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A Climate Action Planning Implementation Guidebook for Small Cities

ACKNOWLEDGEMENTS

Three southeast Michigan communities lent their lessons learned in the development of this model process manual: the cities of Ypsilanti, Southgate and Hazel Park. These cities developed community supported Climate Action Plans in partnership with the Michigan Suburbs Alliance. WARM Training Center provided technical expertise for the Greenhouse Gas (GHG) Assessment.

The Climate Action Planning Small City Implementation Guidebook and three Climate Action Planning Reports were made possible through grants awarded to the cities of Ypsilanti, Hazel Park and Southgate by the Michigan Department of Environmental Quality in August 2010. Over two years, these cities and the Michigan Suburbs Alliance identified and tested the strategies included in the guide.

A handful of dedicated community leaders, who collaborated closely with the Michigan Suburbs Alliance made this Small City Implementation Guidebook possible. Their local expertise throughout the process helped identify realistic and achievable objectives for other cities to consider.

City of Hazel Park
Ed Klobucher, City Manager
Shelley O'Brien, Management Assistant

City of Southgate
Brandon Fournier, City Administrator
Keith Tacket, Public Works Director

City of Ypsilanti
Teresa Gilotti, City Planner
Stan Kirton, Director of Public Services

And many thanks to the mayors and city council members in the City of Hazel Park, City of Southgate and City of Ypsilanti. Your leadership serves as inspiration for other communities.

Prepared By:

Michigan Suburbs Alliance
Valerie Bieberich : : Talent Programs Coordinator
Sarah Hoerl : : Project Assistant
Richard Murphy : : Place Programs Director
Andrew Reaume : : Graphic Designer
Melanie Piana : : Deputy Director

WARM Training Center
Joel Howrani Heeres : : Sustainable Communities Coordinator

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A Climate Action Planning Implementation Guidebook for Small Cities

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SMALL CITIES, BIG IMPACT

SMALL CITIES HAVING A REGIONAL & STATEWIDE IMPACT

Metropolitan Detroit, as Michigan's largest metro area, both presents the state's greatest challenge to sustainability and holds the most promise for the future. The region contains an abundance of human capital, energy and other resources for development but is also rooted in a history of sprawl, inadequate transportation options and aging infrastructure. To confront these substantial barriers to reform and move toward a better, more sustainable future, we must draw on both a desire to change and local resources.

As built-out communities, many southeast Michigan cities, villages and townships struggle to meet the challenge of reducing greenhouse gas emissions. These communities' growth primarily occurred in the 1950s and 1960s, a time when cheap energy drove housing and transportation choices. This has left our communities with significant GHG "legacy costs" that must be addressed. The success of future greenhouse gas reduction is in the hands of an educated and active citizenry as much as local policymakers. The citizen network must be empowered to make lasting change in their homes, habits and community at large.

> *Southeast Michigan communities have the opportunity to step-up to lead the region in local sustainability efforts.*

In response, the cities of Hazel Park, Southgate and Ypsilanti set out to developed standardized approaches and best practices that can be used to efficiently replicate their experiences in neighboring communities. These three cities tested and modeled greenhouse gas emissions reduction strategies for small cities in metro Detroit. Each city engaged a broad and diverse citizenry to assist in reducing each city's collective carbon footprint, and each developed a local climate action plan that addresses issues like transportation, buildings, renewable energy and government operations. Their two-year experience shaped the lessons learned and advice included in this guide.

Municipal Action: Energy & Climate

Climate change is a global process and cannot be addressed by one community acting alone. Many mitigation efforts, however, can only be implemented at the local level, and community-scale strategies must be developed.

The communities where we live and work present many opportunities to reduce greenhouse gas emissions, simultaneously addressing climate change and providing direct local benefits. While small cities may not be able to match national examples like Chicago for headline-grabbing efforts, they have the ability to tailor efforts to local concerns and create meaningful impacts on that scale. From an individual home to the citywide street network, local action can help slow climate change while also saving money, improving quality of life, and supporting new business and employment opportunities.

Many communities across southeast Michigan are motivated to undertake a more robust approach to addressing climate change through more direct planning efforts. Frequently they have specific projects that target areas for improvement that inherently reduce greenhouse gas emissions. Yet, these worthwhile projects are disconnected from a broader picture; therefore cities need assistance knitting individual pieces together under the climate action planning umbrella.

Through the Climate Action Planning process, communities

1. Identify and prioritize measures that can result in energy and cost savings to residents, businesses and the municipality;

2. Gain the necessary information to mobilize resources for achieving the outcomes recommended by the plan. This includes building community networks necessary to promote outreach efforts as well as establishing a basis for leveraging future funding; and

3. Generate a citizen-supported approach that reflects community values for improving quality of life through an effective community engagement process.

BEYOND ENVIRONMENTALISM

Setting aside for a moment the global necessity for reducing carbon emissions, climate action planning presents myriad benefits more tangible to the community itself, making the process worthwhile for its localized economic, environmental and social impacts. Given the current high-carbon basis of our economy (e.g. in 2011, non-renewable carbon-based sources accounted for 82 percent of U.S. energy consumption [1]), cost savings can be a major benefit for cities implementing a climate-change strategy. For municipal governments, most strategies will involve reducing their energy use, and hence their energy bills. Similar benefits accrue to residents and businesses who adopt energy efficiency and renewable energy improvements.

One of the most important intangibles of climate action planning is its marketing effect for the city. The National Association of Realtors' 2011 Community Preference Survey suggests that two-thirds of prospective homebuyers feel that being within easy walking distance to amenities is an important factor in deciding where to live. With 25 percent of greenhouse gas emissions coming from transportation sources, leveraging a climate action plan to promote more walkable neighborhoods can lead to a stronger housing market and higher quality of life for the city.

The community design elements and sustainability practices enshrined in a climate action plan ultimately result in a more affordable and more livable community. Whether by reducing the costs of every day living – from heating a home to driving the commute – or offering the satisfaction that comes from helping to turn the "Rust Belt" green again, this process can help civic leaders and residents take meaningful steps to create a more better, more attractive region and community.

USING THIS GUIDEBOOK

This guidebook was designed for cities with population sizes less than 40,000 and takes into account limitations on resources that cities of this size may experience. The step-by-step process outlined in this guidebook for creating climate action plans generally follows ICLEI's nationally recommended steps to creating a community supported climate action plan.

What makes this guidebook unique is that it includes Michigan-specific experiences that your community may encounter through each process step. This guide will help you

- Understand and overcome the barriers to both the planning process and implementation of specific tactics and recommended strategies for overcoming them;
- Define the parameters for reasonable metrics for cities given their size, resources and the availability of data;
- Utilize a standardized approach and best practices for small city engagement;
- Leverage resources and materials specific to southeast Michigan communities;and
- Cite lessons learned and examples from the cities of Hazel Park, Southgate and Ypsilanti.

Intended Guidebook Users:

This guidebook is written for city residents, staff and government leaders looking for straightforward ways to reduce their community's carbon footprint, including

- Mayors and city council and commission members who seek to set meaningful and achievable goals for the city;
- Key staff, such as city managers and administrators, economic and community development directors, and public works directors with the responsibility for implementing programs and reporting progress; and
- Civic leaders responsible for community engagement and the private sector investments necessary for long-term success.

