

**CITY OF SEBASTOPOL
CLIMATE ACTION COMMITTEE
AGENDA ITEM**

Meeting 11-January-2023

Submitted By: Energy Working Group

Topic: Workplan Project

RECOMMENDATION: That the Climate Action Committee Include in its 2023 Workplan a project to develop a set of Community Sustainability Indicators that will be tracked periodically and reported to the City Council on an annual basis.

The KPIs (Key performance Indicators) reported in the Community Sustainability Indicator report, though included coincidentally with the City's Level of Service Report, are not intended to report how the city services are performing. But rather it is used to determine if initiatives and projects completed with the purpose of making the community more sustainable are having measurable impact. As such, each KPI needs to include trending as part of its report and review.

GOALS/RESULTS: *"You can't change what you don't measure."* Ok maybe Deeming didn't say this, but he was thinking it.

The reason for making various measurements is twofold:

1. To determine if we are moving in the right direction
2. To determine which of the efforts we make have the best return for the cost of implementation

With limited resources it is important that Sebastopol expends efforts where they have the greatest returns. It is true that any specific metric may show contradicting indications. So, it is important to have a suite of indicators that can capture a picture of the sustainability the city is achieving.

For instance, we might have a metric that measures the electric energy delivered to buildings within the border of the city with the intension of determining if conservation efforts are bearing fruit. However, if the residents begin to electrify their buildings, without measuring this change it would not be apparent that goals are being achieved.

BACKGROUND/DISCUSSION: Every responsible city does measure the success of the services it provides. With climate change impacting everyone, initiatives are being taken to counter and/or reverse the impacts. This is new ground. Each effort taken is likely to have little history to substantiate that it can deliver the desired results. Consequently, for any action taken to improve the city's sustainability, a set of measures/metrics should be identified to determine how well the action is succeeding.

The measure should be designed so that they can be consistent, relatively easy to collect, and presented in a format such that the uninitiated can quickly recognize if progress is being made.

This is not new ground. Many cities are tackling this same issue of measuring and presenting results. A literature search did not reveal a single brilliant list of metrics to track. This is because the conditions and efforts taken in each municipality differ. Hence the useful metrics will differ.

In the literature search one institute suggests how to define what is to be measured. In Attachment B is a copy of one of the measures documented by SEHIC.

Taking ideas from that model, SCAC might consider the following be used to create and document each metric definition;

SCAC - Sustainability Indicator Submission Form	
Category	<i>[Waste, Water, Transportation, Building, Energy, Sequestration]</i>
Indicator	<i>[What is to be counted or quantified]</i>
Measure	<i>[Description of the measure]</i>
Last Update:	<i>[Date definition of the metric was last changed]</i>
Measurement units:	<i>[The units to be used; count or measure specific to the indicator]</i>
Scope:	<i>[Area to be included. Some measures may need to extend beyond city borders resulting from measurement technique, while others may only be appropriate within a limited project area]</i>
Time Scale:	<i>[How frequently should the metric be assessed. Due to seasonality, some metrics may be best trended monthly. If the metric is only appropriate for a limited period, indicate over what time period.]</i>
Background:	<i>[Identify how this metric will be used to make decisions and to evaluate project results.]</i>
Rationale:	<i>[Explain why this specific metric was selected.]</i>
Limitations:	<i>[Identify any limitation in the interpretation of collection of this metric.]</i>
Data Source:	<i>[Explain from where this data will be collected, who will do it, and how trending will be maintained. No metric should be accepted until a practical method of collecting data is also identified.]</i>
Contrasting Data:	<i>[If this metric is to be compared to national, state, or other comparable values, identify them]</i>
Associated Costs:	<i>[If any data acquisition costs or extraordinary labor is associated with data collection, an estimate should be recorded here]</i>
Recommendations:	<i>[If a specific method of presentation should be used, then describe it here.]</i>

ALIGNMENT: Sebastopol does not yet have a set of specific measures that indicate how the community is faring as regard to addressing Climate Change. By establishing a set of metrics and reviewing progress periodically, the SCAC will be able to make adjustments to processes, actions, and advice it has provided resulting from the many projects it takes on.

These are measures about how the city is changing. This contrasts with some of the existing metrics that measure how well city functions are addressing the needs of the community.

Many of the initial metrics/measures considered are currently being reported as part of the City’s annual Level of Service report. In that context they are illuminating how the city is addressing changing needs. Many of these same measures will be useful to determine if initiatives are yielding results. However, the focus of the LOS reporting often does not include an analysis of trending. The nature of the Community Sustainability Indicators KPIs relies on recognizing how they change over time.

