1. In 2019, in response to the UN’s Intergovernmental Panel on Climate Change (IPCC) Special Report on Climate, our city made a Declaration of Climate Emergency, and created its 2040 Environmental Action Plan and Green Building Policy (GBP). A key goal of that EAP was to achieve a 50% reduction from 2005 levels of greenhouse gas pollution emitted by Alexandria by 2030. In the last election campaign, most if not all candidates identified climate change as among their top five priorities.
   a. Do you agree that Alexandria is in a climate emergency, and if so, where do you rank the climate emergency among your priorities?
      I do, and I rank addressing this emergency among my top five priorities along with addressing the housing crisis, expanding affordable high-quality child care, improving our parks and recreation facilities, and meeting our labor and workforce talent needs. I further agree with our city’s acknowledgement of the emergency in our 2019 resolution, which committed us to “a citywide just transition and climate emergency mobilization effort to reverse global warming, which, with appropriate financial and regulatory assistance from the Commonwealth of Virginia and Federal authorities, reaffirms our commitment to the goals, targets, and actions set forth in the City’s Environmental Action Plan 2040, ends citywide greenhouse gas emissions as quickly as possible, immediately initiates an effort to safely draw down carbon from the atmosphere, and accelerates adaptation and resilience strategies in preparation for intensifying climate impacts.”
   b. Are you committed to achieving the goal of 50% GHG reduction in our community-wide emissions by 2030, or do you see this as aspirational?
      Any meaningful goal should always be aspirational, because that’s what pushes us to go beyond our typical means and measures. That being said, I am indeed committed to achieving this goal.

2. To its credit, the present Mayor and Council have established and begun funding a City Office of Climate Action.
   a. How will you evaluate our progress on achieving the greenhouse gas emissions reduction targets included in the City’s Environmental Action Plan?
      I think we have to start by quantifying the amount of carbon-free electricity (CFE) needed to meet our community goal of 50% GHG emissions reduction by 2030 and request that Dominion make available the necessary amount (even if they don’t feel compelled to do so because they have already surpassed their overall obligation under the Virginia Clean Economy Act). Without a sense of the resources needed to meet the goal—and in turn, a plan to acquire those resources—it will be difficult to measure progress. And electricity is key here, because recent data from the city indicates that 70% of building-related emissions stem from electricity (and 50% of that total coming from commercial buildings).
Even while I think we can make the most progress by focusing on that up-stream power generation intervention, I would also look to make progress by establishing benchmarks for 1) the number of new project starts under the updated green building code and 2) number of homes weatherized. I would also establish ambitious benchmarks for increasing DASH ridership, and pair that with goals to add new routes/stops as well increase the electric bus fleet.

b. How will you hold the City Manager accountable for achieving the reductions necessary to meet these targets?
   The first half of this question outlined some of the benchmarks I would seek to establish: amount of energy required, number of green buildings started, number of homes weatherized, and various transit related benchmarks. I would make achieving these benchmarks an aspect of his performance review.

3. The Office of Climate Action is developing an update of our Green Building Policy to limit the increase in emissions from new buildings. Similarly, our neighbors in Arlington, Montgomery County, and the District of Columbia, among others in the region, have been strengthening their green building policies. Developers have raised concerns about this and are asking candidates to oppose or dilute this policy.
   a. How do you respond to the developers’ threats that they will go to other jurisdictions if we upgrade energy efficiency requirements in new buildings approved under the DSUP process?
      We have financing tools (like IDA bonds) and other measures available to us (like increased density) to ensure that the overall package of incentives to developers is attractive to them while also still meeting measures of the public interest which include both energy efficiency requirements as well as open space and affordable housing commitments.

   b. Will you support a Green Building Policy that requires levels of energy efficiency in new buildings, such as reaching net-zero energy use, that are in line with our 2030 and 2050 emissions reduction goals?
      Yes.

   c. How should Alexandria estimate and plan for the multi-generational social costs to our community if developers continue to put up buildings that waste energy and burn methane?
      We can quantify current expenditures on attempts to both prevent and remediate the impact of localized flooding and extreme heat, and project those costs out over time if we hold constant no new or additional policy measures that slow or reverse the rate of such incidences occurring. We can express that social cost both in terms of overall data, in addition to specific anecdotes that show the human suffering that results from inaction on insufficiently rigorous energy waste prevention.

