

Cooperative Federalism and Climate Change: New Meaning to “Think Globally—Act Locally”

by Patricia E. Salkin

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I. Cooperative Federalism and Climate Change

The potential impacts of global warming and climate change are well documented in the international scientific literature. In the United States, James Hansen, a leading National Aeronautics and Space Administration (NASA) scientist, warned that there is only a brief window of opportunity to meaningfully address this world crisis. From an international policy standpoint, it may be easy to point fingers at other countries and stall activity until others demonstrate movement. Further, the negotiation of traditional treaties, accords, and international diplomacy on these issues can take years to reach realization. Nationally, the federal government has only recently acknowledged the critical importance of more immediate action,¹ and while much more must be done at the federal level, most state governments have not waited, and governors have made climate change mitigation strategies state priorities.² What has been missing at the federal

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1. During the George W. Bush Administration, the White House did not embrace the scientific findings about global warming and climate change, see *NASA Scientist Rips Bush on Global Warming: Renowned Expert Says Data “Screened and Controlled,”* MSNBC.COM, Oct. 27, 2004, <http://www.msnbc.msn.com/id/6341451/>, although the U.S. Supreme Court did. See *Massachusetts v. EPA*, 549 U.S. 497, 37 ELR 20075 (2007). In October 2009, President Barack Obama issued an Executive Order that “requires Federal agencies to set a 2020 greenhouse gas emissions reduction target within 90 days; increase energy efficiency; reduce fleet petroleum consumption; conserve water; reduce waste; support sustainable communities; and leverage Federal purchasing power to promote environmentally-responsible products and technologies.” Press Release, White House Office of the Press Sec’y, President Obama Signs an Executive Order Focused on Federal Leadership in Environmental, Energy, and Economic Performance (Oct. 5, 2009), available at http://www.whitehouse.gov/the_press_office/President-Obama-signs-an-Executive-Order-Focused-on-Federal-Leadership-in-Environmental-Energy-and-Economic-Performance/.
2. See, e.g., Pew Center on Global Climate Change, *State Legislation From Around the Country*, http://www.pewclimate.org/what_s_being_done/in_

and state levels is recognition of the critically important role and responsibility that local governments have to play in addressing the root causes of greenhouse gas (GHG) emissions and the implementation of effective strategies.

While the federal government, through the U.S. Environmental Protection Agency (EPA), has subtly begun to recognize the opportunities of municipal government partnerships, the fact remains that more must be done. EPA recently issued for comment a report on the connections between local land use controls and climate change in the area of land preservation,³ and there is a special area of the EPA website focused on local government.⁴ EPA’s Local Climate Program attempts to provide local governments with the resources and tools they will need to develop and implement their own climate action plans.⁵ The program’s primary focus is on reducing GHG emissions, with an emphasis on promoting energy efficiency and renewable energy. Some of the resources available to local governments include strategy guides, training, and information from groups working in collaboration with EPA.⁶ In 2009, EPA allocated \$10 million to assist local governments in reducing their GHG emissions as well as other climate change activities.⁷ The goal of the Climate Showcase Communities Grant program is “to create replicable models of sustainable community action that generate cost-effective and persistent greenhouse gas reductions while improving environmental . . . conditions in the

[the_states/state_legislation.cfm](#) (last visited Apr. 18, 2010).

3. U.S. EPA, AN ASSESSMENT OF DECISION-MAKING PROCESSES: THE FEASIBILITY OF INCORPORATING CLIMATE CHANGE INFORMATION INTO LAND PROTECTION PLANNING (2009), available at <http://cfpub.epa.gov/ncea/cfm/recordisplay.cfm?deid=210027#Download>.
4. U.S. EPA, Local Climate and Energy Programs, <http://www.epa.gov/cleanenergy/energy-programs/state-and-local/local.html> (last visited Mar. 29, 2010).
5. U.S. EPA, Clean Energy, <http://www.epa.gov/cleanenergy> (last visited Feb. 15, 2010).
6. U.S. EPA, Local Climate and Energy Programs, *supra* note 4.
7. U.S. EPA, Climate Showcase Communities Grants, <http://www.epa.gov/cleanenergy/energy-programs/state-and-local/showcase.html> (last visited Feb. 25, 2010).

community.”⁸ Awards are expected to be announced in the first quarter of 2010.⁹ The federal government must, however, do more to incentivize increased cooperative federalism to more aggressively engage local governments in programs and policies that are national priorities.¹⁰

Although state governments have, in large number, appointed task forces and study commissions on climate change and adopted climate action plans,¹¹ the fact remains that most of these efforts focus almost exclusively on opportunities and recommendations for state-level agencies to improve their own actions, e.g., energy efficiency initiatives for agencies’ buildings and construction projects, greening state vehicle fleets, green procurement strategies, etc. What is missing from the majority of the states’ plans are goals and strategies for the involvement of local government officials and recognition of the benefits of municipal actions.¹² The lack of focus on local governments is troubling. It will be impossible for the United States to meaningfully respond to the complexities of climate change without a full partnership between local governments and governments at other levels, since local governments possess broad local land use planning and control authority,¹³ and in many states, they are on the front line of local environmental review, conducting National Environmental Policy Act-type evaluations that may include GHG emissions and carbon footprint-reduction strategies.¹⁴

This Article briefly discusses examples of the limited involvement and recognition states have carved out for local governments in state-level climate action plans. The main focus of the Article follows with an examination of the high level of largely uncoordinated activity taking place at the local government level, including innovative strategies worthy of replication throughout the country. The Article concludes with recommendations for cooperative approaches to

be introduced at the federal and state levels to harness the power and opportunities of acting locally to address significant global challenges.

II. State Recognition of the Local Role in Addressing Climate Change Mitigation

State climate action plans issued to date can best be analogized to comprehensive land use plans: they are reports that set forth a goal (usually a percentage of GHG reduction by a certain date) and they offer a series of recommendations, strategies, and options that could be implemented to achieve the goal.¹⁵ With respect to local government, California articulated it best: “Local governments have the power to affect the main sources of pollution directly linked to climate change through infrastructure investments, land use decisions, building codes, and municipal service management.”¹⁶ However, many of the states’ planning efforts have focused on interagency approaches that have failed to include local government representation, and when municipal representation has been welcome, it has been minimal.¹⁷

Some of the recommendations identified across the country most relevant to municipal governments can be organized into the following categories:

- Energy Efficiency in Buildings (green building standards, appliance efficiency standards, loans/grants/

8. *Id.*

9. *Id.*

10. This can be accomplished similar to strategies that were employed more than a decade ago during the Clinton-Gore Administration, which, while stopping far short of creating a national land use policy, certainly used fiscal incentives across the spectrum of federal agencies to incentivize changed behaviors in furtherance of smart growth. See Patricia E. Salkin, *Smart Growth and Sustainable Development: Threads of a National Land Use Policy*, 36 VAL. U. L. REV. 381 (2002).

11. See Pew Center on Global Climate Change, Active Climate Legislative Commissions and Executive Branch Advisory Groups, http://www.pewclimate.org/what_s_being_done/in_the_states/climatecommissions.cfm (last visited Apr. 26, 2010); Pew Center on Global Climate Change, U.S. States and Regions, <http://www.pewclimate.org/states-regions> (last visited Apr. 18, 2010).

