Convening the Conversation about Sustainability & Resilience: five introductory references

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This briefing paper cites five references (downloadable at no cost) that describe community-based initiatives to address climate and energy sustainability and resilience, emphasizing the first step of "how to convene a conversation."

Reference **01** Abt Associates / Kresge (2016) summarizes 17 case studies and a digest of over 40 "thought leader" interviews. Highlight "NOTES" are listed in this working paper that offer tips on engaging a community discussion. Reference **02** Orton Family Foundation (2015) is a "grass-roots" approach to community dialogues with resources that guide low-key and volunteer initiatives. Reference **03** Post-Carbon Institute (2015) describes generalized principles of community engagement addressing energy, sustainability, and climate vulnerabilities. Reference **04** Rocky Mountain Land Use Institute (2016) is an on-going project to provide zoning code guidelines for codes and ordinances related to renewable energy and security. Reference **05** Sustainable Jersey website provides information about community initiatives and actions, supported by Sustainable Jersey's Certification program.

[01] Abt Associates / Kresge (2016) Climate Adaptation: The State of Practice in US. Communities Nov. 2016 (260 pp.)

NOTES FROM *Climate Adaptation: The State of Practice in US. Communities* 1- HOW TO ENGAGE A COMMUNITY DISCUSSION

- 2- MESSAGING
- **3- FACTORS THAT CREATE CONTEXT FOR COMMUNITY ENGAGEMENT**
- **4- EFFECTIVE ACTIONS**
- **5- BARRIERS**
- [02] Orton Family Foundation (2015) Community Heart&Soul Guide 2nd Edition.
- [03] Post-Carbon Institute (2015) Six Foundations for Building Community Resilience
- [04] Rocky Mountain Land Use Institute (2016) Sustainable Community Development Code A code for the 21st century
- [05] Sustainable Jersey (2017) Sustainability Institute, College of New Jersey

These references are representative of resources available on topics of energy, sustainability, resilience, and climate action. See <u>www.theOARSlist.com</u> for an updated index.



[<mark>01</mark>]

Abt Associates / Kresge (2016) Climate Adaptation: The State of Practice in US. Communities Nov. 2016 (260 pp.) Cambridge: Abt Associates URL: kresge.org/sites/default/files/library/climate-adaptation.

Case studies, practices, lessons learned, mechanisms for coordinating adaptation action plans.

Community-Based Champions of Adaptation Action and Adaptation Professionals Should Use Vulnerability Reduction as a Key Baseline to Assess and Facilitate Progress in Adaptation (p. 45)

Activity Streams (p. 242) 1 Understand Community-Based Adaptation State-of-the Practice 2 Develop an Analytical Framework 3 Obtain External Expert Guidance 4 Conduct Case Studies 5 Compare Case Studies 6 Share Project Findings

NOTES FROM *Climate Adaptation: The State of Practice in US. Communities* Nov. 2016 (based on interviews with national thought leaders)



SOURCE: Appendix E: Summary of Insights from Thought-Leader Interviews (pp. 251-254)

1- HOW TO ENGAGE A COMMUNITY DISCUSSION

Several of the interview questions focused on issues surrounding community engagement, including whom to engage, how to engage them, and what messages to use. Below, we outline some of the key community engagement themes that emerged.

Whom to Engage Interviewees focused on two dominant messages about whom to engage: that the messenger matters, and that the engagement process should target the community's needs. Information about climate change adaptation needs to come from a trusted source. Several thought leaders said that community engagement should be broad and inclusive, engaging all interested community members and stakeholder groups early on and throughout the adaptation process. Others felt it was more important to focus on engaging key constituencies, such as government agencies or key community groups.

Leading with a "climate change" message is not necessary. You can often address the issue of climate change adaptation from a starting point that the community feels is more relevant. **Work incrementally.** In some communities, it makes sense to start small and gain support along the way.

Community engagement is complex. Community engagement can be more complex and time consuming than communities realize. Communities should be sure to have an effective communications strategy in place.

Take advantage of opportunities. Promoting an adaptation action immediately after a severe

event is an example of taking advantage of a community engagement opportunity. **Take a whole-community approach.** Adaptation should be not be considered in a vacuum. Develop a comprehensive approach that addresses current issues in addition to climate change.

Peer action. Seeing what other communities are doing, with good results, can be an important motivator to start or continue the adaptation process.

Prepare advanced messaging. Communities need to have their messaging prepared in advance of extreme events. There is a narrow window to act following an event.

Understand "where the community is" and meet them there. This may mean focusing on an issue seemingly distant from climate adaptation—such as building a robust economy or preserving local environmental resources—and then shifting toward adaptation and vulnerability reduction.

