



THE CENTER FOR  
**CLIMATE STRATEGIES**

WORKING TOGETHER TO CREATE A BETTER SAFER AND MORE JUST WORLD

Memo

To: Maryland Building Interests

From: The Center for Climate Strategies

Re: **Federal Funding Opportunities for Maryland Building Policies**

Date: June 22, 2022

This memo provides an **overview and mapping of funding opportunities from the Federal Infrastructure Investment and Jobs Act (IIJA) for specified Maryland climate change policies and programs** in the residential and commercial buildings sector, including public schools, focused on **energy efficiency and electrification and creation of workforce**.

Funding from IIJA includes formula-based programs and competitive (discretionary) grant programs that are open to governmental and nongovernmental organizations. The federal guidance for awards in these areas is in varying stages of release. Programs are authorized over the next 4-5 years. Actual amounts depend upon appropriations. The requirements of each award are unique, but IIJA includes cross cutting requirements for compliance with Justice 40 Initiative<sup>1</sup> (Justice 40) (targeting disadvantaged populations) and Buy America provisions.

The table below provides summary details on current federal funding programs under IIJA relevant to the areas listed above with indication of key dates for application. More information about each program is provided in the text following the table.

FEDERAL FUNDING PROGRAM	MARYLAND ACTIONS	KEY DATES
<a href="#">Weatherization Assistance Program (IIJA Sec 40551), Formula</a>	Low-income household weatherization; address J40 communities	Plan to be submitted by July 1, 2022
<a href="#">State Energy Program (IIJA Sec 40109), Formula</a>	Weatherization for low to middle income households; address J40 communities	Closed, next round TBD
<a href="#">Energy Efficiency Revolving Loan Fund Capitalization Grant Program (IIJA Sec 40502), Formula</a>	Energy efficiency upgrades and audits for commercial and residential buildings	Expected to open 4 <sup>th</sup> Quarter 2022

<sup>1</sup> 40 percent of the overall benefits of relevant federal investments must be directed to disadvantaged communities in geographically concentrated areas as well as dispersed populations with common conditions.

June 22, 2022

FEDERAL FUNDING PROGRAM	MARYLAND ACTIONS	KEY DATES
<a href="#">Building Codes Implementation for Efficiency and Resilience (IIJA Sec 40511), Competitive grant</a>	New and existing residential and commercial building codes updates and training	Applications expected to open at end of 2022
<a href="#">Efficient and Healthy Schools (IIJA Sec 40541), Competitive Grant</a>	Energy efficiency and health improvements of public schools; address J40 communities	Notice of Funding Opportunity (NOFO) expected late summer or early fall 2022
<a href="#">Energy Auditor Training Grant Program (IIJA Sec 40503)</a>	Training for energy audits and surveys for commercial and residential buildings	Application opening date TBD
<a href="#">Deployment of Technologies to Enhance Grid Flexibility (IIJA Sec 40107), Competitive grant</a>	Smart grid investment	Application expected to open end of 2022
<a href="#">Energy Efficiency Materials Pilot Program, Cooperative Agreement</a>	Grant to provide non-profits with energy efficiency materials	Application expected to open 1 <sup>st</sup> quarter 2023
<a href="#">Low Income Home Energy Assistance Program (LIHEAP)</a>	Assistance to reduce energy burden for low-income households; address J40 communities	Due date September 2022
<a href="#">Building Resilient Infrastructure and Communities (BRIC) program</a>	Mitigation activities that provide significant resilience benefits, including building code adoption and enforcement efforts; address J40 communities	Application closed on January 28, 2022 for FY 2021; application opening date for FY22 to be determined
<a href="#">ARPA Spending for HVAC in schools</a>	HVAC upgrades for public schools	Schools must apply for funding from the State of MD July 9-26, 2022

**Please note that:**

- For several funding programs demonstrated approaches and tie-ins to **workforce development** will be required. This could include expansion of government program capacity as well as non-governmental and private sector capacity for installation and operation of charging stations. More details are provided under the individual programs.
- **Maryland state leadership** on buildings
  - The Maryland Energy Administration (MEA) serves as the state lead on buildings and energy issues, including its Low to Moderate Income Energy Efficiency Grant Program. In addition, the Maryland Department of Human Services (MDHS) supports buildings and energy efficiency programs through the Office of Home Energy with the Maryland Energy Assistance Program (MEAP), Electric Universal Service Program (EUSP), and Utility Service

Protection Program (USPP). Weatherization and Energy Efficiency Services are withing the Maryland Department of Housing and Community Development (DHCD).