12. See Patricia E. Salkin, *Can You Hear Me Up There? Giving Voice to Local Communities Imperative for Achieving Sustainability*, 4 ENVTL. & ENERGY L. & POL’Y J. 256 (2009).

13. PATRICIA E. SALKIN, AMERICAN LAW OF ZONING ch. 1 (5th ed. 2009).

14. See, e.g., BINGHAM MCCUTCHEN LLP, EVALUATING CLIMATE CHANGE IMPACTS UNDER THE CALIFORNIA ENVIRONMENTAL QUALITY ACT—RECENT DEVELOPMENTS (2010), available at <http://www.bingham.com/Media.aspx?MediaID=10285>; N.Y. STATE DEP’T OF ENVTL. CONSERVATION, ASSESSING ENERGY USE AND GREENHOUSE GAS EMISSIONS IN ENVIRONMENTAL IMPACT STATEMENTS (2009), available at http://www.dec.ny.gov/docs/administration_pdf/eisghgpolicy.pdf.

15. See Salkin, *supra* note 12.

16. CAL. AIR RES. BD., EXPANDED LIST OF EARLY ACTION MEASURES TO REDUCE GREENHOUSE GAS EMISSIONS IN CALIFORNIA RECOMMENDED FOR BOARD CONSIDERATION, at C-8 (2007), available at http://www.arb.ca.gov/cc/ceca/meetings/ea_final_report.pdf (further explaining, “While a handful of local governments in California have already started to plan and implement local GHG reduction measures, development of a State guidance document and local government protocols is needed to encourage and support greater and coordinated local action statewide.”). Utah’s report, in contrast, doesn’t quite make the same connection:

Typically, local and city governments have neither the legislative latitude nor the taxing authority to promote a wide range of mitigation measures. To a larger extent, however, energy efficiency strategies adopted by municipalities frequently overlap with those advanced by state governments. Municipalities, for example, often host public utilities which generally offer DSM services to most customer classes Local governments promote a number of conservation programs in the transportation sector (alternative fuels, rideshare, telecommuting). States, in contrast, are at the center of most laws regarding transportation efficiency including feebates, consumption taxes, and land-use planning. Local governments are generally limited to supporting traffic improvements, speed limits, and funding for mass transit projects such as Salt Lake City’s light-rail project.

OFFICE OF ENERGY & RES., UTAH DEP’T OF NATURAL RES., GREENHOUSE GAS REDUCTION STRATEGIES IN UTAH: AN ECONOMIC AND POLICY ANALYSIS, at 8-4 to 8-5, available at <http://epa.gov/climatechange/wydc/stateandlocalgov/downloads/UtahActionPlan.pdf>.

17. The climate action team in Florida, for example, has only “one representative from local government.” Press Release, Governor’s Press Office, Governor Crist Appoints Energy Action Team (Aug. 13, 2007), available at <http://www.flgov.com/release/9315>. The Iowa Climate Change Advisory Council is to contain one representative from local government. IOWA CODE §455B.851(2)(a)(16) (2007).

- incentives for energy retrofits, modified electricity pricing)¹⁸;
- Energy Efficiency in Transportation (reduction of vehicle miles traveled)¹⁹;
 - Carbon Sequestration (reforestation programs, agricultural soil carbon management)²⁰;
 - Public Education and Outreach²¹;
 - Energy-Efficient Land Use (smart growth, infill, increased density, transit- and pedestrian-oriented design, urban tree planting, encouraged telecommuting, bicycling)²²;
 - Climate Change Adaptation²³;
 - Development of Local Climate Action Plans²⁴; and
 - Training Specifically Targeted to Local Governments.²⁵
- There are many other important strategies that also relate to local initiatives including: agricultural uses and solid waste issues, e.g., methane gas reduction; renewable energy issues, e.g., siting issues with wind and solar energy; disaster preparedness and adaptation; green procurement; mass transit; etc. Outside of coordinated state climate action plan activities, some individual state agencies have recognized the key role municipalities play in addressing GHG reduction.²⁶ Local government stakeholders need to be more fully
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18. See, e.g., ARIZ. CLIMATE CHANGE ADVISORY GROUP, CLIMATE CHANGE ACTION PLAN 10 (2007), available at <http://www.azclimatechange.gov/download/O40F9347.pdf> (“Arizona should adopt and implement improved energy efficiency building codes, including potentially establishing a statewide code or strongly encouraging local jurisdictions to adopt and maintain state-of-the-art codes.”); NEV. CLIMATE CHANGE ADVISORY COMM., GOVERNOR JIM GIBBONS’ NEVADA CLIMATE CHANGE ADVISORY COMMITTEE FINAL REPORT 37 (2008), available at <http://gov.state.nv.us/Climate/FinalReport/ClimateChangeReport.pdf> (“The Governor’s Climate Change Advisory Committee recommends local governments and the State of Nevada enact new or support existing energy efficient building standards to reduce energy consumption as necessary.”).
19. See, e.g., OR. GOVERNOR’S CLIMATE CHANGE INTEGRATION GROUP, A FRAMEWORK FOR ADDRESSING RAPID CLIMATE CHANGE 49 (2009), available at <http://oregon.gov/ENERGY/GBLWRM/docs/CCIGReport08Web.pdf>:
Creating and implementing incentives or, possibly, requirements for VMT—or greenhouse gas—reductions in local governments’ comprehensive plans and development proposals. For comprehensive plans, this could be achieved by requiring cities or counties to do greenhouse gas or VMT inventories, setting goals for per capita greenhouse gas emissions or VMT, and evaluating proposed comprehensive plans based on how much progress they make toward goals. On a project-by-project basis, cities could require developers or planners to include VMT or greenhouse gas estimates in proposals and awarding development credits based on reductions achieved.
20. See, e.g., WILLIAM J. HERZ ET AL., POLICY PLANNING TO REDUCE GREENHOUSE GAS EMISSIONS IN ALABAMA 20 (1997), available at http://epa.gov/climatechange/wyecd/stateandlocalgov/downloads/Alabama_action_plan.pdf:
Improved Promotion of New Tree Planting Programs—New tree planting programs can be utilized by industry to offset future CO₂ emissions and should be encouraged by state forestry programs. Local governments should be encouraged to have tree commissions and urban foresters. Urban tree planting is becoming increasingly important across the nation.
21. See, e.g., CAL. AIR RES. BD., *supra* note 16, at C-8 to C-9.
22. See, e.g., ARIZ. CLIMATE CHANGE ADVISORY GROUP, *supra* note 18, at 70:
Transit-Oriented Development (TLU-3), as well, will require integrated action by state, regional, and local governments. The State can lead by ensuring that state investments support regional and local smart growth, by both how and where it makes those investments. Finally, TLU-2 and TLU-3 are mutually supportive, and implementing one will increase the benefits generated by the other.
- CTR. FOR ENERGY & ENVTL. POLICY, UNIV. OF DEL., DELAWARE CLIMATE CHANGE ACTION PLAN 141 (2000), available at <http://ceep.udel.edu/publications/globalenvironments/reports/deccap/fullreport.pdf>:
Development growth management strategies that include afforestation/reforestation goals: Low-density urban expansion continues to characterize new development in Delaware. Allowing urban development to spread out upon rural, undeveloped land accelerates the already rapid rate of loss of existing forests. However, strategies exist to support development that does not contribute to sprawl. Growth management policies provide a compromise between the need for growth and the need to control sprawl by encouraging compact growth that preserves existing forestlands. Development is directed to areas where infrastructure exists or can be adequately and efficiently provided. Such policies typically require state and local governments to adopt comprehensive, coordinated land use plans that include consideration of natural resources, farmland, and forest impacts of development.
- N.H. DEP’T OF ENVTL. SERVS., NEW HAMPSHIRE CLIMATE CHANGE ACTION PLAN 57 (2008), available at <http://blogs.nh.gov/nhpress2/climate/wp-content/uploads/2008/12/climate-action-plan-full-draft-12-19-08.pdf> (“Encourage Land Use Patterns that Reduce VMT: Implementation costs for these actions are projected to be low, to occur over time, and to be largely borne by state government, although direct action by local municipalities and developers would also be required.”); WERC, NEW MEXICO GREENHOUSE GAS ACTION PLAN 76 (2002), available at <http://www.werc.net/outreach/Book.pdf> (“New strategies should be developed to make Urban Tree Planting Programs more widespread and effective, including: Requiring tree planting elements in local general plans; requiring new school buildings to incorporate tree planting; Mandating ‘tree space’ in every development project; . . . Requiring planning for trees in parking areas.”); WASH. CLIMATE ADVISORY TEAM, LEADING THE WAY: A COMPREHENSIVE APPROACH TO REDUCING GREENHOUSE GASES IN WASHINGTON STATE 57 (2008), available at http://www.ecy.wa.gov/climatechange/CATdocs/020708_InterimCATreport_final.pdf.
23. See generally Salkin, *supra* note 12; Matthew D. Zinn, *Adapting to Climate Change: Environmental Law in a Warmer World*, 34 *ECOLOGY L.Q.* 61 (2007).
24. See, e.g., OR. GOVERNOR’S CLIMATE CHANGE INTEGRATION GROUP, *supra* note 19, app. 2 at 3 (“[The Legislature should] Establish and fund a program of technical assistance to assist local governments to devise climate change action plans including policy, practices, and programs specific to the concerns of Oregon communities.”); HUGH T. SPENCER, CLIMATE CHANGE MITIGATION STRATEGIES FOR KENTUCKY 83 (1998), available at http://epa.gov/climatechange/wyecd/stateandlocalgov/downloads/ky_2_fin.pdf:
Each local government commits to climate protection action, sets a greenhouse gas reduction target, and develops a local action plan to meet that target. Recommended steps to meet that target include: a) base year emissions analysis and forecast; b) greenhouse gas emissions reduction target established; c) local action plan or emission strategy created; d) implementation of the plan by local government.
- S.C. CLIMATE, ENERGY & COMMERCE COMM., FINAL REPORT, at 3-3 (2008), available at <http://www.sccimatechange.us/ewebeditpro/items/O60F19029.PDF>, at 1-1:
Ultimately, many strategies for reducing GHG emissions will need to be developed and implemented by local communities. Thus, the CECAC has included in its set of CC recommendations a policy to encourage and support local governments and communities in efforts to develop plans to address GHG emissions. In so doing, these local governments and communities are encouraged to consider including the CECAC’s recommendations in their planning efforts. This recommendation provides the state with the opportunity to support building capacity at the local level through education and outreach efforts, developing a model plan for local governments to follow, and organizing an annual workshop for sharing information and success stories.
25. See, e.g., ARIZ. CLIMATE CHANGE ADVISORY GROUP, *supra* note 18, at 70 (“To be most effective, Smart Growth (TLU-2) will require change at every level of government, and as such will be most effective with focused leadership by the State, including training, outreach, and technical assistance to local governments.”); OR. GOVERNOR’S CLIMATE CHANGE INTEGRATION GROUP, *supra* note 19, at 63 (“The [Oregon Climate Change Research Institute] is directed to . . . provide technical assistance to local governments to assist them in developing climate change policies, practices and programs.”).
26. For example, in February 2009, the New York State Department of Environmental Conservation launched the Climate Smart Communities Initiative, designed as a state and local partnership effort to encourage climate protection. More than 40 municipalities have now adopted the climate smart community

