



**Committee:** PHED  
**Committee Review:** At a future date  
**Staff:** Livhu Ndou, Legislative Attorney  
**Purpose:** To introduce agenda item – no vote expected  
**Keywords:** #Decarbonization #ElectricBuildings

AGENDA ITEM #3E  
June 14, 2022  
**Introduction**

## SUBJECT

Bill 13-22, Buildings – Comprehensive Building Decarbonization

Lead Sponsor: Councilmember Riemer

## EXPECTED ATTENDEES

None

## COUNCIL DECISION POINTS & COMMITTEE RECOMMENDATION

N/A

## 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, income-restricted housing and schools will have an extended timeline.
- A public hearing is tentatively scheduled for July 26, 2022.

### **This report contains:**

Staff Report	Pages 1-2
Bill 13-22	© 1
Legislative Request Report	© 4
Joint Memo from Councilmember Riemer and the County Executive	© 5

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**MEMORANDUM**

June 9, 2022

TO: County Council

FROM: Livhu Ndou, Legislative Attorney

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

PURPOSE: Introduction – no Council votes required

Bill 13-22, Buildings – Comprehensive Building Decarbonization, lead sponsor Councilmember Riemer, is scheduled to be introduced on June 14, 2022. A public hearing is tentatively scheduled for July 26, 2022.<sup>1</sup>

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.<sup>2</sup> Locally, more than 50% percent of Montgomery County’s total carbon emissions come from building inefficiencies.<sup>3</sup> 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 regulated by the Maryland Public Service Commission for the generation of electric power or steam;

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<sup>1</sup> #Decarbonization #ElectricBuildings

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

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.

<u>This packet contains:</u>	<u>Circle #</u>
Bill 13-22	1
Legislative Request Report	4
Joint Memo from Councilmember Riemer and the County Executive	5

Bill No. 13-22  
Concerning: Buildings – Comprehensive  
Building Decarbonization  
Revised: 6/6/2022 Draft No. 1  
Introduced: June 14, 2022  
Expires: December 23, 2022  
Enacted: \_\_\_\_\_  
Executive: \_\_\_\_\_  
Effective: \_\_\_\_\_  
Sunset Date: \_\_\_\_\_  
Ch. \_\_\_\_\_, Laws of Mont. Co. \_\_\_\_\_

## COUNTY COUNCIL FOR MONTGOMERY COUNTY, MARYLAND

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Lead Sponsor: Councilmember Riemer

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**AN ACT** to:

- (1) require the County Executive to issue a building code by a certain date with “all-electric 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

<b>Boldface</b>	<i>Heading or defined term.</i>
<u>Underlining</u>	<i>Added to existing law by original bill.</i>
[Single boldface brackets]	<i>Deleted from existing law by original bill.</i>
<u>Double underlining</u>	<i>Added by amendment.</i>
[[Double boldface brackets]]	<i>Deleted from existing law or the bill by amendment.</i>
* * *	<i>Existing law unaffected by bill.</i>

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

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

2   **8-14C. [RESERVED]Comprehensive Building Decarbonization.**

3           (a) Definitions. 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          (b) 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.

27          (c) Exemptions. All-electric building standards do not apply to new

- 28 construction, major renovations, or additions in:
- 29 (1) the emergency backup systems of buildings that require an
- 30 emergency system and hence backup power;
- 31 (2) buildings primarily used by a utility regulated by the Maryland
- 32 Public Service Commission for the generation of electric power or
- 33 steam;
- 34 (3) applications for building permits submitted to the Department
- 35 prior to the effective date of the regulation;
- 36 (4) district combined heat and powers facilities; and
- 37 (5) buildings used for the following uses, as defined in Chapter 59:
- 38 (A) Manufacturing and Production uses;
- 39 (B) Crematory;
- 40 (C) Life Sciences; and
- 41 (D) Commercial Kitchens.

42 **Sec. 2. Effective Date.** The County Executive must issue all-electric building

43 standards for new construction, major renovation, and additions as part of the County’s

44 next building code adoption cycle after this Act takes effect but not later than January

45 1, 2024.

46 **Sec. 3. All-Electric Transition.** Section 8-14C(b) of this Act must not apply to:

47 (1) housing development projects where 50 percent or more of the dwelling units are

48 moderately priced dwelling units as defined by Chapter 25A, or a similar instrument

49 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.

## LEGISLATIVE REQUEST REPORT

Bill 13-22

*Buildings – Comprehensive Building Decarbonization*

<b>DESCRIPTION:</b>	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.
<b>PROBLEM:</b>	Climate change.
<b>GOALS AND OBJECTIVES:</b>	The goal is to ensure all-electric building standards will become part of the County’s building code, in order to ensure construction will be for a zero-greenhouse gas emissions future.
<b>COORDINATION:</b>	Department of the Environment (DEP) and Department of Permitting Services (DPS)
<b>FISCAL IMPACT:</b>	To Be Completed
<b>ECONOMIC IMPACT:</b>	To Be Completed
<b>RACIAL EQUITY AND SOCIAL JUSTICE IMPACT:</b>	To Be Completed
<b>EVALUATION:</b>	To Be Completed
<b>EXPERIENCE ELSEWHERE:</b>	New York, San Francisco, Denver
<b>SOURCE OF INFORMATION:</b>	Livhu Ndou, Legislative Attorney
<b>APPLICATION WITHIN MUNICIPALITIES:</b>	N/A
<b>PENALTIES:</b>	N/A



ROCKVILLE, MARYLAND 20850

## MEMORANDUM

June 9, 2022

TO: Gabe Albornoz, President  
Montgomery County Council

FROM: Marc Elrich, County Executive   
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 [latest recommendation](#) 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.

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 [Building Energy Performance Standards \(BEPS\)](#) b) to invest nearly \$20 million annually in the County's Green Bank for energy efficiency upgrades across the County, c) to enhance the [County's green buildings property tax credit](#) 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) [cheaper](#) over the life of the building; b) [safer from explosion](#) 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 [asthma in children, respiratory illness, cardiovascular disease, and premature death](#) - a problem [disproportionately affecting communities of color](#).

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