

# **SUSTAINABILITY** and Local Governments:

Planning Helps Balance Environmental, Economic, and Social Equity Priorities

ocal governments can be laboratories for innovation on many issues, such as sustainability, which are complex and raise concerns of environmental protection, social equity, and economic development. In government, as in business, this triple-bottom-line approach requires planning and acting beyond typical departmental and jurisdictional silos. ICMA's 2015 Local Government Sustainability Practices Survey sought to measure actions, drivers of action, and ways that municipalities and counties measure progress on sustainability.<sup>1</sup>

The survey reveals that the economy remains a primary concern of local governments. However, many local governments now recognize the important role that environmental protection plays in establishing a foundation for both short-and long-term economic development. Unfortunately, the survey also shows that attention to sustainability's third dimension, social equity, lags behind. Sustainability requires that local governments give attention to all three legs of the sustainability stool – economic development, environmental sustainability, and social equity.

The survey finds interesting ways in which some communities link environmental protection and economic development. For example, more than 71% of survey respondents report that the potential to attract development projects is a significant or very significant factor motivating sustainability efforts. The potential for fiscal

### **TAKEAWAYS**

ICMA's sustainability survey indicates that many local governments now recognize the important role that environmental protection plays in establishing a foundation for both short- and long-term economic development. Funding and economic development drive sustainability, and lack of funding is the number one barrier to sustainability.

The survey also shows that attention to sustainability's third dimension, social equity, lags behind. Higher inclusion of social equity concerns in disaster planning may provide a template for integrating social equity issues more effectively into sustainability plans.

The survey also found that local governments seem to learn best from each other.

savings from actions such as energy conservation motivate 82% of respondents. These communities find co-benefits of economic development in environmental protection.

This economic link is how many local governments justify putting environmental protection on their local agenda.<sup>2</sup> However, the survey finds room for improvement. Only 68% of local governments list environmental concerns as a significant motivator for sustainability, and social equity concerns only motivate 39% of responding municipalities. Less than one-third of local governments have adopted a sustainability plan, but many act without a plan. The survey shows that the most effort on sustainability occurs in energy conservation in local government operations, where savings on power bills can translate into savings for the municipality. Recycling is also common.

The 2015 Local Government Sustainability Practices Survey was sent to 8,562 municipalities, townships, and counties. This included all counties (3,031), all municipalities and townships over 25,000 in population (1,889), and a one in 2.5 sample of municipalities and townships from 2,500 to 25,000 population (3,642). The overall response rate was 22.2%, with 1,899 governments (14% of counties, 31% of cities, and 19% of towns) in the final sample.

See Table 1 for the response rates of various local government categories. The highest response rate was from the West region, and the lowest was from the South Central. Every state is represented in the sample, with California cities returning the most surveys. We also find the highest response rate from principal cities in metropolitan areas, and the lowest rate from non-metropolitan communities.<sup>3</sup>

#### **Sustainability Planning**

Only 31% of local governments have adopted a sustainability plan. Nearly half (47%) of metro core communities report adopting such plans, but only 28% of suburbs and 28% of rural communities did. Larger places also adopt plans at a higher rate than smaller places, with locales under 25,000 in population size adopting plans at half the rate of those over 100,000 in population size.

Economic development. Local governments that adopted sustainability plans do a better job balancing the priorities represented by three legs of the sustainability stool. Across all survey respondents, the vast majority (91%) chose economic development as a priority for their community, with 47% choosing environmental protection and 26% choosing social equity. As shown in Figure 1, more than twice as many communities with a sustainability plan prioritized environmental protection compared to those without a sustainability plan. Similarly, just over three times as many with a plan than without considered social equity a priority. Even economic development is impacted, as more communities with plans consider it a priority than do places without plans.

**Plan goals.** For those with a sustainability plan, the survey also asked about its contents. As expected, the top priorities focus on economic development (with 68% reporting its inclusion), energy conservation (60%), and