Existing models vs. needs & assets

Current models supporting municipal climate planning processes can be attributed to different national sources such as ICLEI and Transition Towns, both similar in addressing global climate change goals, yet applying different tools to assist communities that seek to reduce energy usage. The intent of this Guidebook is to leverage and expand on those other products to better target the needs of local Michigan communities.

Consider Scope & Scale of climate planning

A city beginning a climate planning process should consider the scope and scale of planning in order to set realistic expectations. Scope refers to the degree of influence the municipality has over proposed changes (discussed at length in the data collection section), while scale refers to the geographic extent of the planning process.

A greater degree of control, it should be noted, does not always result in a larger impact. A significant percentage of greenhouse gas emissions are attributable to behaviors that are difficult if not impossible to

regulate. For example, how does a city force employees to take the bus to work, compel residents to upgrade the insulation in their houses, or require businesses to install energy-efficient lighting? Frequently, education, programming and incentives can engage more users more productively than regulation alone.

Non-regulatory practices, however, often result in actions that are difficult to measure empirically. Where the city exercises more direct control, for example over facilities, the climate action plan can focus on metrics-driven goals. In designing the plan, the community should consider a range of strategies that blend different scopes and scales.

Municipal Roles in Climate Action Planning

SCALE	SCOPE		
		Control	Incentivize	Support
Community	Regulations and Ordinances	Tax Policy	Community Programs
Municipality	Facilities, Operations, Contracts	Personnel Policy, Internal Programs	Education
Region/State	None	Intergovernmental Partnerships	Advocacy

In Michigan, municipalities do have some significant tools for supporting change at the community scale. Local land use planning and zoning is a clear area to examine, as cities can independently remove barriers to and create incentives for walkable, transit-supportive infill development, getting at the roots of transportation emissions. Proximity to local stakeholders is another factor that small local governments can leverage: elected officials and municipal staff can have meaningful and direct dialogues with community members to explain the public and personal benefits of undertaking climate mitigation.

GETTING STARTED: A PATH TO REDUCE ENERGY CONSUMPTION

This Guidebook combines the best of existing national models with the most effective local programs including the Southeast Michigan Regional Energy Office (SEMREO) and the Michigan Energy Office, and incorporates these models with relevant hands-on local experience and examples. We can expand these national models and products with Michigan learning experiences to better target the needs in your communities.

This guide provides a five-step process for communities to craft and implement a community-driven climate action plan. In contrast to the approach in other national models, this Guidebook recommends first setting goals and engaging the community to uncover data needs which may have otherwise been overlooked if data collection commenced as the first step. You'll proceed more efficiently by reducing the number of times you need to request data from external sources.

MUNICIPAL SCALE

A community taking its first steps into addressing the climate impacts of its energy use should begin
with this question

> *What emissions-producing activities does the city have direct and immediate control over, enabling direct change?*

While the amount of energy used here is small in absolute terms, a municipality can often make changes here quickly and without relying on outside partners, providing demonstration projects as well as enjoying direct cost savings for the municipal budget.

examples of areas of activities:
Lighting and HVAC systems in city buildings; street lighting; municipal fleet vehicles; water and wastewater treatment

COMMUNITY SCALE

A city can have much greater impact by prompting and supporting actions by private community members. Using its regulatory abilities to permit, incentivize or require certain actions, as well as using public communications to educate the community, municipalities can support significant changes in energy use, albeit indirectly and over time. While these actions typically do not have direct fiscal benefits for the municipal government, they can grow the local tax base over time by improving quality of life, reducing costs of doing business and providing similar indirect benefits.

examples of areas of activities:
Home lighting, heating and water use; business lighting and hvac; resident and commuter travel choices; waste stream management: recycling and composting; land use and development patterns; shade tree planting.

REGIONAL / STATE SCALE

Some of the most powerful drivers of climate change are unfortunately beyond the control of individual municipalities. The choices made by state transportation departments and metropolitan planning organizations can dwarf the impact of a small community's efforts, for better or worse. Public finance systems and development incentives can either support emissions-reduction, by encouraging infill development, or impede it by encouraging greenfield development. Communities cannot address these factors single-handedly, but must work with each other and with state-level decision-makers to create changes.

examples of areas of activities:
Regional transit and road networks; regional and state economic development tools; municipal finance policies reducing disincentives to infill development.

CLIMATE ACTION PLANNING STEPS

Engage the Community and City Leadership Throughout the Process	Step One:	Identify and Set Goals for the Planning Process
	Step Two:	Prepare a Greenhouse Gas (GHG) Inventory
	Step Three:	Indentify, Evaluate and Select Strategies for GHF Reductions
	Step Four:	Adopt and Implement the Plan
	Step Five:	Monitor and Evaluate Progress

Each subsection discusses considerations and recommendations for that step in the process, including:

- Risks and Lessons Learned: what to look out for that may cause delays or be more difficult than you anticipate, based on experiences in Hazel Park, Ypsilanti and Southgate.
- Community Engagement: public engagement activities cities could consider to develop broad-based support.
- Resources: people and organizations to connect with throughout the entire process.
- Tools and Materials: documents and tools to help compile and organize data.

Community Engagement

COMMUNITY ENGAGEMENT

To successfully reduce greenhouse gas emissions through local climate action planning, the role of an educated and active citizenry will be as important as that of local policymakers. A main focus of the climate action planning process is on convening a citizen network to make lasting change in residents' homes, habits and larger community. Citizens must feel empowered and help define the city's planning activities so they understand and support future investment and policy changes that help achieve GHG reduction goals. An effective community engagement process finds individuals to join the climate action planning process, leads to increased leadership and a greater number of voices supporting sustainability issues, and addresses community ideas, values and knowledge and encouraging a shift in culture.

This Implementation Guidebook discusses the entire community engagement process, covering getting started, understanding cultural beliefs on climate change, finding stakeholders, and framing the process to different audiences. Throughout the Guidebook, specific community engagement activities will be highlighted to support targeted steps and phases.

A climate action plan lays a roadmap for cities to implement emissions reductions. It' is important to evaluate how much existing interest citizens have in addressing sustainability, environmentalism or climate change to make the planning process worthwhile and productive. It will also be crucial to achieve buy-in and support from a diverse set of stakeholders. Considering each step in the community engagement process will help you evaluate what's realistically doable. Perhaps most important of all, residents often can offer specific expertise relative the planning effort that may not be otherwise available to the community without the expenditure of additional resources. Engineers, electricians, researchers, planners, teachers, construction teams, project managers, marketers, and a wide array of other professions have direct relevance to climate action strategies. Engaging these members of the community can reduce your planning costs and build a stronger strategy with robust citizen support.

Understand Cultural Change and Sustainability Ethos

Local governments are grappling with how to provide essential services with fewer resources. In order to adapt, local governments must respond effectively and appropriately to reduced general fund budgets and adjust operations accordingly. Incorporating environmental issues into government decision-making is a purposeful way to become a more responsible steward of local resources, improving quality of life and saving money and energy. Communities who proactively take this step tackle cultural change by cultivating a new sustainability ethos.

For the many people who view climate change with opposite political and cultural beliefs, changing their response to sustainability issues is not easy. According to Andrew Hoffman, a University of Michigan professor and director of the Erb Institute for Global Sustainable Enterprise, "climate change is not a pollution issue, but an existential challenge to our cultural worldviews."   In response, cities need to be very conscious about the language they use to build a stronger ethos around climate change or sustainability. Certain words and language that work in one community may undermine your message or make your sustainability efforts more difficult.

