Overview

Welcome to the Knoxville Community Outcomes Toolkit. We hope that this tool will be useful as a beginning step for designing projects, programs, or policies that align with issues and outcomes that matter to community members and others working across Knoxville and beyond.

The development of this toolkit began several years ago when many organizations and change leaders explored what it would mean for Knoxville to have a just and equitable food system rooted in community. The original outcomes were those lifted up by a diverse group of people and stakeholders that participated in data and story gathering during our recent food systems assessment (2022-2024). We heard from a lot of people, groups, and communities and did our best to create a plan that reflects the voice of the people.[1]

The original authors and community members that contributed to the development of this tool envision a future where all people are able to enjoy the multiple benefits of investments and innovations here in Knoxville. To that end, anyone is welcome to use this toolkit for guiding decision-making that ensures work is centered in equity and other valued outcomes across different initiatives that you might be working on.

About the Outcomes Toolkit

This 'Toolkit' is intended as an instruction guide for developing ideas for how you or others might participate in evaluating new programs, policies, interventions, or other ideas based on a set of desired outcomes, such as improved health.

Terms Used in the Outcomes Toolkit

What is an Evaluation Matrix?

An evaluation matrix is a tool that helps people compare and assess different ideas or initiatives by first defining what matters and then scoring or screening a set of options. A matrix can help identify the strengths and weaknesses of ideas while also identifying potential risks or consequences, short and long -term benefits, and other impacts (positive or negative) on different groups or populations.

Individuals or groups might use an evaluation matrix before fully developing an action or strategy. It serves to determine whether an idea or option is worth investing in further. For example, when several options being presented are each screened for a set of potential outcomes, an evaluation matrix might reveal that some options are not likely to meet the desired outcomes and therefore should not be considered for moving forward.

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[1] *For the original set of outcomes developed for the Community Food Systems Outcomes Matrix please contact: Erin Rose at erose@threecubed.org OR visit the United Way of Greater Knoxville's Food Systems site.

What is an Outcome Measure?

An outcome measure summarizes a desired result from a proposed idea or action. Complex strategies, like climate action, often aim to achieve multiple outcomes or results. A set of outcomes might include a range of benefits including economic, environmental and social impacts. Outcome measures should not focus on a narrow target goal or objective but should not be so broad that they are then too difficult to measure. The outcome measures described in this toolkit are good examples of reasonable outcomes.

What are Criteria?

Evaluation criteria are outcomes that serve as a guide for scoring or in some way deciding whether an idea, action, or strategy meets a desired goal or objective. A single outcome can be transformed into a 'criterion.' Multiple outcomes can become a set of criteria for determining the strengths and weaknesses of proposed ideas or strategies.

About the Outcomes

The outcomes below were created to screen proposed climate action measures for equity during the development of the BREATHE Plan: A Comprehensive Climate Action Plan for the Knoxville Region. The plan serves as a roadmap for the region to reduce greenhouse gas emissions and other pollution. These outcomes serve as criteria for determining whether the proposed actions developed during the planning process are likely to result in the desired benefits.

Outcome Measures

Environmental Resilience

Climate action can provide benefits at individual, neighborhood and community levels through intentional planning of green spaces, improved preparedness and response to climate hazards and reduced exposure to increasingly frequent and severe weather events – such as poor air quality, flooding, and heat waves. This outcome covers a range of issues and can be targeted as needed depending on the action being evaluated.

Access to Innovation

This outcome captures community and stakeholder commitment to ensuring equitable access to new or innovative technologies, opportunities, and partnerships likely to result from the proposed climate action. Access to emerging technologies and new partnerships allows for participation in the design of important programs and use of technologies that aim to improve quality of life, reduce cost of living, and contribute to a clean environment.

Economic Opportunity

This outcome includes economic benefits that accrue directly from the climate action, such as contracting opportunities for small, minority- and women owned businesses, access to quality jobs, workforce development and union work, and entrepreneur opportunities. When screening an idea or action for economic opportunity, reviewers might focus on what groups or populations are most likely to financially benefit from the work opportunities or capital investments.

Community- and Capacity-Building

Climate action planning and investment involve both sharing knowledge and creating capabilities at all levels of community and across sectors, such as housing and transportation. This outcome area helps determine how a climate action values, builds upon, and advances local knowledge. The outcome measure also asks if the proposed action is likely to create or lead to inclusive education, training and capacity building opportunities for all.

Quality of Life

This outcome captures the extent to which a climate action improves access for all to basic life essentials including affordable, adequate, and secure housing and utilities; nutritious food; safe and reliable transportation; clean air and water; health and well-being; and other basic needs. Although it is unrealistic to expect that a single climate action will improve quality of life across all basic needs categories, the proposed strategy should improve quality of life in some way.

