

Committee: PHED

**Committee Review:** At a future date **Staff:** Livhu Ndou, Legislative Attorney

**Purpose:** To receive testimony – no vote expected **Keywords:** #Decarbonization #ElectricBuildings

AGENDA ITEM #9 July 26, 2022 **Public Hearing** 

### **SUBJECT**

Bill 13-22, Buildings – Comprehensive Building Decarbonization

Lead Sponsor: Councilmember Riemer

### **EXPECTED ATTENDEES**

Members of the public

### **COUNCIL DECISION POINTS & COMMITTEE RECOMMENDATION**

N/A; to receive testimony

### **DESCRIPTION/ISSUE**

Bill 13-22 will require the County Executive to issue all-electric building standards for new construction, major renovations, and additions by January 1, 2024.

### **SUMMARY OF KEY DISCUSSION POINTS**

- All-electric building standards will help the County to achieve its zero-greenhouse gas emissions goal by ensuring future construction is electrified.
- Exemptions are provided for emergency backup systems and certain uses such as manufacturing, crematories, life sciences, and commercial kitchens. In addition, incomerestricted housing and schools will have an extended timeline.

### This report contains:

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Racial Equity and Social Justice Impact Statement	© 7
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#### MEMORANDUM

July 21, 2022

TO: County Council

FROM: Livhu Ndou, Legislative Attorney

SUBJECT: Bill 13-22, Buildings – Comprehensive Building Decarbonization

PURPOSE: Public Hearing – to receive testimony

Bill 13-22, Buildings – Comprehensive Building Decarbonization, lead sponsor Councilmember Riemer, was introduced on June 14, 2022. A public hearing is scheduled for July 26, 2022. A Planning, Housing and Economic Development (PHED) Committee worksession will be scheduled at a later date.

This bill will require the County Executive to issue all-electric building standards by January 1, 2024, for new construction, major renovations, and additions.

#### BACKGROUND

According to the Maryland Commission on Climate Change's Building Energy Transition Plan, direct use of natural gas, heating oil, and propane in buildings – primarily for space heating and water heating – accounted for 13% of Maryland's greenhouse gas emissions in 2017. Locally, more than 50% percent of Montgomery County's total carbon emissions come from building inefficiencies. Building on the 2021 Climate Action Plan, Bill 13-22 will help the County achieve its goal of zero greenhouse gas emissions by requiring the electrification of buildings.

### **BILL SPECIFICS**

Bill 13-22 will require the County Executive to issue all-electric building standards by January 1, 2024, for new construction, major renovations, and additions. The January 1, 2024, deadline for the regulations is meant to coincide with the County's next building code adoption cycle.

The bill provides definitions for addition, major renovation, new construction, and all-electric building. It also provides exemptions for emergency systems; buildings primarily used by a utility

<sup>&</sup>lt;sup>1</sup> #Decarbonization #ElectricBuildings

<sup>&</sup>lt;sup>2</sup> A PDF of that plan can be found here: https://mde.maryland.gov/programs/Air/ClimateChange/MCCC/MWG/Building%20Energy%20Transition%20Plan%20-%20MWG%20Draft.pdf.

<sup>&</sup>lt;sup>3</sup> According to the Metropolitan Washington Council of Governments (COG).

regulated by the Maryland Public Service Commission for the generation of electric power or steam; and certain uses, such as manufacturing, crematories, life sciences, and commercial kitchens. Lastly, the bill provides an extended timeline for income-restricted housing projects and public or private schools.

This packet contains:	<u>Circle #</u>
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BIII No	13-22	<u>′</u>		
Concerning	g: Buildings -	- Comprehen	sive	
Building Decarbonization				
Revised: _	6/6/2022	Draft No.	1	
Introduced	: <u>June 14,</u>	2022		
Expires: _	Decemb	er 23, 2022		
Enacted: _				
Executive:				
Effective:				
Sunset Dat	te:			
Ch	Laws of Mon	nt Co		

### **COUNTY COUNCIL** FOR MONTGOMERY COUNTY, MARYLAND

Lead Sponsor: Councilmember Riemer Co-Sponsor: Councilmember Jawando

### AN ACT to:

(1) require the County Executive to issue a building code by a certain date with "allelectric building" standards for new construction and major renovation; and

(2) generally amend the building code.

