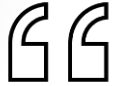




Energy & Climate Change Action Plan

Presentation to City Council
5/23/2023

Purpose



The ECCAP is a framework for how the City, working with its government stakeholders, residents, business, and institutions, will achieve its ambitious, but necessary climate goals. This plan is designed to communicate what priorities for action as all levels of government, the private sector, and citizens have roles to play in addressing climate change.



Key Takeaways

- The actions the City is already taking are some of the most impactful
- There are a few key efforts that can be undertaken in the near future to move the needle further
- The Office of Climate Action can serve as a connective tissue to enhance the great work in the City's existing programs



Scale of Action

By 2030

53,000+ housing units retrofitted with efficiency upgrades or built to be high efficiency

49% of existing housing units use electric heating

13 million square feet of commercial space retrofitted

50% of personal car sales are electric

50% of buses on the road are electric

30% of medium/heavy-duty vehicle sales are electric

By 2050

106,000+ housing units retrofitted with efficiency upgrades or built to be high efficiency

65% of existing housing units use electric heating

33 million square feet of commercial space retrofitted

100% of personal car sales are electric

100% of buses on the road are electric

100% of medium/heavy-duty vehicle sales are electric



Energy & Climate Change Task Force

- Marian Pegram (Co-Chair)
- Mary Harris (Co-Chair)
- Javier Bastos
- Josh Sawislak
- Leah Devendorf
- Marta Schantz
- Fiona Herbold
- Rose Stephens-Booker
- Praveen Kathpal
- Stephen Walz
- Alyssa Morin
- Sangina Wright
- Raquel Nicora



Thank you to the City Departments Involved:

City Manager's Office

Department of General Services

Department of Transportation & Environmental Services

Department of Community & Human Services

Department of Planning & Zoning

Department of Finance

Office of Communications & Public Information

Office of Housing

Office of Management & Budget

Office of Performance Analytics

Office of Race & Social Equity

Code Administration

Alexandria Health Department

Alexandria Economic Development Authority

Alexandria Transit Company (DASH)

Department of Project Implementation

Department of Recreation, Parks, & Cultural Activities

Approach & Process

- Task force held 7 public meetings between May, 2021 and October, 2022
- Hosted 3 Community Workshops from November, 2021 to August, 2022
- Contracted with ICF to produce the report, provide analysis of GHG reduction strategies

Equity-Informed Approach

- Developed an equity framework to evaluate strategies
- Measured equity through a set of targeted questions addressing three dimensions: Economic, Health, and Social
- Each action includes recommendations to increase equitable outcomes

Recommended Actions

BUILDINGS

Decarbonization through Financial Incentives
Educate & Drive Implementation of Green Bldg Policy
Increase decarbonized buildings fuel supply
Accelerate Decarbonization for City-owned Bldgs

Transportation

Reduce Vehicle Miles Traveled
Accelerate the deployment of electric and alternative fuel vehicles
Reduce City Fleet Fuel Consumption & Increase Alt. Fuel Use

Carbon-Free Electricity

Support implementation of VCEA by increasing carbon-free electricity
Transition all applicable Alexandria govt. facilities to 100% renewable energy

