned. An ACE national strategic plan that is co-created with diverse members of the ACE community will overcome a crucial barrier to meeting the climate crisis, namely, the low levels of public engagement and participation. A national strategy will, at last, align the ACE community's work and provide coherence and support to the nation's efforts to inform, encourage, and empower the public to make rapid progress on climate solutions.

THE U.S. ACE AGENDA:

- Acknowledges the deep history of learning and practice that has taken place in the ACE community.
- Weaves climate empowerment and public participation into every aspect of the nation's social, cultural, civic, and economic life.
- Is culturally relevant and highly salient to foster widespread commitments and support.
- Emphasizes local-level climate action and participation in decision-making.
- Recognizes and builds upon the diversity of knowledge, expertise, values, and ways of knowing and acting throughout society.
- Holds climate justice as inseparable from effective climate action. ACE calls for empowering Black, Indigenous, and People of Color (BIPOC); members of low-income communities; and all those on the social, environmental, and economic front lines of climate impacts to participate and lead.

Meeting the climate challenge will require transformative, structural changes in order to foster inclusive public participation and decision-making processes.

AN U.S. ACE NATIONAL STRATEGY WOULD:

- Shift the focus of ACE activities from the actions of individuals to collective action.
- Shift decision-making processes from a model that seeks local input to a model that encompasses local participation, leadership, and consent.
- Create safe and meaningful pathways for BIPOC and low-income communities—which bear the greatest burdens of climate impacts—to participate and lead in decision-making.
- Reduce and remove barriers to effective action by community-scale actors and organizations. This includes reducing barriers to competition for adequate funding.
- Make financial investments through participatory processes that are guided by local concerns, research-based evidence, and the priorities of BIPOC and low-income communities.
- Design policies in ways that enable and encourage cross-sector collaboration and coordination for climate action.
- Integrate ACE—especially education and training—into government purchasing and contracting policies.

- Integrate ACE into the climate action plans of all government agencies and line-item budgets.
- Develop climate messaging that is highly salient, simple, and pervasive.
- Increase financial support and sustained commitments to ACE.
- Develop and implement tools to monitor and evaluate progress on public empowerment and participation.

SUGGESTED URGENT ACTIONS:

- Insert the following language, or its equivalent, into the 2020 NDC to the UNFCCC:

The United States commits to nominate a National Focal Point for Action for Climate Empowerment (ACE) and establish a diverse ACE Task Team that will utilize the community-developed *An ACE National Strategic Planning Framework for the United States* to create an ACE national strategy for delivery at COP26 and follow through on its implementation.

- Establish a federal office for ACE, nominate a National Focal Point (NFP) for ACE, establish the ACE Task Team and its collaboration structures, and provide the authorities and support required to co-create the U.S. ACE national strategic plan with diverse members of the U.S. ACE community.

This *Strategic Planning Framework* is a non-partisan document. It is, however, the product of those who participated in its creation. Future strategic planning will need to bring additional voices into the dialogue process as well. Support must be provided, for example, to members of conservative and rural communities who might find the language of climate change problematic, yet for whom stewardship of the land and the wellbeing of their communities are deeply held values. Further dialogue opportunities should also be extended to members of the business, health, science, social science, and other stakeholder communities. These additional steps will help ensure that the ACE national strategy encompasses the diverse concerns of the nation.

An ACE national strategy will greatly accelerate a just transition to a low-carbon future. Members of the ACE community are ready to assist and support the development and implementation of an ACE national strategic plan for the United States.

I. Where Does the United States Stand on Climate Change?

United States officially withdrew from the Paris Agreement on November 4, 2020. Over the preceding decades, however, numerous actions and programs within federal agencies have made substantial progress toward building understanding and capacity to respond to climate change within various sectors of society.¹ Likewise, states, cities, Tribal Nations, national and community-based non-profits, and private sector organizations have committed themselves to finding solutions. One assessment of climate commitments notes:

American coalitions of states, cities, businesses, and others committed to climate action in support of the Paris Agreement are massive and globally significant. They now represent 68 percent of U.S. GDP, 65 percent of U.S. population and 51 percent of U.S. emissions. If they were a country, these U.S. coalitions would have the world's second largest economy—second only to the United States itself.²

These hope-inspiring commitments do not appear to be widely understood by the public.³ Federal political leadership, in fact, has not delivered coherent messaging on climate change for many years. In a 2018 survey, only six percent of respondents said that humanity can and will reduce global warming, despite about half of the people in the United States saying that global warming could be reduced if appropriate actions are taken. The same survey found that only about one-third of the public—just 35 percent—talks about global warming with family and friends “often” or “occasionally.”⁴ Yet public concern about climate change reached an all-time high in 2020, with nearly 58 percent falling into the two most worried categories in the “Global Warming’s Six Americas” survey.⁵

Such a wide gulf between high levels of concern and low levels of confidence is one of the reasons why the international community calls for a fundamental change in public engagement. Action for Climate Empowerment (ACE) goals, which are expressed in Article 6 of the United Nations Framework Convention on Climate Change (UNFCCC), focus on building public support and capacity for finding solutions and taking action on the climate crisis. UNESCO and UNFCCC Secretariat guidelines for implementing ACE explain that public empowerment is necessary in order to meet the challenges.

The solutions to the negative effects of climate change are also the paths to a safer, healthier, cleaner and more prosperous future for all. However, for such a future to become reality, citizens of all countries, at all levels of government, society and enterprise, need to understand and be involved.⁶

The ACE agenda (goals and recommended processes) involves marshalling creativity, initiative, and collaboration among communities, organizations, and individuals as the best way to accelerate a just transition to a low-carbon and resilient world. Article 12 of the Paris Agreement of 2015 calls on nations to actively pursue ACE:

Parties shall cooperate in taking measures, as appropriate, to enhance climate change education, training, public awareness, public participation and public access to information, recognizing the importance of these steps with respect to enhancing action under this Agreement.⁷

At COP25 in 2019, several nations shared their work to accelerate ACE implementation. The need for such work was reaffirmed by the delegations.⁸ In the United States, however, ACE is not yet central to policymakers' thinking about solving the climate crisis. Residents of low-income and rural communities and Black, Indigenous and People of Color (BIPOC), meanwhile, remain marginalized and largely excluded from policymaking about energy, pollution, education, and justice issues, even though they are being harmed disproportionately by the negative impacts of pollution and climate change.^{9, 10} Policymaking processes rarely recognize the expertise that these populations contribute to climate action.

Public opinion about the priority of climate change in federal policymaking is split along party lines and has been diverging since the 1990s.¹¹ There is strong public support, however, for federal investments in renewable energy sources, generating renewable energy on public lands, providing tax rebates for energy-efficient vehicles and solar panels, regulating carbon dioxide as a pollutant, and the Green New Deal proposal.¹² Some of the components of public engagement, therefore, exist, yet public confidence and empowerment remain low. People have, in fact, been successfully dissuaded by intentional efforts to mislead and confuse them.¹³

Against this backdrop, the "ACE community" in the United States—meaning educators, communicators, researchers, social movements, community groups, and a wide range of others—are doing significant work.¹⁴ They are skillful, hold deep knowledge, and feel a sense of great urgency about harnessing the strategic resources required to accelerate equitable and just climate action.

II. Why Create an ACE National Strategy?

As noted, UNFCCC Article 6 calls on signatory nations to empower their publics to become active participants in solving the climate challenge. This is the case because “The transition to a low emissions and resilient development requires individuals and communities to reach an unprecedented level of awareness, knowledge and skills.”¹⁵ As part of the 2012 UNFCCC Doha Work Programme, moreover, parties recommended that each nation develop a national strategy to achieve ACE goals. At COP24 in 2018, parties agreed:

‘to continue to promote the systemic integration of gender-sensitive and participatory education, training, public awareness, public participation, public access to information, and regional and international cooperation into all mitigation and adaptation activities implemented under the Convention, as well as under the Paris Agreement, as appropriate, including into the processes of designing and implementing their nationally determined contributions’ (Decision 17/CMA.1, paragraph 5).¹⁶

Thus, integrating a national strategic plan for ACE into periodic Nationally Determined Contributions (NDCs) is crucial. Creating and implementing an ACE national strategy will help the people of the United States participate in creating the policies and actions needed to meet the climate challenge. Doing so through inclusive processes that enhance climate justice and equity is necessary, as stated by the explicit alignment between the UNFCCC; U.N. Sustainable Development Goals; and the United Nations Education, Scientific and Cultural Organization’s (UNESCO) deep history and trajectory of work in sustainability education.¹⁷ Equity and empowerment are, in fact, inseparable from successful efforts to reduce carbon pollution and build resilience. The United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) provides further support for self-determination and informed consent, although the United States has not yet elevated this declaration of Indigenous rights to the status of binding law.¹⁸

As part of the commitment to ACE, each nation is expected to identify a National Focal Point (NFP) for developing and implementing an ACE national strategy (under the overall National Focal Point of the Party) and include ACE in NDCs. An NDC covering the 2020 to 2030 timeframe is due in 2020. As of the writing of this *Strategic Planning Framework*, the United States has not designated a National Focal Point, nor has an ACE national strategy been developed. On November 4, 2020, the U.S. officially withdrew from the Paris Agreement and has not submitted a 2020 NDC.

