# **ELECTRIC VEHICLE READINESS**

**Program Description**: In the next 20 to 30 years, electric vehicles (EV) will replace internal combustion engine vehicles as the dominant types of vehicles on the market – including in our community and in our City's fleet. To prepare for this transition, we have created a holistic EV readiness program. This program includes upgrades to the City's zoning ordinance to promote EV infrastructure in parking structures and at new buildings, and incentives and associated programs to help retrofit existing buildings for EV readiness. In addition, the program includes a holistic strategy for how to encourage greater uptake of EVs in our community and within our City's fleet. This strategy is a sub-component of our City's comprehensive transportation planning and movement towards multi-modal transit shifts.

**Vision Statement**: The City of Ann Arbor has an ambitious, streamlined, comprehensive, and living community-wide electric vehicle (EV) strategy that identifies both immediate and long-term actions to provide EV adoption in the community. This strategy has helped ensure that every new building within this City is designed to be EV ready and that 40% of the existing buildings within the City have been renovated and are EV ready. Importantly, 100% of the demand for this new transportation- related electricity is met with renewable energy sources. The City's work around EVs is nested in the City's broader transportation planning efforts, which are heavily focused on active transportation and fostering a transportation system that is clean and equitable.

**Responsible Party for Implementation**: For policy development: Office of Sustainability and Innovations and the Energy Commission. For policy implementation: Building Department and Planning Services.

**Collaborators / Project Co-Designers**: Planning Commission; Planning staff; Building Department; City Council; Ann Arbor Downtown Development Authority (DDA); and Ann Arbor 2030 District; University of Michigan; Ecology Center; Energy Commission (EV Readiness Committee); car rental and vehicle-sharing programs; Detroit Edison; EV charger manufacturers and installers; affordable housing community groups and advocates; owners of public parking spaces; owners of multifamily buildings; home inspectors; private homeowners.

**Target Demographic:** Building developers; building owners; future EV drivers; DDA; parking garage owners.

**Timeline**: Development, research, and adoption of strategy and policy by late-2020. Implementation and effective date of policy by mid-2021. Review and revision of ordinance within 5 years.

### Goals:

1) Increase the number of electric vehicle ready buildings in Ann Arbor;

2) Increase the number of electric vehicle chargers in the City;

3) Ensure that all who desire to drive electric vehicles can access sufficient, cost-effective, and convenient EVs and EV charging equipment; and

4) ensure that electric vehicles are a part of the City's larger transportation planning and that this planning is grounded in equity.

### **Objectives / Indicators:**

- 1. 100% of all new residential homes built in Ann Arbor will have a 240 volt outlet in their garages.
- 2. 100% of all new or renovated commercial and multifamily parking structures meet adopted EV Readiness Ordinance policy guidelines.
- 3. 100% increase in the number of EVs purchased by Ann Arbor residents by 2028, based on 2018 levels.

## Short-Term; Medium-Term; and Long-Term Benchmarks:

- **Short-Term**: By 2021, the EV Readiness Ordinance is approved and being enforced through the building review permitting process. The City has also created a holistic EV strategy with widespread community support.
- **Medium-Term**: By 2025, the City has revised the ordinance to make needed edits and the City has helped run at least two community group EV buys.
- Long-Term: By 2050, a significant portion of the City's building stock has turned over and is capable of supporting the demand for EV charging.

**Cost:** \$125,000 plus staff time. Potentially additional resources to launch an EV car-share program.

**Co-Benefits:** Education; Job creation / workforce training; Air pollution reduction; Improves health of residents; Environmentally friendly.

### Work Plan:

Phase	Action	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9+
1.	Policy Development and Background Research									
	Monthly meetings of Energy Commission's EV Readiness Subcommittee.									
	Research best practices and existing ordinances, readiness strategies, etc. in other cities.									
	Coordinate with Planning Commission and Planning staff.									
	Take stock of current EV use patterns within Ann Arbor, obtain estimates for how EV use is expected to change over the next several decades.									
	Determine proposed guidelines for residential, commercial, and multifamily properties (% of spaces that are EV Ready, EV capable, etc.).									
	Draft proposed EV readiness ordinance.									
	Staff review of EV readiness ordinance.									
	Public meetings on draft EV readiness ordinance.									
	Revised draft EV readiness ordinance based on public feedback.									
	Legal review of readiness ordinance.									
	Review and public engagement of the draft EV readiness policy through the Energy Commission.									
	Review and public engagement of the draft EV readiness policy through the Planning Commission.									
	Public hearing on the EV readiness ordinance.									
	City Council review and adoption of EV readiness ordinance.									

Phase	Action	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9+
2.	Public Engagement									
	Conduct outreach with local potential providers of public									
	EV chargers to gauge their interest in and potential to									
	expand/develop their EV offerings.									
	Engage with local managers of multifamily and rental unit									
	properties to identify their interest in and ability to									
	provide EV charging infrastructure. Communicate with other cities to learn about programs									
	they have developed to promote EV use.									
	Identify optimal locations for installations of future public chargers.									
	Engage with local car dealerships to identify potential for EV group-buy, rent-to-own, or other discount purchasing									
	programs.,									
	Hold public meetings or listening sessions to ascertain the									
	attitudes towards EVs held by different segments of the community.									
	Provide EV test drives and other educational									
	opportunities at City-sponsored public events.									
	Summarize findings regarding EV uptake opportunities into a strategy document – strategy paper.									
	Obtain feedback on strategy paper from relevant stakeholders.									
	Integrate stakeholder feedback into revisions (repeat as necessary).									
	Release strategy paper to the public.									
	Launch, in partnership with others, EV educational materials.									
3.	Policy Implementation									
	Develop implementation plans and materials for the EV									
	strategy paper.	<u> </u>		<u> </u>						
	Establish effective date of EV readiness ordinance.									
	Monitor the success of the EV readiness ordinance.									
	Review EV readiness ordinance and make possible revision [5 years later]									
	Continually revise and launch new EV educational and engagement activities.									

**Potential Barriers**: The complexity of the policy may hinder quick policy development, adoption by Council, and implementation. If the policy sets strong guidelines, there will be pushback from property developers and the business community. Other potential barriers include: lack of funding and staff time, lack of stakeholder/co-designer time and energy, regulations which limit the types of EV adoption actions that can be recommended, lack of available and pertinent information about current EV use patterns within Ann Arbor and the county as a whole.