2- MESSAGING

Thought leaders emphasized that the message is important: *make climate change adaptation relevant at the community level*. Appeal to what matters to people and what affects them every day. If the community believes that climate change impacts will occur 50 or 100 years from now, it will be difficult to move the adaptation process forward.

• Use positive messages. A message about climate change vulnerabilities may not effectively motivate adaptation.

• **Emphasize economic resilience.** Framing adaptation in terms of avoided financial costs in the future, or conducting a cost-benefit analysis can be an effective communication tool.

• Understand what information is currently being used. Information and data can be tailored to meet the needs of local engineers or managers. Local planners and engineers are already using climate data to make decisions.

• Use existing information. Sometimes adaptation professionals complain that communities do not have sufficient climate data. In reality, sufficient data exist, but we need to do a better job targeting climate information to community information needs.

• Improve knowledge of available resources. Some interviewees said that existing tools and resources are sufficient, but communities need to know where to look.

• Focus on strategies that have multiple benefits. Communities are more likely to support strategies that produce multiple community benefits.

Miscellaneous

Other key thoughts and feedback we heard from the interviewees included:

• Communities may not actually use the tools developed by governments and academics.

• Citizens tend not to read reports and may be more responsive to other media for communication.

3- FACTORS THAT CREATE CONTEXT FOR COMMUNITY ENGAGEMENT

that prompted communities to begin an adaptation process or reduce their vulnerabilities, in order of frequency of mention:

Extreme events. Recent large events or recurring events were the most frequently cited motivating factor for communities to begin adaptation.

Strong leadership. Leadership from a champion, such as an elected official, an agency staff member, or other actively engaged community member, can be critical to raising awareness and motivating a community towards adaptation planning and action.

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Peer action. Seeing what other communities are doing can help start the adaptation process. It can also build healthy competition among communities to be a leader in climate adaptation.
Insurance. Communities may undertake adaptation activities to regain insurance for homes and businesses after an extreme event or to benefit from a more favorable insurance rate.
Regulatory drivers. Government requirements, mandates, or enforcement actions can help raise awareness about climate change and motivate communities to adapt.
Funding. Communities may begin the adaptation process because funding is available from local, state, or federal governments; foundations; or nonprofit organizations.
Mitigation or sustainability efforts. A number of thought leaders indicated that there is a shift in focus from greenhouse gas mitigation to adaptation. In addition, some said that sustainability and mitigation plans are increasingly incorporating adaptation and climate risks.

4- EFFECTIVE ACTIONS

How communities identify, select, and implement adaptation actions to reduce climate vulnerability:

Use existing processes, regulations, and mechanisms to implement adaptation actions.

Communities can integrate adaptation actions into existing processes, regulations, and mechanisms. For instance, hazard plans can include elements of climate adaptation by planning for future events and hazards.

Focus on actions that have multiple benefits. Communities are more willing to undertake actions that have multiple benefits. For example, emergency or hazard mitigation planning can include planning for a wide range of hazards over a specific time horizon.

Small actions. Engage community members "where they are" on the issues that matter to them and in a way that resonates with their priorities. For example, communities could be engaged on a small action that reduces impacts they are currently experiencing, such as a small action to develop an erosion control project.

Tools. Tools can help communities move beyond planning.

Engage dedicated technical staff. Dedicated technical staff can help to usher adaptation through to its completion.

Allow for a necessary time lag between planning and implementation. Communities do not go straight from planning to implementation; there is a time lag. They may need to wait for an update to another plan, for example.

Lack of action. Several thought leaders indicated that few examples of adaptation action exist in the United States.

5- BARRIERS

Barriers that communities face in reducing their vulnerabilities and how communities have overcome these barriers on the path to adaptation, in order of frequency of mention:

Lack of funding. Many interviewees said that communities lack the funding to develop adaptation plans or implement adaptation actions. In particular, high price tags for adaptation or adaptation planning can scare people away, especially when the community has limited funds for meeting many important community purposes.

Lack of knowledge and information. Uncertainty, including lack of general and localized climate data and uncertainty about climate projections or climate impacts, can inhibit communities or community leaders from taking action.

Politics or the political environment. These can be a barrier to adaptation. For example, a

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short election cycle can limit the political will to tackle long-term adaptation issues. The idea of climate change can itself be a hot-button issue that detracts from the goal of reducing vulnerability.

Lack of resources, staff, and capacity. In some cases, communities may not have staff with the necessary knowledge to conduct vulnerability assessments, to develop adaptation plans, or implement adaptation plans. Lack of other resources can also pose problems.