- **Maryland county leadership**
  - County and city leadership on buildings and energy efficiency is typically housed in an Office of Sustainability, Department of Environmental Protection, Department of Public Works, or Department of Housing.
- **Technical assistance resources** available to applicants
  - US DOE BIL funding opportunity announcements: <https://www.energy.gov/bil/bipartisan-infrastructure-law-programs>
  - Grants.gov, How to Apply for Grants: <https://www.grants.gov/web/grants/applicants/apply-for-grants.html>
  - US DOE State and Local Solution Center - provides resources to enable strategic investments in energy efficiency and renewable energy technologies through the use of innovative practices: <https://www.energy.gov/eere/slsc/state-and-local-solution-center>
  - Rural Opportunity Tour Fact Sheet: <https://www.energy.gov/articles/rural-opportunity-tour-fact-sheet>
  - Justice 40 Accelerator - to track funding opportunities: <https://www.justice40accelerator.org/accelerator-announcements-1>
  - Climate and Economic Justice Screening Tool - map to see communities that are identified as disadvantaged for the purposes of the Justice40 Initiative: <https://screeningtool.geoplatform.gov/en/about>

## 1. Weatherization Assistance Program

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### *Scope and Level of Funds*

- The U.S. Department of Energy (DOE) Weatherization Assistance Program (WAP) reduces energy costs for **low-income households** by increasing the energy efficiency of their homes.
- Formula grant program: funding flows from DOE to state and territorial governments and then to local governments and weatherization agencies.
- **Federal cost share is 100%.**
- Measures eligible include insulation, space-heating equipment, energy-efficient windows, water heaters, and efficient air conditioners.
- States design the plan and choose allocation of funds.
- Specific allocation to support **workforce development** activities. Plan should specify
  - How to attract, retain, or transition a local workforce
  - Use of workforce partners, unions, community colleges, potential supportive services, and use of Registered Apprenticeships or other joint, labor-management partnerships training programs, or other high-quality training models.
  - Comprehensive training on a regular basis,
  - Support for good-paying jobs
- \$3.5 Billion, Maryland 2022 allocation \$\$45,708,416
  - 15% of total allocation is granted at time of initial award

- 35% of total allocation is granted upon DOE approval of the grantee plan that identifies the quarterly milestones over the 5-year period of performance (due by July 1, 2022)
- Balance of total allocation (50%) is based on the grantee demonstrating progress in meeting expenditures goals, production targets and reporting requirement compliance.
- Current Maryland draft plan is for \$3.5 million

#### ***Eligible Parties***

- States

#### ***Important Dates and Next Steps***

- Plan submission due July 1, 2022.

#### ***Resources***

- Program page: <https://www.energy.gov/eere/wap/weatherization-assistance-program>
- State page: <https://dhcd.maryland.gov/Residents/Pages/wap/default.aspx>

## **2. State Energy Program**

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#### ***Scope and Level of Funds***

- The US DOE Energy Program (SEP) provides funding and technical assistance to states and territories for energy conservation measures, renewable energy measures, and programs to increase deployment of clean energy technologies in buildings.
- SEP's objectives are: **increase energy efficiency**, implement energy security, resiliency, and emergency preparedness plans, **reduce energy costs and energy waste**, expand the use of energy resources, promote economic growth
- MD allocation of \$999,850 for FY22. No matching funds are needed (change compared to past applications)
- Federal cost share is 80%. State must match 20%
- A State Energy Security Plan is required as part of the submission starting form FY 2023
- J40 requirements: specify how to engage **disadvantaged communities** (DACs) as well as how much of annual SEP funding will be delivered to these communities and how delivery or benefit to these communities is measured. No definition of DACs is provided

#### ***Eligible Parties***

- States

#### ***Important Dates and Next Steps***

- Closed, next round TBD

#### ***Resources***

- Program page: <https://www.energy.gov/eere/wipo/state-energy-program>

### 3. Energy Efficiency Revolving Loan Fund Capitalization Grant Program

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#### *Scope and Level of Funds*