### By amending

Montgomery County Code Chapter 8, Buildings Article II, Administration Section 8-14C, Decarbonization for New Construction

Boldface Heading or defined term. Added to existing law by original bill. Underlining [Single boldface brackets] Deleted from existing law by original bill. Double underlining Added by amendment. [[Double boldface brackets]] Deleted from existing law or the bill by amendment.

Existing law unaffected by bill.

The County Council for Montgomery County, Maryland approves the following Act:

### Sec. 1. Section 8-14C is amended as follows:

1

2

8-14C. [RESERVED] Comprehensive Bu	uilding Decarbonization.
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3	(a)	<u>Definitions</u> . In this section, the following words have the meanings
4		indicated:
5		Addition means construction of any new walled or roofed expansion to
6		the perimeter of a building in which the addition is connected.
7		All-electric building means a public or private building that contains no
8		combustion equipment, or plumbing for combustion equipment, installed
9		within the building or building site.
10		Combustion equipment means any equipment or appliance used for space
11		heating, service water heating, cooking, clothes drying and/or lighting
12		that uses fuel gas or fuel oil.
13		Major renovation means any renovation where the work area exceeds
14		50% or more of major structural components, including exterior walls.
15		interior walls, floor area, roof structure, or foundation, or has an increase
16		of 50% or more of floor area.
17		Major structural components means the structural components of the
18		building, addition, or major renovation, namely the foundations, footings,
19		supports, joists, bearing walls, subfloor, roof, structural columns, and
20		beams.
21		New construction means the construction of any new stand-alone
22		building, with no remnants of any prior structure or physical
23		connection to existing structures or outbuildings on the property.
24	<u>(b)</u>	Standards. The County Executive must issue Method (2) regulations to
25		establish all-electric building standards for all new construction, major
26		renovations, and additions as part of the building code.

Exemptions. All-electric building standards do not apply to new

(c)

27

28	construction, major renovations, or additions in:				
29	<u>(1)</u>	the emergency backup systems of buildings that require an			
30		emergency system and hence backup power;			
31	<u>(2)</u>	buildings primarily used by a utility regulated by the Maryland			
32		Public Service Commission for the generation of electric power or			
33		steam;			
34	<u>(3)</u>	appli	cations for building permits submitted to the Department		
35		prior	prior to the effective date of the regulation;		
86	<u>(4)</u>	distri	ct combined heat and powers facilities; and		
37	<u>(5)</u>	<u>build</u>	ings used for the following uses, as defined in Chapter 59:		
88		<u>(A)</u>	Manufacturing and Production uses;		
89		<u>(B)</u>	<u>Crematory;</u>		
10		<u>(C)</u>	Life Sciences; and		
1		<u>(D)</u>	Commercial Kitchens.		
Sec. 2. Effective Date. The County Executive must issue all-electric building					
13	3 <u>standards for new construction, major renovation, and additions as part of the County's</u>				
14	4 next building code adoption cycle after this Act takes effect but not later than January				
15	5 <u>1, 2024.</u>				
16	Sec. 3. All-Electric Transition. Section 8-14C(b) of this Act must not apply to:				
<b>!</b> 7	7 (1) housing development projects where 50 percent or more of the dwelling units are				
18	moderately priced dwelling units as defined by Chapter 25A, or a similar instrument				
19	with a federal, state, or local government for the creation or preservation of income-				
50	restricted or market-rate affordable housing, if the building permit application was				
51	submitted before January 1, 2026; or (2) public or private schools for which a building				
52	permit application was submitted before January 1, 2026.				
	permit appression was seemed out to temper 1, 2020.				

### LEGISLATIVE REQUEST REPORT

Bill 13-22

Buildings – Comprehensive Building Decarbonization

**DESCRIPTION:** Bill 13-22 would require the County Executive to adopt all-electric

building standards by January 1, 2024, for new construction, major

renovations, and additions.

**PROBLEM:** Climate change.

GOALS AND

The goal is to ensure all-electric building standards will become part

**OBJECTIVES:** of the County's building code, in order to ensure construction will be

for a zero-greenhouse gas emissions future.