TABLE 1	Response Rate of 2015 ICMA
Sustainability	Survev

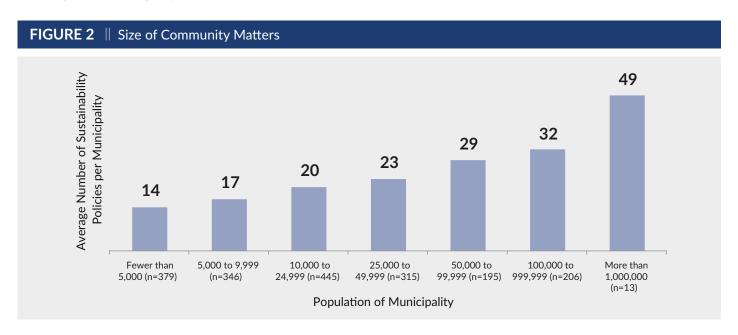
CATEGORY	Number Surveyed	Number Responding	Response Rate
Total	8,562	1,899	22.2%
Туре			
County	3,031	424	14.0%
Municipality	3,758	1,146	30.5%
Town/Township	1,773	329	18.6%
Population group			
Over 1,000,000	42	13	31.0%
500,000-1,000,000	98	24	24.5%
250,000-499,999	168	37	22.0%
100,000-249,999	532	145	27.3%
50,000-99,999	938	195	20.8%
25,000-49,999	1,641	315	19.2%
10,000-24,999	2,022	445	22.0%
5,000-9,999	1,417	346	24.4%
2,500-4,999	1,546	357	23.1%
Under 2,500	158	22	13.9%
Geographic division			
New England	528	135	25.6%
Mid-Atlantic	1,084	213	19.6%
East North-Central	2,004	398	19.9%
West North-Central	1,102	254	23.0%
South Atlantic	1,123	328	29.2%
East South-Central	586	74	12.6%
West South-Central	890	135	15.2%
Mountain	549	154	28.1%
Pacific Coast	696	208	29.9%
Geographic region			
Northeast	1,612	348	21.6%
North-Central	3,106	652	21.0%
South	2,599	537	20.7%
West	1,245	286	29.1%
Metro status			
Principal cities and counties (Metro Core)	1,032	289	28.0%
Non-principal cities and counties (Suburb)	4,328	1,034	23.9%
Non-Metropolitan (Rural)	3,202	576	18.0%



disaster mitigation (48%). Public health (37%), green energy production (37%), community resiliency (34%), and climate change (31%) were less likely to be part of sustainability plans. Social equity (22%) was least likely to be included in sustainability plans.

**Social equity in disaster planning.** Disaster planning is much more common in communities than sustainability planning. The majority of respondents (87%) have a hazard mitigation or emergency evacuation plan, with two-

thirds (69%) of those plans specifically addressing issues of at-risk residents (low-income populations, seniors, etc.). The higher inclusion of social equity concerns in disaster planning is likely due to federal requirements, but it may provide a template for the integration of social equity issues more effectively into sustainability plans. Seventy-six percent of governments have responded to a disaster in the past 15 years, with floods and blizzards the most commonly reported disasters.



**Sustainability policies.** The survey presented 82 specific sustainability policies and asked local governments to identify which ones they had adopted across seven topic areas: climate change, energy conservation, land use, water management, social supports, transportation, and waste management. On average local governments report adopting 21 sustainability policies. As shown in Figure 2, larger communities tend to adopt more policies than smaller ones. Jurisdictions of 100,000 people or more adopt about twice as many policies as the smallest category of local governments. This response to sustainability by size is similar to findings from the 2010 ICMA sustainability survey.<sup>4</sup>

Metro core cities and counties have on average 33 policies on their books, while suburban places average 21 and rural local governments on average report only 15 sustainability policies. Not surprisingly, local governments in the Pacific Coast geographic region (Alaska, California, Hawaii, Oregon, Washington) have adopted the most sustainability policies, with an average of 35 policies per local government. A distant second, with an average of 24 policies, was the Mountain geographic region (Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, Wyoming). California cities averaged the highest (40 policies), with Nevada (33 policies per city) second.

#### **Sustainability Actions**

When policies have the potential to save local government money, the survey reveals that officials seem to adopt those more often than those policies that would benefit the community more broadly. One area in which this trend is strong is energy conservation. As shown in

Figure 3, three policy actions (energy audits; upgrades to heating, ventilation, and air conditioning; and the installation of solar equipment) show the difference in effort.

