

Building on Shared Values to Engage with Mainers on Climate Change

Elizabeth Rogers, Anna Brown, and Keith Bisson

In a politically divided era in Maine, where progress to address climate change had stalled, Coastal Enterprises, Inc. (CEI), a Community Development Financial Institution (CDFI) and community development corporation, sought to create a pathway for action with a mission for expanding good jobs, advancing environmentally sustainable enterprises, and growing shared prosperity. In collaboration with the Maine Climate Table (MCT), a group of concerned organizations and individuals, and the opinion research firm Goodwin Simon Strategic Research (GSSR), CEI undertook a deep analysis of climate change perceptions in order to meet Mainers where they are on the challenges ahead.

The initial orientation of the work focused on developing effective ways to talk about climate change to galvanize greenhouse gas reductions. While the research did provide clear insights to this end, it also yielded important findings relevant to climate change adaptation. CEI and its MCT partners learned that the attitudes, knowledge, and reactions of various audiences can help identify opportunities for shared understanding of, and community engagement around, climate change action. Moreover, the research process helped build trust among stakeholders, clarified promising policy solutions in politically challenging circumstances, and influenced CEI's ongoing programmatic, policy advocacy, and community investment decisions.

Climate Change and Maine

The state of Maine has an historically moderate and independent approach to politics and a legacy of leadership in progressive environmental policy. Maine has the third longest coastline (3,478 miles) and is the most heavily forested state in the country. For people “from away”—a term used to describe visitors and people who were not born and raised in the state—Maine may seem like the end of the line. But with forests, rivers, and beaches within reach, access to the Atlantic Ocean and North American shipping channels, European flight paths overhead, trade connections across the Canadian border, and busy New England neighbors to the south, Maine can feel like the center of everything to those who call it home.

Maine's rural communities share commonalities with other regions of the U.S. where pride and resourcefulness power entrepreneurship at the same time local economies dependent on legacy industries are experiencing tough economic transitions. Adjusting to change is not a new phenomenon for hardworking Mainers, yet community resilience is strained. Since 2000, Maine has lost a net of 37,000 middle-class jobs, many in

paper, forest products, and textile manufacturing.¹ With just 1.3 million people, Maine also has the oldest population in an aging nation. By 2020, the median age in Maine is predicted to be 46. The Greater Portland metropolitan area is showing economic growth but, overall, the state's economy has lagged in recovering from the Great Recession.² Maine ranked 33 nationally in personal income per capita in 2016, according to the U.S. Census Bureau.³

In recent years, individuals that make a living from the land and sea are adjusting to a shifting environment. Maine is experiencing record heat in the summer, and ice-out—the thawing of ice on lakes and ponds—is happening earlier, affecting ice fishing.⁴ The Gulf of Maine surface temperatures are rising 99 percent faster than sea surface temperatures anywhere in the world.⁵ Local fishermen and University of Maine scientists agree that warming waters are causing changes in our oceans and rivers that are bad for populations of fish and shellfish. While overall lobster catches are high, lobster landings are moving north. Northern shrimp numbers are at an historic low, and the fishery has been closed since 2013 and will be closed until at least 2021.⁶

Mainers are facing other impacts of climate change, including an upswing in pests and invasive species that are affecting farming, forestry, and recreation. Lyme disease, once found only in southern New England, is now endemic even in the northernmost parts of Maine, along with other serious tick-borne ailments.⁷ Farmers are seeing changes to growing seasons along with severe storms that cause crop damage and are altering farming practices to account for temperature shifts. In the fall of 2017, Hurricanes Harvey, Irma, and Maria, and a powerful wind and rainstorm, left hundreds of thousands of homes without power, in some cases, for more than a week.⁸

1 Myall, J. "State of Working Main, 2017," Maine Center for Economic Policy (2017), available at <https://www.mecep.org/wp-content/uploads/2017/09/MECEP-State-of-Working-Maine-2017.pdf>.

2 Ibid.

3 Murphy, E.D. "Maine climbs 3 notches to No. 33 in median household income," *Portland Press Herald* (September 14, 2017), available at <https://www.pressherald.com/2017/09/14/maine-ranks-no-33-in-median-income/>.