- Lack of authority. Governments must have sufficient authority to implement adaptations. Coordinating multiple communities without such authority can be a challenge.
- **Legal barriers.** Adaptation policies must be in compliance with federal and state law and regulations.
- More pressing day-to-day needs. Communities have short-term priorities that often take precedence over adaptation.
- Lost property tax revenue. Limiting development, such as along valuable coastal areas, can result in lost property tax revenue.
- Unrealistic optimism, amnesia about past events, or denial. In some cases, communities feel a sense of optimism that they will face few challenges from climate change. In other cases, communities may feel that they will not experience extreme events again.
- **Sentimentality.** Communities may resist change because they feel they might lose their history or unique characteristics.
- Lack of understanding of adaptation options. Many communities do not know what the adaptation options are; they need help understanding the options and selecting the right one.
- **Organizational, cultural, or institutional inertia.** One of the challenges for adaptation, in particular, is for government entities to work across agencies. Some communities lack a history of collaboration among departments or agencies.
- **Misunderstanding of data.** Many communities feel they need site-specific data to make decisions or move forward. However, climate models are not yet sophisticated enough to provide the information communities *think* they need.
- **Fear.** If not communicated properly, adaptation can lead to perceptions that things are being "taken away" from individuals or the community.
- Lack of urgency. Climate change might feel like a problem that is far in the future. This can make adaptation planning and implementation a low priority in some communities.



[<mark>02]</mark>

Orton Family Foundation (2015).

Community Heart&Soul Guide by What Matters Most 2nd Edition. Shelburne VT: Orton Family Foundation (70 pp.)

URL: <u>www.orton.org/heart-soul</u>

"Community Heart&Soul begins with a partnership between local government and residents in a process that casts a wide net of engagement that works to identify and articulate what matters most—emotionally—to residents" Lyman Orton Preface

Phase 1 Lay the Groundwork Step 1: Get Organized Step 2: Create a Work Plan Step 3: Spread the Word Phase 2 Explore Your Community Step 4: Gather and Share Stories Step 5: Identify What matters Most Phase 3 Make Decisions Step 6: Develop Options Step 7: Make Choices Step 8: Formalize Decisions Phase 4 Take Action Step 9: Mobilize Resources Step 10: Follow Through

Step 11: Cultivate Hearth & Soul

Six Foundations for Building Community Resilience

post carbon institute



[<mark>02</mark>]

Post-Carbon Institute (2015).

Six Foundations for Building Community Resilience

Santa Rosa CA: Post Carbon Institute. [40 p.)

URL: www.postcarbon.org/wp-content/uploads/2015/11/Six-Foundation...

Efforts to build community resilience often focus on growing the capacity to "bounce back" from disruptions, like those caused by climate change. But climate change is not the only crisis we face, nor is preparing for disruption the only way to build resilience. Truly robust community resilience should do more. It should engage and benefit all community members, and consider all the challenges the community faces—from rising sea levels to a lack of living wage jobs. And it should be grounded in resilience science, which tells us how complex systems—like human communities—can adapt and persist through changing circumstances. Six Foundations for Building Community Resilience describes how communities can approach the full scope of the 21st century's challenges equitably and sustainably.

Although many resilience frameworks and tools for building community resilience are now available, no single approach will likely work for all communities and their varied social and economic contexts. We have identified six foundations that support building community resilience, rather than achieving resilience as a fixed goal, so as to emphasize resilience building as an ongoing process. The six foundations are:

1. People. The power to envision the future of the community and build its resilience resides with community members.

2. Systems thinking. Systems thinking is essential for understanding the complex, interrelated crises now unfolding and what they mean for our similarly complex communities.

3. Adaptability. A community that adapts to change is resilient. But because communities and the challenges we face are dynamic, adaptation is an ongoing process.

4. Transformability. Some challenges are so big that it's not possible for the community to simply adapt; fundamental, transformative changes may be necessary.

5. Sustainability. Community resilience is not sustainable if it serves only us, and only now; it needs to work for other communities, future generations, and the ecosystems on which we depend.

6. Courage. As individuals and as a community, we need courage to confront challenging issues and take responsibility for our collective future.

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FRAMEWORK – SUSTAINABLE COMMUNITY DEVELOPMENT CODE BETA VERSIONS 1.5 AND 2.0

[<mark>03</mark>]

Rocky Mountain Land Use Institute (2016) *Sustainable Community Development Code* A code for the 21st century. Beta Version 2.0. Denver: Univ. of Colorado Denver College of Architecture and Planning (40 pp.)