The United States has deep and diverse resources—communities, businesses, networks, organizations, institutions, and individuals—working to advance the ACE objectives, yet their

efforts are not strategically coordinated or aligned.¹⁹ Building an ACE national strategy will significantly enhance coordination and collaboration, create financial efficiencies, reduce duplication of effort, and improve the effectiveness of efforts to engage and empower the public in inclusive and equitable ways. Developing an ACE national strategy is a key step to accelerating climate actions in the United States.

III. Why Create an ACE National Strategic Planning Framework?

COP26, in November 2021, will be an important update on the Paris Agreement. Taking stock of global commitments will be based on revised NDCs from signatory nations, which are expected to include national strategies for ACE implementation. As noted, the U.S. is unlikely to submit a revised NDC in 2020, nor designate a National Focal Point for an ACE national strategy.

By its own initiative, the ACE community in the United States undertook this *Strategic Planning Framework* process in accordance with UNESCO and UNFCCC Secretariat ACE guidelines, in order to accelerate development of the first U.S. ACE national strategic plan in early 2021. The objective was to lay the groundwork by engaging the ACE community in an inclusive process and provide a roadmap for completing a national strategy in time for delivery at COP26.

Although this *Strategic Planning Framework* reflects the ACE community's contributions over many years, the *Strategic Planning Framework* project was initiated in late 2019 and the majority of the work was accomplished in the midst of the global COVID-19 pandemic. The strong commitments by all involved are founded on the shared understanding that a coordinated and strategic approach to the ACE agenda in the U.S. is critical to ensuring a post-COVID economic recovery that will accelerate climate action in just and equitable ways.

IV. What Does the ACE Framework Contribute?

The U.S. ACE community is now deeply engaged in a collaborative process to help develop a national strategy. The process of building the *Strategic Planning Framework* involved participants from 120 different organizations, institutions,²⁰ social movements, businesses, Tribes and governments ranging from federal agencies to municipalities. This community is diverse, talented, experienced, and engaged in significant work.²¹ Despite the community's participation in various professional networks and numerous gatherings over decades, however, their work, overall, has never been strategically aligned and coordinated in systematic ways.

To build the *Strategic Planning Framework*, participants engaged in four online dialogues based on the U.N.'s Talanoa Dialogue Platform²² that were designed to bring people from different professions, geographies, and perspectives together. Through their collective contributions, the *Strategic Planning Framework* provides a coherent vision of where climate action and public empowerment efforts should be by 2030. The ACE community's inputs also reveal many different perspectives that are based on lived experience in a range of different contexts. For example, Indigenous participants stated that the right to self-determination requires the United States to honor past treaties and to seek actual consent—not just opinions—when considering energy and environmental policies. While deeply supporting the rights of BIPOC to equity, justice, and self-determination, the *Strategic Planning Framework* does not advocate for any participants' specific policy prescriptions. Instead, the *Strategic Planning Framework* articulates issues and viewpoints that must be addressed in the national strategy and in the strategic planning process.

Beyond stating a vision, the *Strategic Planning Framework* also offers specific recommendations in the six ACE elements: education, training, public awareness, public access to information, public participation, and international cooperation.²³ The recommendations are designed to overcome structural and often unintended obstacles, while making the most of opportunities to improve the efficacy and alignment of climate education, communication, and outreach²⁴ programs, policies, and initiatives. New approaches to improving collaboration, up-front and periodic evaluation, funding, and inclusive decision-making are clearly expressed in these recommendations.

The *Strategic Planning Framework* is not a strategic plan, however, so recognizing the limitations of its scope is important.

1. Guidelines from UNESCO and the UNFCCC Secretariat suggest that the National Focal Point inventory all federal and subnational policies that can be improved through the incorporation of ACE goals and strategies. While the *Strategic Planning Framework* iden-

tifies connections to certain policies, the ACE community did not have the resources to conduct a comprehensive inventory.

2. ACE guidelines call for assessments of public knowledge, perceptions, and attitudes about climate change and climate solutions:

Assess needs specific to national circumstances regarding implementation of Article 6 of the UNFCCC, using special research methods and other relevant instruments to determine target audiences and potential partnerships; and develop communication strategies on climate change based on targeted social research in order to create behavioural changes.²⁵

The *Strategic Planning Framework* describes certain attributes of public knowledge and perceptions, but a full and complete assessment is beyond the scope of this project. Such an assessment would need to consider multiple methodologies in order to ensure that a comprehensive picture emerges and culturally responsive results are obtained.²⁶

3. ACE guidelines call for inclusive consultations and decision-making processes involving all segments of society and its diverse ACE communities. The *Strategic Planning Framework* accomplished a robust pilot project and, in so doing, identified gaps where additional dialogue will be needed.

For example, future engagement could expand dialogue with the business, labor, and health communities, which are crucial elements of the nation's climate response, but were not well represented in this process. Support should also be provided to members of conservative and rural communities who might find the language of climate change problematic, yet for whom stewardship of the land and the wellbeing of their communities are deeply held values.

While youth and BIPOC communities were engaged, there is considerable room for further dialogue and wider participation. Likewise, many individuals, organizations, and institutions that promote climate-friendly behaviors (e.g., communication firms, public utilities, behavioral scientists, natural scientists, environmental and educational NGOs, etc.) will have more to contribute to the national strategy. These additional steps will help ensure that the ACE national strategy fully addresses the diverse concerns of the nation.

Given these caveats, the *Strategic Planning Framework* and its processes provide (1) a shared vision from the ACE community, (2) key recommendations for policy implementation, (3) identification of key concerns among various ACE communities that the national strategy must address, (4) a practical model for community engagement using the U.N.'s Talanoa Dialogue Platform combined with strategic review, and (5) guidance on specific needs for further dialogue and engagement in order to complete a U.S. ACE national strategic plan.

V. The U.S. National Circumstances

UNESCO and UNFCCC Secretariat guidelines urge nations to develop national strategies for public empowerment according to their national circumstances. The circumstances for ACE action in the United States are inherently complex, distributed, and diverse. The U.S. is a country in which decentralized authority is both structural and cultural. We are a nation that shares decision-making among multiple branches of Tribal, federal, state, and local governments, and some segments of society are excluded from decision-making processes altogether. We are a multi-cultural society that often celebrates individual liberty, individual initiative, free enterprise, and individual responsibility. Because such ideals are not universally held by all cultural groups,²⁷ compliance with and fidelity to coordinated strategies will rely heavily on individual stakeholder commitments to and participation in the design of strategies, policies, reporting protocols, and other measures.²⁸

In school-based education, for example, national principles for climate and energy literacy were developed by a network of educators, scientists, and stakeholders in thirteen federal agencies.²⁹ New approaches such as “justice-centered phenomena” have been shown to make climate science more relevant to students and improve educational outcomes.³⁰ These principles, in combination with *A Framework for K-12 Science Education*³¹ and the *Next Generation Science Standards*,³² are highly influential, yet individual states can choose to adopt all or part of national guidelines or develop guidelines of their own. Curriculum and textbooks are written with multiple standards in mind.

Additionally, education funding also varies according to the financial circumstances of the various states. As a result, access to climate education is at least partly conditioned by the financial capacities of the states. While federal funding for education is guided, at least in part, by achievement according to standards-based tests, the states and districts retain authority over curriculum, textbooks, and the creation and administration of testing in their jurisdictions. Because funding and decision-making in education are distributed across multiple jurisdictions, there is a lack of coherence in climate education.

The leading programs in climate-related workforce development and training, community-based education, and the other ACE elements are equally decentralized. A large number of informal networks, professional societies, trade associations, and other types of organizations develop and manage climate- and energy-related learning programs of their own design according to their own standards and theories of societal change.

Justice-centered environmental and climate networks have been working on ACE activities for a long time.³³ Meanwhile, a growing number of other community-based organizations that focus on ACE activities have deepened their commitments to social and environmental justice.³⁴ Such ACE activities have been and continue to be undertaken both by those in paid

and volunteer roles. Framing ACE work as justice work is also an emerging and important direction in academic research.³⁵ The ACE community agrees that justice principles need to be integral to ACE work.

Six attributes specific to the U.S. require further attention.

1. *Awakening to Climate Justice*—The United States is a nation in which BIPOC have been and continue to be disenfranchised and discriminated against, and in many cases, removed from their lands. The history of forced movements of BIPOC communities have harmed generations of people over time. Moreover, low-income and BIPOC neighborhoods, communities, institutions, and individuals are exposed to more environmental health risks, such as pollution, heat stress, flooding, and extreme weather, than are affluent populations.³⁶ Economic, educational, social, and political opportunities are far less available to BIPOC populations than to white and generally more affluent populations.³⁷ The ACE community understands that the wide disparities in health outcomes and opportunities—and ever-widening income inequality³⁸—are unjust and unsustainable. A national ACE strategy and the processes through which it is developed and implemented must embrace a paradigm shift—a fundamental break from the colonialism, anti-Blackness, Indigenous invisibility, racism, patriarchy, and English language dominance³⁹ that have oppressed BIPOC people, communities, and governments in the United States and abroad.

