

**CLIMATE CHANGE, ENERGY AND ENVIRONMENT COMMISSION**

**c/o Department of Environmental Services  
2100 Clarendon Blvd., Suite 705  
Arlington, VA 22201**

May 5, 2021

Honorable Matt de Ferranti, Chair  
Arlington County Board  
2100 Clarendon Blvd., Suite 300  
Arlington, VA 22201

Re: 2001 S. Clark St – Crystal Plaza 1 Site

Dear Chair de Ferranti,

The Climate Change, Energy and Environment Commission (C2E2) has reviewed the application for the *2001 Clark St. – Crystal Plaza 1 Site* project. Based on our review, the C2E2 assesses that the project does not sufficiently advance Arlington’s Community Energy Plan (CEP) goals for carbon neutrality. We commend the applicant’s commitment to LEED Gold and its willingness to conduct a zero-carbon analysis and urge the County to continue to work with the developer to incorporate the recommendations of the analysis. Other features such as bird-friendly glass and low .32 ratio of parking spaces to units support other sustainability goals.

The success of Arlington’s CEP depends, in large measure, on the County’s resolve in ensuring that all buildings are at least zero carbon ready. In practical terms that means three things for every new and renovated building: Make it highly efficient; make it electric; and make the electricity renewable. In this case, the project falls short on each of these essential categories, even though the zero-carbon analysis indicates that meeting these goals is feasible.

**Energy Efficiency**

Making a building energy efficient is the first step toward reducing the building’s energy use and therefore its carbon emissions. The Applicant has committed to improve energy efficiency by 12 percent over the ASHRAE baseline. The zero-carbon analysis indicates that a 40 percent and 28 percent energy savings could be achieved for the East and West Towers, respectively, with improvements to the building envelope and energy-efficient mechanical systems.

**Electrification of Systems:**

All-electric buildings are essential for achieving the County’s climate goal of carbon neutrality. The electric grid that serves Arlington is becoming cleaner each year, so buildings that are all-electric will *automatically* result in a steady reduction in greenhouse gas emissions as the electric grid shifts to

renewable energy sources. As soon as the County achieves its 100% renewable electricity goal, all electrified buildings in Arlington will be operationally carbon neutral, while buildings still using fossil fuels will not. All-electric buildings also will improve public health and safety by eliminating a major source of indoor air pollution and the risk of fire and explosion.[1]

In the case of 2001 S. Clark St, the Applicant has proposed using natural gas for its HVAC and centralized hot water systems, although the zero-carbon analysis indicates that all-electric options are viable for both. We urge the County staff and the developer to continue to explore the potential for installing electric HVAC and hot water systems as part of the current design, or at a minimum to build in the infrastructure to facilitate a future transition.

### **Renewable Electricity (Energy):**

The Green Building Incentive Policy update requires onsite and offsite solar or the option to contribute to the Green Building Fund. The zero-carbon analysis explored the installation of Solar PV on the roof of the building, which we commend. However, the space available is small and onsite solar would offset less than 1/2 a percent of projected electricity consumption.

We urge the Applicant to pursue the purchase of off-site renewable energy options to meet future electricity use with renewable energy. We also recommend that the Applicant consider battery storage and smart technologies to manage the electric load consumption of the building to reduce peak consumption.

### **Electric Vehicle Charging Infrastructure**

The applicant is only proposing 7 parking spaces with EV chargers out of 247 spaces or 19 spaces to be EV-ready. We ask the County to urge them instead to also make 50 percent of all spaces EV-ready (conduits in place) to meet future demand for a full transition to electric vehicles and avoid the need for much more expensive retrofitting later. The applicant should consider “smart charging” technology to maximize the number of vehicles that can be charged while reducing demands on the electrical capacity available at site.

The world is facing a catastrophic climate crisis which requires immediate action by individuals, governments, and businesses to avoid the worst consequences, and all future development needs to align to these goals. I urge the County to ask the Applicant to move into the forefront by offering a climate-friendly building with this project.

Sincerely,



Joan McIntyre

Chair, Climate Change, Energy and Environment Commission

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[1] [Gas Stoves: Health and Air Quality Impacts and Solutions](#), Rocky Mountain Institute, 2020.