engaged, however, and the federal and state governments' failure to involve them in the development of climate action plans will undoubtedly lead to missed opportunities.

III. Factoring in the Key Role of Municipalities to Achieve a Reduced Carbon Footprint

According to the U.S. Census Bureau, in 2007, there were 89,476 units of local government throughout the United States.²⁷ They are the units of government that have direct authority when it comes to land use planning, adoption and enforcement of building codes, and transportation planning for efficiency and reliability. While climate change is not exclusively a land use issue, some of the most effective strategies to slow climate change can be accomplished through modifications to building codes, zoning ordinances, and other land use regulations. However, to be truly effective and to attain quantifiable results, local governments must implement a variety of tools and techniques and send a consistent message to residents.

Local governments must look at opportunities for energy efficiency in municipally owned buildings and in services provided, as well as for methods that can be utilized by residents to promote conservation and increased efficiency.²⁸ Municipalities are collectively the largest government consumer of buildings, infrastructure, and products, and together they have the potential to make significant progress in the implementation of strategies to slow climate change. Emissions reductions could be immediately realized if, for example, every municipality converted its traffic lights to LED bulbs, and municipal fleets were replaced with green vehicles.²⁹ Further, major cultural shifts are possible if local governments,

as a group, use their land use planning and control authority to plan for and implement various green development standards, transit-oriented development strategies, and adaptation measures. In a newly published book exploring the legal and planning response to global climate change, Prof. James Kushner explores the broad changes that will be necessary at all levels of government, as well as specific policies needed to implement the identified changes.³⁰ By outlining the possible local responses in the areas of agriculture and food policy, brownfield redevelopment, consumption and conservation, economic development, education, emergency preparedness, energy, housing and construction, management of federal lands and agencies, oceans and seas, population, smart growth, species protection, technology, transportation, and water management,³¹ it becomes readily apparent that the possible benefits of collective action are staggering.

The good news is that, individually, local governments are not waiting for Washington and the statehouses, and they are taking steps on their own to study and develop plans and implementation strategies to advance climate change mitigation goals.³² However, given the large number of units of local government, anecdotally, most local governments have not yet taken action. What follows are examples of how some local governments are addressing key aspects of climate change mitigation. It is impossible to catalogue all of the initiatives, as new proposals are being introduced, adopted, and implemented almost daily.³³ Research reveals that while there are clear trends and similarities in the types of goals and initiatives identified by local governments, the reality is that local governments are this country's laboratory for innovation and experimentation in this area, and their actions must be carefully studied and their successes benchmarked to best inform future policies and implementation strategies at all levels of government.

