PLANNING PROCESS - ROLES AND TASKS

STEP 1: DETERMINE STAKEHOLDERS AND ENGAGE

Based on your community's topic areas of interest, determine the key stakeholders that should be included in the planning process. Stakeholders should include both local government staff and community members who will be instrumental in implementation of identified strategies, as well as key community voices. Suggestions about who to engage as stakeholders by focus area are listed in Table 1. Keep in mind that a larger stakeholder group will often have more diverse ideas and better represent the whole community, while smaller groups of experts and key stakeholders can move more quickly through the planning process. Once you have identified stakeholders, invite the team to a kick-off meeting.

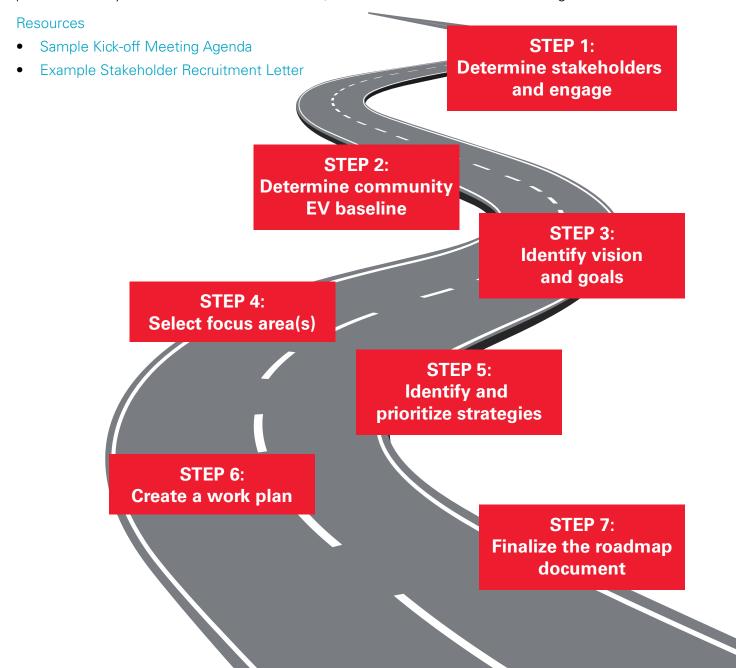


Table 1: Suggested Stakeholders by Focus Area

	Community Outreach and Education	Public Access	Light-Duty Commercial and Municipal Fleets	Transit and Other Heavy- Duty Vehicles	Policy
	сомм	UNITY MEM	BERS		
Utility Representative	X	X	X	X	Χ
Local Nonprofits	X	X			Χ
HOA Representatives	X				
Business Owners		Χ	X		
Multi-family Building Owners	X				
Large Employers	X		X		
Local Dealerships	X		X		
Business Fleet Managers			X		
Community-Based Organizations	X	X		X	Χ
School Boards				X	
Community/Technical Colleges		X			
School District Staff				X	
Transit Operators				Х	
Transportation Network Companies	X	Х			
Developers	X	Х			Х
Other Engaged Community Members	X	X	X	X	Х
	COMMUNITY STA	AFF OR ELEC	TED OFFICIALS		
Economic Development Staff		Χ			
Public Communications Staff	X	X			X
Maintenance Staff		X			
Air Quality Staff		X			
Health Department Staff		X			
Mechanics			X		
Facilities Staff			X		
Fleet Managers			X		
City Department Heads			X		
Motor Pool Staff			X		
Employee Training Coordinator			X		
Elected Officials		X		X	X
New Building Permitting Staff					X

STEP 2: DETERMINE COMMUNITY EV BASELINE

Develop a common understanding among stakeholders regarding current EV technology (both vehicles and charging stations), the benefits of EV adoption, the real or perceived barriers to widespread adoption, and local, state, or national trends on EV use.

EV 101

It is important to build a common understanding among stakeholders around EV terminology and technology to facilitate conversation about strategies at the workshops. This handout can be shared with stakeholders in advance of the first workshop.

National EV Trends

- 1. Increasing battery range: By 2030, average driving range for electric vehicles will average between 200-250 miles (International Energy Agency, 2020)
- 2. The U.S. Department of Energy forecasts that under a medium scenario, there will be 14 million EVs on the road in the U.S. by 2030, representing a 5 percent market share (U.S. DRIVE, 2019).
- 3. Increased load on electric grid: If expansion happens as projected, EV charging could represent 13%-15% of the national electricity demand by 2050 (Myers, 2019).