**COORDINATION:** Department of the Environment (DEP) and Department of Permitting

Services (DPS)

**FISCAL IMPACT:** Office of Management and Budget

**ECONOMIC** To Be Completed

**IMPACT:** 

RACIAL EOUITY

AND SOCIAL

**JUSTICE IMPACT:** Office of Legislative Oversight

**EVALUATION:** To Be Completed

**EXPERIENCE** New York, San Francisco, Denver

**ELSEWHERE:** 

**SOURCE OF** Livhu Ndou, Legislative Attorney

**INFORMATION:** 

**APPLICATION** N/A

WITHIN

**MUNICIPALITIES:** 

**PENALTIES:** N/A



ROCKVILLE, MARYLAND 20850

#### MEMORANDUM

June 9, 2022

TO: Gabe Albornoz, President

Montgomery County Council

FROM: Marc Elrich, County Executive Man W

Hans Riemer, Chair

Planning, Housing, and Economic Development Committee

SUBJECT: Introduction of Bill 13-22, Comprehensive Building Decarbonization

We have partnered on legislation to accelerate the decarbonization of the County's building sector. Bill 13-22, Buildings – Comprehensive Building Decarbonization, scheduled for introduction at the County Council on June 14. The legislation requires the County Executive to issue all-electric building standards for new construction, major renovations, and additions by January 1, 2024.

This legislation aims to accelerate an evolution already underway across the country and right here in Montgomery County of the building sector moving towards 100% electric-powered systems. Instead of systems that rely on the combustion of fossil fuels (e.g., natural gas furnaces and boilers), fully electric buildings take advantage of market-available technologies (e.g., heat pumps, electric water heating, electric cooking) that are cleaner, more energy-efficient, and cost-effective.

Consistent with the <u>latest recommendation</u> of the Maryland Commission on Climate Change to electrify new construction by 2024, the legislation also mirrors ordinances enacted in jurisdictions like New York City, San Jose, San Francisco, and Seattle.

The latest report from the U.N. Intergovernmental Panel on Climate Change (IPCC) delivered a stark warning that urgent mitigation measures are needed now to avert calamity to our climate, our economies, and our very way of life. At the current rate of emissions, the planet will irrevocably exceed the 1.5 degrees Celsius of warming by 2030, which is the maximum level adopted by world leaders in the Paris Climate Agreement. Recent instances of local flooding demonstrate that Montgomery County is far from immune to the damaging effects of climate change.

Introduction of 13-22, Comprehensive Building Decarbonization June 9, 2022 Page 2 of 2

Fortunately for the planet, the IPCC report charts a path forward to a sustainable future with tried-and-true, currently available technologies. That path requires a coordinated effort at all levels of government and industry to transition away from using fossil fuels—primarily our transportation and building sectors—and dramatically scale up renewable energy production (e.g., wind, solar, geothermal) to clean the electricity grid. At the federal level, the Biden Administration invoked the Defense Production Act in June 2022 to scale up the domestic production of clean energy technologies, including heat pumps, while the Senate is working on manufacturing tax credits to further reduce costs.

Locally, we need to match these initiatives with the deployment of the clean energy technology. The building sector accounts for 50% of the County's emissions. Bill 13-22 complements the County's recent work a) to improve existing building energy performance through <u>Building Energy Performance Standards (BEPS)</u> b) to invest nearly \$20 million annually in the County's Green Bank for energy efficiency upgrades across the County, c) to enhance the <u>County's green buildings property tax credit</u> for sustainable design, and d) to improve the County's commercial property-assessed clean energy (CPACE) program.

In addition to the climate benefits, there is mounting evidence that decarbonized buildings are a) <a href="mailto:cheaper">cheaper</a> over the life of the building; b) <a href="mailto:safer from explosion">safer from explosion</a> since they do not rely on a highly flammable fossil fuels for energy, and; c) healthier for indoor air quality since they do not produce carbon monoxide and nitrogen oxide as byproducts, pollutants that have been shown to contribute <a href="mailto:asthma">asthma</a> in children, <a href="mailto:respiratory illness">respiratory illness</a>, <a href="mailto:cardiovascular disease">cardiovascular disease</a>, and <a href="mailto:premature death">premature death</a> - a problem <a href="mailto:disproportionately affecting communities of color.">disproportionately affecting communities of color.</a>

The legislation acknowledges that there are isolated examples where 100% electric is not yet feasible, or an extended timeline is warranted. Exemptions are provided for utility generation, as well as systems related to emergency backup systems of buildings that require emergency power, life science uses, manufacturing, crematoriums, district combined heat and power facilities, and commercial kitchens. There are also extended compliance timelines for affordable housing and school construction.