Climate action planning can be a controversial project for a city to undertake given the philosophical differences and controversial scientific research about global climate change and its impacts. Cities that face challenges stemming from differences in belief should focus instead on common goals. Obtaining stakeholder

buy-in is necessary to learn about the needs, desires and wants of the community to build a plan that everyone can get behind.

Be certain to consider the many reasons for divergent views of climate change. It's important that city leadership become familiar with the various positions stakeholders may voice during the climate action planning process, and address these points of view during message development. Expect to listen to and interact with individuals from across the cultural spectrum, including both those who believe climate change is having a negative impact locally and globally and seek government intervention, and those who believe action to address sustainability issues is an inappropriate role for government. It is important that community leaders hear all points of view and seek to reach community-wide consensus through compromise. More information on how to develop messaging that works is provided in the audience and messaging section.

CULTURAL OBSTACLES TO A SOCIAL CONSENSUS ON CLIMATE CHANGE

1. Political Ideology of Climate Proponents
2. Trust in the Market
3. Distrust in Science, Scientists and the Scientific Process
4. Differing Conceptions of Risk
5. Value of and Relationship to the Environment
6. Discomfort with the Scenarios of Climate Outcomes
7. Role of Government
8. Differing Values and Notions of Morality

[2] List is taken from "Tactics for Reaching Social Consensus", by Andrew Hoffman. University of Michigan. Erb Institute For Global Sustainable Enterprise. July 16, 2012.

CLIMATE ACTION PLANNING IMPLEMENTATION GUIDEBOOK

KEY RESOURCE

Andrew Hoffman, a professor at the The Erb Institute For Global Sustainable Enterprise at the University of Michigan, researches and teaches sustainability. His presentation "Tactics for Reaching a Social Consensus," prepared for the Michigan Green Communities Leadership Academy, is a good primer on why climate change and taking action to address environmental impacts are salient and controversial issues.

Convene A Diverse Group of Community Stakeholders

Communities that seek out committed leaders and diverse voices to support the planning process will have stronger community buy-in on the final GHG reduction strategies. Any city undertaking a community-wide planning initiative will want to find interested local leaders, residents and business voices to participate. Finding supporters is more difficult , however, when the initiative seeks to challenge deeply-held local beliefs and practices on a controversial issue. Securing buy-in from participants is essential for long-term success. Leaders from across the community can bring together a variety of expertise and supporters, which will have a broader impact leading the charge on behalf of local government.

Key participants should include:

- Elected officials such as the mayor or members of city council;

- Department heads from various departments, including Public Works, Community Planning and Economic Development;

- Members of appointed commissions, such as the Planning Commission, Environmental Commission or Recycling Commission;

- Local non-profit organizations with a sustainability focus; and

- Thought leaders or prominent residential voices.

Inviting key participants is easiest because these personal connections already exist and many relationships are nurtured by members of local government. Finding new people that care about sustainability issues, yet typically unengaged in city-led initiatives, will help expand participation and potentially enhance neighborhood-government partnerships. Focus search efforts to identify and invite the following stakeholders to participate:

- Local energy experts who reside in the community such as LEED certified professionals, energy product installation contractors or housing contractors;

- Institutions such as universities and hospitals;

- School district and K-12 teachers;

- Parent-teacher associations;

- Local business owners and business associations;

- Local non-profit organizations, especially those who focus on community organizing or development;

- Neighborhood associations and block clubs;

- Representatives from local utility providers; and

- Religious leaders.

Risks and Lessons Learned: state engagement values

It's important to expressly acknowledge shared values that will drive the city's approach to public engagement. When citizens have a chance to shape the guiding forces of the process and see that the diverse parties and municipal actors are all working with the same goals for the process, they will feel more empowered and valued. An open and inclusive approach will make it easier for participating stakeholders to address citizens, business leaders and local organizations who may have concerns about sustainability issues, particularly individuals who may be skeptical of the climate planning process. These values, which should be made public, can include principles such as:

- Everyone gets a chance to be heard.

- The city genuinely desires to gather valuable input into the plan creation.

- Participants experience a shared sense of ownership.

- Participants experience a shared sense of efficacy.

Risks and Lessons Learned: assess availability and capacity

After reaching out and inviting these groups to join the process, you'll need to consider whether or not the organization or individual has existing capacity or time constraints that may limit their level of participation. Knowing how much time and commitment they are willing to extend to this process will impact the types of engagement activities the city will consider for implementation.

Risk and Lessons Learned: Connect to schools

Residents from Hazel Park, Southgate and Ypsilanti expressed the desire to teach school children about sustainable choices early, giving those children the chance to make a larger impact throughout their lifetimes. Working with schools and teachers is an easy way to identify advocates and create and improve student sustainability programs like recycling or composting. Many local teachers design curricula to teach children about the importance of best practices and individual action one can take to protect and enhance the environment. Schools and local governments provide a platform for widespread sustainability education and should work together to coordinate efforts.

Evaluate Community Networks

Finding and tapping into different local networks may uncover loose connections between people and organizations--they may share the same values, goals and intentions around improving the local environment and quality of life, but they just haven't met or talked about these issues. Local government can serve as the conduit that convenes individuals and existing groups, and organizes them around sustainability and climate planning.

The character of existing local networks will impact your public engagement process. At the outset, your leadership team may find it either easy or difficult to get people engaged on the program or project. In communities with established, active and visibly present organizations or a strong history of citizen participation or advocacy, it's easy to tap into this engaged population with the help of insiders. Identifying stakeholders who typically are not engaged in local government requires proactively seeking new networks.

Risks and Lessons Learned: Tight citizen networks

Cities with a strong history of community engagement can draw from a larger pool of local political advocates, one that hopefully includes environmental activists. It's easier to identify and contact interested individuals and groups when a network of people is already established, and these people tend to be aware of and engaged in what's happening with their local government. However, many groups may not be working in concert. Anchor institutions, schools and businesses often focus on their own sustainability efforts. Climate action planning outreach efforts should connect like-minded stakeholders and build relationships that live after the completion of the city's climate action plan.

Risks and Lessons Learned: Loosely connected or non-existent citizen networks

Conversely, communities with loose or non-existent community networks, particularly around sustainability or environmentalism, should plan to spend more time finding people and groups that may be interested in sustainability issues. It will take some time and effort from city staff and local leaders to build credibility and change local culture around participation in community issues and the importance of sustainability planning. Only after establishing a base of community trust and understanding of the issue can the City explain the purpose of climate action planning, and then show stakeholders what they can do to act on it.

Risks and Lessons Learned: Focused on issues other than sustainability

Some communities may be focused on issues other than sustainability and may not be ready to take on a community-wide initiative like climate action planning. Many small cities are dealing with drastic drops in property values, which impact the city's ability to provide essential services. In response to these difficult financial choices, some cities have engaged and involved the public in local-decision making on other topics. For example, the residents of Hazel Park are strongly organized around employment and local government finance issues, but not around environmental activism; however, many residents have individually adopted sustainable practices or are committed to a global culture of sustainability. Although a handful of dedicated and interested residents participated in community forums, turnout numbers were lower than expected. Still, the feedback gathered from this group offered significant insight into what GHG reduction strategies could work in this community, and the meetings connected these like-minded individuals. Your planning team may experience similar circumstances and need to reassess community interest and ability to build a plan supported by the entire community.