4 Trotter, B. "Milder winters shaving weeks off ice fishing seasons in Maine," *Bangor Daily News* (April 4, 2018), available at <https://bangordailynews.com/2018/04/16/environment/milder-winters-shaving-weeks-off-ice-fishing-seasons-in-maine/>.

5 Pershing, A.J. et al. "Slow adaptation in the face of rapid warming leads to collapse of the Gulf of Maine cod fishery," *Science*, 350(6262) (2015), pp. 809–812, available at <http://science.sciencemag.org/content/350/6262/809>.

6 Sharp, B. "Regulators close Maine's shrimp fishery for next 3 years," *Associated Press* (November 17, 2018), available at <https://www.apnews.com/aef9835a7a404bd2a66f33176dc48d50>.

7 Robinson, S. "Lyme Disease in Maine: a Comparison of NEDSS Surveillance Data and Maine Health Data Organization Hospital Discharge data," *Online Journal of Public Health Informatics*, 5(3) (2014), p. 231, available at <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3959910/>.

8 Graham, G. "Power companies expect recovery from historic storm to take Days," *Portland Press Herald* (October 30, 2017), available at <https://www.pressherald.com/2017/10/30/more-than-74000-without-power-as-storm-roars-into-maine/>.

In 2016, CEI was one of three CDFIs highlighted at a White House climate change forum on economic resilience, innovative partnerships and low-income communities.⁹ Historically, climate change and environmental issues have not been priorities for most of the 1,135 federally certified CDFIs and Native CDFIs throughout the country. In recent years, CDFIs in areas affected by devastating storms, including Hurricane Katrina and Superstorm Sandy, have stepped up disaster preparedness and response efforts, particularly in relation to affordable housing and real estate development. CDFI practitioners work closely with communities and see up-front how climate-related shocks and less immediate stresses can disrupt both enterprises and people. They can play a role in supporting economic stability and community resilience.

Joining Forces as the Maine Climate Table

While CEI and others in Maine viewed climate change as a growing challenge, the political environment constrained action. In 2013, CEI and ten-plus organizations formed the MCT in an effort to address the ongoing and eventual impacts of climate on the economy. At the time, Mainers were in the first term of the administration of former Governor Paul LePage, who openly disputed the validity of climate science and ordered the removal of any reference to climate change from the website of Maine's Department of Environmental Protection.¹⁰ The governor made it clear that he would not support the expansion of renewable energy in Maine due to his view that it would be too expensive for Mainers struggling to heat their homes.¹¹ From 2010 to 2012, climate-related planning stalled;¹² in 2013, the governor vetoed legislation authorizing a study of climate change risks for Maine.¹³ Long a national leader in environmental protection and greenhouse gas reduction and a founding member of the Regional Greenhouse Gas Initiative (RGGI), Maine fell behind in promoting and adopting clean energy technologies. MCT members were determined to do something to get Maine back on course and started meeting regularly to determine how best to do that without legislative support. While every organization participating in MCT had a history of

9 Goldfuss, C. and Donovan, A. "Blog: Community Development Financial Institutions Finding Innovative Ways to Build Climate Resilience," The White House: President Barack Obama (May 26, 2016), available at <https://obamawhitehouse.archives.gov/blog/2016/05/26/community-development-financial-institutions-finding-innovative-ways-build-climate>.

10 Higgins, A.J. "Paul LePage Profile—Your Vote 2010," *The Maine Public Broadcasting Network* (2010), available at <https://web.archive.org/web/20101231194146/http://www.mpbn.net/News/YourVote2010/YourVote2010TheRaceforGovernor/PaulLePage.aspx>; Sharon, S. "Paul LePage Campaigns Against Climate Change Science but as Mayor He Supported It," *The Maine Public Broadcasting Network* (2010), available at <https://web.archive.org/web/20120902004131/http://www.mpbn.net/Home/tabid/36/ctl/ViewItem/mid/3478/ItemId/13751/Default.aspx>.

