I rise to propose that Montgomery County consider innovation that unites industry and Government to achieve exceptional energy performance in new residential housing during this decade. In addition, Government will apply solutions that ensure access to all incomes.

Counties shall not weaken the current energy code promulgated by the State. And innovative solutions can exceed code by incentivizing a path to Zero Energy performance while relying on the voluntary programs, Energy Star, DOE Zero Energy Ready and National Green Building Standard as the vehicles that can manage a rapid change to energy performance rather than reliance on Prescriptive Path as is typically used by new home builders.

Energy Star v.3.1 is currently applied in roughly 30% of all newly built homes in Maryland and exceeds 2018 IECC by at least 10% in all energy performance pathways. Energy Star this year will incorporate HVAC testing protocols found in ACCA 310 Standard and will surpass energy performance of the 2021 IECC Prescriptive Path.

Innovation will continue exceeding Code because the Energy Code relies on thermal improvements to lower energy loss or gain as its primary means to lower operating costs. The greater reliance on a single solution always has a diminishing effect on outcome as each upgrade is added, requiring builders to apply greater costs without seeing greater energy performance. 2021 IECC Prescriptive Path demonstrates that thermal requirements exceeding 2018 IECC are not cost-effective when evaluated through REM/Rate energy modeling.

The IECC permits energy modeling to demonstrate compliance and future versions of IECC, including 2021 will enable Raters and Verifiers to apply performance path energy modeling to develop cost-effective solutions for builders while limiting their exposure to Prescriptive Path requirements that the market cannot support using current building practices.

Buildings that approach Near Zero and reach Zero energy performance will increase building costs three to ten percent, pushing affordability out of the reach of many middle-income buyers. These buyers must consider existing less efficient homes to stay in the County or consider homes outside of Montgomery County.
When building costs rise due to energy performance mandates, wealthy buyers with greater income and savings can pay for the energy features that created higher sales prices. If the buyer’s income can just barely support current Code built homes, they will not qualify until innovative financing can enable energy savings provided from highly efficient homes to be considered as income that supports mortgage repayment.

Appraisers do not consider “Code Minimum” as a feature with greater value. Appraisers use market acceptance as a primary determinant of value. The builder who is obligated to include energy features mandated through code may not find market acceptance of higher priced homes and be forced out of the affordable housing market.

Innovative solutions are being developed by certified Green Appraisers to ascertain the contributory value of energy features greater than code, thereby ensuring their evaluation recognizes market acceptance of the higher sales price. The reality though is this process is limited to a few appraisers in Maryland, who have expanded their training and expertise.

Innovative lending solutions are required that consider energy savings as a consideration for principal & interest (P+I) repayment. When cost effective energy designs are applied, we find that increased (P+I) is offset with lower energy costs. In the few cases of Net Zero Energy homes built in the State, parity was found even at the highest energy performance level, Net Zero Energy.

Lenders can consider bona fide funding derived from Government support for buildings with demonstrated energy performance. Federal, State and County incentives provide home buyers with short-term reductions in tax obligations. This funding can adjust the Tax portion of (PITI) used for qualifying buyers and their ability to repay their mortgage. Currently Anne Arundel, Baltimore & Howard County offer significant financial support for homes with low HERS Scores or Green Certifications.

If Montgomery County incentivized new home buyers with short-term tax reductions linked to the level of energy performance, lenders who supported these incentives could develop financing solutions that ensures middle-income buyers remain at the table. Lenders currently are not performing this modification because the marketplace is not demanding these solutions. Training for Realtors, Appraisers and lenders is needed to facilitate market transformation of highly efficient housing.

In summary, innovation can drive the bus and many businesses that support new home building must be on the bus to reach Net Zero Energy Homes. Buyers must consider the opportunity of financing highly efficient new homes as their best alternative. County Government can ensure that buyers who can afford current code-built housing are enabled to afford the highly efficient homes of the future.

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