Future Generations

Climate action impacts both current and future generations. When future generations are meaningfully considered in climate action planning, long-term benefits are more likely to be achieved. This outcome area helps identify and measure benefits – and possible unintended consequences – for generations not yet born that will inherit what we leave behind. This outcome area intends to ensure the impacts of climate action extend beyond immediate benefits and are not at the expense of future generations.

The Outcomes Matrix Worksheet

Before diving into screening your idea or measuring the impacts of your project, you should first clearly state the purpose of the project, initiative or intervention.

Designing Your Project

We recommend first developing your project idea in line with one of the goals and key outcomes areas described below.

Example Goals

1. What do you hope to achieve through the project or action?
2. What strengths or assets are you building upon?
3. What problem or need is being solved by working on this project?
4. What are the expected project or action outputs?

Objectives

The worksheets below can be used to help determine whether and how the priority climate action will fulfill the action measures and any benefits or possible negative impacts if implemented.

You can use the following symbols to show the likely benefits of your climate action.

Key to the Symbols:

- ● Major potential benefits
- ◐ Moderate potential benefits
- ○ Some potential benefits
- — No anticipated benefits and might add burden

Completing the Outcomes Matrix Worksheet

You can use the table below to start mapping out a proposed climate action.

1. You can begin by identifying the climate change action identified in the CCAP Breathe Plan.
2. Next, you can write the most related climate change sector (e.g., buildings, transportation) and/or 'measure' category that your project falls under (see example below) at the bottom of the table.
3. The project's purpose statement will help guide the screening and will communicate priorities and details important for measuring outcomes or impacts. It also generally states what you hope to achieve through your work.
4. Likely benefits: The suggested outcome areas (defined above) can now be screened for likely benefits or even burden. You can add 'other benefits' that you believe are important. For example, Benefits to Future Generations can be added as a screening criteria or outcome.
5. While you work through the matrix, you should list the key partner(s) you want to work with or are critical to the success of the measure, project or policy.
6. Next, write down any important considerations and unintended consequences, such as what funding or resources are needed, or what other issues need to be addressed like transportation, communication and engagement strategies, or agreements between partners. A set of considerations/questions for each climate action area are provided on pages 6-7.
7. Finally, would you recommend this action move forward for funding, adoption, or implementation.

Community Outcomes Matrix for Climate Actions

CLIMATE ACTION: **OUTCOMES**	Environmental Resilience	Access to Innovation	Economic Opportunity	Community + Capacity Building	Quality of Life	Future Generations	Other Benefit:	Other Benefit:
Likely Benefits: [Use Symbols]								
Project Purpose Statement:								
Key Partners: [Who needs to be included?]								
Important Considerations and Unintended Consequences:								

	Yes	No	Recommend with Reservations
Recommend Moving Forward:			

CCAP Sector or Climate Measure:

Climate Action Examples for Each Sector

	CLIMATE ACTIONS
Sector: Buildings	
Measure Category B1: Increase uptake of energy efficiency and weatherization of residential, commercial, and industrial buildings.	• **Action:** Expand weatherization and energy efficiency programming to incorporate emerging building technologies and building science. • **Action:** Provide training and funding to grow the local weatherization workforce. • **Action:** Offer more incentives and zero-interest loans for both developers and homeowners to support weatherization and energy efficiency upgrades.
Sector: Transportation and Land Use	
Measure Category T10: Expand and improve public transit infrastructure to create safe, reliable and affordable options for the region.	• **Action:** Improve sidewalks and pedestrian access around bus stops, especially along Knox Loves Bikes corridors. • **Action:** Increase bus service frequency and reduce wait times to make transit a viable option for more residents. • **Action:** Restrict and eventually eliminate on-street parking to prioritize dedicated bus lanes, bike lanes, and pedestrian spaces.
Sector: Energy	
Measure Category E12: Develop, invest in, and provide marketing outreach and education around distributed clean energy options, including onsite solar and community choice solar.	• **Action:** Invest in storage programs to make behind the meter solar more economic and reliable. • **Action:** Develop a net-energy metering (NEM) policy to make residential solar more affordable and accessible. • **Action:** Offer a property tax incentive to LMI house to promote residential solar in disadvantaged communities (e.g., improving on the NetAdvocate program from TVA)
Sector: Agriculture	
Measure Category A18: Create opportunities for, reduce barriers to, and increase education about small-scale farming and benefits.	• **Action:** Use innovative new technology to enhance farming techniques such as agrivoltaics and carbon capture. • **Action:** Partner with educational entities and community partners to create educational programs on the basics of small-scale farming (e.g., growing native plants and produce, reducing erosion through sustainable practices) • **Action:** Involve developers in maintaining lands in new developments for potential urban farms and gardens.

Climate Action Planning for Different Sectors

The following questions might also be used when considering how beneficial an action (e.g., project, initiative, or policy) might be for specific sectors listed in the climate action plan (CCAP).