Accordingly, the ACE community recognizes that transformative structural changes are necessary, and that ACE-related policies that fail to address inequity and injustice will, themselves, fail. The ACE process is not merely about adjusting existing power relationships. ACE is grounded in the recognition that different power relationships, knowledge, and practices already exist throughout society. ACE strategies and planning processes, therefore, must recognize that diversity and differences are assets, and that just and equitable partnerships and policies will enable everyone to engage and share power equitably, and benefit from the resulting opportunities.

The ACE strategic planning process must also recognize that diverse groups of people, as well as individuals within those groups, have different views and perspectives about climate goals and solutions. For example, some BIPOC leaders call for the U.S. to become a zero-emissions society, not a net-zero society, because the latter goal allows for the continued use of fossil fuels and, therefore, a continuation of disproportionately poor health for BIPOC communities. The zero-emissions goal reflects the widespread view within the ACE community that decolonizing⁴⁰ decision-making processes requires that the U.S. honor existing treaties with Indigenous nations and seek consent, not merely advice, when making energy and climate-related policies. Many people, including people in the BIPOC community, have called for accountability on the part of polluters, and an end to the extraordinary influence polluters have in governance that allows pollution to continue as a default in people's expectations.

2. *Increasing Public Concern about Climate Change*—People’s concern about the climate crisis has been increasing over the past five years, at least. The number of people who say they are alarmed has grown by 15 percentage points since 2015, while the number of people who are dismissive of the issue has decreased by five points.⁴¹ There is strong evidence that a confluence of factors is driving engagement including, among other things, an increase in people’s lived experience with extreme weather events and the amplification of the voices of trusted messengers other than climate scientists and environmentalists. These trusted voices include doctors who have been speaking out about climate-related health harms that people and communities are actually experiencing,^{42,43} and weathercasters who have been validating the reality of the climate crisis.⁴⁴ As a result, climate change is being repositioned in the minds of the public from an abstract and distant risk to an immediately relevant and concrete threat. An ACE national strategy will be strengthened by a reliance on social science research to identify factors that are likely to motivate public engagement and validate the efficacy of communication campaigns.

3. *Youth-Centered Education and Social Movements*—Young people learn about climate change, climate justice, and social justice more broadly in school and in a variety of other contexts, but there is a lack of coherence across jurisdictions. The quality and extent of climate education is uneven in the U.S., and it is tied closely to the knowledge and political views of the educators that youth encounter.⁴⁵

Meanwhile, the growing youth climate movement, which is largely coordinated and expanded through social media, calls for accelerated action and reform of climate-related learning opportunities.⁴⁶ The redesign of educational resources, however, will require more than a focus on climate science. Since educational institutions and curricula have long perpetuated colonial thinking and power structures,⁴⁷ a paradigm shift is necessary. Young people need, and in some cases are calling for, active, solutions-oriented science, social studies, and media literacy education that emphasizes systems-thinking approaches to learning about environmental and social interconnections as part of broader civics education.

4. *COVID-19 Impacts*—The COVID-19 crisis is a defining feature of policymaking today and is likely to remain so in the coming years. Recovery from the pandemic represents a unique opportunity to organize and direct investments in climate solutions, justice, communities, and public empowerment.⁴⁸ For example, investments in green infrastructure, workforce development, and alignment of subject matter in climate and climate justice education can work together more effectively than they have in the past.⁴⁹

5. *Overcommunication and Competition for Attention*—By any measure, people are bombarded by more messages today than at any other time in human history. According to a 2013 report in *Science Daily*, 90 percent of the world’s data had been generated in the previous two years.⁵⁰ Various reports place the number of messages the average person receives between 5,000 and 10,000 per day.⁵¹ The implications for ACE strategies in the

U.S. are profound because effective messages will need to be salient enough, engaging enough, simple enough, and sufficiently aligned with the things people care about to gain attention in a highly competitive communication environment.⁵²

6. *Intentional Disinformation and Dissuasion*—Governments and the people of the United States have been subjected to well-documented, decades-long campaigns to mislead and misinform them, and dissuade them from seeking and implementing solutions to the climate crisis. Funded largely by fossil fuel interests and ideological libertarian individuals and organizations, these campaigns have generated misleading pseudo-scientific reports, attacked individual scientists and the scientific enterprise as a whole, asserted narratives that global warming is not dangerous while climate solutions will cause economic suffering, prioritized individual actions and liberty over collective action, written draft legislation favorable to the fossil fuel industry, challenged climate-related policies in court, and more.^{53, 54} These efforts have been effective: according to a 2018 study, 46 percent of the U.S. population thinks that global warming can be reduced, but only six percent believes that humanity will do what is necessary.⁵⁵ These views are reflected around the world, especially in industrialized nations. The 2019 version of the international Edelman Trust Barometer survey found widespread pessimism that humanity will be better off in five years' time, while the overwhelming majority said that "the system" is not working for them.⁵⁶ As a result, addressing intentional disinformation and its harmful effects must be incorporated into national strategic planning for ACE.

As mentioned, ACE work in the United States has expanded significantly in recent years through youth movements, initiatives in formal and informal education, workforce training, and civic engagement.⁵⁷ Taken together, these attributes explain why the ACE community believes that an ACE national strategy must encourage collective action and not rely entirely on the actions of individuals. The ACE community also understands that a national strategy will be inherently iterative and dynamic because the circumstances in which ACE policies are implemented are dynamic.

In such a context, the UNESCO and UNFCCC Secretariat guidelines' call for inclusive decision-making processes is crucial to success. The U.S. ACE national strategy must articulate a compelling and coherent vision that empowers all stakeholders. ACE policies, moreover, must embrace the nation's rich diversity without imposing the dominant values systems and worldviews that offend or disenfranchise various constituencies. The goal is to weave climate action, justice, meaningful involvement, fair treatment, and empowerment into the social and decision-making fabric across an extraordinarily diverse society.

VI. The U.S. ACE Community's Vision

Diverse members of the ACE community in the United States used a back-casting process⁵⁸ to establish a vision for where the nation should be in 2030. This is the initial time frame for ACE national strategies. In the ACE community's view, the adoption of the recommendations put forth in this document will help the United States have achieve a number of crucial goals for climate action, and for the conduct of ACE work as well.

1. *The U.S. is a leader in identifying and implementing climate solutions.* These solutions are powered by universal and inclusive community and civic engagement. Civic engagement is expressed by a number of different accomplishments, including the following:
 - a. Actions by government agencies, communities, private sector organizations and individuals demonstrate a society-wide commitment to climate solutions.
 - b. The social ethos for action is justice- and solutions-oriented and conveys a broadly held sense of urgency.
 - c. Every government has implemented a climate action and disaster preparedness plan that includes budget line items for climate action, coordination, education, and other priorities.
 - d. Decision making and policymaking are accomplished through the participation of all concerned community members. Decision-making processes combine top-down coordination with bottom-up representation and action. The widespread participation reflects a high level of trust and mutual respect which, in turn, enables productive partnerships among members of the public, community organizations, elected officials, and businesses.
 - e. Elected representatives are more accountable to the public on climate, energy, and public health issues. Public access to information and universal access to electronic communication provide the public with very high levels of accountability.
 - f. With strong public support, the U.S. has placed a ban on new fossil fuel development.
 - g. People feel national pride about U.S. leadership on climate action.
 - h. The U.S. has earned a positive international reputation for its collaborative public participation and decision-making.
2. *Equity and justice are inseparable from climate action.* The United States has built transparent processes for inclusive decision-making that recognizes expertise in BIPOC, low-income, and rural communities; substantially elevates their leadership; and provides resources for meaningful participation. These processes allow those who have traditionally been

disenfranchised to feel safe and valued as they engage in meaningful decision-making and collaboration.

- a. Climate and social justice training is standard practice for all policymakers.
- b. Federal and state governments have aligned policymaking with ACE goals, which include BIPOC, youth, and gender representation at all levels of decision-making.
- c. Multiple perspectives on decision-making processes have replaced traditional colonial, patriarchal, white perspectives as the unspoken default assumptions.
- d. BIPOC, youth, and diverse genders are fully integrated into governance structures in government, business, philanthropy and other aspects of public and civic life.
- e. Members of other low-income and rural communities who have historically had relatively little political and economic power have been invited and received the financial support necessary to be integrated into dialogue and decision-making processes.
- f. The U.S. has established international, national, Indigenous, and sub-national processes for sharing and expanding the adoption of effective practices in culturally sensitive and appropriate ways.

3. *Rapid decarbonization of the U.S. economy is driven by a climate-ready workforce.* People in all jobs are aware of and attentive to sustainable solutions.

