

Description of the Synthesis Excel of Key Environmental Plans (REVISED Draft 8/18/21)

Introduction

The excel is a synthesis of certain key local environmental plans and related documents (“Environmental Plans”) as well as the Ann Arbor, Michigan “A2Zero Ann Arbor’s Living Carbon Neutrality Plan April 2020” (“Synthesis Excel”). This is the third draft of the Synthesis Excel. This revision was done in order to add relevant recommendations from the recently passed Fairfax County Operational Energy Strategy July 13, 2021 and the Fairfax Carbon Neutral Counties Declaration. The third draft also incorporates City staff comments posted on the Task Force website on July 27, 2021 that the Staff added to the first draft of the Synthesis Excel dated May 14, 2021.ⁱ

The Synthesis Excel should greatly facilitate the work of the Energy and Climate Change Task Force (“Task Force”), Alexandria City staff, City consultants and other interested parties in creating a bold and workable new Energy and Climate Change Action Plan for Alexandria (“Action Plan”). It is worth noting that the draft scope of work for the consultant to be hired by the City in support of the development of the Action Plan envisions that the consultant prepare a “[s]ummary review and synthesis of relevant regional and state plans, policies, or actions” and a “[s]ummary review and synthesis of relevant City plans and policies.”ⁱⁱ

The Synthesis Excel is intended to highlight the best ideas on combating climate change from local Environmental Plans so that one does not have to “reinvent the wheel” in producing the Action Plan. However, this is just a first step. The technologies and ideas for combating climate change are rapidly changing and anyone involved in preparing such an Action Plan needs to make sure they are always looking for the best and brightest ideas emerging in this country as well as abroad.

With the issuance on August 7, 2021 report of the IPCC titled *Climate Change 2021 The Physical Science Basis* (“IPCC Climate Change Report”),ⁱⁱⁱ the City’s and the region’s current Environmental Plans to combat climate change will need to be reassessed to quantifiably determine whether they will sufficiently reduce greenhouse gases. The IPCC Climate Change Report makes it clear that it is “unequivocal that human influence has warmed the atmosphere, ocean and land” and that the “scale of recent changes across the climate system as a whole and the present state of many aspects of the climate system are unprecedented over many centuries to many thousands of years.” UN Secretary-General Antonio Guterres called this report a “code red for humanity” and stated that countries “should also end all new fossil fuel exploration and production, and shift fossil-fuel subsidies into renewable energy.”^{iv} The IPCC Climate Change Report states that we need to achieve global net zero CO₂ emissions by 2050.

Background on the Synthesis of Key Environmental Plans

Given that the Task Force has a short amount of time to provide feedback and guidance on the new Action Plan, I decided to assist the work of the Task Force and City staff by undertaking a synthesis of some of the more forward-looking local Environmental Plans.^v

Environmental Plans Synthesized

The Environmental Plans synthesized are as follows:

1. Alexandria Energy and Climate Change Action Plan 2012-2020 (March 14, 2011)^{vi}
2. Alexandria Environmental Action Plan 2040 (July 2019)^{vii}
3. Ann Arbor, Michigan “A2Zero Ann Arbor’s Living Carbon Neutrality Plan April 2020”^{viii}
4. Arlington Solid Waste Management Plan June 12, 2004^{ix}
5. Arlington Urban Forest Master Plan (July 28, 2004)^x
6. Arlington Natural Resources Management Plan (Adopted November 13, 2010)^{xi}
7. Arlington Stormwater Master Plan (September 20, 2014)^{xii}
8. Arlington Zero Waste Resolution (November 19, 2015)^{xiii}
9. Arlington Master Transportation Plan – Goals and Policies Document (Adopted November 13, 2007, Updated February 25, 2017)^{xiv}
10. Arlington Community Energy Plan (September 2019)^{xv}
11. Climate Ready DC (2016)^{xvi}
12. Clean Energy DC August 2018^{xvii}
13. Sustainable DC (2019)^{xviii}
14. Climate Resilient by 2050 – Making Progress Toward a Climate Ready DC (2020)^{xix}
15. Fairfax 2017 Edition of the Policy Plan^{xx}
16. Fairfax Environmental Vision June 2017^{xxi}
17. Fairfax County Sustainability Initiatives FY 2020^{xxii}
18. Fairfax County Operational Energy Strategy July 13, 2021^{xxiii}
19. Fairfax Carbon Neutral Counties Declaration (July 13, 2021)^{xxiv}
20. May 6, 2020, Memo regarding Climate Adaptation and Resilience Planning in Fairfax County^{xxv}
21. Fairfax County Sustainable Development Policy for Capital Projects Revised September 15, 2020^{xxvi}
22. Fairfax Monthly CECAP Update: October 2020^{xxvii}
23. Metropolitan Washington Airports Authority Final 2020 Sustainability Plan (September 25, 2020)^{xxviii}
24. Metropolitan Washington Council of Governments 2030 Climate and Energy Action Plan November 2020, including Appendices^{xxix}
25. Montgomery County Climate Action Plan (December 14, 2020, Draft), including Appendices^{xxx}

The above comprises a total of twenty-five Environmental Plans of Ann Arbor, the Metropolitan Washington Council of Governments, the Metropolitan Washington Airports Authority Final 2020 Sustainability Plan plus five local jurisdictions that total 2,434 pages. The

Synthesis Excel sets forth more than 800 recommendations to combat climate change from these Environmental Plans.

Description of the Synthesis Excel & How to Use It

A key objective of the Synthesis Excel was to organize relevant information from the various Environmental Plans to facilitate an apples-to-apples comparison. There are many ways one can organize the information contained in the Plans, but it is not possible to do so by simply following the table of contents of these Plans. Accordingly, I chose to break out the information into alphabetically organized categories that are widely and easily understood. Then I chose to further break out the recommendations in each category alphabetically by topic.

The excel sheets in the Synthesis Excel cover the following categories:

1. Goals + Policy + Baseline
2. Climate Adaptation/Resilience/Vulnerability
3. Energy Efficiency and Renewables
4. Green Buildings
5. Land Use (Open Space and Trees)
6. Measuring Success
7. Outreach and Education
8. Transportation
9. Waste Management
10. Water Conservation
11. Other (e.g., Air Quality, Economy, Equity, Food, Governance, Health, Light & Noise)

As noted above, the Synthesis Excel contains eleven excel sheets and each sheet contains a list of recommendations that are in alphabetical order. Each Environmental Plan addressing a particular recommendation contains a page referent and a direct quote with the most pertinent language from that Environmental Plan.

Each excel sheet contains columns for the ten main and most current Environmental Plans which are as follows: (1) Alexandria Energy and Climate Change Action Plan 2012-2020 (March 14, 2011); (2) Alexandria Environmental Action Plan 2040 (July 2019) (“EAP”); (3) Ann Arbor, Michigan “A2Zero Ann Arbor’s Living Carbon Neutrality Plan April 2020”; (4) Arlington Community Energy Plan (September 2019); (5) Clean Energy DC August 2018; (6) Sustainable DC (2019); (7) Fairfax 2017 Edition of the Policy Plan; (8) Metropolitan Washington Airports Authority Final 2020 Sustainability Plan (September 25, 2020); (9) Metropolitan Washington Council of Governments 2030 Climate and Energy Action Plan November 2020; and, (10) Montgomery County Climate Action Plan (December 14, 2020 Draft). Where one of these ten main Environmental Plans contain nothing relating to a particular recommendation, that row will either be blank or contain the words “Not Applicable.” However, in those instances where another Environmental Plan from the same jurisdiction contains relevant information on a

particular recommendation, then that row will have a “Note” in parenthesis with the requisite quoted language.

