

The following is a compilation of comments received from EPC members and various community members. Given the exceptionally short turn-around time of 7 days, these comments focus on those areas of the document that could “move the needle” on achieving the Council approved EAP2040 targets of reducing GHG emission by 50% by 2030 and 80-100% by 2050.

What are your impressions of the ECCAP report?

- 1) There are many excellent Climate Action Plans published in the DC Metro area including DC’s **Clean Energy DC** that could have served as a model for this plan, but unfortunately did not. DC’s Plan is especially good because it includes three separate documents for various different audiences. First, a 40-page summary report that is easy to read and understand for all of DC. Second, the full plan with details that runs about 250 pages. Third, the executive summary for the full-length plan that is 22 pages and begins with a section on “what is this plan and why does it matter.” Alexandria’s plan would be much easy to read if it followed this model.
- 2) It is **unclear who is supposed to read and use this document**, i.e. City Council members, City staff, residents, business owners, developers, environmental activists, climate nerds, all of the above, or a limited subset. A document aimed at all generally does not succeed with any unless it includes a comprehensive, but easy to read Executive summary – this one does not.
- 3) Although the City’s Climate Emergency Declaration highlighted the urgency of the problem and the health, budgetary, and equity impacts of inaction, this document does not capture the urgency of the matter until perhaps page 86. If this document is to guide future action, it must convey the **urgency at the beginning** so the reader cares and wants to take action to achieve results. See DC’s Plan.
- 4) **No strategy or list of actions meets Resolution 2958 of City Council by providing specific, measurable, time-bound steps to implement the EAP2040 targets (metrics) that Council, City Manager, residents or businesses must take to meet the targets.** Instead, the “strategy and actions” include words such as support, increase, establish, reduce, advocate, provide, etc. As such, it is **impossible** for anyone to determine the success or failure of any of these actions. Also, **no progress can be assessed** over time especially when the official, approved data we receive from MWCOG is up to 4 years old when finally received. (In 2022, we are using 2018 data) No possible metrics are proposed, nor how to collect them.
- 5) According to the EAP2040, 96% of the GHG emissions come from the community, thus it is critical that 96% of the **strategy and actions** be devoted to the community and since 57% of the emission come from buildings then 57% of the strategy and actions should be devoted to them. This is the only way residents, business, elected officials and City staff can “move the needle” and not fall for the “shiny objects”ⁱ that cost, time or money and have little impact.
- 6) In each of the narrative descriptions listed in pages 29 through 85 there are **no specifics about HOW or HOW MUCH (no metrics)** must be done in order to achieve the GHG emission reductions highlighted in Table 2 and Figures 5 and 6 of the document. Without this

information, the reductions are just wishful thinking. See #4 above.

What does the ECCAP Report succeed in providing the City and community?

This document provides some data and information that might be useful if it was better defined, better organized and the modeling made clearer. The Chapters on Equity and Climate Impacts and Adaption Strategies are good.

What do you believe is missing from the ECCAP report? And where does the ECCAP report need additional information or focus?

- 1) Table 2 on page 17-19
 - a. **There is no definition of low, moderate and high cost** – the lack of a definition leads to different interpretations by the reader that can be many orders of magnitude different.
 - b. **There is no specific heading or discussion focused on increased energy efficiency.** Advocating for amending the building codes (i.e. Stretch or Reach codes) and amending the Green Building Policy to improve energy efficiency could save residents a great deal of money and reduce the energy burden on low and moderate-income resident (an equity issue) as well as reduce energy costs for businesses. **It is widely understood that increasing energy efficiency costs less than any current energy source, including renewables.** Instead, the document refers to the “cutting-edge” green building standards on page 32 when current high performance buildings with EUIs of 22 are being builtⁱⁱ and our GBP allows buildings with an EUI of 56 to be built.ⁱⁱⁱ **There is nothing “cutting-edge” about the GBP. City staff has already admitted to Council that it does not get us to our EAP2040 targets. Further, when approved City staff said it would reduce GHG emissions by 3% - far less than indicated in this report – so which number is correct? See Slide 7 of Staff presentation on June 22, 2019.**
 - c. **Models come from data and/or assumptions, but their sources must be clear.** All modeling info should be included in the narrative pages under GHG Reduction Priority Strategies and Actions - pages 29 – 85 instead of an Appendix. On page E-1 the narrative refers to energy use intensity (EUI) number that is used, but it is never spelled out. There is no discussion of the equation used to determine the number, only reference to commercial growth based upon 1000 square feet per household and 250 square feet per job. **Since we do not know what the numbers are, where they came from – the accuracy of the ultimate number is not verifiable.** In other words, what should be provided is: we used **this** data (source provided) and **this** equation to show a reduction of GHG emissions by X amount - thus each new building must have an EUI starting in 202___. And then X square footage of existing buildings must be retrofit to 30% (or some other percentage) increased energy efficiency above code each year to achieve the GHG emission reduction quoted. Whatever data is unknown – the writer can make assumptions - but they must be reasonable and specifically spelled out so the reader and decision-makers can verify and thus have confidence in the numbers and assumptions. Another example is on page E-6 it says, “efficiency over code was assumed to be 15% over code for new buildings built between 2022 and 2030, etc. However, the writer does not explain why this assumption appears. Therefore, what is

the current “over or above code” percentage when it comes to energy efficiency being built in Alexandria over the last 2-5 years? How much square footage or number of units? Do we have any idea? If not, why make the assumption?