Table 2 lists all of the local policies in terms of energy sustainability and illustrates the tendency of local governments to try to "green" their own operations first. In addition to saving money, acting on government operations is easier than acting on community-wide issues. Local capacity is important in instituting any program, and previous research shows that the presence of a municipal utility helps local governments spread energy conservation programs more widely across the community.<sup>5</sup>

Waste management. Another part of the survey asked about waste management policies. Almost two-thirds of local governments (66%) have instituted internal government recycling programs, while 57% have community-wide recycling for homes; 55% have recycling of house-hold electronic waste; 52% have programs for recycling household hazardous waste; and 46% collect yard waste for composting. The greater parity between recycling in government operations and across the general community is probably due to top-down mandates in many states. Twenty states require recycling by local governments while 47 have some kind of disposal ban, such as on electronic or hazardous waste, that makes recycling a viable option for keeping prohibited items out of landfills.

**Provision of water.** With the years-long drought in California and water quality issues in older, deindustrialized cities, the provision of water has become an important sustainability topic. The survey found that only 56% of local governments own their drinking water utility. Just over one-quarter (27%) use pricing to encourage water

FIGURE 3 || Adoption of Energy Sustainability Policies: Government Operations Versus Countywide Efforts 0% 10% 40% 20% 30% 50% 70% 60% 63% Conduct energy audits 17% 12% 49% Upgrades to heating/ 24% air conditioning 7% 18% In government operations Install solar equipment 9% For residents 8% For businesses

**TABLE 2** | Energy Policies in Government Operations and Communitywide

POLICIES AIMED AT GOVERNMENT OF	PERATIONS	COMMUNITYWIDE POLICIES	
POLICY	Local govts adopting (%)		ol govts oting (%)
Upgraded office lighting	64%	Weatherization for residences 2	24%
Conducted energy audits	63%	Energy audits for residences 1	.7%
Upgraded heating / air conditioning	49%	Heating/ air cond. upgrades for residences 1	2%
Upgraded streetlights or other ext. lighting	45%	Energy audits - businesses 1	2%
Upgraded traffic signals	35%	Purchase of energy efficient appliances 1 in residences	1%
Upgraded water or sewer system pumps	28%	Installation of solar on residences	9%
Installed solar panels	18%	Weatherization for businesses 8	8%
Installed electric vehicle charging stations	17%	Installation of solar on businesses	8%
Established a policy to only purchase Energy Star equipment	14%	Heating/air conditioning upgrades for businesses	7%
Established a fuel efficiency target for fleet vehicles	14%	Purchase of energy efficient appliances for businesses	6%
Required all new construction projects be certified green	9%		
Generated electricity through waste or landfill operations	8%		
Installed a geo-thermal system	8%		
Required all renovation projects be certified green	6%		

Sample size: 1,899.

conservation. Only 8% have programs to protect low-income households from water service shutoffs.

**Reclaimed water.** A small, but significant number of places have become creative in their reuse of water. Grey or reclaimed water is used by 14% of locales to water the landscape of public facilities, such as parks and buildings. Ten percent of local governments have provided for the reuse of grey water on the landscapes of private homes or businesses. Previous research has found communities in Washington State, Arizona, and Florida going as far as laying a second set of pipes through neighborhoods from which homeowners can draw reclaimed water for reuse on lawns.<sup>7</sup>

Climate change. Climate change actions garnered the lowest response from survey respondents. Only 6% of local governments have adopted a climate mitigation plan and 3% a climate adaptation plan. A greenhouse gas inventory of local government facilities and operations was conducted by 14% of respondents, with 11% setting greenhouse gas reduction targets for government operations. Only 9% have undertaken a green house gas inventory of the community, and only 7% have set targets for the entire jurisdiction.

**Performance measurement.** Measuring the effectiveness of any program is always a challenge for local governments. One goal of this survey is to explore the ways that communities might measure their sustainability efforts. The survey asked about policy monitoring and whether the policies produce positive results in four areas: recycling, government energy conservation, community-wide energy conservation, and water conservation. As shown in Table 3, recycling has the highest rate of monitoring (45%), with 85% of those who track their program reporting that it has increased recycling rates. Just over a quarter of local governments (29%) monitor energy conservation in their own operations, with 91% of those reporting increases in energy savings.

The rate of monitoring drops for energy conservation across the community; this is a far more difficult challenge, as investor-owned utilities are often reluctant to share electricity usage data, which they may consider proprietary. Still, 8% of local governments do track energy use across their jurisdiction, with 59% of those reporting success in energy conservation. Only 22% of local governments monitor the success of water conservation efforts, with 72% reporting positive results.

#### **TABLE 3** | Monitoring Sustainability

ACTION	<b>Community Tracks</b>	Positive Results
Recycling (n=1,811)	45%	85%
Government Energy Conservation (n=1,787)	29%	91%
Community Energy Conservation (n=1,778)	8%	59%
Water Conservation (n=1,778)	22%	72%

Sample size: 1,899.