It is important to note that this bill does not itself create the all-electric standards but codifies a process for when they must be issued and sets framework around inclusions and exemptions. The legislation requires the all-electric standards to be developed during the next building code adoption cycle and to be issued by January 1, 2024.

All-electric building standards are a crucial step for the County to achieve its zero-greenhouse gas emissions goal through ensuring future construction is electrified.

cc: Adriana Hochberg, Acting Director, Department of Environmental Protection Mitra Pedoeem, Director, Department of Permitting Services

# Racial Equity and Social Justice (RESJ) Impact Statement

Office of Legislative Oversight

BILL 13-22: BUILDINGS — COMPREHENSIVE BUILDING DECARBONIZATION

### **SUMMARY**

The Office of Legislative Oversight (OLO) anticipates that Bill 13-22 will have a favorable impact on racial equity and social justice (RESJ) in the County, as Black, Indigenous, and Other People of Color (BIPOC) residents could disproportionately benefit from the countywide reductions in greenhouse gas emissions driven by building decarbonization. The magnitude of the RESJ impact is indeterminant, since this will depend on how RESJ is centered in new building development and building decarbonization.

### **PURPOSE OF RESJ IMPACT STATEMENT**

The purpose of racial equity and social justice (RESJ) impact statements is to evaluate the anticipated impact of legislation on racial equity and social justice in the County. Racial equity and social justice refer to a **process** that focuses on centering the needs, leadership, and power of communities of color and low-income communities with a **goal** of eliminating racial and social inequities.<sup>1</sup> Achieving racial equity and social justice usually requires seeing, thinking, and working differently to address the racial and social harms that have caused racial and social inequities.<sup>2</sup>

### **PURPOSE OF BILL 13-22**

Building decarbonization refers to the process of reducing or eliminating the carbon dioxide (a greenhouse gas) emissions that contribute to climate change from a building's energy sources.<sup>3</sup> Building decarbonization includes four main components: energy efficiency, electrification, renewable energy, and managed electricity loads. The electrification component involves replacing equipment in buildings that use fossil fuels (e.g. natural gas, oil) with electric technology.<sup>4</sup>

The purpose of Bill 13-22 is to require the County Executive to issue all-electric building standards by January 1, 2024 for new construction, major renovations, and additions.<sup>5</sup> The Bill codifies a process for the development of all-electric standards, which would eventually require all new buildings to be powered solely with electrical systems, instead of with systems that rely on burning fossil fuels, such as natural gas furnaces and boilers.<sup>6</sup> The Bill is intended to help the County achieve its zero-greenhouse gas emissions goal, building on the 2021 Climate Action Plan.

The Bill provides exemptions for areas where 100-percent electric is not yet feasible, including for utility generation, emergency back-up systems, and buildings that have certain uses. The Bill also provides an extended compliance timeline for affordable housing and school construction.<sup>7</sup>

Bill 13-22 was introduced to the Council on June 14, 2022.

In September 2021, OLO published a RESJ impact statement (RESJIS) for Expedited Bill 31-21, Property Tax Credit – Energy Conservation Devices and Energy Efficient Buildings – Amendments – a Bill that was also directed towards reducing greenhouse emissions. OLO builds upon the analysis for Expedited Bill 31-21 for this RESJIS.

Bill 13-22

### THE CLIMATE GAP AND RACIAL EQUITY

Greenhouse gas emissions from the burning of fossil fuels is the primary cause of current climate change. <sup>9</sup> Climate change has far-reaching harmful consequences on public health, community assets, and the economy that will impact all residents. <sup>10</sup> BIPOC, especially those who are low-income, are disproportionately harmed by climate change due to a lack of resources and ability to adjust to the consequences of global warming. <sup>11</sup>

The term "climate gap" refers to the unequal impact that climate change has on BIPOC and low-income communities. As noted by researchers at the University of Southern California, the climate gap means that BIPOC communities and the poor will suffer more during extreme heat waves with increased illness and deaths, will breathe even dirtier air due to global warming, will pay more for basic necessities, and may have fewer job opportunities with increased climate change. Drivers of the climate gap include inequities in income, education, employment, and access to health services.

Drivers of the climate gap help to explain the role of government in fostering the climate gap. Data on inequities in energy burden, housing, and environmental risk help to explain the increased vulnerably of BIPOC to climate change.