Local EV Trends

To understand the local EV market, gather information about local EV market penetration. This information should include:

- 1. **Community Characteristics:** Collect data from the U.S. Census and other publicly available data sources. By understanding the size of the community, as well as its projected growth and housing characteristics, you can better target strategies to the population.
- 2. **Vehicle Number and Type:** Since most EV models currently available are light-duty passenger vehicles, it is important to understand the number of vehicles on the road by type to estimate the integration potential. Break down this data by fuel type to determine the number of EVs currently in the community. Atlas Hub is a great resource for understanding EV trends, such as EV market share in your region, state, county, or zip-code using EV registration data.
- 3. **Electricity Emissions Factor:** GHG emissions benefits gained from conversion to EVs will vary based on your local electricity emissions factor. Your local utility may be able to provide an emissions factor. For Xcel Energy emissions factors, refer to this information sheet. If not, use the regional eGrid factor developed by the U.S. Environmental Protection Agency.
- 4. **Air Pollution Disparities:** The American Lung Association has found that low-income neighborhoods and communities of color often face higher exposure to air pollutants and are more susceptible to health threats. To understand which neighborhoods in your community are disproportionately impacted, map air pollutants alongside income and race.
- 5. **Existing Charging Infrastructure:** To understand the prevalence of EV charging infrastructure in your community, conduct a survey of existing public infrastructure. This information is publicly available through Google Maps; just search for "Electric Vehicle Charging" in the area you are analyzing. PlugShare is another great resource for understanding EV infrastructure in your region. PlugShare allows you to filter by charger type, minimum power, network, and more. If possible, catalog the number of residential or commercial private chargers. One potential source for this data is your city's building permit department.
- 6. **Current Policy and Other Efforts:** Conduct a survey of your community's existing policies and other efforts, to identify focus areas where there is already significant progress or momentum as well as areas where additional effort is required. Use the survey in Appendix C: Planning Process Resources, adapted from Plug-In Electric Vehicle Community Readiness Scorecard, or targeted interviews to collect this information.
- 7. **Relevant State and National Incentives:** A variety of local and national programs are available that promote the adoption of EVs and the installation of charging stations and charging infrastructure through policy and financial incentives. For a full list of resources available in your state, visit the list of tax credits and other incentives published by the U.S. Department of Energy. Resources applicable to states within the Xcel Energy service territory (CO, MN, WI) are available in Appendix D: Funding Resources.

STEP 3: IDENTIFY VISION AND GOALS

Meet with stakeholders to understand what the future of EVs in your community will look like. Develop a vision statement to guide your planning process. When there are questions about prioritization of resources, come back to this vision statement and determine whether the activity moves your community closer to its stated vision. Also, state how this vision might tie into your Energy Action Plan developed through Partners in Energy or into other existing community sustainability and planning efforts.

A vision statement should answer the question: Where do you want to go? It should also:

- 1. Determine what core value you want to uphold bolded in examples below.
- 2. Define what success looks like blue in examples below.

Example Vision Statements

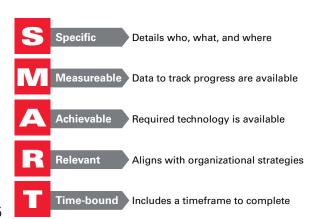
- Aspen Community Electric Vehicle Readiness Plan: The Aspen Community Electric
 Vehicle Readiness Plan envisions a future with drastically reduced greenhouse
 gas (GHG) emissions and improved local air quality and where, if a vehicle is
 necessary, it is powered by clean, renewably-sourced electricity rather than fossil
 fuels. Community members and visitors are knowledgeable and comfortable with this
 technology, and utility providers and businesses are prepared for its presence
 and expansion.
- Fort Collins Electric Vehicle Readiness Roadmap: Fort Collins will be a leader and innovator in supporting the use of EVs within the community's sustainable transportation system. Residents, businesses, and visitors to Fort Collins will choose EVs over conventional-fuel vehicles.

To support this vision, develop one or more goals to track progress of implementing EVs in your community. Make sure that the goals developed directly support your vision statement and that they are SMART goals.

You also need to understand what indicators will be used to track progress toward the community's goals. Ensure that the data identified are readily available.

Example Goal

 Increase EVs in the city fleet by making 100% of light-duty vehicle purchases plug-in electric by 2025 and incorporating battery electric transit buses, subject to the availability of suitable technology.



Equity Indicators: To understand how your plan is impacting low-income residents and communities of color, you can embed equity indicators into your plan goals. The Greenlining Mobility Equity Framework identifies twelve separate indicators that advance goals related to increasing access to high- quality mobility options, reducing air pollution, and increasing economic opportunities.