- a. Workers at every level of the economy approach their jobs through a climate solutions lens that integrates sustainability goals into the everyday fabric of the workplace.
- b. Climate solutions, communication, and resilience are included in career and technical education and in professional development opportunities throughout the economy.
- c. Climate solutions provide a rubric for aligning workforce education with in-service technical training.
- d. Training and career development opportunities ensure equitable access to jobs for all people.

4. *New levels of transparency, accountability, and collaboration have established strong public trust in climate-related decision-making.*

- a. Those who are negatively impacted by environmental harms—pollution, extreme weather, and climate change—are prioritized in decision-making. This means that municipal, state, and federal policymaking actively facilitates participation by those who are affected the most. Under-resourced communities are supported by trustworthy mechanisms that ensure their participation and prioritize their interests.
- b. The requirement for public consent has replaced the financial and power dynamics that favor the interests of polluters over those of local populations.
- c. The combination of climate solutions, climate justice, and community consent and control are a dominant lens through which leaders approach policymaking.

5. *Lifelong learning that is both wide and deep⁵⁹ is integrated into local communities and helps accelerate a just transition to a sustainable future.*
 - a. Educators and communicators are engaged in continual professional learning in order to better serve the public.
 - b. Education about climate solutions, resilience, and civic engagement is inseparable from climate action plans. Such education must address the historic and geopolitical dimensions of the climate crisis.
 - c. A wider definition of a “well-educated person” involves awareness of and meaningful relationships with different approaches to knowledge, including local and Indigenous knowledge, practices, and ways of knowing. This wider definition recognizes the different values in rural, BIPOC, urban, and other communities.

6. *Progress on these accomplishments is measured by multiple types of quantitative and qualitative metrics.*
 - a. Assessments capture the contributions of individuals, organizations, and communities rather than national statistics alone.
 - b. Metrics are culturally responsive to diverse communities and contexts. This includes Indigenous methods and cross-sectoral input.⁶⁰

The ACE Community’s vision for 2030 also describes where the conduct of ACE-related work should be in 2030. Whereas the community’s work is currently fragmented, by 2030 their efforts would allow strong strategic alignment in support of the vision for the nation as described above. Additionally, the work of an expanded and growing ACE community is characterized by the following attributes.

1. *ACE decisions are evidence-based according to metrics that reflect proven effectiveness.*

2. *ACE messages and public education are both widespread and pervasive in the news, media, the arts, schools, community-based learning, and elsewhere.*

3. *Decision-making about ACE projects and funding is inclusive and equitable. A wide variety of institutions, including those in formal and informal education, business, and government, are proactive about removing institutional racism, sexism, classism, and other forms of oppression.*

4. *The United States has mapped ACE resources and established strong support for productive collaboration among government, science, education, communication, and business.*
 - a. The collaboration infrastructure supports shared goals for communication, education, and public engagement in ways that meet the needs of local communities.
 - b. Diverse models for community-based action and BIPOC leadership drive locally grounded learning.
 - c. Collaboration among formal and informal education institutions, media organiza-

- tions, businesses, non-governmental organizations, and government agencies support community-level, project-based learning about climate solutions and resilience.
- d. Collaborative ACE work is focused on the needs and interests of local communities.

5. *Learning systems and literacy standards reflect the values expressed in this vision statement.*

- a. Literacy in formal and informal education focuses on equity, justice, and empowerment in the exercise of personal, community-level, and political rights and responsibilities.
- b. Education prioritizes local connections to ecosystem-wide and global phenomena, such as climate change, and solutions to global crises.
- c. Education prioritizes systems thinking approaches to addressing climate change and the interconnections between disciplines.
- d. Multi-disciplinary learning about climate change has been embraced at all levels of formal education.
- e. Cultural literacy, gender responsiveness, youth empowerment, science-based decision-making, and social-emotional learning⁶¹ are integrated into formal and informal education.
- f. Educational institutions are included in community resilience activities.
- g. Cultural institutions such as museums, aquariums, zoos, nature centers, and community centers enjoy high levels of public trust for accelerating the development of community-based climate solutions.
- h. An examination of the values systems underlying education systems leads to transformative changes.

VII. Strategic Recommendations

One of the most effective ways to engage people with climate solutions and empower them to act is by incorporating the ACE elements into activities that are already taking place. The UNESCO/UNFCCC Secretariat guidelines, in fact, urge nations to build national strategies, in part, by integrating the six ACE elements—education, training, public awareness, public access to information, public participation, and regional and international cooperation—into existing laws, regulations, investments and grants, and decision-making processes. Building public education and empowerment into ongoing activities is potentially more efficient than developing an ACE national strategy as an entirely separate, stand-alone enterprise.

The ACE guidelines equally urge nations to inventory existing programs, organizations, and initiatives that address climate empowerment, assess their effectiveness, and find ways to support and amplify those that are working especially well. While a national ACE strategy will require the United States—its governments, philanthropic foundations, and businesses—to make new investments and build some entirely new, targeted capabilities, the ACE agenda seeks to weave climate empowerment into the deeper social fabric.

According to the ACE community, both the integration of ACE into existing governance and the creation of new capabilities should be guided by four key principles that bring ACE guidance into the U.S. context. These principles apply to all six ACE elements. A discussion of additional recommendations concerning each specific ACE element will follow with the assumption that these, too, should reflect the key principles.

Key Principles

1. *Inclusive and Locally Focused Decision-making* — Public engagement and empowerment need to be rooted in listening to people’s priorities rather than telling people what to do. As decision scientist Baruch Fischhoff wrote in 2007, those who design climate education, communication, and outreach programs must guard against overestimating their own effectiveness:

People overestimate how widely their values are shared. ... People overestimate how widely their knowledge is shared. ... People overestimate how clearly they communicate. ... Research protects scientists and citizens against such imperfect intuitions. ... Communicating entails listening as well as speaking. Research provides a way to do that listening.⁶²

Communication strategist Robert Gould observes that while most social campaigns try to convince their target audiences what they should do and how they should feel, the most successful social marketing campaigns are those that do not try to educate or convince the audience, but genuinely connect with them. He notes that top-down messaging is less effective than listening to people and providing knowledge and tools for them to share with their peers:

The fuel of social change is horizontal, not vertical, influence. As the rise of social media makes clear, people don't respond to the powers that be, they respond to each other. Arm them with relevant content to share and signals to display. It's the secret of generating awareness, setting new agendas for policymakers and creating new social norms.⁶³

These observations by social scientists make it clear that the ACE agenda involves dynamic relationships among people who have different points of view and who live and work in different circumstances. The ACE guidelines specifically emphasize inclusive and community-driven decision-making processes, and recognize that, "In some places, this will prompt profound changes in how political leaders and civil servants are accustomed to working and encourage people to be more attentive to policy-making."^{64,65}

As noted, the U.N. Talanoa Dialogue Platform provides a crucial methodology for diverse stakeholders to listen to one another, learn, and build trust. This Framework was built using such a dialogue process. Participants came together from many different perspectives and professions and set aside familiar transactional conversations in order to hear one another's values and concerns, and discover the elements of shared purpose. In his book, *The Magic of Dialogue*, social scientist Daniel Yankelovich describes how important this type of process is:

In traditional hierarchical arrangements, those at the top of the pecking order can afford to be casual about how well they understand those at lower levels. When people are more equal, they are obligated to make a greater effort to understand each other. If no one is the undisputed boss anymore, and if all insist on having their views respected, it follows that people must understand each other. You don't really have a voice if those making the decisions aren't prepared to listen to you.⁶⁶

This approach to working in and with stakeholder communities is also consistent with and supported by justice-framed academic research in the learning sciences⁶⁷ and organizational change.⁶⁸

RECOMMENDATIONS ABOUT INCLUSIVE AND LOCALLY FOCUSED DECISION-MAKING:

- a. The ACE national strategy should establish a long-term dialogue capacity for climate-related decision-making at the community and regional levels. The ACE community recognizes that municipal governance is largely built around creating action plans, so space must be intentionally created in order to transcend transactional negotiations and allow sufficient time for people to develop mutual understanding and trust.
 - b. Designate a National Focal Point (NFP) for ACE, as required under the UNFCCC process, and require the NFP to establish and support ongoing cross-cutting and multi-sector dialogue processes with the ACE community itself (including educators, researchers, philanthropic organizations, communication practitioners, community groups, leaders of social movements, business, etc.).
 - c. The two previous recommendations reflect an urgent need to bring local knowledge and experience into decision-making. The ACE agenda recognizes that people experience the impacts of climate change, and also take action, where they live. Strategic decision-making, therefore, should combine effective coordination and relationship building.
 - d. Effective local programs should be identified, and their visions and methodologies should be championed, shared, and taken up in new locations. While the mitigation contributions of individual community-based programs might appear to be relatively small, they also transform people's and communities' relationships to the climate crisis. The NFP should develop assessment tools that capture and aggregate the collective achievements of local actions throughout the nation.
2. *Equity and Justice in ACE Decision-making and Climate Solutions* — Climate justice and climate solutions are one and the same thing. The ACE community recognizes that colonial thinking is a driving force in the climate crisis, and that unjust processes will necessarily lead to unjust outcomes.⁶⁹

Equity and inclusion can no longer be side conversations about climate solutions. The term “inclusion,” in fact, strikes many people as a euphemism for “assimilation.” This is neither the U.S. ACE community's intention, nor that of the UNFCCC. Instead, inclusion means shared power and structures that ensure equitable and meaningful involvement in all aspects of ACE work. The national strategy, therefore, should place equity and inclusion at the center of climate solutions and ensure a safe environment for BIPOC participation in discussions and decision-making.