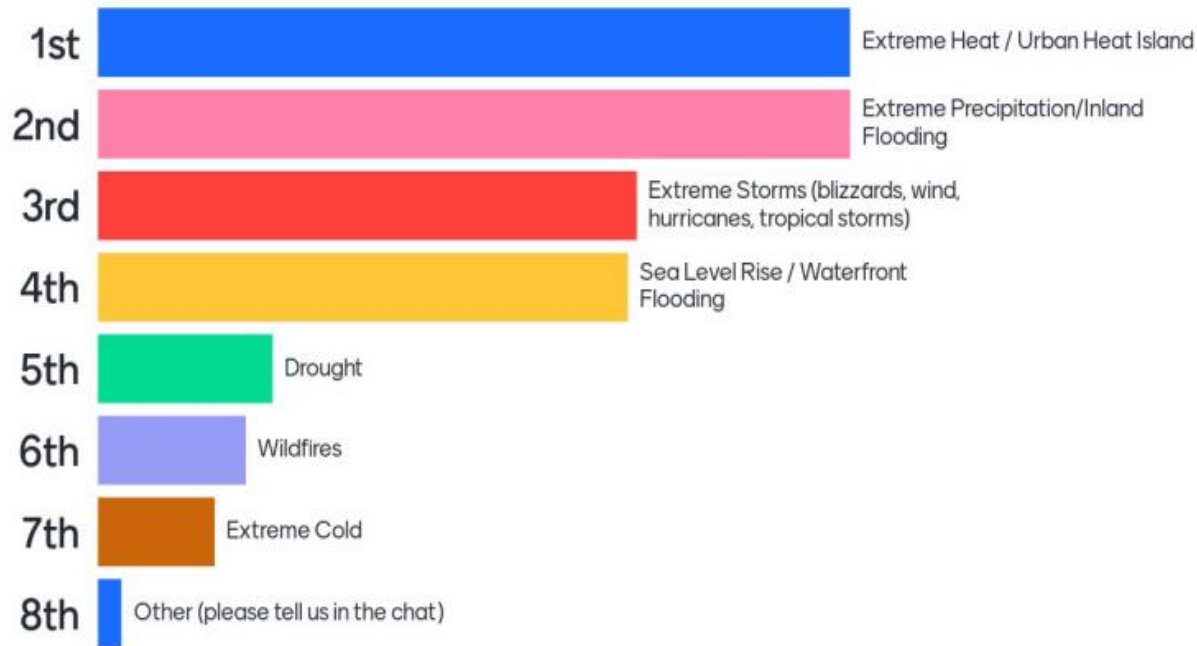
Waste

Recover resources & reduce GHG emissions by optimizing collection/processing of solid waste
Reduce total solid waste collected from City-served residential customers

Other Actions

Address fugitive gas system leaks
Recognize & understand the role of future technologies as they develop

Adaptation Efforts



Climate vulnerabilities in Alexandria as identified in Community Engagement Workshop #2

Heat Adaptation

Average Annual Number of Hot Days

Historical

1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	32	33	34	35
36	37	38	39	40	41	42
43	44	45	46	47	48	49
50	51	52	53	54	55	56
57	58	59	60	61	62	63
64	65	66	67	68	69	70
71	72	73	74	75	76	77
78	79	80	81	82	83	84
85	86	87	88	89	90	

2030s

1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	32	33	34	35
36	37	38	39	40	41	42
43	44	45	46	47	48	49
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64	65	66	67	68	69	70
71	72	73	74	75	76	77
78	79	80	81	82	83	84
85	86	87	88	89	90	

2050s

1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	32	33	34	35
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71	72	73	74	75	76	77
78	79	80	81	82	83	84
85	86	87	88	89	90	

above 100°F
 above 95°F
 above 90°F

Extreme Heat (H)	
H-1: Heat reduction	
H-1.A: Establish cool roof and pavement programs	
H-1.B: Expand waste heat reduction programs	
H-1.C: Expand and incentivize urban greening	
H-2: Heat management	
H-2.A: Expand heat relief programs for vulnerable residents	
H-2.B: Expand cooling centers for residents	
H-2.C: Address personal exposure to heat	
H-3: Heat coordination	
H-3.A: Establish a heat preparedness program	
H-3.B: Develop an extreme heat incident response plan	
H-3.C: Coordinate regionally	

Conclusion

- The ECCAP provides a great roadmap for next steps in addressing the ambitious goals of the EAP 2040
- Existing efforts from City staff have largely been targeting the highest-impact areas to move the needle
- Continually connecting these efforts will be crucial to the success