**Drivers of the Climate Gap.** The disproportionate impact of climate change on BIPOC results from government policies and practices that concentrated housing for BIPOC and low-income residents in close proximity to polluting facilities and infrastructure like major highways. More specifically, the climate gap results from a history of land and wage theft that enriched a subset of White households at the expense of BIPOC and low-income residents. Slavery, the Indian Removal and Homestead Acts, and occupational segregation have undermined the economic development of people of color.<sup>13</sup>

Further, housing segregation through redlining, racial covenants, and exclusionary zoning has contributed to the climate gap as have the policies and practices of the Federal Housing Administration, the Social Security Act, GI Bill, and the Department of Transportation that have reinforced housing segregation and undermined wealth building and housing equity for BIPOC residents. Housing segregation has also fostered the concentration of BIPOC residents into densely populated neighborhoods with fewer trees and larger amounts of impervious surfaces that make them exceptionally vulnerable to effects of excessive heat and flood events exacerbated by climate change. 15

In short, government efforts to cultivate and protect White wealth by segregating BIPOC residents and excluding them from comparable wealth-building opportunities has resulted in the situating of BIPOC communities in or adjacent to environmentally hazardous areas. As such, government has played a significant role in developing the climate gap.

**Data on Energy Burden.** In Montgomery County, about 17 percent of households are energy-burdened (expending more than 6 percent of their income on energy bills) and 9 percent are living in energy poverty (expending more than 10 percent of their income on energy bills). Inequities in poverty rates by race and ethnicity suggest that Black and Latinx households face greater energy burdens than White and Asian households. Locally, 10 percent of Black and Latinx households lived below the poverty level compared to 6 percent of Asian households and 4 percent of White households. In the poverty level compared to 6 percent of Asian households and 4 percent of White households.

Bill 13-22

**Data on Housing.** A study of 2005 American Housing Survey data found that 6.3 percent of Latinx and 7.5 percent of Black households resided in substandard housing, compared to 2.8 percent of White households. The older-age of affordable housing in the County and local data on rent-burden suggests that Black and Latinx households in Montgomery County experience higher risks for substandard housing. In 2019, 66.4 percent of Latinx renters and 59.8 percent of Black renters were cost burdened, expending more than 30 percent of their income on rent, compared to 43.4 percent of White renters and 33 percent of Asian renters. Further, 75 percent of White and 73 percent of Asian households resided in owner-occupied units in 2019 compared to 50 percent of Latinx households and 41 percent of Black households.

**Data on Environmental Risk.** Nationally, BIPOC and low-income residents often reside in communities located near polluting and environmentally hazardous industries and uses.<sup>21</sup> This can include proximity to power stations, industrial plants, and infrastructure like major highways. This leads to far greater rates of serious health problems in communities of color, from cancer to lung conditions to heart attacks, as well as a higher prevalence and severity of asthma, lower birth weights, and greater incidence of high blood pressure.<sup>22</sup>

The County's Climate Action Plan shows that communities with high concentrations of BIPOC and low-income residents (greater than 25 percent for each) are located in areas of the County with higher levels of traffic and air pollution.<sup>23</sup> Of note, between 2017 and 2019, Black residents had the highest rates of emergency room visits for chronic lower respiratory diseases (including asthma) at 1,594 visits per 100,000.<sup>24</sup> The rate of emergency room visits for chronic respiratory diseases was 923 visits per 100,000 for Latinx residents and 526 visits per 100,000 for White residents.<sup>25</sup>

### **ANTICIPATED RESJ IMPACTS**

The Climate Action Plan found that most of the County's greenhouse gas emissions come from residential and commercial building energy use (50 percent of emissions).<sup>26</sup> The decrease in greenhouse emissions anticipated by the required electrification of new buildings could generate favorable public health outcomes. Further, more efficient energy use in all-electric buildings could result in lower utility payments for customers.

Since BIPOC and low-income communities are more vulnerable to the negative consequences of climate change, they may benefit disproportionately from countywide reductions in greenhouse emissions. Thus, OLO anticipates that Bill 13-22 could have a favorable impact on RESJ in the County.

Generally, new development tends to favor higher-income residents, White residents, and White-owned businesses, and has the potential to displace low-income and BIPOC residents. Further, as more buildings move to electrical systems, low-income residents who are not able to transition could be left with increased energy costs from using non-electric systems.<sup>27</sup> Thus, the magnitude of the favorable impact is indeterminant, as it will depend on the extent to which RESJ is centered in new building development and decarbonization efforts in general.