- US DOE Formula grant to establish a revolving loan fund that states will use to administer grants for **residential and commercial** energy efficiency audits, upgrades, and retrofits to increase efficiency and comfort of residential and commercial buildings.
- The federal cost share is 60%.
- \$250 Million for formula grants. State allocation TBD

#### *Eligible Parties*

- States

#### *Important Dates and Next Steps*

- Estimated application opening date 4th quarter 2022

#### *Resources*

- Program page: <https://www.energy.gov/bil/energy-efficiency-revolving-loan-fund-capitalization-grant-program>

### 4. Building Codes Implementation for Efficiency and Resilience

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#### *Scope and Level of Funds*

- US DOE competitive grant for building codes updates for new and existing residential and commercial buildings (including multifamily); development of building codes implementation plans; **training** to builders, contractors and building codes officials; address various implementation needs in **rural, suburban**, and urban areas
- \$225 million available nationally until expended

#### *Eligible Parties*

- States and State Partnerships

#### *Important Dates and Next Steps*

- Applications expected to open at the end of 2022.

#### *Resources*

- Program page: <https://www.energy.gov/bil/building-codes-implementation-efficiency-and-resilience>

## 5. Efficient and Healthy Schools

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### *Scope and Level of Funds*

- US DOE grant for energy efficiency, renewable energy, and alternative fueled vehicles improvements at public school facilities that result in direct reduction of energy costs, energy savings and health improvement
- Schools and districts are allowed to leverage multiple sources of funding, including federal and state resources, internal financing, debt financing, leasing arrangements, and energy service performance contracts. Priority will be given to projects that leverage other public and private sector funds
- \$500 Million in competitive grants from IIJA
- DOE Loan Programs Office Renewable Energy and Efficient Energy Solicitation can provide an additional \$3 billion in loan guarantees for retrofits.
- Priority will be given to **public school in DACs**

### *Eligible Parties*

- States

### *Important Dates and Next Steps*

- NOFO late summer or early fall 2022

### *Resources*

- Program page: <https://www.energy.gov/eere/buildings/efficient-and-healthy-schools>

## 6. Energy Auditor Training Grant Program

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### *Scope and Level of Funds*

- Cooperative Agreements and Management and Operating Contracts at National Laboratories to provide grants for **training** individuals to conduct energy audits and surveys for commercial and residential buildings
- Training can be provided by States or State certified third party training programs
- \$40 million available nationally until expended

### *Eligible Parties*

- States

### *Important Dates and Next Steps*

- Opening TBD

### *Resources*

- Program page: <https://www.energy.gov/bil/energy-auditor-training-grant-program#:~:text=Description%3A%20To%20provide%20grants%20to,pollution%20from%20building%20energy%20use.>

## 7. Deployment of Technologies to Enhance Grid Flexibility

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### *Scope and Level of Funds*

- US DOE Competitive grant for smart grid upgrades and technologies that allow buildings to engage in demand flexibility or Smart Grid functions.
- Eligible investments include metering, control, and other devices, sensors, and software; communications and broadband technologies to support smart grid deployment; **Workforce training** associated with Smart grid installation and maintenance is also eligible.
- \$3 billion in total
  - \$600 million appropriated annually for Y22 through FY26- available until expended.
- **Federal cost share is 50%.**

### *Eligible Parties*

- Utilities

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### *Important Dates and Next Steps*

- Applications expected to open at the end of 2022.

### *Resources*

- Program page: <https://www.energy.gov/bil/deployment-technologies-enhance-grid-flexibility>

## 8. Energy Efficiency Materials Pilot Program, Cooperative Agreement

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### *Scope and Level of Funds*

- US Department of Energy Cooperative Agreement to provide non-profits with energy efficiency materials including (i) a roof or lighting system or component of the system; (ii) a window; (iii) a door, including a security door; and (iv) a heating, ventilation, or air conditioning system or component of the system (including insulation and wiring and plumbing improvements needed to serve a more efficient system).
- \$ 50 million, available until expended

### *Eligible Parties*

- Non-Profit Organizations

### *Important Dates and Next Steps*

- Estimated application opening date, 1st quarter 2023.