URL:www.ucdenver.edu/academics/colleges/ArchitecturePlanning/AboutCAP/ResearchCenters/C <u>CSU/Sustainable_Community_Development_Code_Framework</u>

Rocky Mountain Land Use Institute Sustainable Community Development Code has the goal of making the goals of sustainable development more easily applied to zoning and code practices. It defines a range of measures and goals, from entry-level (similar to USGBC LEED) with upper range more demanding than LEED-ND.

The Beta 1.1 version is a DRAFT, with some sections ell developed, others to be completed. The overall framework is helpful as a summary of best practices and suggestions, including reference for local code frameworks and adoptions. Special topics include open space to fulfill health criteria, wildfire, solar and wind energy system applications.

The code provides provisions for regulations that address each of the following topics:

Energy

Healthy Neighborhoods, Housing, Food Systems

Environmental Health and Natural resources

Mobility

Natural Hazards

Urban Form/Community Character

The basic organization and approach to each topic is to examine relevant obstacles, incentives, and regulations. The Code identifies obstacles to achieving stated goals that might be found in a local zoning code (e.g., bans on solar panels as accessory uses). It suggests incentives that might be created to achieve a goal (e.g., increased density in a multi-family development that installs green roofs). A third focus is upon on regulations that might be adopted to ensure progress in a particular area (e.g., mandatory water-conserving landscape standards)



[<mark>04</mark>]

Sustainable Jersey (2017) website (extensive). Ewing NJ: Sustainability Institute College of New Jersey

URL: www.sustainablejersey.com

Sustainable Jersey provides tools, training and financial incentives to support communities as they pursue sustainability programs, by supporting community efforts to reduce waste, cut greenhouse gas emissions, and improve the environmental equity.

Sustainable Jersey Master Action Tracking Spreadsheet (representative actions) Arts& Creative Culture

Community Partnership & Outreach

Create Green Team	10	Mandatory
Diversity & Equity		
Diversity on Boards and Commissions	10	Priority
Emergency Management and Resiliency		
Climate Adaptation: Flooding Risk	20	Priority
Emergency Communications Planning	15	MICROGRID
Vulnerable Populations Identification Emergencies	10	MICROGRID
Energy Efficiency		
Energy Tracking and Management	10-20	Priority
Implement Energy Efficiency Measures	5-30	Priority
Food Green Design		
Health & Wellness		
Innovation & Demonstration Project		
Land Use & Transportation		
Sustainable Land Use Pledge	10	Priority
Local Economies		
Green Business Recognition Program	10-20	Priority
Natural Resources		
Natural Resource Inventory	20	Priority
Operations & Maintenance		
Public Information & Engagement		
Sustainability Planning		
Municipal Carbon Footprint	10	Priority
Waste Management		
Prescription Drug Safety and Disposal	10	Priority

Municipal Resilience Cycle SOURCE: http://www.njresiliency.com/about/resilience-cycle/

Municipal resilience is the ability of a community to adapt and thrive in the face of extreme events and stresses. Municipal resilience is achieved by anticipating risk, planning to limit impacts, and implementing adaptation strategies that integrate all community systems – civic, environmental, social and economic – to support recovery and growth.

The Municipal Resilience Cycle presents a summary snapshot of the Network's current understanding of the process local governments must undertake to build long-term community-scale resilience.





[05]

VNRC (2000, 2011). Resilience Communities Scorecard: A Tool for Assessing Your Community Montpelier: Vermont Natural Resources Council. (49 pp.) URL: <u>vnrc.org/wp-content/uploads/2013/04/Whole-Scorecard-FINAL</u>

This Scorecard is a checklist of questions to help Vermont communities assess their resilience in key areas including land use, transportation, energy, and healthy community design, to:

Promote the vitality of downtowns and villages Address rising energy costs Build community resilience Reduce transportation costs Improve public heath

Adapt to climate change

- 1. Promote vibrant communities by directing business and housing development toward compact, mixed-use town centers, at a scale of growth that fits the community and region.
- 2. Provide for and encourage transportation options that support community land use goals, reduce energy consumption and cut carbon emissions
- 3. Protect the environment and natural resources.
- 4. Preserve historic features and public access to open spaces.
- 5. Promote physical activity and access to healthy, local food.
- 6. Strengthen and protect farm and forest enterprises, minimizing conflicts between them and other development.
- 7. Encourage the creation and renovation of housing to meet the full diversity of local and regional needs.
- 8. Support a diversity of businesses in the community's town centers.
- 9. Reduce energy use and carbon emissions through energy planning.
- 10. Improve community resilience and reduce energy costs by promoting energy efficiency and conservation.
- 11. Promote renewable energy development that works in harmony with community goals for land use.
- 12. Develop and implement goals and projects by working with community groups, building coalitions, engaging the public, and considering the regional context