Bill 13-22

### **RECOMMENDED AMENDMENTS**

The RESJ Act requires OLO to consider whether recommended amendments to bills aimed at narrowing racial and social inequities are warranted in developing RESJ impact statements.<sup>28</sup> OLO finds that Bill 13-22 could narrow racial and social inequities in the climate gap by requiring the electrification of new buildings in the County. If the Council chooses to implement more significant reductions in the climate gap through incorporating recommended amendments or introducing companion legislation to further promote RESJ, the County's Climate Action Plan offers two relevant recommendations for enhancing equity that could be considered:

- Evaluate the need for financial incentives or financing to help overcome the increased initial costs associated with building under an all-electric code when applied to certain building types and building ownership.
- Offer technical assistance for all-electric code compliance for certain building types or owners.

Additionally, as discussed in 'Anticipated RESJ Impacts,' how RESJ is centered in decarbonization efforts for existing and new buildings will determine the extent to which the Bill will favorably address racial and social inequities. The Greenlining Institute developed a five-step framework for equitable building electrification that could be helpful to consider.<sup>29</sup> Further, there are several examples of community-led efforts that are focused on centering RESJ in building decarbonization:

- Portland: The Build/Shift Collective, a grassroots group that is primarily composed of low-income BIPOC residents, has been working with the City of Portland to develop the Health, Equitable Energy, Anti-Displacement, Resilience, and Temperature control (HEART) standards. 30 The standards would require landlords of the city's largest existing commercial and multifamily residential buildings to properly insulate all units and install air conditioning.
- California: The Building Energy, Equity, and Power (BEEP) Coalition, a coalition of environmental justice communities, studied what equitable building decarbonization would look like in California.<sup>31</sup> Their recently released report includes findings around barriers to participation in clean energy programs, the need for holistic building upgrades, and the need to provide funding for no-cost improvements to low-income households.

### **CAVEATS**

Two caveats to this racial equity and social justice impact statement should be noted. First, predicting the impact of legislation on racial equity and social justice is a challenging, analytical endeavor due to data limitations, uncertainty, and other factors. Second, this RESJ impact statement is intended to inform the legislative process rather than determine whether the Council should enact legislation. Thus, any conclusion made in this statement does not represent OLO's endorsement of, or objection to, the bill under consideration.

#### **CONTRIBUTIONS**

OLO staffers Elaine Bonner-Tompkins, Senior Legislative Analyst and Janmarie Peña, Performance Management and Data Analyst drafted this RESJ impact statement.

<sup>&</sup>lt;sup>1</sup> Definition of racial equity and social justice adopted from "Applying a Racial Equity Lens into Federal Nutrition Programs" by Marlysa Gamblin, et.al. Bread for the World, and from Racial Equity Tools. https://www.racialequitytools.org/glossary <sup>2</sup> Ibid

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https://www.elevatenp.org/climate/building-decarbonization-is-essential-heres-how-it-works/

<sup>4</sup> Ibid

<sup>6</sup> Memorandum from County Executive and Chair of Planning, Housing, and Economic Development Committee to Council President, Bill 13-22, Buildings – Comprehensive Building Decarbonization

7 Ibid

<sup>9</sup> "Burning of Fossil Fuels," Understanding Global Change, University of California Museum of Paleontology, Accessed July 5, 2022. https://ugc.berkeley.edu/background-content/burning-of-fossil-fuels/

<sup>10</sup> "Montgomery County Climate Action Plan: Building a Healthy, Equitable, Resilient Community," Department of Environmental Protection, Montgomery County, Maryland, June 2021.

https://www.montgomerycountymd.gov/green/Resources/Files/climate/climate-action-plan-printer-friendly.pdf

<sup>11</sup> Ibid

<sup>12</sup> Rachel Morello-Frosch, et al, *The Climate Gap: Inequities in How Climate Change Hurts Americans and How to Close the Gap,* Dornsife Center, University of Southern California, 2009

<sup>13</sup> "Turning the Floodlights on the Root Causes of Today's Racialized Economic Disparities: Community Development Work at the Boston Fed Post-2020," Federal Reserve Bank of Boston, December 2020. <a href="https://www.bostonfed.org/publications/community-development-field-notes/2020/racialized-economic-disparities.aspx">https://www.bostonfed.org/publications/community-development-field-notes/2020/racialized-economic-disparities.aspx</a>