Environmental Resilience

Question: To what extent does this action prepare populations vulnerable to increasing local heat, storm, and flooding events expected from climate change?

Question: How does the action address urban sprawl and insufficient green space and urban heat islands? For example, does the plan for action address lack of shade in different places across communities, including at bus stops and other places people gather?

Access to Innovation

Question: How does the action advance access to innovative or new technologies? For example, clean energy technologies like distributed energy systems and community solar?

Question: What is the plan for ensuring community-ownership in innovation or technology when feasible and if desired?

Question: Does the action increase access to innovation and/or clean energy technologies through affordability? How does the strategy address high upfront costs for energy efficiency upgrades, electrification, and solar installation likely to deter participation, especially for low-income households. What are the mechanisms for addressing limited access to financing and high interest rates, which make it challenging for contractors, homeowners and renters to invest in new technologies?

Economic Opportunity

Question: To what extent does this action affect the number of local, quality jobs in the climate workforce?

Question: How does the action contribute to workforce training programs or apprenticeship programs to increase access and participation in new workforce opportunities? For example, who are the partners for training programs needed for solar panel installations or battery production to support economic resilience and create job opportunities?

Question: How does the action identify and reduce barriers to any potential economic opportunities and ownership? For example, does the action intend to assess for barriers during contractual negotiations and in training opportunities? Does the action include these benefits and workforce protections into procurement and contracts?

Community- and Capacity-Building

Question: To what extent does this action support peer-to-peer or network learning opportunities about climate hazards and resources?

Question: How does the planning process intentionally include community education and participation? For example, are community conversations, workshops, town halls or other intentional outreach activities planned?

Question: Are the planned communication strategies and outreach activities accessible for all community members? Do they use shared and accessible language (including interpretation and translation)? Do they use direct communication channels and trusted messengers to reach target groups and communities? How do the engagement activities ensure safe and accessible spaces for community members?

Quality of Life

Question: To what extent does this action improve health and safety, especially for groups, populations, and communities historically exposed to climate hazards, such as poor air quality?

Question: To what extent does this action prevent gentrification and displacement? Does the plan or measure plan to evaluate the impacts of gentrification and displacement on local areas?

Question: How does the action address increasing energy and housing prices that put strains on affordability, especially for low-income households? For example, how does the plan or measure repurpose abandoned buildings for affordable housing or mixed-use development provides as opportunities to revitalize communities while addressing energy-efficiency and environmental justice goals?

Question: How will the action benefit community members in tangible ways (food security, housing, utility costs, health, community resilience, air pollution)?

Future Generations

Question: Are young people intentionally engaged in meaningful roles in participation? How are future generations being considered in the planning of the climate action measures?

Question: How does the action incorporate workforce development initiatives for training or capacity building to increase access to the clean energy workforce and quality jobs? How does the action build upon existing capabilities and programs and invest in needed workforce programs to ensure access for groups and populations underrepresented in the clean energy workforce? What is the strategy for engaging with, recruiting, and training youths to be ambassadors and stewards for this work in the future?

Additional Equity Considerations

Questions to consider during the planning phase of your climate action:

1. **To what extent will this action's planning process identify and meaningfully involve key stakeholders – especially individuals who could be most negatively affected by climate change and/or the proposed action?**

   Examples: Individuals with high exposure to outdoor elements, individuals with respiratory health risks, youth, neighborhoods adjacent to project location.

2. **To what extent will this action's planning process include outreach strategies that are accessible and inviting to all community members?**

   Examples: Simplifying language, translating materials, communicating through multiple channels, hosting meetings in community 'safe spaces', providing childcare and food at meetings, compensation for time spent participating in the process.

3. **To what extent will this action's planning process minimize 'stakeholder fatigue' in the collection of data?**

   Examples: Researching prior related efforts, honoring and compensating participants for their time, avoiding extractive processes and using empowerment models.

4. **To what extent does this action address long-term funding and sustainability of investment?**

   Examples: Funding and investment commitments beyond a grant cycle, establishment of working groups or committees to ensure sustainability of the project or investment.

5. **Does the action have measurable impacts that are either immediate (short-term) or long-term? Does the action provide a timeframe for projected short and/or long-term benefits?**

   For example, how many people or neighborhoods were able to access or benefit from the climate action and over what period of time? Did the benefits from the action impact those groups immediately or are the benefits likely to be observed in 2 to 5 years or longer?

6. **To what extent does this action address existing policies that might hinder implementation?**
   Examples: State laws that limits local regulations, zoning laws.

7. **Thinking about the proposed action, what considerations are important for ensuring equity within and across each of the outcome areas?**

   For example, to ensure equity in Economic Opportunity, reviewers might recommend strategies for including historically underrepresented groups in workforce programs, contracting, and neighborhood investments or capital improvements.