CLIMATE CHANGE, ENERGY AND ENVIRONMENT COMMISSION
c/o Department of Environmental Services
2100 Clarendon Blvd., Suite 705, Arlington, VA 22201

November 18, 2024

The Honorable Libby Garvey
Chair, Arlington County Board
2100 Clarendon Blvd.
Arlington, VA 22201

Re: Proposed Update to the Green Building Incentive Program

Dear Chair Garvey:

The Climate Change, Energy and Environment Commission commends the County AIRE team for proposing an expansion to the current Green Building Incentive Program (GBIP) to include existing buildings, address adaptive reuse of older commercial properties, and promote the rigorous climate adaptive pathway that incorporates green infrastructure. These are bold and exciting ideas, and C2E2 strongly supports the general approach.

For the County to meet its carbon neutrality goals, buildings must be a key focus as they account for almost 60 percent of Arlington's greenhouse gas emissions. This expanded GBIP has the potential to spearhead the needed transformation for both new and existing buildings, but we believe that the standards must be strengthened in certain areas.

In particular, electrification must be required for all new construction and for new systems in Adaptive Reuse projects to receive incentives and should be encouraged for all other existing buildings. Eliminating the use of onsite fossil fuel consumption is essential to meeting the County's greenhouse gas emissions goal and continuing to install systems that use onsite fossil fuels will lock in greenhouse gas emissions for another 40 or 50 years. The program should also set higher energy efficiency targets to align with county goals.

We recognize the challenge that the County faces in offering persuasive incentives for developers and building owners with varying circumstances while not limiting participation due to fiscal constraints, but believe improvements to the proposed baseline requirements can be made now while still attracting many participants. Initial outreach and engagement with the building sector will allow for refinement in incentives in the next 6-12 months and continued modification as appropriate as technology, building practices, and other external factors evolve.

Proposed GBIP Update

The proposed update has four components, two for new buildings and two for existing buildings:

1. The **Traditional Pathway** has four tiers. The 0.45 and 0.55 FAR tiers based on International Future Living Certifications would meet the most rigorous criteria for sustainable and zero energy and low carbon construction and operations, and we support

them. However, the lower two tiers, which almost all projects over the last few years have opted for, would only slightly increase the rigor of the existing energy efficiency and other requirements for new buildings to obtain bonus density and would score only marginally better against C2E2's checklist. Electrification is not mandated, and energy performance and several other key criteria remain too low.

2. The **Climate Adaptation Pathway**, a new option offering new buildings bonus density and cash payments, as well as the higher tiers of the Traditional Pathway, would achieve the highest level of energy performance, full electrification, and a host of other desirable environmental benefits. Although more challenging, the required certifications could be applied to existing buildings undergoing substantial renovation or adaptive reuse. The County should seek to structure incentives to lure as many participants as possible to this pathway.
3. The **Existing Buildings Pathway**, also new, would provide cash payments for energy efficiency upgrades for existing buildings. While we recognize that electrification of these buildings can be challenging technically, the requirements should encourage, at a minimum, a future pathway to full electrification as existing systems age out and technologies improve.
4. The **Adaptive Reuse Pathway** would make existing commercial building owners eligible for cash payments if the building is converted to housing and meets specified sustainability criteria, tied to the baseline criteria defined in the Traditional Pathway although somewhat less demanding. The savings in carbon emissions would be substantial compared with demolition and new construction but we believe that such conversions present an excellent opportunity for meeting higher standards for energy savings and full electrification for all new building systems. If existing fossil systems are to be reused in the renovation, than participants should be required to provide an electrification plan once systems age out.

Making Building Decarbonization Attractive

We understand the concern that setting more rigorous standards that align with the County's GHG emission goals for the Traditional, Existing Building, and Adaptive Reuse pathways would be seen as too costly by developers and discourage participation. However, County presentations indicate that for buildings certified under PHIUS Zero, required for the Climate Adaptive Pathway, as well as higher Traditional Pathway tiers, additional upfront costs are only about 3-5 percent over conventional construction. Lifecycle costs of operating these buildings will be much lower, helping make up for that initial cost, as will the incentives offered by the County. The County's encouragement of full electrification and higher energy performance for all participants under these circumstances would be very reasonable, in our view. (Where absolutely necessary, the County could make exceptions for minor fossil fuel uses, such as a back-up gas generator in the rare cases where battery back-up, as discussed in the appendix, is infeasible.)