RECOMMENDATIONS FOR EQUITY AND JUSTICE IN ACE DECISION-MAKING AND CLIMATE SOLUTIONS:

- a. The ACE national strategy should establish diversity requirements for decision-making boards and committees in civic governance, philanthropy, corporate affairs, and

- in developing and implementing the ACE national strategic plan.
- b. The public comment model should be shifted away from one that gathers opinions to one that requires the consent of BIPOC communities and Tribal Nations. The ACE community understands that this recommendation includes a call for the United States to honor treaties with Tribal Nations. Members of the ACE community agree that decisions about policies that would encourage fossil fuel extraction on public lands or investments in carbon capture and storage in order to prolong the use of fossil fuels, for example, should not be made without the consent of the low-income and BIPOC communities where people are already suffering the most severe health and ecological consequences of fossil fuel pollution and climate change.
 - c. The United States should ratify the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP).
 - d. Evaluation of policy performance should include non-colonial methodologies, such as the Most Significant Change⁷⁰ approach supported by USAID and the Mauri Model,⁷¹ in order to help ensure equity and inclusiveness in measurement outcomes.
 - e. In addition to assessing changes in public understanding and perceptions, the ACE NFP should incorporate metrics about natural ecosystems and human health: clean air, clean water, changes to the built environment, and changes to manufacturing practices.⁷²
 - f. The NFP and the ACE national strategy should encourage scientists, educators, businesses, governments, and others to proactively engage with BIPOC communities and provide resources to support locally prioritized grassroots efforts.
3. *Evidence-based, Collaborative Planning and Decision-making* — Too many ACE-related programs are designed within single professions or according to the perspectives of the designers and their organizations. A strategic approach to public empowerment requires a shift to evidence-based planning and decision-making. Fischhoff describes a crucial feature of evidence-based planning:

It is impossible to judge people fairly or to provide them with needed information without knowing what is on their minds when they formulate, resolve, implement, and revise climate-related choices.⁷³

Understanding audiences is crucial, yet institutional guidelines and capabilities often take precedence in outreach planning and funding. These errors can be overcome through in-depth interactions among people at the local level, combined with collaborative research to yield a more complete picture:

Climate science is needed to focus on choices that matter and get the facts right. Decision science is needed to identify the facts that should matter most when people evaluate their options. Social science is needed to describe people's perceptions of those critical facts, as well as their goals when making choices.⁷⁴

As Fischhoff notes, research to understand target audiences is crucial and requires more than one professional perspective. This means that decisions about design and investment in public outreach should be guided by processes that will create a deeper understanding of target audiences than is typically the case today.

Additionally, *Strategic Planning Framework* dialogue participants emphasize that the perspectives of professional researchers are not always sufficient. The ACE community points out the critical importance of local knowledge and different cultural and Indigenous ways of knowing. Local communities possess information that is needed in order to develop just and efficient resilience projects.⁷⁵ They also hold the relationships, rights, and interests that will determine whether mitigation strategies are both just and effective. Designing policies that people will embrace and implement requires genuinely inclusive collaboration and the consent of those who will be impacted by the decisions.

Clearly, evidence-based decision-making requires careful gathering of appropriate and actionable evidence. Some of the most effective intervention programs underway today were designed around assessments of who people trust for information about climate change, from whom they receive such information, how they interact with new information, what they already know and believe, and how they are influenced by other people whom they know.⁷⁶

RECOMMENDATIONS FOR EVIDENCE-BASED,⁷⁷ COLLABORATIVE DECISION-MAKING:

- a. The ACE national strategy should encourage the development and implementation of robust audience evaluation practices for government agencies, philanthropic institutions, and the range of ACE actors as a fundamental criterion for decision-making.
 - b. The national strategy should encourage the development and implementation of robust evaluation standards for ACE initiatives in order to measure their effectiveness so that adjustments can be made where necessary.
 - c. The national strategy should encourage the development and implementation of needs-based research so that results can be applied to ACE activities by funders and ACE actors more effectively and with greater confidence.
 - d. The NFP should make periodic assessments of the ACE national strategy and its implementation in order to report progress to the UNFCCC and the U.S. ACE community. Procedures should be established to update the national strategy as needed.
4. *Access to Sustained Financial Support* — Achieving ACE goals will require higher levels of sustained funding from a variety of sources for public education, communication, outreach, and empowerment. Funding decisions should be made according to a coordinated national strategy. This means that decisions should be evidence-based, as described above, that decision-making processes should be inclusive and just, and that decisions should be made according to the strategic merit of proposed initiatives.

A second guideline is that decision-making about ACE investments should shift

away from top-down approaches, which tend to focus on the largest potential reductions in greenhouse gas emissions as the only metric. Decision-making should lean toward people-related and community-scale projects that, in aggregate, will contribute significant emissions reductions while also engaging larger numbers of people in productive action. Redistributing ACE investments in this way should focus on equity, recognizing that the United States will be a BIPOC majority society in the coming decades. The recommendations, below, identify some specific ways to make funding decisions more inclusive and equitable.

A third guideline is to lean funding away from the production of products and toward the processes of connecting with audiences. Community-level engagement is inherently process oriented. The ACE community recommends that process-based metrics be employed to validate expenditures that are meant to increase the capacity of people and communities to create and implement solutions to the climate crisis.

RECOMMENDATIONS FOR ACCESS TO SUSTAINED FINANCIAL SUPPORT:

- a. The national strategy should encourage funding for ACE programs to be aligned with each program's implementation timeline rather than the funder's financial cycles. This will allow initiatives to more fully meet the objectives they are designed to achieve.
- b. The national strategy should encourage the creation of funding pathways for BIPOC and low-income communities to pursue locally guided climate actions. The ACE community also recognizes that BIPOC and low-income communities may also work at regional, state, and national levels.
- c. The national strategy should call upon funders to simplify grant application and administration processes. The ACE community reports that many community-based and BIPOC organizations are unfamiliar with the grant application process, often struggle to stay informed about funding opportunities, or lack the resources to compete equitably.
- d. The national strategy should encourage or require greater BIPOC representation on the boards and decision-making committees of funding organizations.
- e. The national strategy should increase funding to sustain the infrastructure of ACE organizations, such as community groups. At present, funding tends to focus on new, innovative pilot projects, but does not support the infrastructure—salaries, rent, benefits, administrative costs, etc.—that would allow experienced ACE actors to remain engaged in ACE-related work.
- f. The national strategy should increase and sustain funding for backbone coordination by multi-sector and multi-organization networks that support knowledge sharing and collaboration. At present, funding tends to support individual actors and organizations, but not the collaborative networks that are urgently needed.
- g. As noted in the previous section, the national strategy should support increased funding for target audience evaluation and in-depth interactions with local ACE

- actors in order to increase the efficacy of ACE activities.
- h. The national strategy should prioritize taking effective pilot projects to scale. At present, much more funding is available to test new concepts than to build successful concepts into full-scale programs. The nation will benefit from deploying proven ACE initiatives at significantly larger scales.
 - i. The United States should use the recovery from the COVID-19 pandemic to increase funding for ACE and integrate these principles and recommendations into government and philanthropic funding processes.