- d. Although the Table lists undefined costs, ***Risks and City control*** are not. Risk and City control or influence must be highlighted in order to help decision makers evaluate where to focus the City’s energy, time and money. Risks appear under the narrative section for each subheading, but the Table should also display this information to help the reader.
 - e. B-1 & B-2 There is no information about options on exactly **HOW or HOW MUCH PER YEAR** (no metrics) the City must “support” decarbonizing buildings or “opportunities for a green bank,” to achieve the level of reduction of GHG emissions as displayed. **It is a math equation with an ending, but no equation/calculation on the values to get you there.** Further, according to various reports from the City at least 95% of current developments are complying with the current Green Building Policy, so little is gained under B-2 unless advocating for changes to the GBP, which this report does not. B-1B - Further, since no one in Alexandria has taken advantage of C-PACE to date, it is unclear how “increased marketing and promoting will help achieve the results needed to cut GHG emissions.” The report assumes the failure to use the program is just a marketing problem. It is unclear **WHY** the writer reached this conclusion. B-2B - It is unclear **HOW or HOW MUCH PER YEAR** (no metrics) of Alexandrian’s residents and business owners must be “educated to support energy efficiency and conversion” from gas to electric to achieve the reduction of GHG emissions listed here. For example, we do not know how much “education” is required to achieve measurable results. No data is provided indicating that a similar program elsewhere achieved the desired results that we could model Alexandrian’s after.
 - f. Remove B-3 and B-4 since we have no estimates or high cost estimates for only 4% of the emissions (City’s share). City funds should be spent **ONLY** on “lead by example” City projects when they are highly promoted to help convince the community to take action – such as electric buses, highly visible and promoted solar panels and displays at Rec Centers, etc.
 - g. T-1 Although Table 3 on page 23 appears to indicate how much at various critical milestones (2030 and 2050) must be achieved to meet the GHG emission reductions provided – there is no information on exactly ***HOW or HOW MUCH*** (no metrics) of all these actions must be taken to achieve the GHG emission reductions listed.
- 2) Figure 5 on page 21 (and also EA-1 on page ES-1 in the Executive Summary)
- a. There is **no key or legend to this Figure** – the data apparently is in Table 2 pages 17-19 of the document, but that is not clear. No figure or Table should require the reader to hunt for the key or legend; display it on the same page.
 - b. It is unclear if there is a direct correlation between the Table 2 and the Figure 5 because the GHG emission numbers do not seem to add up to the display in the Figure. The text later says some data is for informational purposes and included in other data numbers, but none of the numbers add up leading to confusion as to where the numbers come from and how they are determined. **All Figures should also display the actual**

percentage numbers at each milestone and the arrows should line up with the correct points on the Figure.

- c. The data displayed in Figure 5 should show the largest item at the top with descending order following that so the reader can focus on those actions that “move the needle” the most.
 - d. Why does RE-1 disappear on the Figure? Why do you apparently anticipate that after the Grid is 100% renewable that no one would want to have individual solar or other renewables to reduce their energy costs, (competing with the utility on costs) and provide more personal resilience during utility outages? There is no data provided about why the writer made this conclusion.
- 3) B-2A narrative on page 34. The description highlights various plans and strategies (ESMP) (CSS) (CNA) produced by various developers. Unfortunately, it does not make clear **that NONE of those plans makes any firm commitments** – they mostly provide a list of various options that they *might* consider. This report must focus on facts, not possibilities and greenwashing by developers.

Table 3. **Summary of GHG Reductions estimated for all Transportation Scenarios under all Electric Grid cases**

- 1) This table might be more useful and easier to interpret if displayed differently as a graphs or bar charts vs. just a table with numbered percentages.
- 2) The most critical transportation point is on page 43 where the results of the National Capital Region Transportation Planning Board (TPB) results appear. The bottom line from the TPB is when it set an aspirational goal exactly like Alexandria’s (50% reduction by 2030) , the results were that **“none of the scenarios analyzed as part of the 2021 study, including the most aggressive scenarios, could achieve close to this aspirational goal.”** Based upon this result, this document must explain what Alexandria would do differently than the most aggressive proposals of the TPB to reach our target of 50% by 2030.

Figure 6 – **Key Milestones that will put Alexandria on a Path to Meet its GHG Reduction Goals**

- 1) This Figure might be helpful if the information was better defined and correlated directly with the data in Figure 5 and Table 2. Also, perhaps this data could be displayed better as a either a bar chart with an associated line following each bar or just a line showing an increasing percentage on one axis and the 5-10 year interval on the other axis.
- 2) New Building decarbonization shows 95% by 2025 and defines this in *tiny* print as the percent net zero ready buildings, but there is no explanation anywhere in the document as to how this is accomplished. **How does the City get from a GBP to net zero ready buildings in essentially 2 years’ time? Once again a result, but no explanation on how to achieve the result.** What is required of the City, Community, elected leaders, and businesses to achieve this result?

What would you prioritize for City Staff to focus their efforts in writing of the ECCAP report?

- 1) As highlighted repeatedly over the last 4-5 years to City Staff, those concerned about the implementation of the EAP2040 indicated we must focus 96% on community actions - since 96% of the emission come from the community. Further, given the pie chart in the EAP on the breakdown of what sector the majority of emissions come from – Staff should focus their attention on 3 sectors: buildings, energy and transportation. Nothing has changed today except the heightened urgency of the actions required AND the need for specific, measurable, time-bound actions (metrics) that must be taken by all those who care about Alexandria and future generations.

ⁱ Comments made by the Mayor during the City Council meeting approving the new Climate Action Office.

ⁱⁱ Achieving Zero Energy – Advanced Energy Design Guide for Multifamily Buildings published by ASHRAE, the American Institute of Architects, Illumination Engineering Society, US Green Building Council and US Dept. of Energy. 2022

ⁱⁱⁱ This number comes from PRGS carbon neutrality plan that indicates their design (EUI of 45) is 25% more energy efficiency than the GBP, thus the GBP would be 56. $125\% \times 45 = 56$.