## CITY OF SEBASTOPOL CLIMATE ACTION COMMITTEE AGENDA ITEM

Meeting 11-January-2023

Submitted By: Energy Working Group

**Topic:** Workplan Project – Community Electrification

**RECOMMENDATION:** That the Climate Action Committee Include in its 2023 Workplan a multifaceted campaign that incentivizes, educates, and advocates for multiple forms of electrification in new and existing buildings.

Sebastopol has a relatively low rate of new buildings; electrification efforts that focus only on new and major renovation construction will not make major impact in the GHG emission of Sebastopol. Efforts to make it easy and compelling to upgrade existing buildings is imperative.

The central focus is to promote electrification of existing building stock. Many different aspects will be included under this project effort. These likely will include:

- Marketing availability of electrification changes that can be made in each home/building
- Providing preferential permit rates for changes to buildings that target transition from gas to
  electric power. This would include changes to reduce electric demand, to increase supply,
  and/or to shift demand/supply.
- Identifying the market for electrification through surveys or other means.
- Providing preferential permit rate for changes to buildings that are made to support replacement of fueled vehicles with electric options.
- Development and maintenance of lists of funding supplements that can be used for private electrification projects.
- Identify and promote contractors qualified to complete electrification projects

<u>GOALS/RESULTS</u>: Retirement of the use of fossil fuels as primary energy sources will require a focus on electrification so that the quality of life is sustained during this transition. This effort is designed to make that transition easier for the Sebastopol Community.

The goal of the effort is to remove the roadblocks that typically make electrification attractive. The project is to:

- Provide education about the electrification options available
- Identify what makes electrification challenging to Sebastopol community members
- Financially incentivize efforts to transition from fossil-fueled energy to renewables through electrification discounts
- Leverage financial incentives available from outside of Sebastopol
- Transition home heating, water heating, cooking, and private travel to be powered by efficient electric appliances

**BACKGROUND/DISCUSSION:** The greening of our lifestyles will be facilitated by electrification. The power grid is increasingly supported by renewables that do not increase the Green House Gases found in the atmosphere (and absorbed into the oceans). In the past year, periods have been experienced where the electric grid was powered 100% by renewables. Even the IOU PG&E is now 48% renewable for base plan customers.

In the USA over 50% of the energy consumed in a home is still provided by fossil fuels. This is primarily used to heat the building, heat water, and cook. California has a mandate that by 2045 100% of electric energy will be carbon free. However, without focusing on electrification of building utilities, the impact of this change will be substantially reduced.

Much of the effort to promote this transition to efficient and electric-powered buildings is embedded in the 2022 Title 24. However, this only addresses new and major renovation construction. In Sebastopol, with just 150 available allocations for new buildings, the impact of efficient new construction will be marginal. A focus on tackling electrification improvements in the built inventory is critical.

Enacting constraints on use of fossil fuels will neither be popular, nor possible. Rather than using a stick, this effort focuses on what carrots might be available that will leverage the limited public funds available.

Electrification is indeed beneficial to those that make the change. It has been shown that even with the relatively high up-front costs, electrification projects ultimately cost less over the life of the appliances. Both operating costs and maintenance costs have been demonstrated to offset the initial installation cost within a predictable number of years. As well, recent studies have identified the harmful health effects of natural gas in homes.

<u>ALIGNMENT:</u> The concept of neighborhood energy is supported by the Sebastopol Climate Action Framework and the Sebastopol General Plan

## From the Sebastopol Climate Action Framework

BE1. Reduce greenhouse gas (GHG) emissions from buildings and support better community health by eliminating natural gas use in new buildings, electrifying existing structures, minimizing embodied carbon in new construction and remodels, and making all buildings more energy efficient.

BE3. Expand the installation of solar panels and other renewable energy sources, both locally and in partnership with other entities in Sonoma County, to further decarbonize Sebastopol's electricity supply. BE5. Make buildings more resistant to climate change impacts, such as damage from floods, wildfires, extreme weather events, and other climate hazards.

BE6. Ensure energy sources are reliable during extreme weather conditions.

C5. Improve community preparedness for climate-influenced hazards.

## From the Sebastopol General Plan

COS2. Reduce Emissions of Greenhouse Gases from City Operations and Community Sources

COS9. Promote Conservation of Energy and Other Natural Resources

EV1: Encourage Economic Development that Broadens the City's Employment Base, Attracts High-Quality

Jobs, Provides Services and Goods that Reflect the City's Values, and Increases the City's Tax Base

F-1: Promote Energy Conservation in Residential Development

F-2: Promote Resource Conservation in Residential Development

**TIMING:** This is a multi-aspect and likely multi-year effort. The timing will vary based on the various parts.

The first effort should be to assess community awareness, challenges, and willingness to take on personal electrification projects. This would be in a survey that will also determine perceived roadblocks to electrification.

Changes to permit and filing fees should be done early in the year so that later marketing efforts can make use of these as incentives for community members to take on efforts.

From there, the survey will help inform which efforts might be the most useful to accelerate the electrification of Sebastopol's building stock.

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

**<u>PUBLIC NOTICE:</u>** 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 scheduled meeting date.

<u>FUNDING NEEDS – Staff Estimate:</u> With the multiple aspects of this effort, funding needs must be identified individually. Many of the efforts will rely on staff. For instance, the assessment of changes to building permits and filing fees should be provided by staff after they identify how this might impact the city budget.

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

## ATTACHMENT(S):

none