Select Preferred Engagement Approach

For planning and administrative professionals, successful public engagement requires picking the most appropriate outreach method, developing messaging , then combining multiple tools to disseminate these messages and collect feedback. An effective approach combines personal conversations, print, online tools, social media and traditional media to increase awareness about the your initiative and garner meaningful stakeholder participation.   Pairing these considerations with dedicated management oversight will position your community to reach your outreach goals. Being ready for citizen responses will also enable elected leaders and the project team to nimbly respond to sticky situations, if they arise.

Formal Task Forces

A formal task force created by local government offers an opportunity for consistent and dedicated stakeholder participation and drives the process forward. Meeting frequency will depend on group availability and the timeline to develop the plan.   A skillful facilitator who is knowledgeable about climate change will be able to set ground rules, respond to different cultural beliefs about climate change and the need to plan, and keep the group on track.

Community Forums

Instead of a formal committee approach, it may be more suited to your needs to utilize a decentralized, voluntary process wherein the city hosts smaller community forums to solicit input as the process progresses. A planning team with limited staff capacity and resources may find this approach less demanding. It also allows more flexibility, if you find your input needs change at different stages of the plan creation or with different groups of people.

These groups will provide input on each step of the climate action planning process: setting climate action planning goals and objectives, defining challenges and opportunities, recommending strategies for consideration, prioritizing these strategies, and finally, supporting the plan's implementation.

Risks and Lessons Learned: low participation turnout
Low participation turnout results in not enough input. When your turnout is not what you want, finding community members who will help you conduct outreach is crucial – personal connections are at the core of engagement. The planning team will need to revisit the types of local networks previously identified, and then find citizens who can make introductions into those networks.

Risks and Lessons Learned: not getting the right kind of input
Even with good participation turnout, the kind of feedback the planning team seeks may not be the kind of input offered throughout the discussion. If this happens, revisit the plan's overall goals and the for the step of the process you are, and reevaluate your methods accordingly. Assess whether the team is asking the right questions in the right way. Participants may need more background information or education on a particular issue. Or the event may need more energy and fun activities to engage participants in a different way that draws out the type of feedback your are looking for. It is important that the planning team meets people where they are--only then can they join you as you move forward.

Promote the Process and Get the Word Out

Undertaking a major sustainability project like climate action planning requires frequent, intentional messaging about the city's goals, progress and outcomes. Small cities typically have few or no staff resources to write and maintain fresh content on their municipal websites and preferred social media tools. Education and promotion to the public about the city's climate action planning process should include a communications strategy that details the city's plan to inform people about how to get involved and explains why citizen participation will be good for the city. Ideally, this project-specific strategy should be integrated into a broader messaging and outreach plan, so that sustainability communications go hand-in-hand with an effective and comprehensive engagement strategy.

Frame Messages around the Audience

Tailor the messaging around your climate planning goals, process and final product to the diverse audiences present within your city. Addressing local needs and priorities highlights the importance of climate action planning and taps into existing community and individual goals that citizens are already passionate about and willing to act on. To develop effective messages, it is crucial to consider the audience. Start by answering the following questions:

- From where do they get their information?

- What needs shape their actions?

- Will your language be understandable--or technical--enough?

- What is their cultural or political background, and how will it influence their perception of climate action planning?

- Ask yourself whether your messages are reaching the people you need, whether they're inspiring participation, and how they're helping you reach your planning goals.

The most effective tools available to the city are the ones already in municipal control, many of which are low-cost or free to maintain. Integrate climate plan communications into existing tools, and consider creating:

- Dedicated project webpage on city website.

- Dedicated City-sponsored Facebook group or page to promote community events and share updates on city progress. Facebook can help the city network with partners and stakeholders to promote meetings. It's easy for groups and individuals to share information on this platform, increasing your reach.

- Tweets from City Twitter account announcing community events.

- Local cable announcements announcing participation opportunities

Risks and Lessons Learned: framing for individuals that attack the process

The Ypsilanti climate planning process was picked up by opponents of a proposed tax increase as fodder against government action in general. The planning team had to explain what the planning process was, how it was different from the ballot proposal, whose ideas were being shared, and how these ideas and plans were intended to be used. Going forward, the cities included this information on each communications piece that was circulated. A dedicated climate change skeptic in Hazel Park also opposed the process on Facebook and in person, at community meetings. His antagonism was diffused when the city focused on the community benefits and goals that were separate from greenhouse gases. For instance, making buildings more energy-efficient saves residents money, which was a goal he shared.

STEP ONE

Identify and Set Goals for the Planning Process

IDENTIFY AND SET GOALS

The first and most important framing task is to identify and set a realistic climate action planning target for your community. Many models recommend commencing the climate action process by diving first into GHG data collection. Based on the three-city experience, you'll save time and effort if you think strategically how your community will integrate climate planning into existing community goals and develop clarity around the scale and scope of the elements in the plan.

Desired Municipal Climate Action Planning Outcomes

How much your community can take on with climate action planning activities is a significant consideration when selecting and setting GHG reduction goals. A high-level survey of your community's present desires, capabilities, staff resources and financial wherewithal will help uncover whether your community can take on developing a full climate action plan or plan for smaller steps that move the city forward.

Risks and Lessons Learned: reasons not to do climate action planning:

You may hear community stakeholders voice concerns about whether or not it is necessary for the city to engage in climate action planning activities, especially given your community's financial position. Residents may voice criticism about climate action plans running afoul of tax base concerns, like the fear that placing higher standards on buildings will deter development. It's important to acknowledge these concerns and document them for future discussion during community engagement.

Risks and Lessons Learned: Connect to existing efforts

Pairing existing community goals, existing efforts and projects underway to climate action planning goals will direct climate action goals with other community goals, as well as limiting factors. In the fall of 2011, the City of Southgate launched a city rebranding effort and convened a group of interested stakeholders to design and lead this effort. These stakeholders desired to rebrand the city with a green, environmental focus to better connect projects like the city's municipal solar installations and conversion to LED streetlights. Climate action planning served to weave the rebranding effort with individual GHG reduction projects to formalize the city's environmental sustainability goals.

READINESS TO DEVELOP A FULL CLIMATE ACTION PLAN

Undertaking the development of a full climate action plan with a community-wide focus requires significantly more effort from all stakeholders and a longer time frame to collect data, solicit community feedback and analyze strategies for implementation. Determining the most appropriate and achievable target may evolve throughout the planning process, as results from data analysis reveal which sectors emit the highest GHG emissions and which solutions offer the highest return on investment. By contemplating and answering these questions with your planning team, your city can survey its readiness to commence the development of a city-wide action plan.

Readiness to Tackle Smaller Data Collection Effort

Creating a full climate action plan may be out of reach for your community right now. Instead, you may have dedicated individuals and organizations, in partnership with the city, that are willing and able to take on a smaller scale assessment that help achieve long-term GHG community reduction goals. It may be more feasible for your community to tackle collecting and analyzing data at a municipal scale, which has a smaller impact on total community-wide GHG reductions impacts, yet such a focus can reduce costs for government operations and influence culture change toward increased sustainability awareness and involvement.