11 Marshall, C. "Maine and New England Stew Over Climate and Energy Projects. Climate Wire," *The New York Times* (November 1, 2010), available at <https://archive.nytimes.com/www.nytimes.com/cwire/2010/11/01/01climatewire-maine-and-new-england-stew-over-climate-and-10325.html>.

12 Woodard, C. "Is Maine ready for climate changes?" *Portland Press Herald* (March 16, 2013), available at https://www.centralmaine.com/2013/03/16/is-maine-ready-for-climate-changes_2013-03-17/.

13 Hoey, D. "LePage vetoes climate change study," *Portland Press Herald* (June 24, 2013), available at https://www.pressherald.com/2013/06/24/lepage-vetoes-climate-change-study_2013-06-25/.

protecting Maine’s natural resources, most had been working in silos, focused on conservation, economic development, or environmental advocacy. As a first step, MCT invited over 80 statewide leaders to participate in a series of facilitated meetings to identify the top climate priorities for Maine. Consensus emerged on what constituted the most critical areas for policy action: renewable energy, energy efficiency, marine and coastal resources, agriculture/food systems, and supporting financing mechanisms, such as bond funding.

MCT was founded by Cathy Lee, a Maine-based attorney who advises and provides legal and advisory services to international and U.S. clients on climate change policy, projects, and practices. Recognizing the need for a new approach to building consensus and support (and inspired by the 2012 turnaround in Mainer’s attitudes toward, and resulting victory for, marriage equality), Lee reached out to Oakland-based GSSR, a firm that helped reshape state marriage equality campaigns in Maine and Washington state. GSSR conducts research on emotionally complex, socially controversial issues. With a goal of enabling attitudinal change, GSSR attempts to understand underlying perceptions and emotional reactions that impact behavior and decision making. The complexity of climate science made it hard for organizations to speak with one voice and connect with audiences beyond their base. The highly charged political environment further aggravated bipartisan working relationships. MCT brought GSSR on board to help identify and analyze how Mainers from different regions of the state, life experiences, and political and social backgrounds thought and talked about issues related to climate change. Beginning in 2015, MCT members pooled resources and commissioned GSSR to conduct a series of focus groups to explore attitudes towards climate change generally, as well as reactions to draft policy proposals for the five issue areas chosen by climate supporters.

What members learned from the GSSR research was that the gap between passion and getting to collective action stemmed, in part, from communications challenges. The research findings helped clarify shared values and economic realities as a context for communicating with Mainers about their everyday lives. It highlighted the fact that Mainers’ immediate and long-term economic concerns outweigh uncertainties caused by the warming climate. For them, proposed solutions and the messengers delivering them can seem elitist and out-of-touch. These findings echoed the response to the 2016 presidential campaigns, particularly how they played out in rural regions of the country.

Helping Farmers, Fishermen, and Food Businesses Adapt

Maine’s coastal and marine resources are deeply connected to the state’s economy and character. Many Mainers are familiar with, and can share personal stories about, climate change impacts they’ve experienced. In fact, changes—both man-made and environmental—have been occurring for decades. Historically, fishermen have fished a variety of species, so they were not dependent on one species for their livelihood. With the wintertime shrimp fishery closed, a limited wild scallop fishery and ground fishing closed to all but the largest operations due to the cost of federal permits and limited stock, the only income many fish-

ermen have today is from lobstering, an industry notorious for price fluctuations, unpredictable costs, and license restrictions.

Since 2010, recognizing ongoing economic challenges, CEI has worked with fishermen to diversify their income streams through ocean-based farming. In 2012, CEI, Maine Sea Grant, and the Maine Aquaculture Association launched a free class, *Aquaculture in Shared Waters*, to train commercial fishermen for successful careers in shellfish and seaweed aquaculture. With support from various federal funding sources, the program combines classroom training with hands-on workshops and field trips. Lessons cover the mindset shift from wild catch fishing as a hunter/gatherer to sea farmer, and the production of high-demand, native species that have a proven track record of thriving in a Maine coastal aquaculture environment. Program participants are also introduced to scallop farming, a nascent opportunity that CEI has researched extensively, leveraging Japanese technology and custom-built machinery to grow and harvest scallops in Maine waters.