The Synthesis Excel is intended to function like a searchable database containing the relevant recommendations from the above noted ten Environmental Plans. To locate information on any subject of interest in the Synthesis Excel, run a search either within a particular sheet (i.e., selecting “Search in Sheet”) or across the entire excel (i.e., selecting “Search in Workbook”). In addition, it is recommended to use the “Hide” function in excel to hide rows and/or columns you may not be interested in order to make navigation through the excel quicker and easier.

The Synthesis Excel is highly organized so that one can readily see differences across jurisdictions as to how each handle (or does not handle) a specific recommendation to combat climate change. The Synthesis Excel is also designed so that one can add additional columns to analyze other Environmental Plans. Finally, if one wants to select recommendations that should be included in a new Action Plan for Alexandria, a quick way to do so is to color highlight individual cells and then sort by color to locate all such cells.

Background on the Energy and Climate Change Task Force

Environmental Action Plan 2040 dated July 9, 2019

The EAP called for the formation of an Energy and Climate Change Task Force “[b]y FY 2021 [i.e., July 1, 2020 – June 30, 2021]...to guide an update of the Energy and Climate Change Action Plan.” The EAP also stated that the Task Force “will base its recommendations for improvements in energy efficiency for both new and existing private and public buildings on the Green Building Policy.” Lastly, the EAP noted that the Action Plan “will include recommendations for specific policies and programs, each with funding strategies, to achieve emissions reductions targets by 1) increasing of renewable energy production and availability for city residents and businesses; 2) working to curtail consumption of fossil fuels; 3) engaging Alexandria residents and businesses in emissions-reducing actions; 4) identifying opportunities for climate adaptation policies and practices.”^{xxxii} The last Action Plan the City promulgated was the City of Alexandria Energy and Climate Change Action Plan 2012-2020 dated March 14, 2011.

City Council Resolution 2958

Pursuant to Resolution 2958 adopted by City Council on September 22, 2020,^{xxxii} a thirteen member Task Force was approved. The Resolution states that the “mission” of the Task Force is “to provide *feedback and guidance*” on the update of the Action Plan, “including a plan on specific, measurable, time-bound steps to implement the targets” of the EAP on “climate change, energy, and transportation.” (emphasis added)

Alexandria City staff, City consultants and other interested parties

Task Force Website

The Task Force website was updated on July 27, 2021 to include the Charter for the Task Force that was passed at the May 4 meeting of the Task Force. The Charter notes that the Task Force “is charged with providing *guidance* to the City’s effort to update the Energy and Climate Change Action Plan as described in City Council approved Resolution 2958.”^{xxxiii} (emphasis added)^{xxxiv} The Charter further states that “[a]s part of the City’s update of the Energy and Climate Action Plan (ECCAP), the Energy and Climate Change Task Force will provide City staff *guidance*:

- on the ECCAP’s update consistent with the Environmental Action Plan 2040 (EAP2040)’s targets and goals;
- on an implementation roadmap for the ECCAP, including identifying and evaluating funding and budgeting strategies, specific implementation steps and approaches, and methods to measure and track progress against time-specific goals consistent with the EAP2040;
- on the inclusion of equity and economic development principles and actions in the ECCAP’s recommendations;
- assist and support the City’s ECCAP community engagement and climate change action outreach efforts; and,
- pledge to lead by example and utilize the City’s household greenhouse gas inventory tool.”^{xxxv} (emphasis added)

The membership of the Task Force was disseminated by the City on the Task Force website on April 22, 2021. The Task Force held meetings on May 4 and July 27, 2021. Based on the presentation by City staff given at the second Task Force meeting on July 27, 2021,^{xxxvi} the Task Force is planning to meet on September 28, 2021, November 30, 2021, February 1, 2022 and May 10, 2022 with a vote by City Council on the Action Plan in June 2022. The presentation for the July 27 meeting also noted that City staff currently is planning for a total of three community workshops that will take place on October 26, 2021, January 10, 2022 and April 23, 2022. In addition, the July 27 presentation noted that the City plans on having three community feedback surveys and a yet to be determined date and time.

