

CORE CRITERIA AND PRINCIPLES FOR ACHIEVING ANN ARBOR'S RENEWABLE ENERGY GOALS

To support our work in achieving the energy-related goals in A²ZERO goals, a series of core criteria and guiding principles were adopted by City Council in early 2021. These criteria and principles are rooted in the A²ZERO plan and stem from the overall ethos of the Office of Sustainability and Innovations. The energy *criteria* are requirements for all investments, meaning that any energy-related activity needs to meet these criteria or clearly articulate why it was not possible to meet these criteria to be considered. The energy *principles* represent values the City holds, which should be maximized, to the fullest extent possible, in decision-making related to energy. Principles may, at times, be in conflict with one another.

The core criteria include:

- Reducing greenhouse gas emissions.
- Additional to what is already being generated.
- Grounded in equity and justice.

The principles include:

- Enhancing the resilience of our people, our community, and our natural systems.
- Start Local.
- Speed.
- Scalable and transferable to other locations.
- Cost effective.

Criteria

The City of Ann Arbor will evaluate potential investments based upon 3 Core Criteria: the investment will 1) reduce greenhouse gas emission; 2) add to the available renewable energy within the electric system; and 3) will be grounded in equity and justice. The Criteria will be, at times, in tension with each other during decision making, but this tension can be necessary to create a balanced investment approach.

Reducing greenhouse gas emissions. The first criterion seeks solutions that reduce energy demand and/or power Ann Arbor's electricity needs with carbon neutral renewable energy solutions. This includes investments in energy efficiency, HVAC improvements, and investments in technologies such as solar photovoltaic, hydroelectric turbines, and biodigesters. This does not include certain forms of generation that have been labeled "renewable" such as biofuels, solid waste incineration, and wood-burning since these fuel sources are associated with operations that continue to release large quantities of greenhouse gas emissions and other harmful byproducts.

Additional to what is already being generated. The second criterion is about ensuring that renewable energy or energy efficiency projects are new and, to the extent possible and quantifiable, displacing fossil fuel energy sources. We want to ensure that our investments are leading to additional renewable energies being developed or additional energy efficiency investments being made; avoiding having our projects fulfill state mandates (i.e., RPS). This is true for physical new renewable energy builds, new energy efficiency investments, as well as if we choose to invest in power purchase agreements (PPA), virtual power purchase agreements (vPPAs), renewable energy credits (RECs), virtual power reductions (VPRs), or carbon offset initiatives.

Grounded in equity and justice. The third criterion is about ensuring our strategy is grounded in procedural and distributive equity. This means that the solutions we find to reducing energy consumption and powering our grid with renewable energy should center low-income and minority populations in both decision-making as well as in the benefits of solutions. It also means piecing together different solutions that are respective of the different capacities

and lived experiences of members of our community and finding solutions that support fair and just compensation for those helping to create a renewable energy future.

Principles

In addition to the Core Criterion, a set of value-added principles will support the decision-making process. Situations will exist where these principles are in conflict but addressing that conflict helps ensure the City achieves a balanced approach to carbon neutrality in the energy sector.

Enhancing the resilience of our people, our community and our natural systems. Through the eyes of our energy work, this principle focuses on ensuring that individuals, especially at-risk individuals, emergency services and emergency service personnel, have power during and after a disaster. Solutions may include implementing local renewable projects with battery storage, investing in microgrids, or creating a more reliable and resilient physical grid infrastructure. The driving factor is ensuring that, during a disaster, loss of power does not compound an existing crisis.

Start Local. The second principle emphasizes location. There is a desire to focus investments locally, including generating as much new local renewable energy as possible. When not possible, stakeholders have emphasized a desire for Michigan generation. When renewable energy solutions are not viable in Michigan, we propose prioritizing projects that are developed in partnership with environmental justice communities that have been disproportionately burdened by the extractive nature of the fossil fuel-based economy. Only when communities such as these are not interested in partnering, are we proposing to actively seek other locations for new renewable energy developments.

Speed. The third principle is about time. This principle focuses on finding solutions that can be deployed rapidly in order to quickly reduce greenhouse gas emissions. At the center of this principle is a desire to reduce emissions, fast.

Scalable and transferable to other locations. The fourth principle is about finding solutions that are scalable and transferable to other locations. At the core of this principle is ensuring that we find solutions to achieving carbon neutrality in Ann Arbor that other Michigan municipalities (and, potentially, municipalities in other states) could replicate, thereby increasing the impact of our actions.

Cost Effective. The final principle is about finding solutions that are cost effective. This means finding solutions that are as affordable as possible while also aligning with the core criteria outlined above and in support of as many principles outlined in this section.