### *Resources*

- <https://www.energy.gov/bil/energy-efficiency-materials-pilot-program>

## 9. Low Income Home Energy Assistance Program (LIHEAP)

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### *Scope and Level of Funds*

- US Department of Health and Human Services grant program for **low-income households with high energy burdens** from heating and cooling in dwellings for managing energy bills, energy crises, weatherization, minor energy related home repairs.
- Grant recipients can use funds for heating and/or cooling costs, as well as up to **15% of their funding (or 25% with a waiver) for weatherization assistance.**
- Household funding depends on income. Begins at \$20,385 and increases \$7,080 per person.
- \$3.8 billion in block grant for FY22. **Maryland allocation \$69,851,450**
  - Additional \$500 million under IJA for next five fiscal years, of which \$100 million released for FY22. **Maryland allocation of additional funds for FY22 is \$1,505,787**
  - Funds can be used for heating and/or cooling costs, as well as up to 15% for weatherization assistance.
  - 90% of their award to be obligated by September 30, 2022 and 10% may be carry over to obligate in FY 2023

### *Eligible Parties*

- States and Tribes

### *Important Dates and Next Steps*

- State application **due September 1, 2022.** September 1 every year.

### *Resources*

- Fact sheet: <https://www.acf.hhs.gov/ocs/fact-sheet/liheap-fact-sheet>
- Funding release FY2022: <https://www.acf.hhs.gov/ocs/policy-guidance/liheap-dcl-2022-05-infrastructure-funding-release-fy2022>

## 10. Building Resilient Infrastructure and Communities (BRIC) program

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### *Scope and Level of Funds*

- Th program supports mitigation activities that provide significant resilience benefits, including building code adoption and enforcement efforts as a capability- and capacity-building activity under the BRIC State/Territory Allocation and BRIC Tribal Set- Aside.
- The program covers also:
  - **Development of professional workforce** capabilities through technical assistance and training
  - 90% of the cost of eligible mitigation activities for **economically disadvantaged rural communities** (i.e., a community of 3,000 or fewer individuals with an average



per capita annual income not exceeding 80 percent of the national per capita income, based on best available data).

- Total \$1 billion for FY 2021 of which \$56 million allocated to states and territories; up to 25% cost-sharing (cash, donated or third-party in-kind services, materials, or any combination thereof)

#### ***Eligible Parties***

- State, tribal, and territorial governments; local governments may submit subapplications to their states or territories

#### ***Important Dates and Next Steps***

- Application closed on January 28, 2002 for FY 2021; application opening date for FY22 to be determined

#### ***Resources***

- <https://www.fema.gov/grants/mitigation/building-resilient-infrastructure-communities>

## **11. American Rescue Plan Act (ARPA) Spending for HVAC in Schools**

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#### ***Scope and Level of Funds***

- Eligible activities include:
  - Heating, cooling, and ventilation upgrades.
  - Projects related to air quality, insulation of pipes to prevent mold
  - Roofing and window replacements are also eligible.
- Grants prioritized for issues that pose an immediate threat to health and safety.
- MD received \$3.7 billion from the ARPA
  - \$80 million allocated by MD state government for HVAC improvements in schools, \$40 million in FY22 and \$40 million in FY23.

#### ***Eligible Parties***

- School Districts

#### ***Important Dates and Next Steps***

- Period for school district to submit applications to state for FY2023 is **July 7-26, 2022**.

#### ***Resources***

- MD Healthy School Facility Fund: [https://iac.mdschoolconstruction.org/?page\\_id=750](https://iac.mdschoolconstruction.org/?page_id=750)

## Annex A. - Maryland Context Overview

### 1. Expected GHG Emissions Trajectories - Statewide

This section provides an overview of the Maryland economy-wide GHG emission baseline. Background information provided in this section are retrieved from the assessment conducted for the GGRA.

Figures 1 and 2 below show the **share of emissions by each sector in the 2017 state inventory and forecasts through 2050**. While all sectors play a critical role in emissions, transportation plays a dominant role, accounting for about 40 percent of Maryland emissions – consistent with its national and global sector ranking as the number one source of emissions. Note that the share of emissions attributable to operation of Light Duty Vehicles (LDV) is dominant. The next highest contributor to Transportation emissions is Heavy Duty Vehicle (HDV).