Conclusion

The City and the Task Force should not only be creating a new Action Plan with “specific, measurable, time-bound steps to implement the targets” of the EAP, but also one that is comprehensive and incorporates the most forward looking and best ideas from environmental plans and environmental studies both in the U.S. and abroad.

Given the apocryphal predictions noted in the recently issued IPCC Climate Change Report, the Task Force needs to reassess and quantifiably determine whether the City’s EAP and other environmental plans and policies will be sufficient to achieve net zero CO₂ emissions by 2050. The need for a bold Action Plan is abundantly clear and humanity has run out of time

to continue to kick the can down the street. Our City has recognized this truth when is unanimously declared a climate emergency in 2019.^{xxxvii} Now is the time to boldly lead by example.

ⁱ City staff comments to the Synthesis Excel are in red type.

ⁱⁱ See https://www.alexandriava.gov/uploadedFiles/tes/eco-city/info/4_ECCAP_ScopeOfWork_DRAFT_v20210723.pdf.

ⁱⁱⁱ See https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_Full_Report.pdf.

^{iv} See <https://www.un.org/press/en/2021/sgsm20847.doc.htm>.

^v I wish to thank and acknowledge Steve Banashek, Brian Hires, Paul Klapowitz, Ana Maria Kleymeyer, Carolyn Lyle, Mike Olex and Bill Pugh for some initial work and input on this synthesis.

^{vi} See <https://www.alexandriava.gov/uploadedFiles/tes/eco-city/DraftEnergyClimateActionPlan03.14.2011.pdf>.

^{vii} See <https://www.alexandriava.gov/uploadedFiles/tes/EAP2040v25.pdf>. As of the date of this document, the most current “EAP 2040 Status of Actions” by City staff as of the date of preparation of this document was provided to the Environmental Policy Commission at its February 22, 2021 meeting and can be found at <https://www.alexandriava.gov/uploadedFiles/tes/oeg/info/EAP%202040%20progress%20EPC-PC%20jointmtg2-22-21.pdf>.

^{viii} See <https://www.a2gov.org/departments/sustainability/Carbon-Neutrality/Documents/A2Zero-Climate-Action-Plan-3.0.pdf>.

^{ix} See <https://recycling.arlingtonva.us/wp-content/uploads/sites/8/2013/11/Solid-Waste-Management-Plan.pdf>.

^x See <https://arlingtonva.s3.dualstack.us-east-1.amazonaws.com/wp-content/uploads/sites/31/2014/04/Urban-Forest-Master-Plan.pdf>.

^{xi} See <https://arlingtonva.s3.amazonaws.com/wp-content/uploads/sites/31/2014/03/Read-the-Natural-Resources-Management-Plan.pdf>.

^{xii} See https://arlingtonva.s3.dualstack.us-east-1.amazonaws.com/wp-content/uploads/sites/31/2014/05/SWMP_FINAL_Sept2014.pdf.

^{xiii} See <https://countyboard.arlingtonva.us/zero-waste-resolution/#:~:text=The%20Zero%20Waste%20Plan%20could,Arlington%20County%20as%20a%20whole.>

^{xiv} See <https://arlingtonva.s3.dualstack.us-east-1.amazonaws.com/wp-content/uploads/sites/31/2017/03/Overall-plan-updated-February-25-2017.pdf>.

^{xv} See <https://arlingtonva.s3.amazonaws.com/wp-content/uploads/sites/13/2019/10/Final-CEP-CLEAN-003.pdf>.

^{xvi} See https://doe.dc.gov/sites/default/files/dc/sites/ddoe/service_content/attachments/CRDC-Report-FINAL-Web.pdf.

^{xvii} See https://doe.dc.gov/sites/default/files/dc/sites/ddoe/page_content/attachments/Clean%20Energy%20DC%20-%20Full%20Report_0.pdf.

