

MEMORANDUM

From: Tom Crawford and Missy Stults

To: Ann Arbor City Council

Subject: Carbon Neutrality Prioritization Framework

Date: May 4, 2020

Below is a prioritization framework and the associated descriptions for each criteria proposed for evaluating strategies within the A²Zero Carbon Neutrality Plan and/or other candidate actions for inclusion in the City's carbon neutrality work. The Prioritization Framework groups criteria into four main categories: 1) Greenhouse Gas Mitigation Criteria; 2) Cost Criteria; 3) Feasibility-Related Criteria; and 4) Co-Benefit Related Criteria.

In each category are four columns. The first column is the specific criterion being evaluated. The second column is a short summary of the potential ranking system. The third column is a more detailed description of the ranking options. The fourth column presents a numerical score that can be assigned to each action that meets that given criterion. Effort was taken to balance scoring in each of these categories with 12 possible points available in the Greenhouse Gas Mitigation and Cost Categories, 10 possible points available in the Feasibility-Related Category, and 13 points possible in the Co-Benefits Related Category.

In addition to a description of the Framework provided below, staff have enclosed their assessment utilizing this Framework. In this document we present a weighted evaluation of all 44 actions included in the A²Zero Plan.

Two additional points to note. First, being "opportunistic" will undoubtedly influence, to some extent, what gets proposed for implementation and when. For example, should a grant opportunity present itself to move a given action forward, even though that action was slated for implementation in a future year, the potential funding opportunity would be an important variable to weigh in considering implementation timelines. However, since we can't foretell when new funding opportunities will perfectly align with the individual actions outlined in the Plan, it was not prudent to include this variable in the prioritization matrix. However, the value of an approved plan allows staff to focus on finding funding opportunities that align with the strategies in the Plan and bring those opportunities forward to Council for consideration. Secondly, some of the actions in the A²Zero Plan will necessitate "ramp-up" time. This variable was not included in the prioritization framework but is important to remember as we evaluate actions for implementation on a year-over-year basis. The staff are aware of these "ramp-up" times and have built them into the models that inform the A²Zero Plan.

While no prioritization framework is perfect, below is the proposed model to ensure comprehensive evaluation of the actions proposed and their co-benefits and unintended consequences.

PRIORITIZATION FRAMEWORK

GHG MITIGATION CRITERIA			Scoring
High Long-Term GHG Reduction Potential	High Long-Term	The action has a high (over 5%) community greenhouse gas emissions reduction potential past 2030	6
	Medium Long-Term	The action has a medium (between 3%-5%) community-wide greenhouse gas reduction potential past 2030	4
	Small Long-Term	The action has a small (between 0%-2%) community greenhouse gas reduction potential past 2030	2
High Short-Term	High Short-Term	The action has a high (over 5%) community greenhouse gas reduction potential before the year 2030	6
GHG Reduction	Medium Short-Term	The action has a medium (between 3%-5%) community greenhouse gas reduction potential before 2030	4
Potential	Small Short-Term	The action has a small (between 0%-2%) community greenhouse gas reduction potential before 2030	2

		COST CRITERIA	Scoring
City Cost Effectiveness	Benefits Significantly Outweigh Costs	Long-term financial benefits greatly outweigh implementation costs	2
	Benefits Outweigh Costs	Long-term financial benefits outweigh implementation costs	1
	Benefits Match Costs	Long-term financial benefits match implementation costs OR don't know the overall cost effectiveness of the action	0
	Costs Outweigh Benefits	Implementation costs slightly outweigh the long-term financial benefits	-1
	Costs Significantly Outweigh Benefits	Implementation costs significantly outweigh the long-term financial benefits	-2
	None	The City can pursue without a major capital investment	2
City Relative Cost (Capital)	<\$5M	The City can pursue with a modest capital investment OR don't know what kind of capital investment is needed	1
	>\$5M	The City requires a major capital investment to pursue this action	0
City Deleting Cont	Decreases Costs	Action will minimize operating costs for the City (i.e., staffing, maintenance)	2
City Relative Cost	No Impact	Action will have no impact on operating cost for the City OR don't know the relative operating costs	0
(Operation)	Increases Costs	Action will not minimize and may increase operating costs (i.e., staffing, maintenance) for the City	-2
Residential and Businesses Cost Effectiveness	Benefits Outweigh Costs	Long-term financial benefits outweigh implementation costs	2
	Benefits Match Costs	Long-term financial benefits match implementation costs OR don't know the overall cost effectiveness of the action	0
	Costs Outweigh Benefits	Long-term financial benefits do not outweigh implementation costs	-2

Resident and	None	Residents and businesses can pursue this without a capital investment	2
Businesses	Small Investment	Residents and businesses can pursue this with a modest (\$5k or less) capital investment	1
Relative Cost (Capital)	Large Investment	Residents and businesses require a major capital investment (over \$5k) to pursue this action	0
Resident Relative	Decreases Costs	Action will minimize operating costs for residents and businesses	2
Cost (Operation)	No Impact	Action will have no impact on operating costs for residents and businesses	0
	Increases Costs	Action will not minimize and may increase operating costs for residents and businesses	-2

