NAIOP
MARYLAND CHAPTERS
THE ASSOCIATION FOR COMMERCIAL REAL ESTATE

October 1, 2021

Mr. Mark Stewart, Program Manager
Climate Change Program
Maryland Department of Environment
1800 Washington Boulevard
Baltimore, MD 21230

MDE Draft Building Energy Transition Plan

Dear Mark:

The NAIOP Maryland Chapters represent 700 companies involved in development and ownership of commercial, mixed-use, and light industrial real estate, including some of the largest property owners in the state. NAIOP's membership is comprised of a mix of local firms and publicly traded real estate investment trusts that are invested in the future of Maryland but also have experience in national and international markets. On behalf of our member companies, I am writing with interim comments MDE's Draft Building Energy Transition Plan.

Resubmitting Our Document Request

These comments are incomplete because we have not received a response to several information requests going back to our September 10th written comments. To summarize and resubmit the request for the record we would appreciate the following information:

- Unlocked spreadsheets of the modeling results for:
  - The 2030 Plan Detailed Energy and Greenhouse Gas Modeling Results for the sensitivity analysis – optimistic and pessimistic scenarios.
  - E3's Reshape model and Building Pathways tool results used in the Maryland Building Decarbonization Study

- The following supplementary information that may not be in the model results.
  - Details on the building characteristics [e.g. square footage, number floors, age, existing heating fuel] and
  - The number of buildings in each category for the multifamily, small and large commercial buildings in slides 100-105.
  - Inputs, assumptions and methodology used to calculate the annualized capital cost for multi-family and commercial buildings in slides 100-105.

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- Details on the vintage of equipment in commercial buildings in each category and the number of units that will reach the end of their useful life each year between 2020 and 2050.

During my time serving on the Mitigation Working Group, I have always found the E3 spreadsheets and supplemental information important to understanding and building support for the most effective policy options. That the staff does not have copies of the data underlying the E3 model runs but continues to make policy recommendations based on the slide decks and stakeholder input raises concerns.

Context for Our Comments

Success in climate mitigation fits the ambition and values of commercial real estate. For decades, NAIOP's member companies have been dedicated to energy efficiency, conservation, and high-performance construction. This experience leads NAIOP to consider deep reductions in carbon emissions from buildings to be the most challenging of the sectors.

From our perspective making progress will require coordinated and concurrent efforts in six interrelated areas: 1) decarbonization of energy sources; 2) transformation of utility distribution infrastructure; 3) commercialization of new technologies; 4) adoption and coordinated integration of supportive policy reforms; 5) changes to end use operations and equipment and; 6) restructuring and scaling of financial incentives.

No one agency or even the General Assembly has the ability to control all six of these elements. The September 3rd Discussion Draft has the potential to serve as a plausible framework because a longer-term target provides the time to develop supportive policy and technologies and allows for concurrency between building electrification and increases in renewable energy generating capacity.

The Necessity to Keep Options Open

Preventing access to technologies, narrowing the set of compliance options, and limiting the geography of eligible mitigation practices will unnecessarily increase compliance costs and slow progress. The majority of IPCC model compliance pathways, academic literature and numerous technical studies make clear the need to preserve the option to use a full range of future technologies related to carbon capture, nuclear, green hydrogen, bio energy, synthetic and natural gas technologies. E3s study of of least-cost carbon reduction policies in the PJM utility service territory found, "*Reaching the end points of many "100%" goals being set today may require carbon capture and sequestration, new nuclear generation, new sources of renewable biogas or hydrogen fuels or other forms of clean generation that while technically achievable are not commercially available today. Achieving absolute zero carbon emissions requires one or more of these resources to become available."*

The renewable fuels standard puts emphasis on efficiency measures that directly lower emissions. It uses existing infrastructure assets and requires far fewer buildings to undergo expensive retrofits than the high electrification scenario. There are uncertainties and challenges to the clean fuels approach but clean fuels

have always been one of the pillars of decarbonization strategy. Climate consultants for New Jersey, New York, Massachusetts and Maryland have all advised that low and zero energy fuels are key to cost-effective reductions below 80%. Inclusion of that policy option is entirely in keeping with the Clean and Renewable Energy Standard approach of deploying the most cost-effective clean and renewable energy based on how technologies mature.

Current Draft Unreasonably Closes Off Opportunity for Innovation and Cost Containment

Decarbonizing the commercial building stock on a 2050 timeframe with goal of 2045 if it is feasible would be a challenge even under optimistic scenarios for technology advancement, renewable energy deployment and favorable economic conditions. Requiring 50% of commercial building emissions to be abated by 2030 is unreasonable and does not align with the assumptions and findings in the E3 study.

The equipment cost forecasts in the E3 study assume significant improvement in the efficiency and cost of heat pumps and heat pump water heaters. Advances in technologies will be crucial for commercial buildings. A 2030 deadline does not allow time for those technologies to advance. An abrupt deadline also prevents replacement of equipment at the end of its service life which further increases consumer costs.

The study assumes that build out of energy storage assets will not begin until 2030. In order to achieve emissions reductions, marginal increases in demand resulting from electrification of heat and hot water need to be met by wind and solar. Because the peak heating demand occurs at times when renewable power generation is weak. Moving additional demand to the grid needs to be concurrent with the buildout of additional solar and wind capacity as well as supporting energy storage not set by arbitrary calendar dates.

An eight-year window would also prevent the use of a lower-cost blended fuels strategy which presents a potential pathway that is demonstrably less expensive and less disruptive than the high electrification scenario.

New Construction

Our review of the building stock information in the E3 study would help refine a clearer picture about what to do with new construction. It is possible that emissions reductions can be achieved in the near term by focusing on electrifying primary heat in smaller commercial and multifamily buildings that have characteristics similar to residential buildings – e.g., smaller floor area, occupancies that are not energy intensive.

I appreciate your consideration of NAIOP's point of view.

All the Best,

Tom Ballentine, Vice President for Policy
NAIOP Maryland Chapters -*The Association for Commercial Real Estate*