Recommendations Specific to Each ACE Element

1. *Education Recommendations* — “Education enables people to understand the causes and consequences of climate change, to make informed decisions and to take appropriate actions to address it.”⁷⁸

THE ACE NATIONAL STRATEGY SHOULD:

- a. Integrate the relevance of climate change and climate solutions into all fields of study in school- and university-based education, not only science, technology, education, and math (STEM) fields. The ACE community recognizes that there is a difference between education about climate change and education for climate action. Knowledge that is disassociated with building the capacity to make informed decisions and take action is incomplete and insufficient. Integrating climate relevance into all fields, including civics, is intended to support education for climate action.
- b. Increase funding and organizational support for interdisciplinary climate education.
- c. Build data literacy into K-12 education as a fundamental skill for informed decision-making.
- d. Incentivize school districts to appoint climate justice coordinators at the district level to help increase the capacity of educators and ensure that climate and climate justice curricula are implemented.⁷⁹ Coordinators should foster partnerships between K-12, higher, and informal education, and other organizations.
- e. Develop and deploy curricula that approach climate change and climate solutions from a climate justice perspective.
- f. Develop and deploy curricula that connect the local, regional, and global implications of climate change. There is strong evidence that local behaviors and impacts have the greatest salience to people.⁸⁰ The ACE community calls for an increased focus on place-based and intergenerational approaches to climate education.
- g. Develop and deploy curriculum about climate solutions. As one participant noted, “I’ve earned three advanced degrees and I don’t know what to do.”
- h. Develop and deploy curriculum to enhance systems thinking about climate change and other environmental issues.⁸¹
- i. Train educators to use socio-emotional learning practices to help students cope with

- the traumatic nature of climate change.
- j. Support the integration of Indigenous values, knowledge, and ways of knowing into climate change and environmental curriculum. Develop curriculum in collaboration with Tribal Nations.
 - k. Encourage investment in broadband access in low-income and rural communities and Tribal Nations, where online access is limited.
 - l. Support extending climate change education beyond the classroom through interactions with local ecosystems and by providing opportunities for students to become involved in climate solutions.
 - m. Empower educators—both teachers and educators in informal learning institutions (museums, aquariums, zoos, nature centers, and cultural centers)—to be key voices for advancing climate knowledge beyond the classroom. One goal of the ACE national strategy is to overcome the separation people experience between science and their lives outside the classroom.⁸²
 - n. Prioritize equitable access to educational opportunities. For example, the COVID-19 pandemic has revealed deep inequities in access to online learning.
 - o. Elevate BIPOC as leaders in formal and informal education settings. The national strategy should address the low representation of BIPOC in STEM fields.
 - p. Increase BIPOC representation in educational decision-making processes.
 - q. Prioritize investments in educational infrastructure in low-income communities in order to help people meet basic needs, such as food, childcare, transportation, etc., that otherwise inhibit learning.
 - r. Incentivize community-based learning institutions to become focal points for community engagement, learning, and dialogue.
 - s. Incentivize informal learning institutions to focus on education about solutions to the climate crisis and help people put learning into practice.
 - t. Deploy COVID-19 relief and recovery funds to ensure that informal learning institutions survive the economic crisis and remain viable in their communities.

THE ACE NATIONAL FOCAL POINT SHOULD:

- a. Survey teachers' understandings, perceptions, and ideological perspectives regarding climate change, climate justice, climate action, and the teaching of these. The survey should also identify obstacles that teachers face when teaching about climate change.
- b. Refine existing and develop new pre- and in-service programs to improve educator confidence and ensure widespread climate learning throughout formal education systems.
- c. Survey informal learning institutions about their capacity and level of comfort in giving people information about climate solutions. The national strategy should help informal institutions find ways to address visitor interest in climate solutions.
- d. Help the education community identify and address forms of oppression by using

interdisciplinary learning models in teaching about colonialism and Euro-centric worldviews.

2. *Training Recommendations* — “Training provides the core technical and soft skills as well as advanced knowledge needed to support the transition to green economies and sustainable, inclusive climate-neutral and resilient societies.”⁸³

THE ACE NATIONAL STRATEGY SHOULD:

- a. Focus on building the knowledge and skills needed to reduce greenhouse gas emissions and increase resilience in the next decade.
- b. Standardize accreditation criteria and climate skills outcomes for all workforce development programs.
- c. Require workforce training in climate-relevant skills, plus support for internships and technical education curriculum in government contracts for infrastructure development projects.
- d. Prioritize investment in emergency preparedness and response training nationwide.
- e. Support and amplify existing in-service training agendas, such as the C40 Mayors Agenda,⁸⁴ the American Society of Civil Engineers training agenda⁸⁵ and similar efforts.
- f. Align K-12 and technical and career education with skills for climate-related jobs and participation in civic decision-making.
- g. Prioritize training in cross-cultural and engagement skills.
- h. Prioritize gender, income, BIPOC, and other forms of equity in the development of workforce training initiatives, including the selection of trainers and recipients of training.
- i. Invest in and provide training for local community centers, which tend to bring people together and marshal their energy and commitments.
- j. Similarly, build long-term funding models for community organizations and environmental justice groups to provide workforce development and wrap-around services, such as soft skills job training, social services, job placement, and counseling.
- k. Ensure equitable access to climate-related internships by requiring that they pay a reasonable wage to cover the costs of housing, transportation, and childcare. Without such provisions, climate training will only be available to a wealthier, predominantly white workforce.
- l. Provide financial support to non-profit organizations in order to compensate interns appropriately.
- m. Develop and deploy workforce training to help people address the socio-emotional aspects of climate change.
- n. Incentivize the training of executives and educators to see all jobs through a climate lens. Such training should focus on resource efficiency (energy, water, food, mate-

- rials), resilience strategies, and soft skills such as management processes and social services. As one participant put it, “The bad news is that we have a lot of work to do. The good news is that there is plenty of work for everyone to do.”
- o. Develop and deploy training for policymakers, business executives, and philanthropic institutions for inclusive decision-making processes that are adapted to the characteristics of the communities they serve.
 - p. Encourage a reexamination of professional cultures and their reward systems in order to reduce the disconnect between the dispassionate presentation of technical information vs. caring about the future.⁸⁶

THE ACE NATIONAL FOCAL POINT SHOULD:

- a. Coordinate climate-relevant career pathways beginning at the grade levels where career identification begins.
 - b. Coordinate climate-relevant career pathways for mid-career professionals.
 - c. Develop metrics to track trends in the growth of green jobs and climate training across the economy.
 - d. Develop metrics to track the integration of climate action into non-green sector jobs.
 - e. Coordinate with labor unions to integrate climate-relevant skills into workforce development.
3. *Public Awareness Recommendations — “Successful public awareness campaigns engage communities and individuals in the common effort needed to foster climate-friendly behavior, sustainable lifestyles and implement national, regional, sectoral and international climate change policies.”⁸⁷*

THE ACE NATIONAL STRATEGY SHOULD:

- a. Increase funding for public communication about climate change, public health, and climate solutions.
- b. Include development of nationwide and regional strategic messaging campaigns to overcome persistent barriers such as a lack of efficacy and clarity, address critical gaps in knowledge, generate realistic hope about the paths forward, and help people see their own roles in these paths.⁸⁸
- c. Emphasize the need for additional trusted messengers—doctors, weathercasters, clergy, and others—to build confidence and counter disinformation campaigns.
- d. Include a robust strategic and coordinated capacity to counter ongoing and possibly intensified efforts to misinform the public about the risks and costs of climate solutions.
- e. Recognize that confidence in solutions is built through equitable decision-making processes and the attractiveness of the solutions themselves.
- f. Recognize that empowering people to equitably engage in solutions will be enormously aided by an increase in the ability to measure and publicize the immediate improvements in health and health savings that result from climate action.⁸⁹

THE ACE NATIONAL FOCAL POINT SHOULD:

- a. Establish and manage a long-term infrastructure to guide national-scale messaging priorities and develop simple and effective messages based on communication research.⁹⁰ The messaging infrastructure should include a range of ACE-relevant researchers and practitioners in order to guide deployment of effective messages.
 - b. Work with social science researchers to develop the metrics necessary to assess and track public understanding, values, perceptions, and attitudes about climate change over time.
 - c. Work with communication researchers and others in the ACE community to develop a coherent understanding of climate solutions.
 - d. Ensure that the public receives up-to-date and reliable information about climate risks and their causes, as well as information about the positive impacts of climate solutions.
 - e. Develop a publicly accessible dashboard of actions by the ACE community that includes factors such as the people reached, and actions people have taken as a result.
 - f. Seek additional dialogue with the ACE community to identify strategies to encourage climate-friendly lifestyles and behaviors and implement climate change policies.
4. *Public Access to Information Recommendations — “Public access to information strengthens connections between knowledge production, knowledge sharing and decision-making, and provides people with the tools they need to play an active role in addressing climate change.”⁹¹*

THE ACE NATIONAL STRATEGY SHOULD:

- a. Establish lasting protocols to ensure public access to information about climate research, solutions, and decision-making. Such protocols should enshrine public access to government-generated data and information and promote public access to information held by non-governmental organizations, businesses, and local communities.
- b. Establish protocols with Tribal Nations for respectful sharing and public access to information about climate research, solutions, and decision-making.
- c. Incentivize or require the sharing of climate-relevant knowledge in federal contracting and procurement policies.
- d. Incentivize the sharing of the data, models, and other information resources that are needed to empower concerted action across various professions and localities. The strategy should align with existing models, such as the Urban Climate Change Research Network, the Urban Sustainability Directors Network, the Association of Climate Change Officers, CoolCalifornia.org, UNESCO Climate Frontlines, and many others.
- e. Treat the internet as a public utility, develop policies to ensure equitable access, and reduce barriers to education and workforce training.