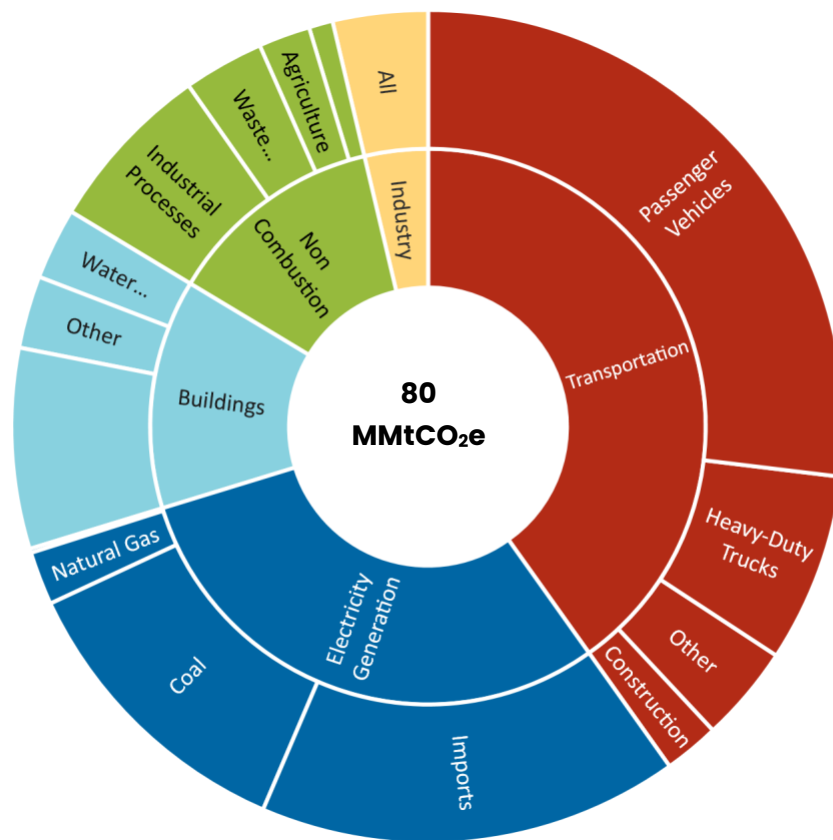


Figure 1. Maryland GHG Emissions Inventory (Gross Emissions), 2017

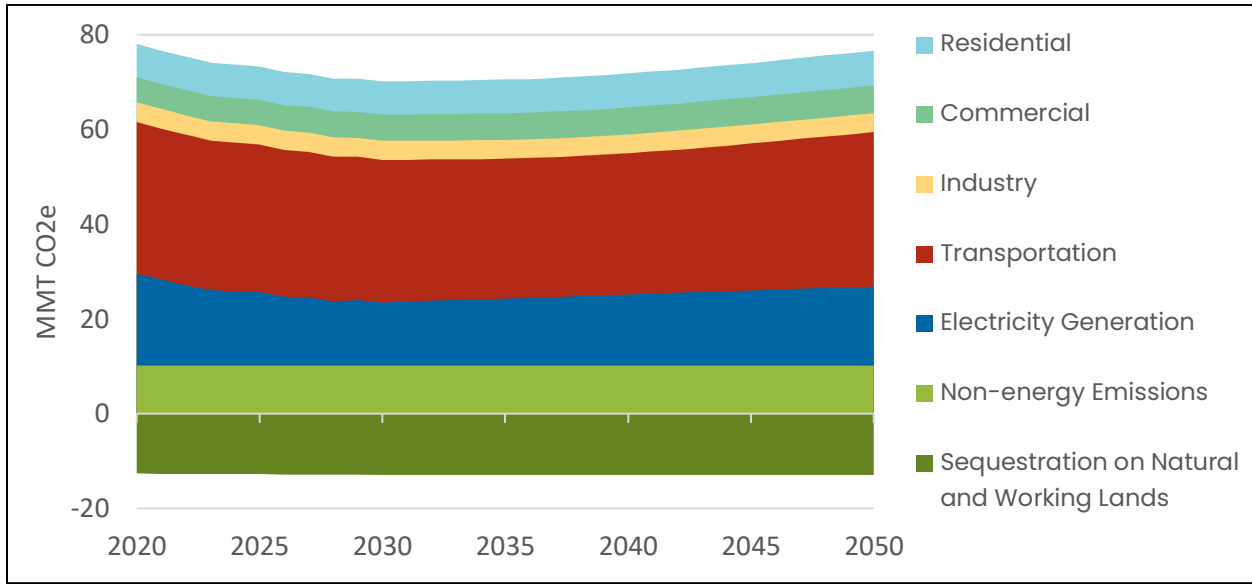


Figure 2. Maryland GHG Emissions Reference Case Scenario, 2020-2050

Prior to the passage of CSN in April 2022 Maryland had comprehensive state legislation through GGRA that set ambitious GHG reduction targets for 2030 and 2045 and specified a series of sector-level policies and measures for their potential attainment. Many of these were official or “on the books” governmental commitments and others included recommendations by the MWG not yet formally adopted by the state. With the passage of CSN, **GHG emissions reduction targets were expanded to 60 percent reduction from 2006 levels by 2031 and net zero emissions by 2045**. Figure 3 below compares the expected GHG emission reduction trajectories under the Reference Case, the GGRA scenario and the CSN scenario.