Balancing Aspiration and Achievement

In setting achievable goals around climate action planning, a community needs to balance the community's value system, the capacity of staff and leadership to implement changes, and the feasibility of any strategy based on available data. The relationship among the three elements represents a dynamic tension that it is essential to monitor. For example, a community that places a high value on environmental protection may not have the staff capacity to meet the aspirations of the community, or a city seeking to understand how to optimize cost-savings might not have sufficient data to prioritize strategies. In small cities especially, it is important to focus on what can be done intelligently and with good odds of success using limited resources.

Consider and answer these questions to assist in defining the scope of project your community is able to undertake for climate action planning:

1. What should our community consider when launching such a process?

   • What are our existing community goals (placemaking, economic development, quality of life, capital improvement, etc.) that impact GHG emissions?

   • Are we tweaking existing plans to incorporate climate mitigation or is climate/mission/energy a more primary goal that requires an independent planning effort?

CLIMATE ACTION PLANNING IMPLEMENTATION GUIDEBOOK

KEY RESOURCE

ICLEI, www.icleiusa.org, is a national non-profit leader in helping cities achieve their sustainability goals from climate mitigation, adoption and renewable energy. ICLEI maintains a large collection of city and county focused climate action plans and provides data collect tools for membership use. ICLEI is a good place to learn more about climate change and mitigation methods.

In 2009, the Michigan Department of Environmental Quality published a statewide climate action plan that identified 54 policy recommendations for reducing GHG emissions.

Post Carbon Institute and Post Carbon Cities helps create more resilient communities by shifting policies that address peak oil and climate change. The institute offers guidance on the climate action planning process.

2. What are reasonable staffing expectations (municipal or otherwise)?

- Select a project lead
- Identify a non-profit, community or business partner
- Assign individual(s) to collect , aggregate and assess energy data
- Create climate action messages to generate awareness and get the word out.
- Assign city staff person or local partner to manage communication tools.

3. What community assets (people) should be in place to make the process successful? Consider these individuals to join your team:

- Elected officials
- City department heads and support staff
- Partner organizations
- Local energy experts
- Utility representatives

4. What is the cost of the project?

- City staff time to support the project
- Cost to collect and track data
- Costs to host public outreach forums
- Graphic design and production costs for outreach materials

5. What funding sources are available?

- State and federal grant opportunities
- Local foundation commitment & support
- Direct government investment
- Individual or local organization fund raising or donations

SELECTING REALISTIC & ACHIEVABLE REDUCTION TARGETS

A prescribed standard GHG reduction target does not exist for a community to readily adopt as its preferred target reduction baseline. Instead, cities select the most achievable target based on scale and scope, total energy usage by sector (buildings, land use, infrastructure and culture change) and the most effective strategies within their wherewithal to achieve GHG reduction targets. Example targets chosen by other cities lend insight to what could be possible in your community.

ICLEI:
Typical 15% to 35% over a 15 to 20 year period

ICLEI tracks and monitors emission reduction targets for its member cities. For large and small cities, a typical target ranges from 15%-30% over a 15 to 20 year period, whereas some cities selected a smaller target for a shorter period of time. For example, 7% reduction target over a 10 year period.

MICHIGAN SUBURBS ALLIANCE:
50% by 2050, or 12.5% per decade

The target reduction amount selected for Hazel Park, Southgate and Ypsilanti was 50% by 2050, or approximately 12.5% (37,838 mtCO2e) per decade. This percentage is based on a review of climate planning efforts around the country and a consideration of feasibility: many of these used targets of 80%-100% emissions reductions by 2050. The 12.5% goal is based realistic achievable for limited powers of a smaller city on issues like regional land use or travel patterns.

MILLENNIAL MAYORS CONGRESS:
25% reduction from 2005 levels of non-renewable energy usage by 2015

The MMC is a partnership of city officials and rising leaders working together to address regional challenges in metro Detroit. In 2009, this voluntary coalition of municipal leaders and residents of the cities agreed to work together to promote energy efficiency and renewable energy projects focused on cost savings, economic diversification and development and job growth.

STEP TWO

Prepare a Greenhouse Gas Inventory

PREPARE A GHG INVENTORY

In order to set specific GHG reduction goals and craft strategies to reach them, a city needs to know where it currently stands. To do this, the community should establish a baseline inventory of energy usage and greenhouse gas emissions. This inventory clarifies where to target strategies for the greatest impact and allows the city to measure achievements over time. The actual process of creating an inventory is straightforward and can generally be done without significant public engagement or outside support. Pitfalls may arise, however, around the availability of data.

ICLEI's International Local Government GHG Emissions Analysis Protocol indicates that any community-scale emissions inventory must include all emissions associated with any activity occurring within the geopolitical boundaries pertaining to the jurisdiction of the local government. The rationale for this edict is that local governments have a greater degree of influence over activities occurring within their jurisdictions, as opposed to activities occurring outside of their jurisdiction.6 The actual emission sources, as in the case of electrical power plants, may occur outside of the geopolitical boundaries but be driven by activities within the community.

Data Collection Steps:

1. DESIGNATE A DATA COLLECTION "POINT PERSON" AND PROVIDE TRAINING.

An individual within City Hall should be responsible for coordinating municipal data collection. Ideally, identify someone with access to at least some of the needed data, such as finance staff who handle utility invoices, or facilities staff within a public works department. That person should be briefed on the purpose of the plan and given enough guidance to understand the types and format of data needed. While this role doesn't need to be filled by top-level executive staff, city leadership does need to be briefed on the collection process and data needs in order to provide support--internally or externally--to advance the data collection process.

2. IDENTIFY DATA TO BE COLLECTED.

Depending on your goals and the scope of planning you have selected, the data sources necessary will vary significantly. Tackling municipal operations requires a relatively small, mostly in-house, data collection process, while a community-wide focus requires much more work with outside sources.

This step also requires an understanding of how you intend to use data, so that you can collect the right information and organize it appropriately. All assumptions and decisions made during data collection should be documented in order to provide context. It is especially important to note where estimates were used in place of missing data. These decisions will be relevant when tracking impacts of the plan over time, to calculate comparison data in the same fashion.

While the data collection process can go into great detail, especially on the governmental operations side, we identified the topics listed in the following table as providing the greatest opportunity for improvement or being of greatest community interest. (A community interested in direct comparisons to other communities or to national averages will want to undertake a more comprehensive GHG inventory, but these items will allow the community to identify opportunities to tackle energy use and emissions.)