STEP 4: SELECT FOCUS AREA(S)

Work with stakeholders to identify the focus areas for this plan. A focus area helps inform stakeholders and plan readers about the main topics that will be covered in the roadmap. To determine the focus areas that make sense for your community, consider the following factors:

- Available resources
- Political will
- Community support

Options for focus areas are shown in the navigation graphic of this toolkit. The focus area(s) can be customized for your community. Be sure that the focus areas help to succinctly communicate what topics are included in the roadmap.

Example Focus Area(s)

Here are some examples of focus area structures used by other EV roadmaps:

- 1. Accelerating Electric Vehicle Adoption: A Vision for Minnesota: The State of Minnesota chose to develop a comprehensive plan to promote EV use and chose four focus areas to organize their strategies.
 - a. Accelerate Sales and Use
 - b. Build Out Charging Infrastructure
 - c. Coordinate on Regional and National Initiatives
 - d. Prioritize Renewable Energy to Charge Electric Vehicles
- Opportunities for Vehicle Electrification in the Denver Metro Area and Across Colorado:
 The City of Denver chose to further specify their focus. In their plan, they have one
 focus area access to EV charging infrastructure which they broke into two topic
 areas: 1) DC Fast Charging and 2) Multi-family Charging.



STEP 5: IDENTIFY AND PRIORITIZE STRATEGIES

For each focus area identified in Step 4, work with stakeholders to identify strategies to reach the goals within the chosen focus area. Strategies should be action sentences that describe what the community will do (e.g., "Educate residents about the economic and environmental benefits of EV ownership").

Identifying strategies is a three-step process:

- 1. **Identify Barriers to Adoption:** It is important to determine why the desired action is not already happening. Some barriers of EV adoption as identified by a national survey are available in Appendix A: Electric Vehicles 101. Local barriers should also be specified.
- 2. **Strategy Brainstorming:** Use brainstorming exercises to gather as many strategy ideas as possible. Strategies outlined in this toolkit can be used to facilitate brainstorming.
- 3. **Strategy Prioritization:** Review the identified strategies and choose the most impactful options. Using the vision and goals established in Step 3, identify the strategies that will have the largest impact (considering limitations on community resources [e.g., money, time, political will]).

Example Strategies

Under each of the focus area sections in this toolkit, you will find example strategies and best practices from communities around the country. Here are a couple examples from the Outreach and Education focus area:

- 1. **Maintain an Up-to-Date Website:** Develop and maintain a comprehensive EV website that allows residents, businesses, and visitors to easily access EV-specific information.
- 2. **Recognize/Highlight Local Businesses with Workplace Charging:** Encourage local businesses to install EV charging stations by recognizing and highlighting these efforts through local green business programs or other local business recognition programs.



STEP 6: CREATE A WORK PLAN

Use the priority strategies developed in Step 5 to create a work plan outlining how each strategy will be implemented. Through this exercise with stakeholders, you should identify:

- 1. Specific targets for each strategy to track progress
- 2. Specific activities you want to encourage
- 3. Benefits of target behaviors
- 4. Specific outreach channels
- 5. Parties responsible for implementation
- 6. Resources required for implementation
- 7. Timeline for implementation and key milestones

These work plans can be used to inform budget requests, guide staff and community efforts, and evaluate success. Compare the success of each strategy to the target and determine whether those strategies should be continued or if different ones should be prioritized.

STEP 7: FINALIZE THE ROADMAP DOCUMENT

The easiest way to develop the roadmap document is to complete the relevant sections during the planning process. Once the planning process is complete, review and revise the draft as needed. A template has been provided to facilitate the roadmap development process. Be sure you understand your community's approval process. Will you use the document to guide internal staff efforts or will you share it publicly? Will it need approval from a local governing body? Will it need to be available for a public comment period?

Example EV Roadmap Document

Here are some examples of community EV roadmaps:

- 1. Eau Claire (WI) Electric Vehicle Roadmap: This plan was developed as a pilot project to demonstrate the process outlined in this toolkit. Explore Eau Claire's plan to see how they address municipal electrification, expansion of public charging infrastructure, and community education and awareness to increase EV adoption in their community.
- 2. Electric Vehicle Readiness: Energy Efficiency through Regional Planning: This plan was developed by the Des Moines Area Metropolitan Planning Organization. It is targeted to local government staff, which means it is more technical and direct and less graphically rich than other plans.
- 3. Electric Vehicle Readiness Roadmap: This plan was developed by the City of Fort Collins and is targeted for public communication as well as internal coordination. To this end, it is a detailed implementation plan as well as a simple, graphically rich communications piece.

A sample outline of an EV roadmap is provided in Appendix C: Planning Process Resources.