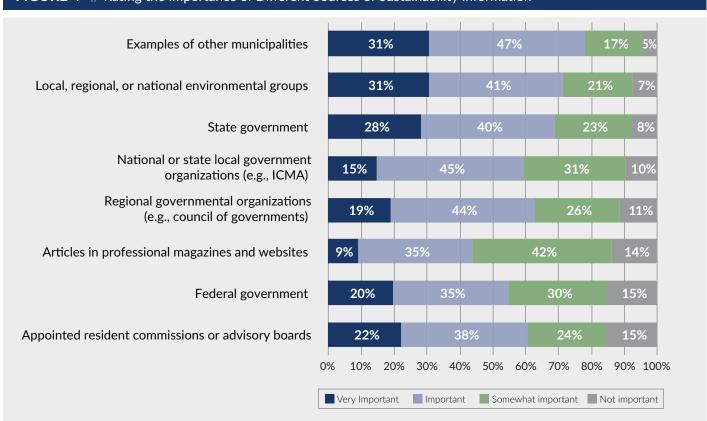
Note that not every respondent answered every question, so raw numerical totals in each program area may vary.

#### Who Pushes Sustainability in a Community?

The survey examined the roles of different actors in the community—city officials and citizens. Only about one-fourth of responding governments have dedicated staffing and 19% have a dedicated budget specifically for sustainability or environmental protection. Another 9% have pulled together a sustainability task force, and 24% simply report having sustainability goals across governmental departments. The remaining 42% of respondents have no staff, no task force, or no goals addressing sustainability issues.

Impact of public engagement. Citizen participation is considered a key ingredient to the creation of sustainability plans and implementation of programs. <sup>10</sup> However it seems to be of limited importance to community sustainability plans, according to the officials who responded to this survey. Nearly two-thirds (59%) of the respondents indicate that public participation had little or no impact in shaping sustainability plans and strategies, while only 14% report that public participation has a lot of impact. Only 38% of respondents report that their communities have established

**FIGURE 4** | Rating the Importance of Different Sources of Sustainability Information



Sample size: 1,899.

Note that not every respondent answered every question, so raw numerical totals for each type of resource may vary.

resident committees, commissions, and/or task forces as a means of public participation. Despite low usage of these kinds of engagement vehicles, many studies report that appointing community members to a formal government committee or body enhances sustainability policymaking, especially in smaller and more rural communities.<sup>11</sup>

Sources of information. The surveys also asked about sources of sustainability information for local officials. More than three-quarters of respondents (78%) rate "examples in other municipalities" as either very important or important sources of information. If looking to other communities happens among neighbors, this understanding may help policy makers promote greater regional coordination. As shown in Figure 4, local, regional, and national environmental groups are the second most important source of information, followed by state government, and then regional governmental organizations. Appointed resident advisory boards are less important than other sources of information. Local governments, it seems, learn best from each other.

#### Collaboration Is One Key to Sustainability

Sustainability policies are complicated, and the issues bridge departmental boundaries within a local government as well as across municipal and county boundaries. Effective implementation requires collaboration across agencies within government and among governments in the region. The 2015 Local Government Sustainability Practices Survey asked respondents if departments within the jurisdiction coordinated on some sustainability programs. As shown in Table 4, the highest areas of interagency collaboration are in land use (91%), economic

development (85%), grant writing (85%), hazard mitigation (84%), and storm water management (82%). Climate change mitigation and adaptation rank lowest, possibly because localities are still figuring out how to address these global challenges. Most municipalities do not have climate change policies.

Regional coordination is highest in transportation, with 85% of respondents reporting that they worked with their neighbors on this issue. Economic development (82%) and hazard mitigation/evacuation planning (80%) were, respectively, the second- and third-ranked areas of regional cooperation. Climate change planning and mitigation, although they rank at the bottom of the list, seem to have more people working across geographic boundaries than across bureaucratic ones. As the most complex issue, collaboration could be a challenge going forward for local governments that engage in climate change projects.