Data	Sources	Considerations
Municipal buildings (heating, cooling, lighting)	Internal: utility billings	Since municipal buildings offer many efficiency opportunities that have 1-year paybacks (or shorter), consider doing full building energy audits.
Municipal fleet vehicles (police, fire, public works)	Internal: fuel purchase records or log sheets	While hybrid vehicles or neighborhood electric vehicles may fit some uses, such as parking enforcement, communities may have little opportunity to make change in this area due to limited vehicle replacement schedules.
Municipal street lighting and signals	Internal: billings External: utility records	Within the municipal budget, this may be the largest source of energy costs. In the metro Detroit area, DTE can provide summaries of light types and wattages for calculating energy use and emissions.
Community waste stream (trash, recycling, yard waste/composting)	Internal: hauling records or contract tonnage	Diverting materials from curbside garbage collection to recycling or composting can have significant financial benefits for a city. While the direct local emissions reductions from these activities are minimal, they can reduce the emissions produced by manufacturing new materials.
Community water or sewer usage	Internal: water department External: utility records	While many communities purchase water from regional authorities and have little control over utility practices, addressing consumer or "at the tap" efficiency can have system-level energy impacts.
Community electricity and natural gas usage	Internal: estimation External: utility data	Utility companies may consider aggregate community energy data to be proprietary, and be reluctant to release it. Consider whether you can treat sensitive data confidentially under the "trade secrets" exception of Michigan FOIA (MCL 15.243(f)) while still informing the community planning process. As a fallback method, consider estimating data based on U.S. Energy Information Administration's residential and commercial energy consumption datasets.
Community emissions--other fuels	External: community partners, EPA	For many small communities, identifying and quantifying on-site private fuel usage will be difficult and of low significance. EPA's GHG reporting program (http://www.epa.gov/ghgreporting/index.html) and the Michigan Air Emissions Reporting System (MAERS: http://www.michigan.gov/deq/0,4561,7-135-3310_4148-11409--,00.html) have some data for very large emitters. Local universities or hospitals may be willing to share their own on-site energy usage data.
Community travel behavior	Internal: community surveys External: MPO travel models and related data; Census Bureau	The regional MPO (such as SEMCOG) should be able to provide car and truck mileage data from their travel model. Consider a few items: total vehicle mileage within the municipal boundaries will include through traffic, but is affected by local road design. Mileage for trips beginning or ending in the community includes resident and commuter travel, including trips to other jurisdictions.. The MPO or local transit agency should be able to provide transit ridership counts. Another useful source is the Census Bureau's Longitudinal Employer-Household Dynamics dataset (LEHD--http://lehd.did.census.gov/), which identifies the specific sources and destinations of commuter travel, and can help refine transportation strategies. A resident or commuter travel survey may be another useful follow-up step, especially when crafting strategies around biking, walking, or transit usage.

ICLEI and other standards recommend focusing data collection on areas where the municipal government has direct "operational control." However, our experience in small cities found that this focus excluded the data that strongly interested community members, including household water usage and recycling programs, since these services were under the operational control of regional bodies. Setting qualitative goals before undertaking data collection is one way to avoid blind spots in data collection; staff involved in data collection should also expect some follow-up work later in the process to fill any gaps.

Some data might be difficult to acquire, either because no clear or centralized source exists or because data owners are reluctant to provide it. If data collection is treated as a prerequisite to the rest of the planning process, this can cause the effort to stall. To avoid this, perform data collection in parallel to goal-setting and strategy identification, using preliminary results to inform those steps as remaining data needs are being tracked down.

3. SELECT A BASELINE YEAR FOR MUNICIPAL AND COMMUNITY SECTOR EMISSIONS DATA COLLECTION.

To the extent possible, attempt to collect all relevant data within the same calendar year.

Risks and Lessons Learned: Data is more easily accessible for recent years

While you may be tempted to select an older base year in order to compare with other processes--such as the State of Michigan's 2005 statewide GHG inventory--data for older years may not be easily accessible. Especially when recording municipal energy usage, select a year for which the city has electronic access to data to minimize manual data entry.

Some data sources are only available in specific years. Document when you must substitute "close enough" datasets. For example, SEMCOG's transportation data is only updated every 3-5 years. The most recent transit user survey was performed in 2010-2011; their travel model base year is 2008, but will be updated in 2013.

Not all strategies have a direct, calculable impact on GHG emissions. For example, it is highly beneficial to reach out to the youth in the community by implementing sustainability and energy efficiency education in the school curriculum. However, there is no way to accurately reflect the effect that the education will have on the environment or energy usage. We can only predict that the earlier people learn about sustainable life choices, the more likely they are to stick with us as we grow.

— CLIMATE ACTION PLANNING IMPLEMENTATION GUIDEBOOK

KEY RESOURCE

Tools: The Local Government Operations Protocol, available through The Climate Registry (http://www.theclimateregistry.org/resources/protocols/local-government-operations-protocol), provides an extensive guide on calculating emissions from municipal activities.

4. Pick a data collection tool.

It is important that the team evaluates and picks a GHG and energy data management tool in place before you commence data collection. Having a tool ready to go and the project lead trained on how to use the tool will speed up the process. However, you should take the time to understand any calculations made by the tool and verify them against your understanding of the data where possible.

KEY RESOURCE

ICLEI's Clean Air & Climate Protection software (CACP) is a powerful tool for recording, calculating, and tracking emissions data. (http://www.icleiusa.org/tools/cacp-2009)

5. Aggregate & Analyze Data

In addition to calculating a total amount of GHG emissions for the municipal operations and community across all sources, you can summarize energy usage a few ways to better communicate where emissions are being produced:

- By sector: residential, commercial and industrial buildings; any singular large sources (such as a hospital, manufacturing plant, or landfill); transportation; water usage; waste stream.
- By fuel type: electricity, natural gas, on-site fuel (propane, fuel oil), gasoline, diesel.
- Within municipal operations: building energy, fleet vehicles, streetlighting & signals, single large sources (such as a water treatment plant).

These summaries of how energy is used can help municipal staff and community members prioritize opportunities for GHG emissions reduction by impact: particularly on the municipal side, just seeing the total energy usage can inform staff action.

Community Engagement: Preliminary data should be presented to stakeholders for feedback before the data collection process is considered completed. This serves a few purposes: stakeholders can verify or question assumptions used in collecting data, strengthening the conclusions drawn from those assumptions; stakeholders may be able to identify data missing from the assessment or additional sources for hard-to-find figures; and a preliminary review of the data allows community members to prioritize further data collection, providing feedback on which data people feel comfortable basing conclusions and decisions, and which data needs additional attention.

Typically, the final step in data analysis is to extrapolate energy usage and emissions, so that future accomplishments can be measured against a "business-as-usual" forecast rather than a static number in the past. However, most small cities will find that regional trends are likely to play a large role in predicting future emissions. Major regional transportation investments or changing national energy efficiency standards can render a local forecast inaccurate. Ideally, any forecast at the local scale should

KEY RESOURCE

The Michigan Suburbs Alliance GHG emissions tracking spreadsheet is one tool that can assist the data collection team calculate how many emissions were saved for each strategy and how much that attributed to the overall sector goals.

be used to inform this these important higher-level policies: a local community might show that locating regional growth in more energy-efficient central locations or increasing investment in transit systems would reduce emissions, even if those decisions are ultimately out of their control.

At minimum, the community should calculate a per-capita emissions figure that includes household energy, travel and waste for residents, and per-square-foot building energy and commuter travel figure, for commercial and industrial users. This allows for comparison of localized achievements over time, and acknowledges that questions like regional development patterns are beyond the reach of a local climate plan.

STEP THREE

Identify, Evaluate
&
Select Strategies

IDENTIFY & SELECT STRATEGIES

While data collection and analysis is underway, municipal staff and community partners can begin generating ideas for reducing emissions. While many strategies will be applicable in nearly any community, local stakeholders can identify specific, on-the-ground opportunities, as well as provide feedback on how to implement strategies locally. The planning process needs to balance anticipated emissions reductions, costs (or savings) and community priorities to develop realistic, implementable strategies that will help the city mitigate the impacts of climate change.

Consider breaking down community outreach into phases over the course of plan development. This will provide participants with opportunities to engage at all steps from initial brainstorming to refining the implementation details of selected strategies. Not only does this lead to a plan more carefully tailored to local needs, but will also help build public awareness and momentum without overburdening project staff or community members with too many meetings in a short time frame.