<sup>14</sup> Kilolo Kijakazi, et al, "The Color of Wealth in the Nation's Capital," The Urban Institute, November 2016.

https://www.urban.org/research/publication/color-wealth-nations-capital

<sup>15</sup> Louis R. Iverson and Elizabeth A. Cook, "Urban Forest Cover of the Chicago Region and Its Relation to Household Density and Income," Urban Ecosystems, 2000 (cited in Zero Cities Project, Equity Assessment Tool).

https://www.fs.usda.gov/treesearch/pubs/21911

<sup>16</sup> "Montgomery County Climate Action Plan"

<sup>17</sup> Table S1701: Poverty Status in the Past 12 Months, 2020 American Community Survey, Census Bureau, Accessed July 5, 2022. https://data.census.gov/cedsci/table?t=Poverty&g=0500000US24031&tid=ACSST5Y2020.S1701

<sup>18</sup> David E. Jacobs, "Environmental Health Disparities in Housing," American Journal of Public Health, December 2011. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3222490/

<sup>19</sup> Table S0201: Selected Population Profile in the United States, 2019 American Community Survey, Census Bureau, Accessed July 5, 2022. <a href="https://data.census.gov/cedsci/table?t=-00%20-">https://data.census.gov/cedsci/table?t=-00%20-</a>

 $\frac{\%20All\%20available\%20races\%3Alncome\%20and\%20Poverty\%3ARace\%20and\%20Ethnicity\&g=0500000US24031\&tid=ACSSPP1Y2019.50201$ 

<sup>20</sup> "Percent Owner-Occupied Households by Race/Ethnicity: Montgomery, MD" National Equity Atlas, Accessed July 5, 2022. https://nationalequityatlas.org/indicators/Homeownership#/?geo=0400000000024031

<sup>21</sup> Rolf Pendall, A Building Block for Inclusive Housing for Community Level Diversity, Participation and Cohesion, Urban Institute, September 2017 (cited in Zero Cities Project, Equity Assessment Tool).

https://www.urban.org/sites/default/files/publication/93616/a-building-block-for-inclusion 1.pdf

<sup>22</sup> Health Equity and Climate Change, "Climate Change, Health, and Equity: A Guide for Local Health Departments," American Public Health Association, 2018. https://www.apha.org/-/media/Files/PDF/topics/climate/Guide Section2.ashx

<sup>23</sup> "Montgomery County Climate Action Plan"

<sup>24</sup> "Health in Montgomery County, 2010-2019: A Surveillance Report on Population Health," Department of Health and Human Services, Montgomery County, Maryland, April 2022.

https://www.montgomerycountymd.gov/HHS/Resources/Files/Reports/PopHealthReportFINAL.pdf

<sup>25</sup> Ibid

<sup>&</sup>lt;sup>3</sup> "Building Decarbonization is Essential: Here's How It Works," Elevate, February 10, 2022.

<sup>&</sup>lt;sup>5</sup> Bill 13-22, Buildings – Comprehensive Building Decarbonization, Montgomery County, Maryland, Introduced June 14, 2022. <a href="https://www.montgomerycountymd.gov/council/Resources/Files/agenda/col/2022/20220614/20220614">https://www.montgomerycountymd.gov/council/Resources/Files/agenda/col/2022/20220614/20220614</a> 3E.pdf

<sup>&</sup>lt;sup>8</sup> Racial Equity and Social Justice Impact Statement for Expedited Bill 31-21, Property Tax Credits – Energy Conservation Devices and Energy Efficient Buildings – Amendments, Office of Legislative Oversight, Montgomery County, Maryland, September 10, 2021. <a href="https://montgomerycountymd.gov/OLO/Resources/Files/resjis/2021/Bill31-21RESJ.pdf">https://montgomerycountymd.gov/OLO/Resources/Files/resjis/2021/Bill31-21RESJ.pdf</a>

<sup>&</sup>lt;sup>26</sup> "Montgomery County Climate Action Plan"

<sup>&</sup>lt;sup>27</sup> Amulya Yerrapotu, "The Case for Equitable Building Decarb in the Midwest," Expert Blog, Natural Resources Defense Council, March 23, 2021. <a href="https://www.nrdc.org/experts/amulya-yerrapotu/case-equitable-building-decarb-midwest">https://www.nrdc.org/experts/amulya-yerrapotu/case-equitable-building-decarb-midwest</a>