IV. Climate Change Action Plans

Similar to state responses, typically the first step in addressing climate change at the local level is the passage of a resolution or local law appointing a committee or task force to inventory existing programs and develop an action plan or recommendations for future action. Many of the efforts ultimately result in local climate action plans (identified by various names)³⁴ that most often seek to significantly reduce GHG emissions within a given time frame. For example, in 2007, New York City enacted the Climate Change Protection Act with the goal of reducing the city's operational GHG emis-

pledge. The Pledge has 10 primary components: (1) pledge to combat climate change by becoming a climate smart community; (2) set goals, inventory emissions, move to action; (3) decrease energy demand for local government operations; (4) encourage renewable energy for local government operations; (5) realize benefits of recycling and other climate smart solid waste management practices; (6) promote climate protection through community land use planning; (7) plan for adaptation to unavoidable climate change; (8) support a green innovation economy; (9) inform and inspire the public; and (10) commit to an evolving process. See N.Y. Department of Environmental Conservation, Climate Smart Communities, <http://www.dec.ny.gov/energy/50845.html> (last visited Apr. 18, 2010); N.Y. Department of Environmental Conservation, Climate Partners, <http://www.dec.ny.gov/energy/56876.html> (last visited Apr. 18, 2010). In addition, as part of the state environmental review process conducted by local governments, guidance has now been issued to assist municipalities in assessing energy use and GHG emissions in local environmental impact statements. See N.Y. STATE DEPT OF ENVTL. CONSERVATION, *supra* note 14.

27. School districts constituted 13,051 out of the 89,476 local units; and 37,381 were special districts. U.S. Census Bureau, Local Governments and Public School Systems by Type and State: 2007, <http://www.census.gov/govs/cog/SchoolOrgTab03ss.html>.

28. See Keith H. Hirokawa, *At Home With Nature: Early Reflections on Green Building Laws and the Transformation of the Built Environment*, 39 ENVTL. L. 507, 529-39 (2009) (discussing the roles of incentive programs and the greening of municipal buildings as largely responsible for the explosion of interest in green building).

29. For example, all traffic signals in San Rafael, California, now use LED lights, an improvement that many other cities have also made. See CITY OF SAN RAFAEL, CLIMATE CHANGE ACTION PLAN 9 (2009), available at <http://www.cityofsanrafael.org/Assets/CDD/Climate+Change+Action+Plan.pdf>.

30. See JAMES A. KUSHNER, *GLOBAL CLIMATE CHANGE AND THE ROAD TO EXTINCTION: THE LEGAL AND PLANNING RESPONSE* (2009).

31. See *id.*

32. See Salkin, *supra* note 12 (containing a review of more than one dozen city climate change action plans).

33. One effort to begin to catalogue local laws, from the Climate Change Law Center at Columbia University, lists approximately 600 municipal initiatives. Columbia Law School, Municipal Climate Change Laws Resource Center, <http://www.law.columbia.edu/centers/climatechange/resources/municipal> (last visited Apr. 18, 2010).

34. For example, Seattle calls its effort the Climate Protection Initiative Progress Report 2009, Chicago simply names its initiative the Climate Action Plan, and the city of Houston has adopted an Emissions Reduction Plan.

sions by 30% of 2006 levels by 2017,³⁵ and by 2011, Denver's Greenprint plan aims to reduce emissions 10% from 1990 levels and to reduce energy use 5% from the 2006 rate.³⁶ San Francisco,³⁷ Atlanta,³⁸ Dallas,³⁹ and many other cities have also adopted GHG reduction goals as part of a climate action plan. Generally, the local climate action plan serves as the "greenprint" for municipalities as they strive to reach stated goals in carbon footprint-reduction within their jurisdiction. While progress toward climate action plan goals must be measured and assessed at varying intervals, it is evident from reviewing dozens of plans that more must be done to ensure that plans incorporate requirements to track progress, benchmark success, and reevaluate goals at regular intervals.

Nationally, regionalism and intermunicipal cooperation have been part of the local government lingo and mindset in the planning and environmental arenas for some time. The literature is replete with examples of local cooperative actions arising out of the realization that the impacts of local land use decisions know no political boundaries. The same is true when it comes to implementing meaningful strategies in the climate change area. The impacts of methane gas releases, for example, are the same when farming practices cross municipal boundaries, and transit-oriented development works best when viewed within the context of interjurisdictional travel patterns. One example of a joint climate change strategy is Multnomah County-City of Portland, Oregon, Local Action Plan on Global Warming, which articulates goals including green jobs generation, aiding community members in adapting to climate change and an overall reduction in carbon emissions by transforming transportation systems, and achieving energy efficiency in local structures.⁴⁰ Collaborative efforts have also been initiated in cities including Fort Collins, Colorado, whose climate action plan stimulated enthusiasm for a neighboring county that is now discussing adopting its very own climate change action plan.⁴¹

V. Energy Efficiency in Buildings

Many local plans articulate goals of reducing energy use in older buildings and achieving zero net GHG emissions in all new buildings and homes. In order to achieve these goals,

35. City of New York, Local Law No. 55 (2007); <http://www.ens-newswire.com/ens/nov2007/2007-11-28-092.asp>.

36. Greenprint Denver, Greenprint Goals, <http://www.greenprintdenver.org/energy-emissions/greenprint-goals> (last visited Apr. 18, 2010).

37. S.F. DEP'T OF THE ENV'T & S.F. PUB. UTILS. COMM'N, CLIMATE ACTION PLAN FOR SAN FRANCISCO: LOCAL ACTIONS TO REDUCE GREENHOUSE GAS EMISSIONS, at ES-1 (2004), available at <http://www.sfenvironment.org/downloads/library/climateactionplan.pdf> (20% below 1990 levels by 2012).

38. City of Atlanta, Atlanta Announces Municipal Carbon Footprint to Measure Emission Reductions, http://www.atlantaga.gov/media/nr_carbonfootprint_031709.aspx (last visited Apr. 18, 2010) (7% by 2012).

39. City of Dallas Office of Environmental Quality, City of Dallas Greenhouse Gas Emission Inventory, http://www.greendallas.net/pdfs/GHG_Emissions_Summary.pdf (last visited Apr. 18, 2010) (7% below 1990 levels by 2012).

40. See CITY OF PORTLAND BUREAU OF PLANNING AND SUSTAINABILITY, CLIMATE ACTION PLAN 2009, at 7 (2009), available at <http://www.portlandonline.com/bps/index.cfm?c=49989&a=268612>.

41. CITY OF FORT COLLINS, FORT COLLINS CLIMATE ACTION PLAN: INTERIM STRATEGIC PLAN TOWARDS 2020 GOAL 28 (2008), available at http://www.fcgov.com/climateprotection/pdf/climate_action_plan.pdf.

cities are retrofitting buildings, weatherizing homes, trading in old appliances, and installing new HVAC systems. Albuquerque offers reduced impacts fees and density bonuses for energy-efficient building projects.⁴² The Houston Airport System is taking special steps to address the environmental issues at the three airports in the Houston area. Its "Environmental Management System will govern how the . . . employees apply environmental objectives in day-to-day activities." The Airport System also plans to implement low-cost measures, such as cutting the energy supply and turning off lights in rooms not being used.⁴³ The city of Seattle is attempting to offset the expense of switching to green efficiency strategies by offering subsidized audits to homeowners. A select number of homeowners will receive an Energy Performance Score indicating "how a home's energy use and carbon emissions stack up against Seattle's averages and goals."⁴⁴

The utility industry has also spurred partnerships with local governments to achieve energy efficiency goals. For example, in New York, Babylon, Brookhaven, Great Neck, Greenburgh, Huntington, North Haven, North Hempstead, Oyster Bay, Riverhead, and Southampton have all joined the Long Island Power Authority Energy Star Homes program and incorporated Energy Star requirements into their building codes.⁴⁵ Pacific Gas and Electric has partnered with 17 cities, counties, and agencies in California as part of its Energy Watch program, which focuses on outreach, energy efficiency options for residential and commercial customers, and developing local energy policies to promote efficiency.⁴⁶

Municipalities must be mindful, however, of the intergovernmental dynamics of regulating energy efficiency standards. The issue of preemption or conflict with state and federal statutes and regulations has already started to surface in litigation. In October 2008, a federal district court issued a preliminary injunction barring enforcement of the city of Albuquerque's green building code pending the outcome of a lawsuit, brought by HVAC and water heating-equipment trade organizations, contractors, and distributors, on the grounds that it was preempted by federal law.⁴⁷ Among other things, the green building code called for a 30% increase in energy efficiency for new commercial and residential buildings, as well as for those undergoing substantial renovations. To achieve this goal, the code provided that single-family homes should have more insulation, more efficient heating, cooling and ventilating, water heating, and lighting; and

42. ALBUQUERQUE CLIMATE ACTION TASK FORCE, CITY OF ALBUQUERQUE CLIMATE ACTION PLAN 21 (2009), available at <http://www.cabq.gov/cap/CAPREV11forWEB.pdf>.