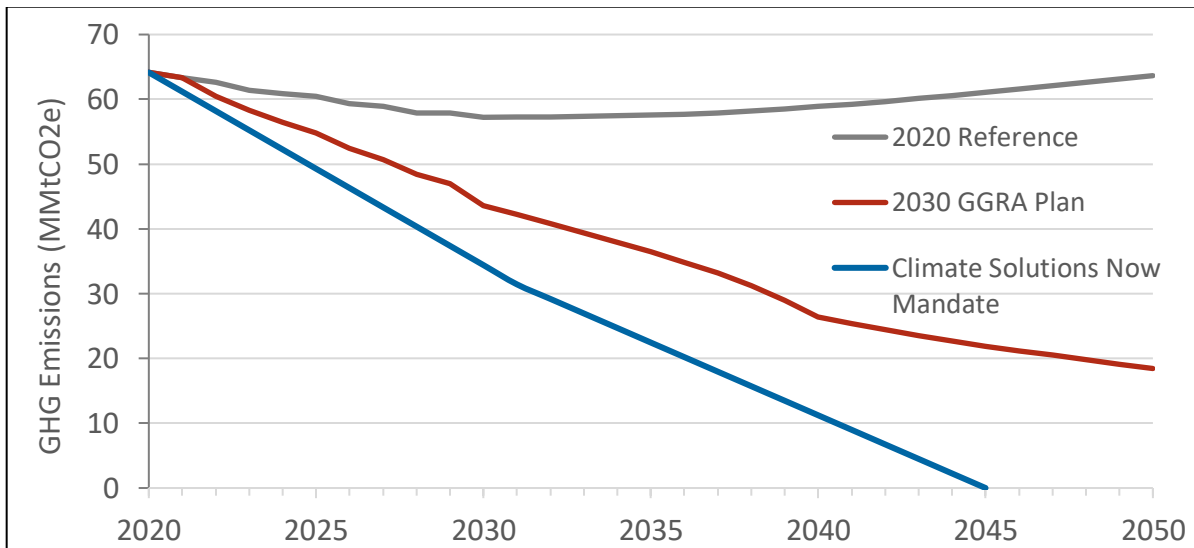


Figure 3. Maryland GHG Reductions Pathways 2020-50: All Sectors

**Attainment of these new goals requires implementation of existing and planned actions as well as the formulation of new actions** specified in CSN and others to be developed.

## 2. Expected GHG Emissions Trajectories – Buildings Sector

Figure 4 shows the energy end uses in the Buildings sector in 2017. Note that the largest contributors for residential buildings are space heating and water heating. For commercial buildings, the largest contributors are the “Other” category, which includes plug loads, office equipment, fireplaces, and outdoor grills, followed by space heating.