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03/BEEP%20Letter%20and%20Report Equitable%20Decarb%20March%202022.pdf

<sup>&</sup>lt;sup>28</sup> Bill 27-19, Administration – Human Rights – Office of Racial Equity and Social Justice – Racial Equity and Social Justice Advisory Committee – Established, Montgomery County Council

<sup>&</sup>lt;sup>29</sup> "Equitable Building Electrification: A Framework for Powering Resilience Communities," The Greenlining Institute, September 30, 2019. <a href="https://greenlining.org/publications/reports/2019/equitable-building-electrification-a-framework-for-powering-resilient-communities/">https://greenlining.org/publications/reports/2019/equitable-building-electrification-a-framework-for-powering-resilient-communities/</a>

<sup>&</sup>lt;sup>30</sup> Sarah Sax, "Portland Community Leaders Bring the Heat to Building Standards," High Country News, February 22, 2022. <a href="https://www.hcn.org/issues/54.3/north-energy-industry-portland-community-leaders-bring-the-heat-to-building-standards">https://www.hcn.org/issues/54.3/north-energy-industry-portland-community-leaders-bring-the-heat-to-building-standards</a>

<sup>&</sup>lt;sup>31</sup> "Preliminary Report: Community Priorities for Equitable Building Decarbonization," Building, Energy, Equity, and Power (BEEP) Coalition, March 1, 2022. <a href="https://ww2.arb.ca.gov/sites/default/files/2022-">https://ww2.arb.ca.gov/sites/default/files/2022-</a>

### Fiscal Impact Statement Bill 13-22 Buildings – Comprehensive Building Decarbonization

### 1. Legislative Summary.

Bill XX-22 requires the County Executive to adopt all-electric construction standards for new construction, major renovations, and additions by January 1, 2024. It further establishes a framework for inclusions and exemptions in those standards.

2. An estimate of changes in County revenues and expenditures regardless of whether the revenues or expenditures are assumed in the recommended or approved budget. Includes source of information, assumptions, and methodologies used.

Bill XX-22 is not expected to have an impact on County revenues or expenditures because it only requires the adoption of all-electric buildings standards as part of the regular code adoption process and does not set the standards itself. It is possible that once the standards are adopted, the cost of County construction projects could increase to meet the all-electric standard, although that could also result in operational savings.

3. Revenue and expenditure estimates covering at least the next 6 fiscal years.

See response to Question 2.

4. An actuarial analysis through the entire amortization period for each bill that would affect retiree pension or group insurance costs.

This Bill is not expected to impact retiree pension or group insurance costs.

5. An estimate of expenditures related to County's information technology (IT) systems, including Enterprise Resource Planning (ERP) systems.

This Bill is not expected to impact the County's IT or ERP systems.

6. Later actions that may affect future revenue and expenditures if the bill authorizes future spending.

This Bill does not authorize future spending.

7. An estimate of the staff time needed to implement the bill.

If approved, this Bill will be implemented during the building code adoption process under typical staff time.

8. An explanation of how the addition of new staff responsibilities would affect other duties.

This Bill is not expected to create new staff responsibilities and enforcement would be performed by the Department of Permitting Services (DPS) covered by DPS' existing fee structure.

<ol><li>An estimate of costs when an additional appropriation is need</li></ol>	9.	An estimate of cos	ts when ar	n additional :	appropriation	is needed
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Not applicable.

### 10. A description of any variable that could affect revenue and cost estimates.

Not applicable.

### 11. Ranges of revenue or expenditures that are uncertain or difficult to project.

Though this Bill does not have an impact on revenues or expenditures, the all-electric standards that would result could increase the cost of County construction projects by requiring them to be built as all electric structures. The County construction projects will need to be all electric to meet the County's climate goals. However, all electric construction typically has lower operating costs once the facility is in use.

### 12. If a bill is likely to have no fiscal impact, why that is the case?

Not applicable.

### 13. Other fiscal impacts or comments.

Not applicable.

### 14. The following contributed to and concurred with this analysis:

Bryan Bomer, Department of Permitting Services Jason Mathias, Department of Environmental Protection Rick Merck, Department of Permitting Services Vicky Wan, Department of Environmental Protection Richard H. Harris, Office of Management and Budget

Jernigen Bly	6/15/22
Jennifer Bryant, Director	Date
Office of Management and Budget	