43. CITY OF HOUSTON, EMISSIONS REDUCTION PLAN 7 (2008), available at <http://www.greenhoustonx.gov/reports/emissionreduction20080909.pdf>.

44. CITY OF SEATTLE OFFICE OF SUSTAINABILITY & ENV'T, SEATTLE CLIMATE PROTECTION INITIATIVE PROGRESS REPORT 2009, at 9 (2009), available at <http://www.seattle.gov/climate/docs/CPI-09-Progress-Report.pdf>.

45. Patricia E. Salkin, *New York Climate Change Report Card: Improvement Needed for More Effective Leadership and Overall Coordination With Local Government*, 80 U. COLO. L. REV. 921, 935 (2009).

46. PG&E, Energy Watch Partnerships 2006-2008, <http://www.pge.com/mybusiness/energysavingsrebates/partnersandtradepros/tradeprofessionals/energywatchpartnerships.shtml>.

47. Air Conditioning, Heating & Refrigeration Inst. v. City of Albuquerque, 2008 U.S. Dist. LEXIS 106706, 2008 WL 5586316 (D.N.M. Oct. 3, 2008).

commercial and residential structures would also have to undergo thermal bypass inspections.⁴⁸ The judge wrote:

The City's goals in enacting [the disputed code] are laudable. Unfortunately, the drafters of the Code were unaware of the long-standing federal statutes governing the energy efficiency of certain HVAC and water heating products and expressly preempting state regulation of these products when the Code was drafted and, as a result, the Code, as enacted, infringes on an area preempted by federal law.⁴⁹

VI. Green Development

Overlapping in many respects with energy efficiency programs is the growing trend of adopting ordinances that encourage development of green buildings. Some green building ordinances apply only to municipal construction/renovation projects⁵⁰; some apply to private projects that receive public funding⁵¹; and others apply to both public and private construction/renovation projects.⁵² Green building requirements that apply to private construction are varied. Some apply only to construction projects larger than a certain size,⁵³ and some are restricted to only particular types of buildings.⁵⁴ While the Energy Star and Leadership in Energy and Environmental Design (LEED) systems are

common, some municipalities use other rating systems, or create their own.⁵⁵ Some green building regulations also permit developers to meet LEED "equivalents" or to merely comply with LEED guidelines without receiving LEED certification. While this allows for flexibility in the development approval process and lets developers avoid the time and expense required by the LEED certification process, it may obstruct the goals of green building regulations if local regulators do not require strict compliance with LEED criteria.⁵⁶ The ordinances also differ in other ways, including which level of LEED criteria must be sought, and whether waivers are available.⁵⁷

New York City's green building law was enacted in 2005 and requires municipal projects costing more than \$2 million to be designed to meet LEED silver criteria, although actual certification is unnecessary.⁵⁸ In addition to city projects, the LEED requirements apply to private developments that receive more than 50% city funding or more than \$10 million of city money. Also in New York, Nassau County's 2007 green building requirements, like New York City's, apply to publicly funded projects, as well as to public works construction and renovation projects.⁵⁹ The law generally mandates compliance with the requirements for the LEED silver rating, but actual certification is not required, and exemptions can be granted on a number of financial grounds.⁶⁰

In California, the city of San Rafael adopted a Green Building Ordinance that requires all new dwelling units to be Green Point Rated, using standards developed by Build It Green, and that requires new commercial or civic buildings to meet LEED standards.⁶¹ Santa Monica requires projects to comply with either performance or prescriptive energy code regulations in addition to green building requirements. Santa Monica's green building ordinance also requires solar water heaters to be installed for certain projects, like swimming pools and car washes.⁶² More than

48. City of Albuquerque, Green Building, <http://www.cabq.gov/albuquerque/green/green-goals/green-building/green-building-page> (last visited Apr. 18, 2010).

49. *Air Conditioning, Heating & Refrigeration Inst.*, 2008 U.S. Dist. LEXIS 106706 at *37.

50. See, e.g., Riverhead, N.Y., Local Law No. 32 (2008), codified at §§52-22 to 52-27, available at <http://www.ecode360.com/?custId=RI0508>; County of Rockland, N.Y., Local Law No. 14 (2008), codified at §§220-4 to 220-8, available at <http://www.ecode360.com/?custId=RO1021>; East Aurora, N.Y., Local Law No. 8 (2007), codified at §§108-11 to 108-13, available at <http://www.ecode360.com/?custId=EA0398>.

51. See, e.g., County of Nassau, N.Y., Local Law No. 16 (2007), codified at tit. 66, available at http://gcp.esub.net/cgi-bin/om_isapi.dll?clientID=50640&infobase=na2789.nfo&softpage=Browse_Frame_Pg42; New York, N.Y., Local Law No. 86 (Oct. 3, 2005), available at http://www.nyc.gov/html/dob/downloads/pdf/ll_86of2005.pdf.

52. See, e.g., Babylon, N.Y., Local Law No. 40 (2006), codified at §§89-83 to 89-87, available at <http://www.ecode360.com/?custId=BA0924>.

53. See, e.g., WASH., D.C., CODE §6-1451.11 (2009) (Green Building Act of 2006), available at <http://www.dccouncil.washington.dc.us/images/00001/20061218152322.pdf> (covering nonresidential city projects larger than 10,000 square feet, residential projects larger than 10,000 square feet, and large nonresidential projects undertaken by private lessees of city land); HUNTINGTON, N.Y., CODE §197-4 (2009) (imposing green building requirements on commercial developments over 4,000 square feet). *But cf.* L.A. County, Cal., Ordinance No. 2008-0065 (Dec. 18, 2008), available at http://planning.lacounty.gov/assets/upl/project/green_20080507-green-building-program-ordinances.pdf (covering all building projects in the county's more than 2,500 square miles of unincorporated land, except agricultural accessory structures, projects on registered historic sites, and first-time tenant improvements smaller than 10,000 square feet).

54. See, e.g., HUNTINGTON, N.Y., CODE §§87-55.2 (covering only residential construction), 197-4 (covering only commercial developments over 4,000 square feet); Carbondale, Colo., Ordinance No. 12 (May 2007), available at <http://www.carbondalegov.org/vertical/Sites/%7BE239F6F5-CCA3-4F3A-8B27-95E8145FD79A%7D/uploads/%7B4E823FFE-8071-45C6-866D-C8A4B1B33613%7D.PDF> (covering only residential construction); L.A. County, Cal., Ordinance No. 2008-0065 (exempting industrial projects from the third-party rating system requirements described in the ordinance, but still requiring them to submit site plans showing all of the green building techniques to be used in the project); Boulder County, Colo., BuildSmart Program Description, <http://www.bouldercounty.org/lu/buildsmart/BuildSmartPurpose.htm> (last visited Apr. 19, 2010) (covering only residential construction).