1. Setting Goals and Generate Ideas

Through public engagement opportunities, residents can help set local goals, inform project staff about community conditions and resources, brainstorm ideas to reduce greenhouse gas emissions, assess proposed strategies, suggest how to best implement the plan, and give general feedback and comments on the plan as it progresses through draft stages.

The community and city staff will voice many ideas for consideration, some feasible for the local government and some that may be need a more regional solution.   Encourage feedback on ideas across a range of activities:

- municipal operations
- residential buildings
- commercial/industrial buildings
- transportation
- infrastructure
- locally unique resources

2. Evaluate, Sort and Categorize Ideas

Now you have compiled a good list of ideas for reducing GHG emissions in your community. Each strategy must be evaluated separately before it can be compared to additional strategies. The evaluation process must consider the city's current status, areas in which the city and community want to see progress, and the plausibility of the strategy to reach the goal.

The city must work with residents to identify areas in which the city can improve its GHG emission rate, lower costs and improve the community overall.

3. Select Strategies for Implementation

Initial strategy selection will rely on how effective the suggested solution will be at reducing GHG emissions, any existing programs the city has in place, the project's return on investment and staff capacity for completing a project. Any strategy that does not meet the decided criteria should be saved for future implementation.

Next, weigh the collected data with that of the GHG inventory and public engagement; each strategy must be realistic and worth achieving. Once the strategies are selected, assemble them into a draft plan that sets implementation timelines, identifies potential funding sources and details staff responsibilities for rolling out the plan. Review the draft plan with relevant city staff prior to its adoption; municipal planning, economic development and public works staff have clear roles in implementing climate mitigation strategies. While these staff should be involved in the data collection and opportunity identification stages, a final "reality check" prior to adopting the plan will help insure the proposed implementation strategy is feasible.

CRITERIA TO EVALUATE PROPOSED STRATEGIES

- Current costs of issue area
- Initial cost of implementation
- Potential cost savings and expected payback period
- Current GHG expenditure of issue area
- Potential GHG savings
- Ancillary benefits of project
- Potential funding sources and sponsors
- Potential project partners and stakeholders
- Any resources and staff needed for project implementation and maintenance

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Risks and Lessons Learned: Ideas collected cross multiple sectors

Each recommended strategy typically impacts multiple sectors. Targeted sectors included municipal, residential, commercial, industrial, civic/non-municipal, transportation and land use. The three-city experience let to goals and strategies being categorized into four sections: Buildings (commercial, industrial, residential and government), Culture Change (events, celebration and education), Infrastructure (water, waste and energy generation), and Land Use & Transportation (zoning and modes of traffic).

Risks and Lessons Learned: This community suggested strategy has little effect on its own.

Sometimes, the community has great ideas but they don't have enough impact on GHG reduction on their own. If it is an idea that the community would absolutely love to implement, don't let it stop you! Consider ways that the idea might work in conjunction with another strategy. For example, adding artistic trash and recycling receptacles might not have a big impact by themselves, but coupling the idea with a school recycling program or community-focused recycling competition just might have the results you're looking for.

Risks and Lessons Learned: Selected strategies don't add to 100% of the goal.

Most local climate plans include numerical targets for greenhouse gas reductions over time. While numerical goals can be a useful yardstick when evaluating strategies and implementation progress, you should not generally be concerned if you can't identify 100% of your target emissions reductions through your selected strategies. It is far more effective to choose actions that are clearly feasible, but won't on their own meet your full goals, than it is to set an unrealistically aggressive plan that can never be met. Additionally, the plan should not be used to dismiss opportunities that arise later: plan to watch for and take advantage of future changes in technology or policy that create new opportunities.

A SAMPLE ENGAGEMENT APPROACH

Hazel Park, Southgate and Ypsilanti planned for five community public forums spaced over 8-10 months, as their preferred engagement activities. Each forum built on the information gathered at the previous public meeting:

COMMUNITY FORUM 1:
Launch Process & Identify Goals

Convene interested individuals to learn about climate action planning and how they can become involved in helping the city reduce its GHG emissions; identify GHG reduction goals for the community.

COMMUNITY FORUM 2:
List Ideas & Show Preliminary GHG Data Collection Results

Provide initial results from the GHG data assessments and a selection of best practice strategies to start conversation, with a goal of identifying additional opportunities from the community for investigation.

COMMUNITY FORUM 3:
Community Feedback on Strategies

Review additional data and strategy research results; prioritize strategies and further tailor to demonstrated community needs and resources.

COMMUNITY FORUM 4:
Present Recommended Strategies

Present strategies recommended for inclusion in the final plan; identify gaps or overlaps; discuss targets and implementation steps for each strategy.

COMMUNITY FORUM 5:
Celebration of Plan Adoption & Implementation Kick-off

Celebrate the completion of the plan; discuss implementation opportunities; mobilize community to support implementation of strategies.

STEP FOUR

Adopt and Implement the Plan

ADOPT & IMPLEMENT THE PLAN

The final step in the planning process is for the city council or commission to formally adopt the plan as a guiding policy document for the community. While this does not bind the city to any single strategy--like the city's Master Plan, a climate plan should be treated as a roadmap guiding decisions, not a law mandating them--adoption by the city's elected officials demonstrates a commitment by the community, and will help give the plan weight in future interactions with funders and partners.

The process of formally adopting the plan is also an opportunity to transition into implementation: a formal city adoption can receive attention from media and community members who were not involved in the public engagement process.

- Discuss specific municipal opportunities for implementation, including as much detail on costs, benefits, and partners as is known, in order to support immediate action by the city.

- Leverage the spotlight of the adoption process to publicize opportunities for community-scale action, such as energy efficiency incentive programs currently available to residents or business owners.

Risks and Lessons Learned: keep elected officials informed about progress
The adoption process should not be the first time that elected officials are engaged! As a policy-setting body, they need adequate background to be comfortable adopting the plan. Be sure to include them in invitations to public engagement opportunities, as well as to provide periodic updates during the process.

Implementation

Most implementation of a local climate plan is likely to be opportunistic: the plan will position the community to recognize and act on opportunities. While the planning process will hopefully provide a thorough set of strategies for implementation, it can't anticipate all possibilities. Cities should take an expansive view: if an opportunity arises that wasn't explicitly dealt with in the adopted plan but will help advance its goals, the city should seize it anyways. The mindset and relationships developed in creating a plan can also help the community create opportunities:

- The planning process itself establishes a framework on which to build projects – especially when those projects are expected to be led by community members rather than city hall.

- The planning process can raise stakeholder awareness of existing opportunities: a downtown Ypsilanti business association hosted a meeting about the plan and learned about free DTE energy efficiency consultations for businesses.

- Using the adopted plan in communications with potential implementation partners will show how their efforts would fit into and support broader, community-wide efforts. For resident- or partner-led efforts, being able to leverage the "brand" and official status of the plan can provide legitimacy and amplify success.

- The plan can help city proposals win funding from state and Federal agencies or foundations by demonstrating that the project submitted is part of a well thought-out strategy and has been identified as a high-impact priority.

The city and its partners should continue to communicate progress at every step of each implementation project, from launch to completion and ongoing monitoring -- use each implementation step as opportunity for education and "culture change" and to recognize community members who have led the way.