THE ACE NATIONAL FOCAL POINT SHOULD:

- a. Develop and manage protocols and platforms that encourage efficient knowledge sharing among diverse local communities and ACE practitioners in various professions.
5. *Public Participation Recommendations* — “Public participation ensures ownership by encouraging people to be more attentive to policy-making and participate in the implementation of climate policies.”⁹²

THE ACE NATIONAL STRATEGY SHOULD:

- a. Prioritize the training of policymakers, executives, and senior decision-makers in philanthropic institutions in processes that encourage inclusive public participation and are responsive to the social, economic, geographical, and gender characteristics of the communities they serve.
- b. Develop and deploy infrastructure to encourage and support ongoing trust-building community-level dialogues equivalent to the U.N. Talanoa Dialogue Platform. This includes establishing protocols for municipal decision-making that create space for public dialogue about climate action plans.
- c. Establish additional processes that promote and enable public participation in decision-making.
- d. Prioritize a shift away from an information-gathering model in decision-making to the implementation of a consent model in order to ensure that the concerns of marginalized peoples are genuinely addressed.
- e. Require that policymaking at all levels of government be informed by Indigenous Peoples’ input, practices, and ways of knowing so that their ways of life are protected.
- f. Prioritize a shift from net-zero approaches to greenhouse gas mitigation to zero-emissions approaches in order to avoid further degradation of natural ecosystems and human health. ACE community members note that a net-zero approach allows for the continuation of pollution that disproportionately harms the health of BIPOC and low-income communities.

THE ACE NATIONAL FOCAL POINT SHOULD:

- a. Work with national and state legislatures to build equitable public participation into climate-related legislation.
6. *Coordination and Collaboration Recommendations* — “These five elements can all be strengthened through international cooperation. Governments and organizations can support each other with resources, technical expertise, ideas and inspiration for developing climate action programmes.”⁹³

THE ACE NATIONAL STRATEGY SHOULD:

- a. Re-commit to the UNFCCC and the Paris Agreement with increasingly ambitious goals for rapid decarbonization of the economy and the protection of the nation's most vulnerable peoples and natural systems.
- b. Be integrated into the U.S. 2020 Nationally Determined Contribution to the UNFCCC process.
- c. Clearly articulate how the ACE agenda will accelerate a just transition to a low-carbon world.
- d. Designate the U.S. ACE National Focal Point and articulate its operational framework including a diverse staff and embrace of a distributed network model for diverse and collaborative leadership.
- e. Provide long-term authority to and financial support for NFP operations.
- f. Require every federal agency to develop a climate action plan that incorporates and operationalizes ACE strategies.
- g. While not mentioned in the dialogues, the national strategy should ensure that international cooperation aligns with a justice agenda.⁹⁴

THE ACE NATIONAL FOCAL POINT SHOULD:

- a. Establish protocols and infrastructure for periodic assessments of public knowledge, perceptions, and attitudes about climate change, as noted earlier. These assessments should be reported to the public and to the UNFCCC on a regular basis. At a minimum, reporting should be included in subsequent NDCs.
- b. Embrace and meet its obligations to collaborate at the international level, share knowledge, and bring international knowledge to the ACE community in the U.S.
- c. Work with Tribal Nations to build trust and set aside colonial thinking and practices in intergovernmental relationships.
- d. Create a government cross-agency dashboard to measure progress on ACE implementation plans.
- e. Foster cross-agency collaboration and knowledge sharing to improve ACE implementation.
- f. Use its national coordination capacity to reduce duplication of effort, promote a shared vision, share best practices, guide investments strategically, and identify and fill gaps in ACE activities.
- g. Promote climate solutions as a core activity for businesses, governments, and non-governmental organizations through regular meetings among senior leadership and governing boards.

VIII. The Path Forward

The ACE community calls upon the United States to insert the following language, or its equivalent, into the 2020 Nationally Determined Contribution:

The United States commits to nominate a National Focal Point for Action for Climate Empowerment (ACE) and establish a diverse ACE Task Team that will utilize the community-developed *An ACE National Strategic Planning Framework for the United States* to create an ACE national strategy for delivery at COP26 and follow through on its implementation.

This *Strategic Planning Framework* lays the foundation for this crucial work. Adding such language to the 2020 NDC will commit the nation to building upon the contributions of the ACE community through a fast-paced, inclusive, multi-sectoral, and participatory process that reflects our national circumstances and the priorities and wisdom of the nation's leaders in education and public empowerment, civic engagement, climate justice, and climate solutions. The ACE community recognizes that respectful relationships with Tribal Nations are critical to this process. Members of the ACE community are ready to assist and support the development and implementation of an ACE national strategic plan for the United States in 2021.

Time is of the essence. The urgency of this work is evident in the rapidly changing climate system, rising concentrations of greenhouse gases in the atmosphere, negative impacts on communities and public health, and the degradation and loss of natural ecosystems. National commitments to the UNFCCC treaty and its processes further demand that the United States act quickly, decisively, and skillfully in meeting the Action for Climate Empowerment mandates and recommendations.

UNESCO/UNFCCC Secretariat guidelines call upon national governments to establish, fund, and empower the NFP and an ACE Task Team typically comprising "five to ten investigators/consultants with broad knowledge across the six ACE elements who are able to invest significant time and energy to support and develop the National ACE Strategy."⁹⁵ Members of the Task Team must have deep and broad knowledge and experience in ACE disciplines and fields of practice. The guidelines and the ACE community call for the ACE Task Team to reflect gender and BIPOC diversity in addition to professional expertise.

UNESCO/UNFCCC Secretariat guidelines call for the Task Team to begin the strategic planning process with "a desktop review of existing ACE policies and initiatives and by conducting a stakeholder mapping exercise . . . leading to the creation of a background document synthesizing all of the findings."⁹⁶ While this *Strategic Planning Framework* does not provide the necessary policy survey, it makes significant contributions by engaging ACE stakeholders and

actors in the United States and providing the initial stakeholder map and background synthesis. We urge the NFP to expand on this work by organizing additional multi-sectoral Talanoa-style dialogues in order to flesh out these findings with additional insights from national and sub-national governments, BIPOC, rural communities, community groups, behavioral scientists, climate scientists, educators, media and communicators, health organizations, labor groups, publicly- and privately-held businesses, and others.

Moreover, the ACE community calls upon the United States to empower the NFP and its staff as a long-term, proactive, multi-faceted, and entrepreneurial enterprise that seeks expertise and input from diverse stakeholders frequently, assesses progress regularly, and guides the implementation of the national strategy through active engagement and support.

By delivering an ACE national strategy at COP26, the United States will become the first major emitting country to do so. But delivering the strategy is the beginning, not the end, of this all-important process. A national strategy that is co-developed with and by the diverse members of the ACE community will overcome a crucial obstacle in meeting the climate crisis. The national strategy will, at last, give coherence to the nation's diverse and inspiring efforts, and thereby empower the nation to make rapid and robust progress in solving the climate crisis.

Appendix A: How the Strategic Planning Framework Was Created

The *Strategic Planning Framework* developed out of decades of thinking and work by ACE community members across the United States and began to coalesce more formally through a series of meetings and workshops in the past few years. More recently, in a 2019 conference workshop, participants explored ways to advance implementation of UNFCCC Article 6—Action for Climate Empowerment—in the United States. Participants concluded the nation’s highly diverse community of ACE organizations, networks, and individuals should undertake the development of a strategic planning framework in order to accelerate and inform creation of the first U.S. ACE national strategy.

Members of the Climate Literacy and Energy Awareness Network (CLEAN), which is a very active community of educators who share resources and advocate for climate education, took the idea to their leadership board. The board agreed in December 2019 and advised that a successful strategy development process should be accomplished by a very broad and diverse coalition of actors.

CLEAN undertook a series of monthly ACE listening sessions in order to provide input to the process. Meanwhile, members of CLEAN and the Climate Education, Communication, and Outreach Stakeholder Community (ECOS) assembled an eleven-member coordinating team comprising experts from government, formal and informal education institutions, social movements, BIPOC, and the private sector. The team organized and facilitated a series of five online events: an orientation session with panels representing the diversity of the ACE community, plus four, three-hour long, multi-sector dialogues based on the U.N. Talanoa Dialogue Platform. The spirit of the Talanoa process is to create inclusive stakeholder-facilitated meetings in which all participants are considered peers regardless of position or influence. These sessions were conducted in August of 2020 and took place online due to the COVID-19 pandemic.

Each dialogue featured a back-casting approach developed by the Citizens’ Climate Engagement Network in its Engage4Climate toolkit.⁹⁷ The back-casting process saw participants describing what an empowered, informed, and active society would look like in 2040, and then recommend specific actions that are needed in order to achieve the result in ten-, five-, and two-year timeframes.

Dialogue facilitators and rapporteurs recorded the ACE community’s inputs. A small team of writers synthesized the notes and drafted the *Strategic Planning Framework* for community review. The review was conducted in three steps: (1) by the coordinating team, (2) by a select group of strategic reviewers who were invited for their expertise and leadership in various aspects of ACE, and (3) finally by the dialogue participants and the larger ACE community in the United States. *An ACE National Strategic Planning Framework for the United States* is the result of the ACE community’s collective work.