Uncertainties about the short- and long-term changes and impacts, and the complexity of explaining factors such as ocean acidification, make it important to build on climate change knowledge based on people's lived experiences. However, as the GSSR research demonstrated, even when they can identify everyday examples, it is clear that the majority of Mainers do not understand the mechanisms of climate change that are leading to the impacts that they see. It is imperative to use a combination of credible messengers, including fishermen and scientists, who can connect the dots between environmental science and lived experience. In Maine, credible messengers include scientists from the University of Maine, an institution that Mainers hold with great pride.

Maine's farms have a long history as producers of iconic crops, including potatoes, blueberries, dairy products and maple syrup. While more young farmers are moving to Maine than any state in the country,¹⁴ there is no shortage of farms that are in survival mode. Farmers, who tend to have low incomes, struggle to expand production, access processing, manufacturing facilities and markets. Smaller family farms may be more vulnerable to climate factors affecting the profitability of farming.¹⁵ The GSSR research process highlighted that while the public values Maine-grown agriculture products and supports helping farmers adapt to climate change, more information is needed about crop diversification, healthy soils practices, and sustainable farming methods.

14 Hoey, D. "Maine's farm count defies national trend," *Portland Press Herald* (February 20, 2014), available at https://www.pressherald.com/2014/02/20/number_of_maine_farms_rises_slightly; Curtis, A. "USDA farming census: Maine has more young farmers, more land in farms," *Bangor Daily News* (February 23, 2014), available at <https://bangordailynews.com/2014/02/23/business/usda-farming-census-maine-has-more-young-farmers-more-land-in-farms/>.

15 Jacobson, G.L. et al. (eds.). *Maine's Climate Future: An Initial Assessment*, University of Maine (2009), available at <http://www.climatechange.umaine.edu/mainesclimatefuture/>.

Pathways to Community Resilience: Energy Efficiency and Renewable Energy

Energy efficiency and renewable energy earn strong support across partisan lines, especially when opportunities were described in ways that reflect traditional Maine values of responsibility, resourcefulness, independence, and common sense. In addition, highlighting collective impacts of both the problems and the solutions helped to counter a belief that strategies are likely to be elitist and costly—benefiting only those that can afford to weatherize their homes or put solar panels on their roofs. Solutions that engaged communities, such as community solar farms and community weatherization projects evoke Mainers’ nostalgia for the past and hope for the future. These findings offer lessons for how to frame solutions—and pay for them. Further, the research confirmed that Mainers are particularly detail-oriented and want to know the nuts and bolts of benefits and costs.

Renewable energy and energy efficiency go hand in hand, especially since efficiency gains can support the cost effectiveness of renewable investments. Distributed renewable energy access that is designed to limit the cascading failures that can arise when centralized power gets knocked out can be an important way to build resilience to climate change impacts. Pride in the natural environment or concerns about climate change can take a back seat to economics in some small rural communities.¹⁶ In practice, CEI is seeing growing support for community solar projects, which tend to be visible within a community, and represent shared community values in terms of “doing the right thing,” saving money, and creating good jobs and energy independence. Community-based solar projects make up one of the fastest growing sectors of CEI’s loan portfolio, with recent investments in solar arrays powering water treatment facilities in Waterville and Farmington.

Economic Development and Financing Change

Many Mainers are struggling financially and working hard to make ends meet. Research findings underscored that while people in Maine are generous by nature when it comes to helping each other, they feel like they do not have a lot left over to give back. Policies and programs that are perceived as costly create a lot of pushback. When actions are justified solely in order to address climate change, they can be seen as elitist. Many Mainers want to live a greener life, but the costs of entry can seem out of reach. Messaging that fails to acknowledge economic and political anxiety, job loss, and loss of community will make solutions seem disconnected for many audiences and provoke negative responses. In order to engage Mainers on climate change mitigation and adaptation strategies, it is important to remember that creating good jobs, dealing with drug addiction, and lowering taxes are the top three issues Mainers say that state officials should address.