> "We need to move past individual energy
> efficiency projects and work on fostering low-
> carbon relationships as a community."
>
> *Liano Sharon, Ypsilanti resident*

Relationship to other Plans:

Most communities undertaking energy and climate planning for the first time are likely to do so as a stand-alone effort. However, the plan will offer potential ties to other city plans:

- Land use and transportation strategies should be considered during the city's next Master Plan review. (Consider scheduling a review of the climate plan simultaneous to a future 5-year review of the Master Plan, so that climate plan updates can happen directly in the Master Plan.) The Planning Commission should also review the plan prior to adoption, in order to educate themselves on opportunities to support change at the level of individual site plans and similar actions.

- Many infrastructure and commercial building strategies may be appropriate to include in a DDA's Development Plan.

- Residential energy efficiency strategies that reduce housing costs could be considered as part of a community development Consolidated Plan

- During the adoption process, the community should also consider where responsibility lies for promoting ongoing successes and implementation efforts. While individual city staff are likely to lead implementation of municipal efforts, the city should also consider building some entity that lives beyond the planning process.

- Cities that already have a standing Energy or Environmental Commission have a natural home for this responsibility. For many small cities, though, creating new standing boards or commissions will be beyond the capacity of the city to provide staff support for.

- A city-led task force or standing sub-committee may be a good approach: representatives from city staff and relevant boards and commissions, along with community members and partner organizations, can meet regularly to coordinate action.

STEP FIVE

Evaluate and Monitor Progress

EVALUATE & MONITOR PROGRESS

The implementations of GHG reduction strategies requires time, city resources and dedication from local partnerships to help evaluate and measure progress. Achieving your target reduction goals, such as the 12.5% GHG emissions reduction per decade in Ypsilanti, Hazel Park and Southgate, needs to include annual assessment of short-term goals and keeping an eye on long-term impacts.

Monitor and Evaluation Steps

1. EVALUATE SHORT-TERM IMPLEMENTATION EFFORTS

The city's short-term evaluation should focus on implementation efforts and reviewed annually. Demonstrating results and understanding their impacts will keep the community focused and engaged toward achieving GHG reduction targets. The city needs to know what was completed and produced from their work, and then analyze results and outcomes from these efforts. More importantly, the community wants to hear stories about the city's achievements and celebrate success. Monitoring progress is important for prioritizing future community outreach efforts relating to climate change and choosing new strategies for implementation. Whoever is responsible for coordinating strategies and overseeing the plan should consider these questions:

- What were the results?
- What do the results mean and what were the outcomes?
- How did implementation experience compare to what was expected?
- What hurdles were encountered?
- What partnerships were created?

Many climate plan implementation steps have outcomes that are quickly and easily measured: progress in municipal building upgrades can show results in monthly energy bills, and recycling competitions can show year over year improvements.

The impacts of other strategies won't be directly measurable over time, and will need to be estimated or calculated indirectly: e.g., it would be very difficult for an individual community to track passenger vehicle traffic within the city limits from year to year, but SEMCOG's periodic travel model updates can provide estimates of change over time.

Still other efforts in the community are more likely to be qualitative: compiling energy use and savings data from homeowners is currently logistically infeasibles, but case studies of individual homeowners within a broader program can communicate the achievements.

> Risks and Lessons Learned: Showcase energy and money saved
> The city should track and report all "scope 1" achievements--city electricity, heating, fleet gasoline/diesel use, waste stream diversion, water/sewer volumes--on on-going basis, including the financial impacts of these achievements. Identify newsworthy benchmarks, both financial and energy-related: saving 100,000 kWh of electricity in city buildings! Another example could include residential home energy bills cut by 10%! Track both annual and cumulative savings over time, and present achievements in ways that are accessible, easy to find and understand.

2. REVIEW, EVALUATE AND UPDATE LONG-TERM PLAN

After 2-5 years and depending on how ambitious the community's climate action plan the city should conduct a review of overall progress and update plan. A shorter review period is appropriate for a limited, "first steps" plan, which may have all of its recommendations completed or in progress in that time while a more comprehensive plan will keep the community busy longer. This review should include compiling fresh data and comparing to the initial plan, and then understanding any changes.

> **Risks and Lessons Learned: watch out for data that skews results**
> When looking at city-wide data, energy and emissions figures should be normalized to a per capita or similar number: it is not a success if your community cuts emissions by 10% but also loses 10% of its population!

Regional or statewide policies may also affect local numbers. For example, Michigan currently has a "renewable portfolio standard" law requiring utility companies to generate 10% of the state's electricity from renewable fuel sources by the year 2015, and the state is currently considering setting an additional target of 25% by 2025. Either of these targets would lead to a reduction in community greenhouse gas emissions over time simply even if the same amount of electricity is used.

> **Risks and Lessons Learned: Manage recommended strategies as they are completed**
> Sorting recommendations into those completed (which can be removed from the plan), those that haven't been completed because resources and opportunities haven't yet aligned (which can be kept in the plan), and those that haven't been completed because they were attempted and found not to be feasible or effective (and can be removed).

Community Engagement: Master plan review is a good time to re-engage community members who participated in the creation of the initial plan as well as new stakeholders. Stakeholders can report on additional, community-scale implementation activities and identify new opportunities. The review process is also a good opportunity to identify and discuss the "intangible" benefits of plan implementation--increased quality of life or improved sense of community may not be measurable from utility bills, but is especially significant in looking at climate (or broader sustainability) planning as part of a community's overall planning.

> **Risks and Lessons Learned: Collaborate with neighboring communities**
> A city that has had success from implementing its climate plan can provide guidance to adjacent communities undertaking their first planning efforts, streamlining replication of those initial steps in addition to finding collaborative efforts. Neighboring communities that have each already undertaken initial planning and implementation can work to identify larger scale, collaborative opportunities. As more communities undertake energy, climate, or sustainability planning, the master plan review process is an opportunity for cities to engage their neighbors. Emerging opportunities for additional collaboration will enable the cities to jointly apply for new grant opportunities to pay for more expensive implementation strategies such as infrastructure improvements.

A
Climate Action
Strategy Library

STRATEGY LIBRARY

The strategy library is a set of templates or how-to's for various climate mitigation strategies available at the small-community scale. Each template explains the strategy, provides case studies, identifies ancillary (non-climate-related) benefits of implementation, and estimated costs/benefits. Treat these templates like a "cookbook" for climate planning: for some strategies, you may be able to simply plug in your numbers and have as much information as you need; in others, the library provides a general guide, but you will need to spend some time customizing it to your community's taste.

The library is intended to be expandable with experience—as communities undertake climate planning efforts, they can feed back new strategies into the library, or refined experience with existing strategies back into the library. For access to the library, visit www.suburbsalliance.org.

The Top Twenty Strategy Library Briefs

- Anaerobic Digesters
- Bicycle Facilities
- Bike Share Programs
- Building Audit Information
- Complete Sidewalk Gaps
- Composting and Recycling Programs
- District Geothermal Utilities
- Fluorescent Fixture Upgrades
- HVAC Upgrades
- Infill Development
- LED Streetlight Installation
- Municipal Solar Thermal Water Heating
- Parking Cash-out Programs
- Pay-as-you-Throw Waste Disposal Programs
- Property Assessed Clean Energy Programs
- Residential Weatherization
- Ridership Promotion Programs
- Shade Trees
- Sustainability Education
- Zoning Ordinance for Urban Agriculture

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