#### What Drives and Slows Down Community Action?

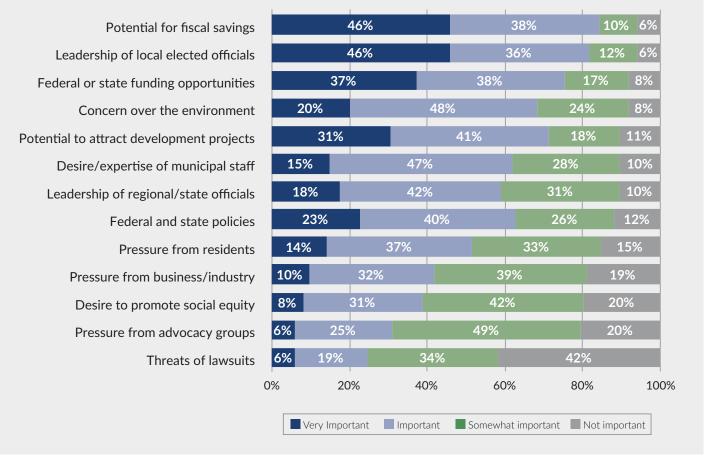
Economics drives communities to act. Fiscal savings is the top motivator for action, with 84% of respondents calling it a very significant or significant driver. Potential to attract development projects is another important motivator for 72% of local governments. In many ways, local governments see the connection between the environment and economic development as operational efficiency or as a way to attract investment. Other important drivers are local leadership (82%) and federal or state funding (75%). These indicate the importance of capacity as technical expertise and fiscal resources (often outside grants) drive the ability of local governments to implement sustainability policies. Other drivers of sustainability can be seen in Figure 5.

TABLE 4 Collaboration and Coordination in Different Areas of Sustainability				
PROGRAM AREA	Interagency Collaboration	Intermunicipal Cooperation		
Land use planning/permitting	91%	73%		
Roads, public transit, bike-pedestrian systems	N/A	85%		
Economic development	85%	82%		
Seeking funding and grants	85%	68%		
Hazard mitigation/evacuation planning	84%	80%		
Storm water management	82%	68%		
Environmental protection	65%	61%		
Open space/farmland preservation	55%	48%		
Provision of affordable housing	50%	53%		
Climate change mitigation	12%	20%		
Climate change adaptation	9%	16%		

Sample size: 1,899.

Note that not every respondent answered every question, so raw numerical totals in each program area may vary.

**FIGURE 5** || Rating the Factors That Motivate Sustainability Efforts



Sample size: 1.899.

Note that not every respondent answered every question, so raw numerical totals for each type of resource may vary.

If funding and economic development drive sustainability, then it stands to reason that a lack of funding holds it back. The survey found that 88% of respondents cite this as the number one barrier to sustainability. No other barrier came close. State or federal restrictions are second, lack of staff capacity third, and opposition by elected officials fourth. Fewer than two-thirds of local governments chose all of these as either a significant or very significant barrier.

## Are Environmental, Economic Development, and Social Equity Goals Linked?

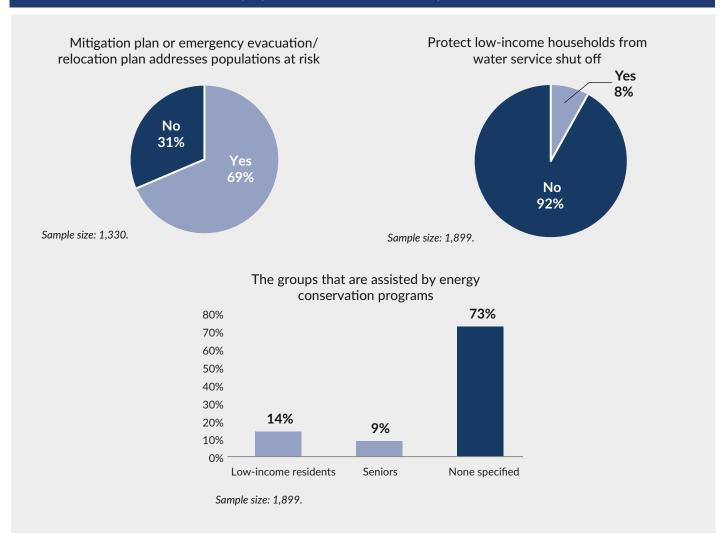
Sustainability requires action across all three dimensions: environmental protection, economic development, and social equity. While the survey found economic development goals most commonly articulated by local governments as drivers of sustainability, social equity ranks low on many measures on this survey.