Participants, Shapers, and Contributors

Participation in this community-driven initiative was entirely voluntary. Nevertheless, 150 individuals from 120 different organizations and networks provided substantive contributions to the process through the dialogues and reviews. A voluntary survey of dialogue participants demonstrates the diversity that this pilot project achieved:

- Gender Diversity: 68% female, 30% male, 1% non-binary, 1% preferred not to say
- Ethnic Diversity: 68.5% white, 11.8% Hispanic or Latinx, 7.9% Asian American, 7.9% Black or African American, 3.1% American Indian or Alaska Native, 0.8% Native Hawaiian or Other Pacific Islander
- From predominantly BIPOC communities: 31.6% yes, 68.4% no
- From predominantly low-income communities: 35.9% yes, 64.1% no
- Age Diversity: 9.4% 18–24, 18.8% 25–34, 27.4% 35–44, 14.5% 45–54, 19.7% 55–64, 9.4% 65–74, 0.9% 75–84

Professional Affiliations of the Participants, Shapers, and Contributors

Alliance for Climate Education	Columbia University
America Adapts Media	Communitopia
American Society of Adaptation Professionals	Cooperative Institute for Research in Environmental Sciences, CU Boulder
AMS Education Program	Cornell Community and Regional Development Institute
Aquarium of the Pacific	Cornell Cooperative Extension, Sullivan County
Arizona State University	Cornell University
Blue Sky Funders Forum	Colorado University, Boulder
Bowman Change, Inc.	Cumberland River Compact
Braided Education Consulting	Ecology and Environment, Inc.
Capital District Regional Planning Commission	Eisele Architects
Carleton College	El Puente Latino Climate Action Network
Center for New Meaning	El Yunque National Forest (USFS)
Central Community College	Environmental Finance Center
Changemakers Books	Environmental Students Leadership Initiative
Chrysalis Management Services	Fenton
Citizens' Climate Lobby	Finger Lakes Institute, Hobart and William Smith Colleges
City of Orlando	Florida A&M University
City of San Luis Obispo	Florida Sea Grant
CIVICUS	Fond du Lac Tribal and Community College
Clark Atlanta University	Force of Nature
Climate Literacy and Energy Awareness Network	George Mason University
Climate Access	Global Youth Development Institute
Climate Central	Graduate School of Planning, University of Puerto Rico
Climate Generation: A Will Steger Legacy	Greater Portland Sustainability Education Network
Climate Resilience Solutions, LLC	Green Schools National Network, Inc.
Climate Voice	Green the Church
CollabraLink, NOAA CPO	HASKELL Indian Nations University
Colorado State University	

Hatch
 Hazon
 Historically Black Colleges and Universities Green Fund Inc.
 Indigenous Environmental Network
 Inside the Greenhouse
 Insight Civil
 Kinetic Communities Consulting
 Knology
 Livelihoods Knowledge Exchange Network
 Local Government Commission
 Mass Audubon
 Member of the Royal Architectural Institute of Canada
 Metropolitan Mayors Caucus
 MI EGLE
 Mississippi State University
 Montana State University
 National Aquarium
 National Network for Ocean and Climate Change Interpretation
 National Science Foundation, International
 National Wildlife Federation
 NEMAC+FernLeaf
 New England Aquarium
 New Hampshire Sea Grant Extension
 New Jersey Department of Environmental Protection
 New Mexico State University Cooperative Extension
 New York City Dept. of Education, Office of Sustainability
 New York City Dept. of Environmental Conservation Office of Climate Change
 New York City Mayor's Office
 New York State Energy Research and Development Authority
 NOAA Chesapeake Bay Office
 NOAA Climate Program Office
 NOAA Education
 NOAA Fisheries
 NOAA Office of Education Northern Gulf of Mexico Sentinel Site Cooperative
 NOAA NWS Caribbean Tsunami Warning Program
 North American Association for Environmental Education
 North Carolina Cooperative Extension
 Northwestern University
 Nuclear New York
 Ohio University & Desert Research Institute
 Oregon State University
 Paul Smith's College of the Adirondacks
 Portland State University
 Project Drawdown
 Puerto Rico Dept. of Natural Resources, Office for Coastal Management and Climate Change
 Puerto Rico Climate Change Council
 Puerto Rico Science, Technology and Research Trust
 Renewable Energy Alaska Project
 Sea Grant Puerto Rico
 Second Nature
 Sociedad Ambiente Marino
 Solstice Initiative, Inc.
 South Louisiana Wetlands Discovery Center
 Spokane Tribe of the Spokane Reservation
 Stanford University
 State of California Ten Strands
 Terra.do
 The Aspen Institute
 The Brookings Institution
 The CLEO Institute
 The Franklin Institute
 The Great Plains Institute
 The Harbinger Consulting Group
 The Mara Partners
 The Wild Center
 U-Hope Consulting, LLC
 United Nations Climate Education, Communication, and Outreach Stakeholders (ECOS)
 United Nations Framework Convention on Climate Change (UNFCCC)
 U.S. Department of State
 U.S. Partnership for Education for Sustainable Development
 UCAR Center for Science Education
 University of California, Berkeley
 University of California, Merced
 University of California, Irvine
 University of California Agriculture and Natural Resources
 University of California Cooperative Extension/California Naturalist
 University of Colorado, Boulder
 University of Florida, IFAS Extension
 University of Maryland Extension
 University of Massachusetts, Amherst
 University of Nebraska, Lincoln School of Natural Resources
 University of Puerto Rico, Río Piedras Campus
 University of Rhode Island
 University of San Diego
 University of Washington
 University of Wisconsin, Madison Extension
 Urban Intersect Consulting
 Washington, D.C. Department of Energy and Environment
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Appendix B: Timeline of ACE Work in the United States

The ACE community in the United States has advanced ACE goals on numerous fronts both within and outside of the federal government. This work has been driven by events, key publications, and the ongoing work of organizations.

ACE-Related Events and Publications	ACE Organizations and Initiatives in the U.S.
	1990 • Indigenous Environmental Network
• AAAS Science for All Americans report • First National People of Color Environmental Leadership Summit • Principles of Environmental Justice published	1991
• UNFCCC Treaty	1992
	1993 • U.S. Green Building Council
• 1st U.S. Climate Action Report to UNFCCC	1994
	1995
	1996
• 2nd U.S. Climate Action Report to UNFCCC	1997 • Strategic Energy Innovations
	1998
	1999 • NASA Earth Observatory website • Climate Change Education website
• 1st National Climate Assessment	2000
	2001
	2002
	2003
• Atlas of Science Literacy, vol. 1 • Climate science exhibition, National Academy of Sciences	2004 • NOAA Regional Integrated Sciences and Assessments program
	2005 • Real Climate website
• 1st California Climate Assessment • An Inconvenient Truth	2006 • Climate Generation: A Will Steger Legacy • Sustainable Brands • The Climate Reality Project
• Atlas of Science Literacy, vol. 2 • Climate science exhibition, Scripps Institution of Oceanography • The Case for Climate Literacy in the 21st Century report	2007 • Citizens' Climate Lobby • Federal Climate Education Interagency Working Group • George Mason University Center for Climate Change Communication • Yale Program on Climate Change Communication

ACE-Related Events and Publications

- Black Lives Matter at COP21
- COP21 Paris Agreement
- Global Citizen 2015 Earth day on the National Mall
- Toward Consensus on the Climate Communication Challenge report
- What We Know published by AAAS

- C40 Cities Benefits of Climate Action report
- ESIP Climate Literacy Collective Impact meeting
- Increasing Our Capacity to Address Climate Change through Collective Impact meeting
- UNFCCC Action for Climate Empowerment: Guidelines for Accelerating Solutions through Education, Training and Public Awareness
- UNFCCC Secretariat recognizes ECOS

- C40 Cities Benefits Research Programme Report on Enabling Inclusive Climate Action
- Climate Education and Opportunities for Collective Impact Summit
- Climate Literacy Cross-Sector Collaboration meetings
- NAAEE Guidelines for Excellence: Environmental Education Professional Development

- 4th U.S. National Climate Assessment
- 4th California Climate Assessment
- Accelerating Climate Action: A Workshop for Communication and Education Leaders
- Equitable and Just National Climate Platform forum
- Greta Thunberg global youth strike
- Sustaining City Climate Action Social Innovations through Education, Civic Engagement and Workforce Development meetings

- Accelerating America's Pledge report
- Raising Ambition: Understanding Your Role in the Paris Agreement
- U.S. Call to Action on Climate, Health, and Equity

- First National Tribal and Indigenous Climate Conference
- Leveraging Education and Public Engagement for Climate Action in the U.S. meeting
- UNFCCC: Integrating Action for Climate Empowerment into Nationally Determined Contributions

ACE Organizations and Initiatives in the U.S.

2015

- Local Communities and Indigenous Peoples Platform constituency of the UNFCCC
- Youth4Climate

2016

- Education, Communication, and Outreach Community of the UNFCCC
- The Solar Foundation Solar Training Network

2017

- Sunrise Movement
- We Are Still In
- Zero Hour

2018

- Fridays for Future

2019

- National Extension Climate Initiative

2020

- Talanoa dialogues for An ACE National Strategic Planning Framework for the United States

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