Creating a dedicated funding source for climate actions is more likely to gain traction

16 Curtis, A. “Why Maine towns and cities are investing in solar projects,” *Bangor Daily News* (July 7, 2018), available at <https://bangordailynews.com/2018/07/28/homestead/why-maine-towns-and-cities-are-investing-in-solarprojects/>.

if it is presented as needed to help create jobs, names specific programs and projects that benefit local communities across the state, and pays for itself. The details are important. Low-interest loans for individuals and businesses, including farmers, are viewed very positively in contrast to government grants, which are more likely to get push-back because they are seen as giveaways.

In addition to helping found and lead the MCT in its capacity as a steering committee member, CEI led the communications research process with GSSR for MCT. These efforts, and the partnerships developed among MCT member organizations are now informing CEI's communications strategy, financing activity, project implementation, and policy priorities. As a direct outcome, CEI partnered with the Maine chapter of The Nature Conservancy to build a pipeline of community solar projects and conduct a landscape analysis of financing opportunities to support communities and municipalities in expanding clean energy, including decentralized renewable power. It is working with Maine Farmland Trust and a MCT working group to explore soil health and other policies that can help farmers make the changes they need to adapt to new weather and growing patterns. As part of these efforts to engage a full spectrum of stakeholders, CEI joined the Natural Resources Council of Maine and 18 other partners in issuing five principles to advance an Energy Pathway for Maine.

“As Goes Maine, So Goes the Nation”

Maine has long prided itself on principles of resourcefulness and innovation. Mainers value the natural resources that support many livelihoods and cultural practices. While Mainers are known for their independence, they are also known for being good neighbors and good citizens, taking responsibility to protect their environment—even as they believe that they are not the cause of its degradation. Nationally, rural communities and post-industrial towns have been hit hard by factors mostly out of their control. A sustainable U.S. economy depends on innovation that prioritizes low-income, economically depressed, rural regions, helping to shift the narrative on the role that green enterprise can play in making the economy work for all.

From a commitment to collective action through the MCT, and the investment in social science research that has provided valuable insight into the hearts and minds of fellow Mainers, CEI is actively seeking ways to work with others to advance climate change action. The conditions for innovation in how to approach climate change mitigation and adaptation are ripe given a growing dynamism in the clean energy marketplace and shifts in state leadership as a result of the 2018 midterm elections.¹⁷

In addition to financing, CEI provides business advice, technical assistance, and training opportunities to help entrepreneurs and enterprises thrive, helping to create economic

¹⁷ Orvis, R. “America’s Renewable Electricity Forecast Grows To 2050, Even Under Trump,” *Forbes* (May 10, 2017), available at <https://www.forbes.com/sites/energyinnovation/2017/05/10/americas-renewable-electricity-forecast-grows-to-2050-even-under-trump/#7fa436ed16e4>.

resilience in a rural state. Cultivating the adaptive capacity to respond to changing conditions, including economic shocks and stresses, is central to adaptation. As CEI increases its knowledge and understanding of the economic and environmental implications of climate change, the organization is poised to better assist entrepreneurs in preparing for different climate conditions in their future. In addition to its 41-year focus on Maine's rural economy, CEI is already leading adaptation strategies for the fishing and aquaculture industries, providing technical assistance and loans to farmers and food businesses to address systems challenges. CEI is investing in companies like Pika Energy and Ocean Renewable Power Company, that are researching and designing independent energy systems, and financing redundant community solar energy systems in rural communities.

The GSSR research focused MCT members on climate change impacts that Mainers are experiencing in their everyday lives, common shared values and solutions that are perceived as creating community benefits. Throughout the research process, MCT member organizations across multiple sectors built a new level of trust and a common approach to communicating about climate change. This is already supporting collective efforts to develop legislation and engage target audiences. In the six years since the launch of MCT, recognition of climate change impacts has increased, as has the ability to talk about them and about solutions. As the research demonstrates, advocates and practitioners need to know their audience and understand the role of communications in making a compelling case for investment at the scale required to address climate adaptation and mitigation challenges.

Elizabeth Rogers is chief communications officer and Keith Bisson is president of Coastal Enterprises, Inc., and Anna Brown is North America climate adaptation director at The Nature Conservancy.