

KEY INSIGHTS ON BUSINESS, STATE, AND CITY COLLABORATION FOR CLIMATE RESILIENCE



C2ES held a Solutions Forum workshop focusing on opportunities for collaboration on climate resilience in November 2015 in Detroit, Michigan. More than 40 business leaders, state and city officials, non-profit organizations, and other experts shared their experiences addressing climate change impacts and enhancing resilience. Discussion focused on the role each stakeholder group can play in planning for climate change. This paper summarizes the key insights of the meeting and areas of focus moving forward.

For more information about the C2ES Solutions Forum, see: <http://www.c2es.org/initiatives/solutions-forum>

KEY INSIGHTS

COLLABORATION IS ESSENTIAL

Businesses, states, and cities across the country are planning for the impacts of climate change and extreme weather, and collaboration has the potential to reduce costs and make all parties more resilient. Collaboration on a single project, like a vulnerability assessment, is a good start, but participants emphasized that partnership needs to reach beyond any one event, meeting, or project, and should be ongoing. A culture of resilience and ability to adjust as better information is developed must be developed and encouraged. Some communities see the value of this cooperation after a devastating event, but business, state, and city leaders should work to create a culture of cooperation around climate resilience before disaster strikes.

COORDINATION ON DATA AND SCENARIOS CAN HELP OVERCOME CHALLENGES

Most workshop participants had completed an individual assessment of the potential near- and/or long-term impacts of climate change on their region or business operation. However, participants noted that stakeholder groups often use different data, assumptions about tim-

ing, and impact scenarios, which can pose challenges for coordinated planning. Federal and state agencies have many climate data resources available, including the Climate Resilience Toolkit, that can help with vulnerability assessments and climate scenario planning. Local data and climate forecasts for a specific region are critical but difficult to obtain or downscale from global climate models. Large companies (e.g., technology, manufacturing, agriculture) and local businesses (e.g., utilities, hospitals) often have useful information, such as data about weather, electricity outages during storms, or heat-related illnesses, that can be shared with communities. While individual stakeholders may struggle with how to translate data and scenarios into action, working together with other groups can allow for data to be shared and these topics to be explored in more detail.

UNDERSTANDING OF COMMUNITY PRIORITIES AND NEEDS IS ESSENTIAL

In addition to examining local-level climate risks, stakeholders discussed the importance of understanding community needs and priorities when deciding on potential solutions. Participants noted that cities, states, non-profit groups, and other local organizations are typically relied on to understand communities' priorities, challenges,

and needs. Business participants also suggested that their workforce and customers are often residents in the surrounding communities and so businesses could be used as a conduit for better understanding local issues. In addition, businesses can communicate climate change risk and resilience information within their workforce. Business participants acknowledged, however, that while this is a communications opportunity, it is not always used.

PARTNERSHIPS CAN HELP LEVERAGE CAPABILITIES

Workshop participants outlined numerous opportunities for partnerships on resilience. Many governments and businesses highlighted the role that academic institutions play in sharing and understanding climate data, evaluating specific risks, and analyzing resilience. Community organizations, cities, states, and businesses have leveraged academic institutions' resources to conduct climate vulnerability assessments, explore the costs and benefits of resilience solutions, and get subject matter expertise.

Large businesses can play an important role in aiding community resilience—providing services and resources (e.g., communication, technical support and expertise, disaster response), as well as data and tools to cities and states. Utility companies have developed communication systems to coordinate with customers during storms and provide updates on outages, response times, and damage to structures. Cities and states can develop agreements with companies in the region to provide services and support during extreme events. These types of agreements have been used in Japan, where companies provide emergency shelters, communication and data centers, health services, and other resources during disasters.

RESILIENCE OPTIONS CAN PROVIDE CO-BENEFITS

Highlighting the co-benefits of resilience solutions can help make the case for investment and implementation. While the goal of resilience solutions is to reduce potential risks and enhance the ability of a community to withstand changes to the climate and extreme weather events, participants emphasized that these solutions can have other benefits. For example, green infrastructure used for stormwater management can increase property values, improve water quality, and improve neighborhoods. Programs aimed at improving resilience also

often involve infrastructure projects that provide jobs and other economic benefits to communities.

Similarly, solutions aimed at reducing greenhouse gas emissions can also help a community be more resilient. For example, energy efficiency improvements can help residents, especially low-income populations, better deal with and be more resilient to extreme temperatures. Reducing energy demand can help reduce electricity loads, which can help a system better withstand extreme heat, cold or storms. Distributed generation, like microgrids or renewables, are other opportunities to improve efficiency of electricity generation and also improve resilience to extreme weather events. Many participants stressed that improvements to electricity generation systems made in response to the Clean Power Plan and other regulations should include options that improve resilience.

ADDITIONAL ISSUES RAISED IN THE WORKSHOP

Discussion repeatedly turned to similar challenges that businesses, states, and cities face in assessing climate risks and enhancing resilience at the local level.

RESILIENCE FINANCING

Participants agreed one of the biggest challenges in resilience planning, particularly for extremely budget-limited cities and states, is securing financing. The finance sector is stepping up its engagement in resilience. Financial institutions are examining how to integrate climate risks into investment decisions and how to market opportunities for resilience.

Still, many participants were unclear on what types of financing options are available, where to go for money, and what is necessary to secure funding for resilience. Can green bonds, tax incentives, or other financial mechanisms be used by cities and states for funding resilience activities? Many stakeholders need better information on how to make the case for investing in resilience. Businesses, states, and cities all need to be able to adequately describe what will be the return on investment. Top-level managers, regulators, city councils, and other decision-makers need to hear what will be the tangible benefits of resilience actions in the near-term and long-term.

ENGAGING SMALL BUSINESSES

Various participants representing cities and community organizations highlighted the challenge of engaging small businesses in the climate resilience discussion. Small businesses often contribute significantly to the local economy but lack the resources to respond to climate risks. Because many large businesses use smaller businesses as suppliers and have established communication channels, localities can leverage business-to-business relationships to coordinate local resilience efforts. States and cities can also design fee and tax structures to be more conducive to resilience planning. For example, participants heard that the City of San Francisco provided a subsidized loan program to retrofit buildings. These types of incentives can engage businesses of all sizes in resilience and disaster planning.

THE ROLE OF EACH STAKEHOLDER GROUP

While it is clear that businesses, states, and cities each have valuable information, services, and resources to contribute to enhancing community resilience, it is less clear what each group's role should be in the planning process. How can each group's capabilities be best leveraged to allow for collaboration on climate resilience? What is the best role for state governments in resilience planning?

Participants also highlighted the need for ongoing collaboration rather than single meetings or projects.

Questions remain on what potential methods would be most successful for bringing together various stakeholders to address long-term planning. For instance, should a non-profit or community organization be responsible for bringing the various stakeholders together when local leadership does not have resources?

C2ES will continue to work with stakeholders to explore these insights and questions. We will develop ideas with stakeholders and reconvene with the goal of helping businesses, states, and cities develop plans for moving forward in collaborating on climate resilience.

Other C2ES Resources:

Collaboration for Climate Resilience in Detroit, November 2015.

Weathering the Next Storm: A Closer Look at Business Resilience, September 2015.

Weathering the Storm: Building Business Resilience to Climate Change, July 2013.



The Center for Climate and Energy Solutions (C2ES) is an independent, nonprofit, nonpartisan organization promoting strong policy and action to address our climate and energy challenges. The C2ES Solutions Forum brings together businesses, states, and cities to expand clean energy, reduce greenhouse gas emissions, and strengthen resilience to climate change.