55. See, e.g., SANTA MONICA, CAL., CODE §8.108.040(a) (2009), available at http://www.qcode.us/codes/santamonica/view.php?topic=8-8_108-subpart_a_green_building-8_108_040&frames=on ("For single-family residential and for multi-family residential under four stories, this checklist shall be either a LEED-Homes checklist, a GreenPoint Rated checklist, or a Santa Monica Residential Green Building checklist."); CARBONDALE, COLO., CODE §15.30.170 (2009) (specifying a checklist of energy efficiency and green building design techniques developed by the town); L.A. County, Cal., Ordinance No. 2008-0065 (including minimum green building requirements in a County Green Building Code but requiring certain projects to meet additional standards under the LEED, California Green Builder (CGB), Green Point Rated (GPR), or equivalent rating systems).

56. See Simi Hoque, *LEED Certifiable vs. LEED Certified*, GREENERBUILDINGS.COM, Mar. 11, 2008, <http://www.GreenerBuildings.com/blog/2008/03/11/leed-certifiable-vs-leed-certified>.

57. A word of caution for practitioners about incorporating LEED certification into local laws—the LEED certification standards continue to evolve, and what may be understood as required today, may not be enough to satisfy the criteria in the future. Furthermore, many discussions have been taking place at conferences over the last year about the impact of requiring LEED certification and housing affordability.

58. New York, N.Y. Local Law No. 86.

59. County of Nassau, N.Y., Local Law No. 16 §§3-4 (2007), *supra* note 51 (projects smaller than 5,000 are not covered).

60. County of Nassau, N.Y., Local Law No. 16 §6 (exemptions).

61. CITY OF SAN RAFAEL, *supra* note 29, at 9.

62. See City of Santa Monica Office of Sustainability and the Environment Homepage, <http://www.smgreen.org/index.html> (last visited Apr. 19, 2010).

30 other California municipalities have also adopted green building requirements.⁶³

The Washington, D.C., Green Building Advisory Council has monitoring and enforcement responsibilities that ensure compliance with its 2006 Green Building Act. The Act calls for the requirements applying to privately owned projects to be monitored by either an agency or a consultant selected by the mayor, and the owners of any buildings that do not meet their verification requirements may be required to forfeit performance bonds to the city for deposit in the Green Building Fund. The fund finances staffing and operation costs for plan review, inspections, and monitoring of covered buildings, as well as education, training, and outreach activities. In many cities, moreover, certificates of occupancy will not be issued unless completed buildings pass compliance inspections.⁶⁴

VII. Alternative Energy Sources

Through their land use control authority, local governments are adopting a variety of ordinances and regulations to ensure that solar, wind, and geothermal energy sources can all be appropriately utilized in a community. For example, local governments are adopting zoning ordinances that will allow residential wind power generators to be constructed.⁶⁵ Commercial wind farm projects probably present the greatest challenge for municipalities in terms of siting decisions. In some states, the decision is made at the state level, but in the vast majority of states, it is a locally based land use decision that encompasses all aspects of siting, construction, operation, and decommissioning of wind turbines. Wind turbines may be specifically permitted in some zoning districts, and prohibited from others, or they may be allowed only in wind overlay zones.⁶⁶ Some type of special permit is typically required, often in conjunction with site design and environmental review.⁶⁷ Municipalities are also consumers of alternative energy. A contract for wind energy was negotiated by the city of Houston with the hopes that by the year 2010, “the City will utilize fifty megawatts of wind energy.”⁶⁸

Municipal regulations may allow solar energy collectors as permitted accessory uses in some or all zoning districts,⁶⁹ or

provide exemptions from height restrictions for solar energy equipment.⁷⁰ The town of Oro Valley, Arizona, requires that all single-family and two-family residences be built to accommodate the future connection of solar systems.⁷¹

Another example of local innovation is from Chattanooga, Tennessee, where “The Green Power Switch Program” was initiated for local energy providers to offer environmentally friendly electric energy to consumers.⁷² This program combines with efforts to encourage community members to utilize alternative energy sources, such as solar panels and wind turbines, to help promote the city’s efforts to reduce emissions.⁷³

VIII. Green Procurement

Green procurement laws at the local level require municipalities to incorporate environmental factors into their purchasing decisions. In New York, Erie County’s 2007 Energy Efficient Products Act, which requires the county to purchase Energy Star-rated products when available, is an example of a green procurement law. Under the law, county agencies must include Energy Star preferences in procurement bid specifications, and they may only refuse to purchase Energy Star products when “the agency can demonstrate, in writing, that the interests of the County would be better served by procuring non-Energy Star rated equipment.”⁷⁴ Nassau County, New York, enacted a similar law in 2008, although its green procurement guidelines are not based on the Energy Star rating system.⁷⁵ Under the Nassau County law, the office of purchasing is directed to establish green purchasing standards for a variety of things, including office supplies and equipment, cleaning supplies, food, landscaping and construction materials, parks and recreation supplies, vehicles, and transportation supplies.⁷⁶ The purchasing criteria are to be established, in part, by reference to green purchasing guides produced by EPA and other environmental advocacy groups, and after consultation with a committee made up of representatives of relevant county departments and local environmental groups.⁷⁷ Both King County and Seattle, Washington, also have environmentally focused purchasing policies. In King County, “Departments shall purchase recycled and other

63. See CAL. DEPT OF JUSTICE, LOCAL GOVERNMENT GREEN BUILDING ORDINANCES IN CALIFORNIA (2009), available at http://ag.ca.gov/globalwarming/pdf/green_building.pdf.

64. WASH., D.C., CODE §6-1451.11.

65. CITY OF SAN RAFAEL, *supra* note 29, at 9. See also DWIGHT H. MERRIAM, *Regulating Backyard Wind Turbines*, 292 VT. J. ENVTL. L. 291 (2009), available at <http://www.vjel.org/journal/pdf/VJEL10091.pdf>.

66. KATHERINE DANIELS, N.Y. PLANNING FED’N, WIND ENERGY MODEL ORDINANCE OPTIONS 3 (2004), available at http://www.powernaturally.org/Programs/Wind/toolkit/2_windenergymodel.pdf.

67. *Id.*

68. CITY OF HOUSTON, *supra* note 43, at 6.

69. See, e.g., ALBANY, N.Y., CODE §375-9 (2009), available at <http://www.ecode360.com/?custId=AL0934>; AMSTERDAM, N.Y., CODE §250-15 (2009), available at <http://www.ecode360.com/ecode3-back/getSimple.jsp?&guid=8071006&j=256>; BEDFORD, N.Y., CODE §125-20 (2009), available at <http://www.ecode360.com/ecode3-back/getSimple.jsp?&guid=6237436&j=256>; Briarcliff Manor, N.Y., Local Law No. 3 (2007), codified at §220-9.1, available at <http://www.ecode360.com/?custId=BR1701>; Ithaca, N.Y., Local Law No. 11 (2006), codified at §270-219.1, available at <http://www.ecode360.com/?custId=IT1944>; Pottstown, Pa., Ordinance No. 2064 (July 13, 2009), available at <http://www.pottstown.org/PDF/Codes/>

SolarEnergyOrdinance2064.pdf; Erie, Pa., Ordinance No. 4-2010 (Feb. 4, 2010), available at <http://www.erie.pa.us/pdf/ordinances/ord.4-2010.urban.solar.farm.pdf>.