A good example of this is the annual (and more likely monthly) consumption of municipal water. Programs to incentivize and educate citizens on how to conserve have been in place. If additional programs/projects are initiated, changes in these measures will indicate additional progress.

The establishment of these Community Sustainability Indicators is simply an extension to the discipline already followed in Sebastopol.

TIMING: This agenda item is to establish that metrics and measures will be maintained. It is expected that included in the workplan for 2023, the specifics of the process to be followed will be discussed in committee.

However, this item does not suggest that all the metrics be identified as part of this work plan item. Instead, each task group will bring metric and measure items to the SCAC for discussion individually. Often this will be in support of a specific project or program put in place. In other cases, there will be items to be added, either because they are general in nature or because they would be useful in determining if a future project or program is warranted.

Submission of a new metric/measure, regardless whether it is in support of a project/program or otherwise, would be scheduled and documented as a SCAC agenda item. The writeup will include an adopted SCAC ***Sustainability Indicator Submission Form*** with the relevant input.

PUBLIC COMMENT: This document has not yet been posted in a public forum. Consequently, no public comment has yet been submitted.

PUBLIC NOTICE: This item was noticed in accordance with the Ralph M. Brown Act and was available for public viewing and review at least 72 hours prior to schedule meeting date.

FUNDING NEEDS – Staff Estimate: Until the precise form and methods for the tour are determined, the full cost (and Sebastopol’s contribution to it) cannot be determined.

Some funding needs (not yet quantified) can be assumed for the development of the project as the steering team is assembled to support meeting and organizational costs.

Funding Source(s): Sebastopol Operational Budget; department TBD

STAFF COMMENTS/RECOMMENDATION: [to be completed by staff before reading at SCAC]

ATTACHMENT(S):

- Attachment A – ideas for future metrics/measures
- Attachment B - Sample from SEHIC of a metric/measure definition

Attachment A

SAMPLES OF FUTURE METRICS AND MEASURES THAT MIGHT BE CONSIDERED

- number of tree removal permits issued
- KW solar installed in residential of 95472
- KW solar installed in commercial of 95472
- KWH imported through the High School transfer station (wondering If PG&E has that)
- KWH electric and and cuft natural gas delivered to Sebastopol addresses
- Number EVs registered in Sebastopol
- Number of public EV charging stations
- % of addresses subscribing to SCP Evergreen
- tons of waste sent to landfill
- tons of recyclable material collected
- tons of recyclable material recycled
- Acre feet of water delivered to Sebastopol
- Acre feet liquid waste handled
- Number heat pumps (water and space) permitted
- Number of utility upgrade permits (for any water heater, space conditioning, etc.)
- Number of permits qualified for discount rates resulting from qualifying for any of the Electrification incentives we identify
- KWh consumed per sqft of city office, garage, meeting, and warehouse space
- KWh imported per sqft to support city office, garage, meeting, and warehouse space
- estimated annual traffic flow East on hwy 12 and South on hwy 116 (trying to find some measure of reduction of VMT)
- KWH delivered through public charge stations
- Permits issued for All-electric buildings

ATTACHMENT B

Sample From SEHIC of a metric/measure definition

STATE ENVIRONMENTAL HEALTH INDICATORS COLLABORATIVE (SEHIC) CLIMATE AND HEALTH INDICATORS	
Category:	Environmental
Indicator:	Greenhouse Gas Emissions
Measure(s):	CO ₂ -Equivalent Greenhouse Gas Emissions Per Capita, by Sector
Last updated:	May 12, 2018
Measurement units:	Metric tons per capita
Geographic scale:	State, by sector (commercial, industrial, transportation, residential, transportation, electric power)
Time scale:	Annual, 1990 - 2015
Background:	Global Greenhouse Gas (GHG) emissions, including carbon dioxide (CO ₂), methane, and nitrous oxide contribute to global warming and are projected to have profound effects on the world's ecosystem and public health, if allowed to continue unchecked.
Rationale:	Much of global warming is due to human activities that release carbon dioxide and other gases. Trends in these emissions are necessary to track to monitor progress in reducing global warming.
Limitations:	Need to estimate CO ₂ emissions from electrical sources imported into U.S.
Data resources:	https://www.epa.gov/statelocalenergy/state-co2-emissions-fossil-fuel-combustion
Data limitations:	Emissions are estimates and are subject to error.
Related data:	State-level annual (July 1) population estimates from the U.S. census
Recommendations:	Graph total as a time series or line graph. Use a stacked bar chart for graphing emissions by section.