**The social equity gap.** The absence of social equity goals in sustainability programs is glaring, as shown in

Figure 6. Only 14% of communities have energy conservation programs targeted to assist low-income residents. Such a program could reap important environmental benefits as well as save money for those poorer citizens who need it most. Only 8% of local governments have programs to protect low-income households from water service shut off—an increasingly important issue as some struggling communities seek to privatize the provision of this vital resource. Only 30% of localities provide incentives for affordable housing.

The one bright spot in terms of social equity was in the creation of hazard mitigation and emergency evacuation plans. Here the survey finds that 69% of plans include provisions specifically targeted to at-risk low-income populations and seniors. Hurricane Katrina and Super Storm Sandy have taught local governments that emergency plans have to be made for the most vulnerable in our communities. The challenge going forward is to extend this same attention to equity issues more broadly in local sustainability policy.

#### FIGURE 6 | Areas Where Social Equity Is Absent From Sustainability and Where It Is Prominent





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#### **ENDNOTES**

- 1 This survey was supported by funding from the USDA Agriculture and Food Research Initiative, Foundational Agricultural Economics and Rural Development Grant (# 2014-68006-21834). We acknowledge fellowship support from the Atkinson Center for a Sustainable Future for Professor Warner.
- 2 George C. Homsy and Mildred E. Warner, Defying the Odds: Sustainability in Small and Rural Places. Washington, DC: ICMA Center for Sustainable Communities, 2013. Briefing Paper. http://icma.org/ en/icma/knowledge\_network/documents/kn/Document/305454/ Defying\_the\_Odds\_Sustainability\_in\_Small\_and\_Rural\_Places (June 16, 2014).
- 3 Metro Core local governments are defined as metropolitan counties (as identified by the U.S. Office of Management and Budget) and principal cities within those metropolitan counties. Suburban places are local governments within metropolitan counties that are not the principal city. Rural areas are all counties identified as nonmetropolitan and the municipalities within them.
- 4 George C. Homsy and Mildred E. Warner, "Off the Beaten Path: Sustainability Activities in Small Towns and Rural Municipalities." In *The Municipal Year Book 2012* (Washington, DC: ICMA Press, 2012), 53–61.
- 5 George C. Homsy, "Powering Sustainability: Municipal Utilities and Local Government Policymaking." Environment and Planning C: Government and Policy, 2015 [published online first]. http://epc.sagepub.com/content/early/2015/07/31/0263774X15596530. abstract (August 8, 2015).
- 6 Richard C. Feiock and Johathan P. West, "Testing Competing Explanations for Policy Adoption: Municipal Solid Waste Recycling Programs." *Political Research Quarterly* 46 no.2 (1993): 399–419.

- 7 Katharine Cupps and Emily Morris, Case Studies in Reclaimed Water Use: Creating New Water Supplies across Washington State. Lacey, WA: Washington State Department of Ecology, 2005; Susanna Eden, Joe Gelt, and Claire Landowski, Once Shunned, Wastewater Now Viewed as a Valuable Resource. Tucson, AZ: Water Resources Research Center, University of Arizona, 2009. http://cals.arizona.edu/azwater: Homsy and Warner, Defying the Odds; Sustainability in Small and Rural Places.
- 8 George C. Homsy and Mildred E. Warner, "Intermunicipal Cooperation: The Growing Reform." In *The Municipal Year Book 2014* (Washington, DC: ICMA Press, 2014), 53–65.
- 9 Maike Sippel and Till Jenssen, "What about Local Climate Governance? A Review of Promise and Problems," MPRA Paper (November 2009), http://mpra.ub.uni-muenchen.de/20987/; George C. Homsy, "Powering Sustainability: Municipal Utilities and Local Government Policymaking," *Environment and Planning C: Government and Policy*, 2015 [published online first], doi:10.1177/0263774X15596530.
- 10 Tad McGalliard, "Advancing Sustainable Communities through Civic Engagement and Performance Measurement." In *The Municipal Year Book 2014* (Washington, DC: ICMA Press, 2014), 53–65.
- 11 Homsy, "Powering Sustainability"; George C. Homsy and Mildred E. Warner, "Cities and Sustainability Polycentric Action and Multilevel Governance," *Urban Affairs Review* 51, no. 1 (January 1, 2015): 46–73, doi:10.1177/1078087414530545.
- 12 Elaine B. Sharp, Dorothy M. Daley, and Michael S. Lynch, "Understanding Local Adoption and Implementation of Climate Change Mitigation Policy." *Urban Affairs Review* 47, no. 3 (3011): 433–57.