70. AMSTERDAM, N.Y., CODE §250-15; see also BEDFORD, N.Y., CODE §125-20; SEATTLE, WASH., CODE §23:43.040 (2009), available at <http://clerk.ci.seattle.wa.us/~scripts/nph-brs.exe?d=CODE&s1=23.43.040.snum.&Sect5=CODE1&Sect6=HITOFF&l=20&p=1&u=-public/code1.htm&t=1&f=G> (solar collectors can exceed height limits in the residential small lot section by four feet).

71. Oro Valley, Ariz., Ordinance No. 09-11 (June 17, 2009), http://www.orovalleyaz.gov/Assets/_assets/building_safety/pdf/Residential+Solar+Ordinance+09-11.PDF.

72. CHATTANOOGA GREEN COMM., THE CHATTANOOGA CLIMATE ACTION PLAN 31 (2009), available at http://www.chattanooga.gov/Final_CAP_adopted.pdf.

73. *Id.*

74. Erie County, N.Y., Local Law No. 4 (2007), available at http://www.erie.gov/legislature/pdf/LL_NO5-2007.pdf. See also NASSAU COUNTY, N.Y., ADMIN. CODE §7-4.0 (2008), available at http://gcp.esub.net/cgi-bin/om_isapi.dll?clientID=50836&infobase=na2789.nfo&softpage=Browse_Frame_Pg42.

75. NASSAU COUNTY, N.Y., ADMIN. CODE §7-4.0.

76. *Id.*

77. *Id.*

environmentally preferable products whenever practicable” and “The county shall require its contractors and consultants to use recycled and other environmentally preferable products whenever practicable.”⁷⁸ Departments in Seattle, when making purchasing decisions, “are directed to consider life cycle effects from: pollution; energy consumption; recycled material content; depletion of natural resources; [and] potential impact on health and nature[.]”⁷⁹

IX. Public Education and Outreach

Educating the public about the importance of climate change plans is an integral part of gaining support and enthusiasm. Cities have begun developing websites where community members can calculate their energy use and find ways to decrease their emissions.⁸⁰ Other programs seek to educate business owners about climate-friendly practices.⁸¹ Albuquerque plans to “educate and develop climate-friendly business practices by coordinating with trade groups to develop education programs that can then be advertised and targeted to business and industry.”⁸² Local governments have also begun to reach out beyond just individuals and other government entities, forming collaborative efforts with local colleges and universities. For example, Houston has collaborated with local students in engineering disciplines to develop programs to reduce diesel usage.⁸³

X. Other Green Measures

Some municipalities are starting to convert their vehicle fleets to more energy-efficient models. For example, last year, the mayor of Seattle signed an agreement with Nissan North America to make the city one of the first areas of the country where its new all-electric car will be released.⁸⁴ Outdated buses, commuter trains, and rapid-transit vehicles are being replaced with newer, more efficient models. For example, the city of Chicago’s public transportation system switched to cleaner fuels.⁸⁵ Cities are also expanding their transit coverage areas, making public transportation a viable option for people who do not live within the immediate city limits.⁸⁶ In an effort to promote alternative modes of transportation, cities are expanding their bicycle lanes and walkways to be more pedestrian-friendly. Cities have added anywhere from

25-100 miles of bike lanes in the past few years.⁸⁷ These improved biking conditions have shown a 15% increase in biking in Seattle between 2007 and 2009.⁸⁸ The plan for the city of Miami calls for encouraging the development of energy-efficient transportation and better quality sidewalks, as well as redevelopment enabling personal and professional activities to be more accessible.⁸⁹

Alternative work options are also being explored by municipalities. Houston introduced a “Flex in the City” program that encourages employers to consider alternative work options for employees, such as telecommuting, flexible start and end times, and shorter work weeks.⁹⁰

In many cities, municipal recycling programs are being reinvented, and the list of recyclables is being expanded to include such things as aluminum foil, plastic bags, plastic cups, aerosol cans, electronics, and used motor oil.⁹¹ Organic waste materials are being collected to generate alternative sources of energy.⁹² The city of Chicago’s efforts to encourage the onsite capture and reuse of stormwater resulted in a stormwater ordinance that requires large developments to capture at least the first half-inch of rainfall on-site.⁹³ In 2008, Tucson, Arizona, enacted an ordinance that requires all commercial developments to include a rainwater harvesting plan in their site plan applications.⁹⁴

XI. Incentives

Human nature responds to rewards or incentives when it comes to changing behaviors. From manufacturer coupons and rebates to get consumers to purchase products, to stores offering specials for early-bird shoppers, municipal governments serious about changing behaviors of their residents have realized that incentives can be a cost-effective tool to achieving GHG reduction goals. For example, the city of Albuquerque is developing ground-source heat pumps, offering rebates and tax credits, as well as working with local electric utility companies to fund the initial costs for a program to help it achieve the 2020 and 2050 GHG reduction goal.⁹⁵ Municipalities that desire to promote solar energy have offered a variety of incentives, including reduced permit fees for projects that include solar improvements,⁹⁶ and rebates

78. KING COUNTY, WASH., CODE §10.16.020 (2009), available at http://www.kingcounty.gov/operations/procurement/Services/Environmental_Purchasing/~media/operations/procurement/documents/EP_Policy_Ordinance.ashx.

79. Seattle Office of Sustainability and Environment, Sustainable Purchasing, <http://www.seattle.gov/environment/Purchasing.htm> (last visited Apr. 19, 2010).

80. CITY OF HOUSTON, *supra* note 43, at 16.

81. CITY OF MIAMI, MIPLAN: CITY OF MIAMI CLIMATE ACTION PLAN 30 (2008), available at <http://www.miamigov.com/msi/pages/Climate%20Action/MiPlan%20Final%20062608.pdf>.

82. ALBUQUERQUE CLIMATE ACTION TASK FORCE, *supra* note 42, at 18.

83. CITY OF HOUSTON, *supra* note 43, at 11.

84. CITY OF SEATTLE OFFICE OF SUSTAINABILITY & ENV’T, *supra* note 44, at 7.

85. CITY OF CHICAGO, CHICAGO CLIMATE ACTION PLAN 30 (2009), available at http://www.chicagoclimataction.org/filebin/pdf/finalreport/CCAPREPORT_FINAL.pdf.

86. CITY OF SAN RAFAEL, *supra* note 29, at 8.

87. CITY OF SEATTLE OFFICE OF SUSTAINABILITY & ENV’T, *supra* note 44, at 2; CITY OF SAN RAFAEL, *supra* note 29, at 8.

88. CITY OF SEATTLE OFFICE OF SUSTAINABILITY & ENV’T, *supra* note 44, at 5.

89. CITY OF MIAMI, *supra* note 81, at 38.

90. CITY OF HOUSTON, *supra* note 43, at 16.

91. See, e.g., CITY OF SEATTLE OFFICE OF SUSTAINABILITY & ENV’T, *supra* note 44, at 12; Press Release, Washington D.C. Dept. of Pub. Works, Mayor Fenty Announces Expanded Recycling Program (Oct. 6, 2008), available at <http://newsroom.dc.gov/show.aspx/agency/dpw/section/2/release/15085>; Bradley Olson, *City Ready to Expand Recycling Program*, HOUSTON CHRON., Jan. 27, 2010.