4. Buildings are responsible for about 60% of our community’s greenhouse gas pollution, and existing buildings are responsible for about 95% of those emissions. Sharply reducing energy use in existing buildings is critical for reaching our 2030 climate goals, will save residents and businesses money over the long-term, and make buildings more comfortable and healthy. As Virginia is a Dillon Rule state and cannot mandate energy reductions of private property, the City is currently limited to incentives such as financial subsidies, tax relief, public
recognition, technical assistance, revamping the City’s PACE program, and taking advantage of existing federal, state and utility weatherization programs. The City can also expand the reach of Alexandria’s Green Building Policy to include all renovated buildings that are subject to City land use approval.

a. **What level of priority should be given to reducing building energy use and methane emissions in existing buildings, and how would you propose financing and supporting such efforts?**

   With 96% of emissions coming from sources not under direct city control, we will always have to put a significant priority on encouraging and supporting the community to reduce the ways in which they are contributing to the product of carbon pollution. Regarding how to finance those efforts, we have started using the bonding authority of the Industrial Development Authority (IDA) to get more projects moving, and we should look at conditioning eligibility for that financing on projects agreeing to certain green building goals. Additionally, there have been past discussions about developing a regional “green bank” that can help fund projects; we should take those discussions more seriously and actually stand up a pilot version of such an effort to demonstrate its effectiveness. I am fortunate to have close existing relationships with two current members of the Arlington County Board, and I’d be excited to work with them on a project like that. Finally, we should always be pushing pertinent city staff (in the government relations and/or public private partnerships offices) to look for federal funding opportunities, for example the Greenhouse Gas Reduction Fund managed by the EPA might be a source of affordable capital to retrofit multifamily housing for HVAC electrification and efficiency.

   Additionally we have to do more to raise awareness of and drive participation in the Home Rehabilitation Energy Efficiency Loan Program, through which income qualified residents can get a loan at 0% interest rate and a 99 year term to do improvements which include air sealing, insulation, and installation of energy efficient appliances in addition to heating and cooling systems. It’s a tremendous value and benefit to qualifying participants—and we should further explore establishing a landlord-focused version of this program that would benefit residents living in multi-family buildings.

b. **Which of the abovementioned ideas would you support, and what other ideas can you offer for reducing the energy use of our existing buildings by 50% by 2030?**

   I’m supportive of all the ideas mentioned above, as I think this is not a “one silver bullet” situation, and having a range of tools to address different audiences and different needs. Of the ideas mentioned, I am probably most bullish on a) better leveraging current federal and state weatherization programs as those would be adding new resources and not require accommodation within the current city budget, and b) financial subsidies on projects that have a positive financial and environmental ROI for the city. Technical assistance is great too, especially when targeted at neighborhoods and city residents that may not have the financial or social capital to navigate some of these programs or opportunities on their own. Recognition programs are great, but they need to be designed and communicated properly - the new Green Business recognition program currently only has two participating members.

Climate change is steadily increasing flooding and extreme precipitation risks. Alexandria has already made substantial investments in flood control, both in our stormwater
infrastructure and along the Old Town waterfront. At the same time, some Alexandria neighborhoods are considerably hotter than others, due to historic redlining, the urban heat island effect, and a lack of tree coverage and green space.

a. **How should projected changes in flooding and extreme weather events over the coming years be accounted for in our City’s infrastructure investments?**

In the past five years there have been five storms (July of 2019; July and September of 2020; August and September of 2021) in which the capacity of our stormwater systems were devastatingly overwhelmed, leading to damaging inland flooding that threatened people’s homes and health. This is to say nothing of other significant rain events in that same time period that also had an impact beyond what we are prepared to accommodate: all clearly a result of a changed and changing climate. The city responded by trying to catch up on years (decades even) of underinvestment in key stormwater infrastructure, and we now have a priority list of $170m in spot improvement projects to be funded by revenues from the stormwater fee, alongside the $100m investment made in Old Town to prevent overflows in the ancient combined sewer system. I’m sharing all of this to say - we have started to make these type of investments in our infrastructure, and we both need to do more and ensure accountability to complete what is already underway. It’s also obvious that most of these investments are on the stormwater/flooding side of things; we have the opportunity before us to try and get ahead of some of the worst impacts of extreme heat by treating the planting of canopy trees, the construction of shade structures, and the installation of water features as infrastructure investments on par with our stormwater efforts. I’d like to see us model a “climate impact public health investments” fee that funds those efforts, to understand how much revenue it could raise and how to structure it in a way that doesn’t adversely impact the same neighborhoods we’re aiming to assist.

b. **Will you support providing funding to increase planting and maintenance of trees with a priority in our hottest neighborhoods, adequately connecting residents to cooling centers if they cannot afford air conditioning, and other needed actions?**

Without question, and I have talked about these issues repeatedly at candidate forums and meet and greets.

6. **Use of public transportation, bicycling and walking should become default modes of transportation in order to increase the safety and livability of our communities, provide mobility for those who cannot drive, and reduce energy use and air pollution.**

a. **Do you support continuing free DASH service, and investments in bus rapid transit (BRT) routes and bus stop infrastructure?**

I am currently a member of the Alexandria Transit Company (DASH Bus) board of directors and passionately support further investments in our public bus system.

b. **Do support establishing protected bike lanes along key routes to connect all Alexandrians?**

Wholeheartedly.