		FEASIBILITY CRITERIA	Scoring
Technological Feasibility	Yes	Technology needed currently exists	2
	Maybe	Technology is on track to be deployed in the specified timeframe OR don't know about the status of the technology	0
	No	Technology is not readily available and is not on track to be deployed in the specified timeframe	-2
	Yes	Policies or ordinances currently exist that support this action	2
Current Policies or Ordinances	Maybe	Policies or ordinances would need to be developed to support this action OR don't know if policies or ordinances currently exist	0
	No	Policies or ordinances currently exist that prohibit this action	-2
Jurisdictional	Yes	City is the actor	2
Control / Ease of	Maybe	City is the regulator	1
Implementation	No	City is the influencer	0
	1-2 Years	Action can be operational in the next 1 to 2 years	2
Implementation	3-5 Years	Action can be operational in the next 3 to 5 years	1
Timeframe	6+ Years	Action could be operational after 6+ years	0
	Yes	Action received > 55 % public support in public surveys	2
Public Acceptability	Maybe	Action is likely to have an equal amount of public support and opposition OR don't know level of public support	1
	No	Action received <30% public support	0

CO-BENEFITS			Scoring
Affordability on Low-Income Residents	Yes	This action helps to minimize long-term energy, fuel, transit, material, waste, etc. costs for low-income residents	1
	Maybe	This action has no effect on long-term energy, fuel, transit, material, waste, etc. costs OR don't know what impact it has on affordability for low-income residents	0
	No	This action does not help to minimize long-term energy, fuel, transit, material, waste, etc. costs for our low-income residents	-1

Equity	Yes	This action enhances frontline communities' quality of life and access to resources and opportunities	1
	Maybe	This action neither enhances nor decreases vulnerable or frontline communities' resiliency, quality of life, access to resources and opportunities, or health OR don't know what impact this action has on equity	0
	No	This action decreases vulnerable or frontline communities' quality of life and access to resources and opportunities	-1
	Yes	This action rectifies past discriminatory/problematic decisions/actions	1
Historical Injustices	Maybe	This action neither rectifies or intensifies past discriminatory/problematic decisions/actions OR don't know what impact this strategy has on past discriminatory/problematic decisions	0
•	No	This action intensifies past discriminatory/problematic decisions/actions	-1
	Yes	This action minimizes local or regional criteria pollutant emissions at the location of implementation	1
Pollution	Maybe	This action does not impact local or regional criteria pollutant emissions OR don't know what impact this action has on local or regional criteria pollutant emissions at location of implementation	0
Prevention	No	This action does not minimize local or regional criteria pollutant emissions and may actually increase criteria pollutant emissions at location of implementation	-1
Health and Well	Yes	This action enhances public health	1
	Maybe	This action does not influence public health OR don't know what impact this action has on public health	0
Being	No	This action decreases public health	-1
	Yes	Action helps increase reliability of the electrical grid, transportation system, emergency response, etc.	1
Reliability	Maybe	Action does not impact the reliability of the electrical grid, transportation system, emergency response, etc. OR don't know the impact on reliability	0
·	No	Action does not help increase reliability of the electrical grid, transportation system, emergency response, etc.	-1
	Yes	Action increases the resilience of the City, people, and ecosystems to climate-related disruptions	1
Resilience	Maybe	Action does not impact the resilience of the City, people, and ecosystems to climate-related disruptions OR don't know what impact action has on resilience	0
	No	Action does not increase the resilience of the City, people, and ecosystems to climate-related disruptions	-1
	Yes	Action maximizes quality job creation in Michigan	1
Job Development	Maybe	Action does not influence job creation in Michigan OR don't know what impact action will have on job creation in Michigan	0
	No	Action does not maximize quality job creation in Michigan OR may harm job creation	-1
	Yes	Action helps preserve greenspaces/prime habitat/wetlands/biodiversity	1
Resource Preservation	Maybe	Action does not impact greenspaces/prime habitat/wetlands OR don't know what impact action will have on these resources/biodiversity	0
	No	Action leads to a loss of greenspaces/prime habitat/wetlands/biodiversity	-1

Safety	Yes	Action maximizes public safety	1
	Maybe	Action does not affect public safety OR don't know what impact action will have on public safety	0
	No	Action does not maximize public safety	-1
Social Capital, Culture, and Community	Yes	Action helps preserve historic and cultural resources and supports development of social capital	1
	Maybe	Action does not affect historic and cultural resources or the development of social capital OR don't know how action will affect these areas	0
	No	Action leads to a loss of historic and cultural resources and/or a decrease of social capital	-1
D. II. 64 .	Yes	Action invests in Washtenaw County	1
Dollars Stay in Local Economy	Maybe	Action invests in Michigan	0
	No	Action invests primarily out of state.	-1
Scalable	Yes	Achieving the action enables other communities to take action	1
	Maybe	Achieving the action has no impact on other communities	0
	No	Pursuing action precludes other communities from participating	-1

TOTAL POSSIBLE POINTS 47