92. CITY OF FORT COLLINS, *supra* note 41, at 32.

93. CITY OF CHICAGO, *supra* note 85, at 36.

94. Tucson, Ariz., Ordinance No. 10597 (Oct. 14, 2008), available at <http://www.ci.tucson.az.us/water/docs/rainwaterord.pdf>.

95. ALBUQUERQUE CLIMATE ACTION TASK FORCE, *supra* note 42, at 33.

96. See, e.g., YORKTOWN, N.Y., CODE §130-4 (2008), available at <http://www.ecode360.com/ecode3-back/getSimple.jsp?&guid=6849802&cj=256>; ROTTERDAM, N.Y., CODE §270-137.1 (2009), available at <http://www.ecode360.com/ecode3-back/getSimple.jsp?&guid=7093522&cj=256>; City of Santa Ana, Build

for installation of solar energy systems.⁹⁷ These types of incentives can be easily transferred to encourage other types of choices and behaviors aimed at GHG reduction.

Evaluating zoning codes and offering incentives to developers who build within current structures in densely populated areas is becoming popular in urban centers.⁹⁸ Offering property tax reductions for those property owners with renewable energy systems,⁹⁹ as well as free transit passes for city employees,¹⁰⁰ grants,¹⁰¹ density or height bonuses,¹⁰² and expedited permit approval,¹⁰³ are examples of other incentives currently offered.

XII. Recommendations

The following recommendations are offered to the federal and state governments as strategies that can be employed to ensure that local governments have the tools, resources, authority, and support needed to continue and to grow the seed work that has already begun in the implementation of plans and actions to slow the impacts of climate change, one community at a time.

A. Federal Government

1. Funding should be made available for the development and adoption of local climate action plans. This can be accomplished with funding to the state governments for this purpose, similar to the old Housing and Urban Development HUD 701 Program for land use plans.
2. Provide incentives to state governments for local plans. An example, the Stafford Act. The federal gov-

ernment incentivized the states to get local governments to develop local disaster-mitigation plans by providing additional support for states with enhanced mitigation plans (meaning local plans coordinated with a state plan).

3. Provide more technical assistance specifically aimed toward local governments to enhance the work that EPA has started. More must be done, and more federal agencies must follow this lead.
4. Climate Change and Communities has to become a theme within each agency for program dollars and support to localities, similar to what happened with the livable communities agenda during the Clinton Administration, when a coordinated federal effort was made to promote smart growth principles.
5. Examine laws and programs that may have a preemptive effect on local actions and determine whether the federal regulation or local initiatives will go farther in achieving GHG reduction goals.
6. Support the development of a national clearinghouse on local climate action initiatives.
7. Provide avenues for recognition of local officials and communities who are engaged in replicable initiatives that have demonstrated a record of success.

B. State Governments

1. State governments must include municipal stakeholders in the development of statewide climate action plans and energy plans.
2. States should develop a one-stop portal for local governments on climate change technical assistance and funding opportunities. Many state agencies provide different types of technical assistance, funding, and incentives for different aspects of climate change mitigation. A one-stop portal would allow municipal officials and advocates to search one database for desired information. This would save time and increase the ability for swifter and more informed local actions.
3. States should provide funding and other incentives to municipalities who adopt local climate action plans and strategies, including funding for initial inventories to support the development of a plan.
4. States should require local governments to include a climate change element as part of the local comprehensive land use plan.
5. States should provide avenues for recognition of local officials and communities who are engaged in replicable initiatives that have demonstrated a record of success.

Green Initiatives, <http://www.ci.santa-ana.ca.us/green/BuildGreenInitiatives.asp> (last visited Apr. 19, 2010).

97. See, e.g., SOUTHAMPTON, N.Y., CODE §§176-1, 176-2 (2006), available at <http://www.ecode360.com/ecode3-back/getSimple.jsp?custId=SO0286&guid=8695756>; San Francisco Public Utilities Commission, GoSolarSF, http://sfwater.org/msc_main.cfm/MC_ID/17/MSC_ID/400 (last visited Apr. 19, 2010); Sunset Valley, Texas, Solar Water Heater Rebate Program, http://www.sunsetvalley.org/index.asp?Type=B_BASIC&SEC={01DB9430-9349-4D76-B751-A29D675AF038} (last visited Apr. 19, 2010).

98. CHATTANOOGA GREEN COMM., *supra* note 72, at 44.

99. See, e.g., ALBUQUERQUE CLIMATE ACTION TASK FORCE, *supra* note 42, at 19.

100. See, e.g., CITY OF HOUSTON, *supra* note 43, at 15.

101. See, e.g., City of Portland Bureau of Planning and Sustainability, Green Investment Fund (GIF), <http://www.portlandonline.com/osd/index.cfm?c=42134> (last visited Apr. 19, 2010); City of Portland Bureau of Environmental Services, Ecoroof Incentives, <http://www.portlandonline.com/bes/index.cfm?c=48724> (last visited Apr. 19, 2010).

102. See, e.g., HUNTINGTON, N.Y., CODE §198-35 (offering building height incentives for certain industrial projects that meet the LEED Silver rating); Arlington County, Virginia, Environmental Services: Green Building Incentive Program, <http://www.arlingtonva.us/Departments/EnvironmentalServices/epo/EnvironmentalServicesEpoIncentiveProgram.aspx> (last visited Apr. 29, 2010) (density bonuses).

103. See, e.g., SANTA MONICA, CAL., CODE §8.108.050 (2008), available at http://www.qcode.us/codes/santamonica/view.php?topic=8-8_108-subpart_a_green_building-8_108_050&frames=on (expedited approval is available for projects that are actively seeking formal LEED certification); City of Chicago Dept of Bldgs., Green Permit Program (2010), available at http://www.cityofchicago.org/content/dam/city/depts/bldgs/general/GreenPermit/Green_Permit_Brochure_2010.pdf; City of San Rafael, Green Building, http://www.cityofsanrafael.org/Government/Community_Development/Planning/Green_Building.htm (last visited Apr. 19, 2010) (homes that achieve at least 100 GreenPoints or LEED Gold ratings are eligible for expedited permit processing).

XIII. Conclusion

What is clear is that when it comes to ideas and the implementation of real and immediate actions that can, today, start to reduce GHG emissions, there is no denying that local governments are the country's first line of offense. The preceding discussion, while packed with actual examples of ideas and strategies, barely begins to scratch the surface of the hundreds of other activities being done in communities across the country. A true partnership or system of cooperative federalism is needed to comprehensively address climate

change mitigation in a coordinated and thoughtful manner with local governments serving as the foundation for implementation and benchmarking. Information sharing, technical and fiscal assistance, and the articulation of broad public policy goals are appropriate and necessary supporting roles for the federal and state governments. Global climate change mitigation cannot be adequately accomplished without effective, immediate, and coordinated local action. The examples provided throughout this Article demonstrate that local governments are ready, willing, and able to meet the challenges with direction, incentives, and needed support.