^{xviii} See https://sustainable.dc.gov/sites/default/files/dc/sites/sustainable/page_content/attachments/sdc%202.0%20Edits%20V5_web_0.pdf.

^{xix} See https://doe.dc.gov/sites/default/files/dc/sites/ddoe/service_content/attachments/Climate%20Ready%20DC_Stra tegicRoadmap%28FINAL%29.pdf.

^{xx} See <https://www.fairfaxcounty.gov/planning-development/sites/planning-development/files/assets/compplan/policy/environment.pdf> and <https://www.fairfaxcounty.gov/planning-development/sites/planning-development/files/assets/compplan/policy/transportation.pdf>.

^{xxi} See <https://www.fairfaxcounty.gov/environment/sites/environment/files/assets/documents/pdf/environmental-vision-2017.pdf>.

^{xxii} See <https://www.fairfaxcounty.gov/environment-energy-coordination/sites/environment-energy-coordination/files/assets/documents/pdf/fy%202020%20sustainability%20initiatives.pdf>.

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- ^{xxiii} See <https://www.fairfaxcounty.gov/environment-energy-coordination/sites/environment-energy-coordination/files/assets/documents/fairfax-county-operational-energy-strategy-2021.pdf>.
- ^{xxiv} See <https://www.fairfaxcounty.gov/environment-energy-coordination/carbon-neutral-counties-declaration>.
- ^{xxv} See https://www.fairfaxcounty.gov/boardofsupervisors/sites/boardofsupervisors/files/assets/meeting-materials/2020/june16_environmental_agenda%20item%20_nip%20climate%20adaptation%20and%20resilience%20planning.pdf.
- ^{xxvi} See <https://www.fairfaxcounty.gov/environment-energy-coordination/sites/environment-energy-coordination/files/assets/documents/pdf/updated%20sustainable%20development%20policy%20fy%202021.pdf>.
- ^{xxvii} See <https://www.fairfaxcounty.gov/environment-energy-coordination/climateaction/news/monthly-cecap-update-october-2020>
- ^{xxviii} See <https://www.mwaa.com/about/sustainability-plan>.
- ^{xxix} The Metropolitan Washington Council of Governments 2030 Climate and Energy Action Plan November 2020, including Appendices can be found at: <https://www.mwcog.org/documents/2020/11/18/metropolitan-washington-2030-climate-and-energy-action-plan/>.
- ^{xxx} See <https://www.montgomerycountymd.gov/green/Resources/Files/climate/draft-climate-action-plan.pdf> and <https://www.montgomerycountymd.gov/green/Resources/Files/climate/draft-climate-action-plan-appendices.PDF>.
- ^{xxxi} See EAP p. 15. It is worth noting that the EAP envisioned an expenditure of \$150,000 “for consultant services to propose recommendations for policies and programs and \$150,000 is for staff (1 FTE) to support a new task force.” City Council did not fund the FTE position and funded \$100,000 for the consultant.
- ^{xxxii} The Resolution forming the Task Force can be found on the City webpage at: <https://alexandria.legistar.com/LegislationDetail.aspx?ID=4643875&GUID=254E91D5-0D79-4636-9D1A-E526570AC286>.
- ^{xxxiii} See <https://www.alexandriava.gov/tes/eco-city/info/default.aspx?id=118548>.
- ^{xxxiv} It is not known why City staff deleted the work “feedback” that was part of the scope of the work in the Resolution, but does not appear in the Charter that was adopted (i.e. the Resolution states that the Task Force is to provide “feedback and guidance” on the Action Plan whereas the Charter states that the Task Force is to provide only “guidance” on the Action Plan.
- ^{xxxv} Id.
- ^{xxxvi} See https://www.alexandriava.gov/uploadedFiles/tes/eco-city/info/ECCTF_Meeting2_SlideDeck_FINAL.pdf.
- ^{xxxvii} See https://www.alexandriava.gov/news_display.aspx?id=111923.