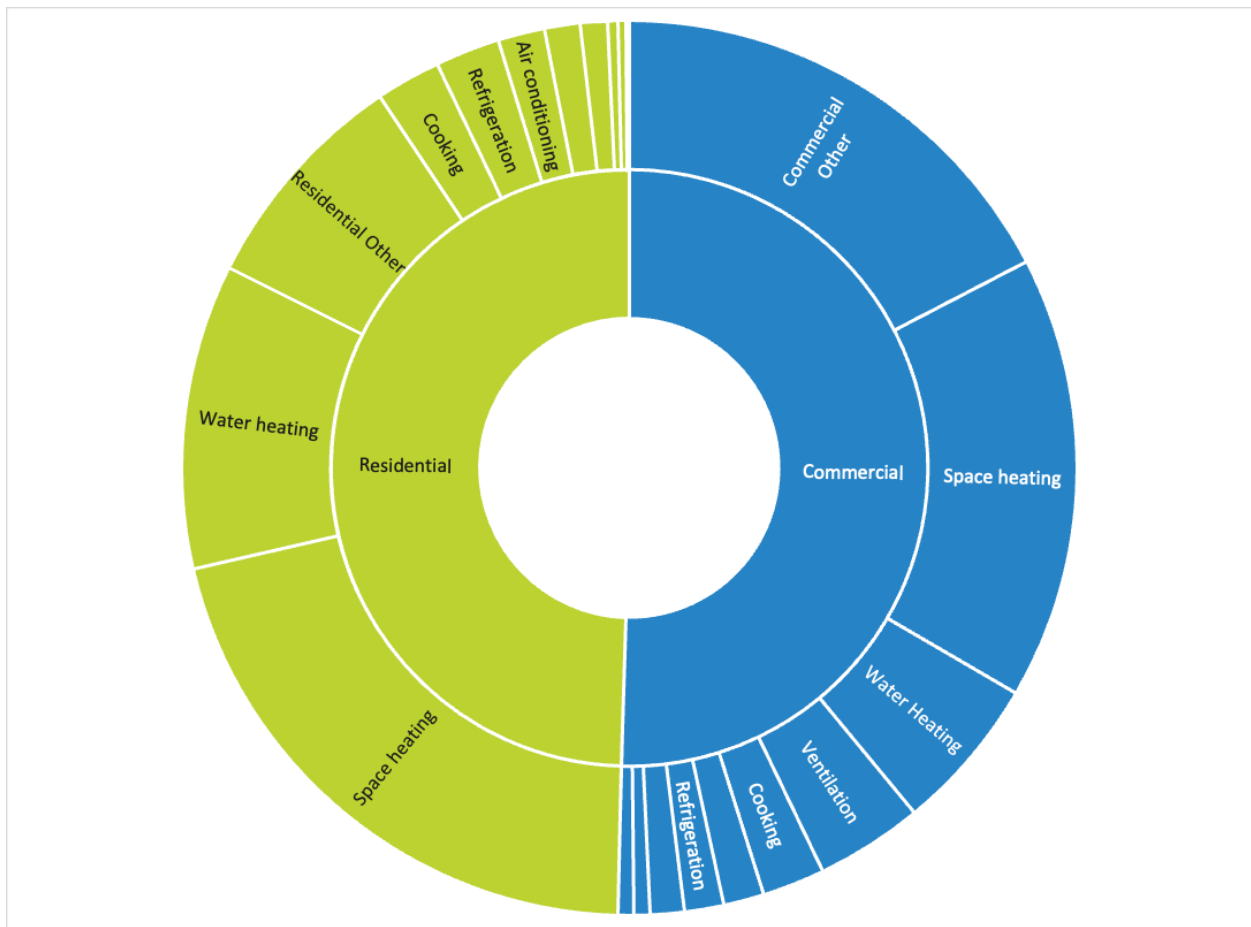


Figure 4. Maryland Residential and Commercial Buildings Energy Use by End Use, 2017

Figures 5 and 6 shows the Buildings sector energy use forecast by fuel for the Reference and GGRA modeling scenarios. Note that the largest energy sources for buildings are electricity and natural gas, and emission reductions from the GGRA plan come primarily from reductions in consumption of these sources.