Introduction of cash incentives is an innovative approach and initial uptake by developers should provide feedback on how well they are working to encourage adoption of the Climate Adaptive

Pathway for new and some existing buildings. However, C2E2 is concerned that funding sources have yet to be identified for this program and thus that budget constraints could limit the number of participants. The County can enhance the attractiveness of the proposed GBIP by combining the GBIP cash incentives with other benefits, such as expedited permitting as is being proposed for the Commercial Market Resiliency Initiative, special branding for participating buildings, and technical assistance to help building owners and developers access other financing such as through green banks and federal and state grants and tax incentives.

We have attached **an appendix with the key changes we believe should be included in a mature GBIP program**. At a minimum, requirements should include higher energy performance for all participants, full electrification of new and adaptive reuse buildings, and installation of EV charging infrastructure to support the transition to electric vehicles. We recognize that it may take some time to strike the right balance of incentives and other benefits without compromising on minimum sustainability criteria to attract robust participation for both new construction and renovation of existing buildings. Developer feedback is important and piloting the program once minimum requirements are strengthened and ideally starting early next year as staff has proposed, will help fine tune incentives and identify opportunities to simplify requirements for participants over the next 6-12 months such that developers will utilize the most sustainable pathways.

Requiring buildings to meet strong sustainability standards will not only advance the County's stated climate goals but will create more resilience in the face of extreme heat, intensive storms, and disruptions to the electric grid. Further, it will keep Arlington buildings competitive in attracting tenants for decades to come, as other nearby jurisdictions, especially Washington, DC, are already moving forward to make their own buildings more sustainable. If the County allows the development of new buildings that are technologically behind those already being built in the District and Maryland, we will wind up with an outdated, unwanted inventory of buildings in ten years.

Thank you for your consideration. We are available to discuss further at any time.

Sincerely,

Cindy Lewin
Chair, Climate Change, Energy, and Environment Commission

cc:

Demetra McBride, OSEM

Paul Roman, AIRE

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Appendix
Potential Framework for a Revised Green Building Incentive Program

For a revised Green Building Incentive Program to serve as a highly effective vehicle driving building decarbonization, it needs to meet three criteria: 1) Establish baseline requirements for all participants regardless of pathway that align with the County's decarbonization goals, 2) Offer an attractive package of incentives that encourages participants to go beyond minimum requirements, using standards and a structure that is relatively simple for them to assess costs and benefits to make an informed decision, and 3) Be feasible within the County's fiscal constraints while allowing for broad participation of developers and building owners.

A. Rigorous Baseline Requirements

Mandate electrification.

The proposed update would allow participants in the lower tiers of the Traditional Pathway and the Adaptive Reuse Pathway to continue to install systems using fossil gas and excludes electrification from the Existing Buildings Pathway. Baseline requirements for the Traditional and Adaptive Reuse pathways should include electrification of HVAC and hot water systems, and participation in the Existing Buildings pathway should at a minimum provide an electrification plan for replacement of fossil systems as they reach end of life.

Since the last update of the GBIP, technology has continued to mature and with early and careful design, full electrification can readily be attained. Energy models for projects going through the SPRC process typically identify a pathway to full electrification, highlighting its feasibility even though too many projects continue to opt for some fossil gas systems. Moreover, electrification will be required for all buildings in DC starting in 2026 and is being phased in over the next few years in Montgomery County, ensuring that regional contractors and developers are familiar with these technologies.

Developers and building owners should be encouraged at minimum to include necessary wiring to accommodate backup batteries for emergency power. Battery backup, especially when combined with solar panels, would not only replace noisy and polluting diesel generators for emergency power but would facilitate greater energy resilience and help balance the electricity grid during peak demand periods.

Set high standards for energy performance.

Proposed energy use requirements have not changed from the current GBIP at a time when buildings need to be achieving even greater energy savings to meet Arlington's greenhouse gas goals. C2E2 recommends that a minimum energy performance baseline requirement for the Traditional, Existing Buildings, and Adaptive Reuse pathways be set at EnergyStar 80 or 85 or an equivalent energy use intensity measure to drive more ambitious energy savings. A number of recent SPRC projects have opted for an EnergyStar of 80 or 85, indicating that meeting such targets is easily achievable. County staff should focus incentives on encouraging even higher energy performance. Based on data provided by County staff, PHIUS certified buildings have an

average energy use intensity (EUI) of 25 kBTUs per square foot per year and APS zero energy schools have demonstrated similar levels of EUI.

Set more ambitious targets for reducing embodied carbon.
C2E2 applauds the County for incorporating adaptive reuse of buildings, which will sharply reduce the overall carbon emissions compared to demolition and new construction, and including under the baseline requirements in the Traditional Pathway a whole building life cycle assessment for carbon emissions and setting a target for reduction of embodied carbon. The carbon embodied in the materials used in a building, especially for concrete and steel, accounts for a sizable portion of carbon emissions over the life of a building, so reducing the embodied carbon during construction has a more immediate impact on greenhouse gas reductions. We consider that this baseline target is too small and recommend that it be replaced with either a specific quantitative target of 20 percent or higher or the more rigorous life cycle reduction included as an extra item. In addition, the proposed required waste diversion of 65 percent is too low and should be raised to at least 75 percent. Most recent projects participating in the GBIP have opted for a 75 percent diversion in their LEED targets. According to its developers, the Douglas in Washington, DC, the first large multi-family project building to pursue ILFI Zero Carbon certification, is on target to reduce its embodied carbon by at least 30 percent and 90 percent of waste will be diverted to recycling or reuse.

Require EV charging-ready parking.
Disappointingly, the proposed GBIP Traditional Pathway calls for reducing the number of parking spaces required to be EV-ready from 15 percent to 10 percent. C2E2 has consistently recommended that buildings include the necessary conduits and other infrastructure that would be needed for installation of EV chargers for at least 50 percent of the parking spaces. While ownership of electric vehicles today is still small, sales are rapidly increasing, automakers are ramping up their manufacturing capacity, prices are coming down, and federal and other rebate programs are further reducing costs. Including the essential infrastructure for EV charging will save money in the long run as retrofitting can be costly and will help accelerate the transition to cleaner, zero emission vehicles.

Strengthen biophilia requirements.
The green infrastructure requirements built into the Climate Adaptation Pathway are impressive and C2E2 recommends that some portions of those requirements be included as part of the baseline requirements of the Traditional Pathway. In particular, minimum requirements for tree canopy coverage should be set to align with the Forestry and Natural Resources Plan and relevant sector plans. Plan Langston Boulevard calls for a 20 percent tree canopy coverage for most projects and 35 percent for the hubs.

B. Attractive and Fiscally Feasible Incentive Practice

C2E2 recommends that the County expand the incentive package to leverage available federal and state programs, green financing mechanisms, and incentives with only a limited direct impact on the budget.

- Most projects should be eligible for tax credits and other funding under the Inflation Reduction Act (IRA) and other federal and state programs.[1] The County is already closely tracking these federal opportunities and can offer technical assistance in identifying and evaluating the savings from these programs.
- The update to the C-PACE program as well as emerging green banks offer additional avenues to traditional financing that could help some program participants.
- County staff could reconsider property tax incentives. While the review of such incentives in jurisdictions such as Montgomery County and Baltimore are apparently not applicable under Virginia law, Charlottesville does offer a one-year 50 percent property tax reduction for buildings achieving a defined energy use reduction target and Fairfax City's proposed green building program provides similar tax-based incentives. The key for Arlington would be to set the target to qualify to align with the County's goals for reducing energy consumption in buildings.
- The Commercial Market Resiliency Initiative, which the Adaptive Reuse Pathway is designed to support, calls for expedited permitting processes, which could be extended to the most rigorous projects utilizing the expanded GBIP, as saving time also saves developers money. The County could also consider accelerating the Site Plan Review Process for projects that agree to the most rigorous sustainability commitments under the Climate Adaptive Pathway and might also be combined with commitments to meet desired affordable housing targets.
- Consideration should be given to including potential cash payouts targeted to the early stages of planning under the Climate Adaptation Pathway to encourage building in rigorous sustainability elements during the initial planning stage and for projects that meet the most rigorous standards.

The planned outreach and education to developers, contractors, and building owners to advance the advantages of building decarbonization and assist them in taking actions best suited to their circumstances is perhaps the most important part of the GBIP update. C2E2 welcomes County staff's proposed six-month period for dynamic education and engagement prior to the launch of the new policy and the new requirement that all participants meet with County staff during all stages of project development, starting at the crucial early conceptual stage. Such ongoing outreach and engagement would play a key role in modernizing new and existing buildings for the 21st century and ensure that older multifamily buildings in Arlington offering more affordable housing are not left behind.

[1] See, for example, info on the 179D tax credit for efficient commercial buildings https://www.irs.gov/credits-deductions/energy-efficient-commercial-buildings-deduction
and the 45L tax credit, which provides up to $5,000 per unit for efficient multifamily housing.
https://www.energy.gov/eere/buildings/section-45l-tax-credits-zero-energy-ready-homes