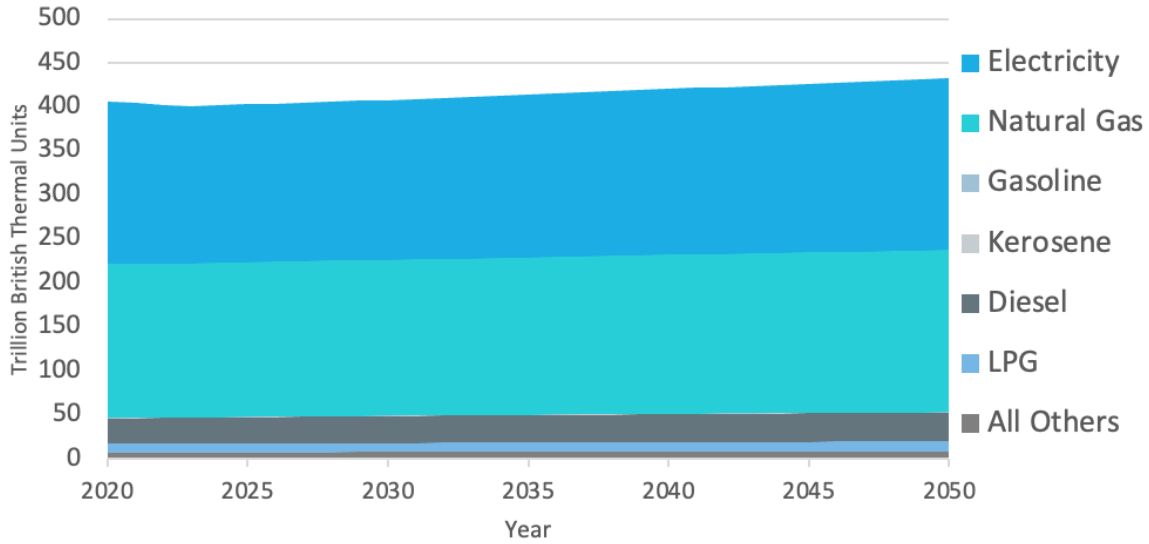


Figure 5. Maryland Residential and Commercial Buildings Energy Use by Fuel, Reference Case 2020-2050

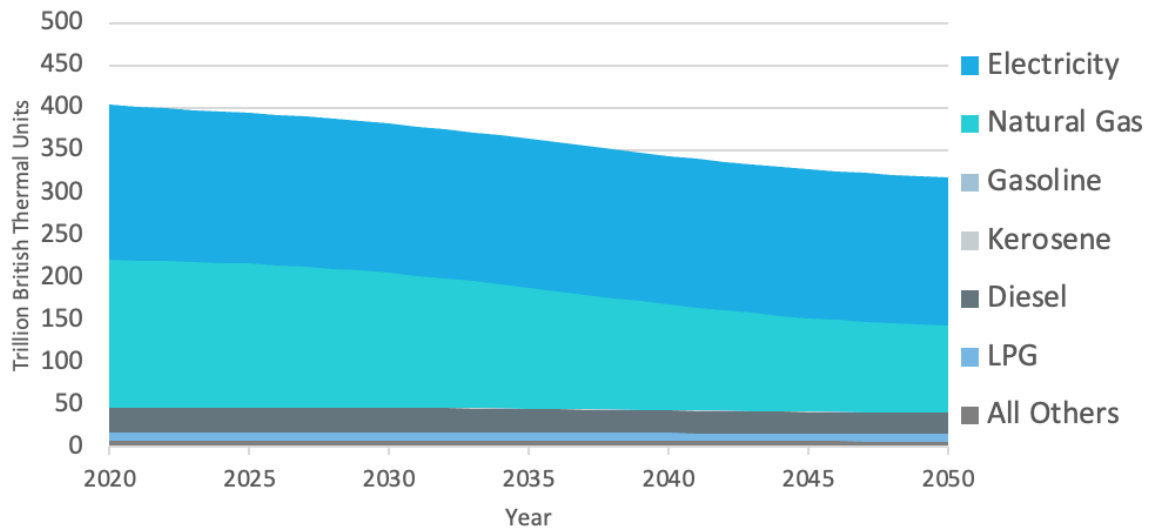


Figure 6. Maryland Residential and Commercial Buildings Energy Use by Fuel, GGRA Scenario 2020-2050