#### U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

# **CLIMATE ACTION PLAN**

NOVEMBER 2021



#### **U.S. Department of Housing and Urban Development**

#### **Climate Action Plan**

Introduction	5
Background	5
Policy Statement	5
Plan Organization	6
Goal 1: Increase Climate Resilience	10
Accomplishments to Date	10
Climate Risk Data	15
1.1 Collect Data and Map Risk	15
1.2 Conduct Research on Climate Resilience	16
Mortgage Financing	17
1.3 Reduce Climate-Related Financial Risk	17
Disaster Recovery and Resilience	19
1.4 Update CDBG-DR Grant Requirements to Promote Resilience and Environmental Justice	
1.5 Enable a Sustainable Recovery for Puerto Rico and the U.S. Virgin Islands	19
1.6 Strengthen Flood Resilience Standards	20
Capacity Building	20
1.7 Provide Climate Resilience and Environmental Justice Training	20
1.8 Create Community Resilience and Sustainability Resources	21
Goal 2: Reduce Greenhouse Gas Emissions	21
Accomplishments to Date	22
Benchmarking and Data Collection	26
2.1 Assess Current Data Collections	26
2.2 Improve Utility Data Reporting and Tracking	27
2.3 Publish Actionable Analysis on Greenhouse Gas Emissions Reduction	28
Green Building Requirements and Incentives	28
2.4 Update Codes and Standards	28
2.5 Align Incentives with Efficiency	29
Capacity Building	31
2.6 Deliver Education and Training	31
2.7 Foster Innovation and Remove Barriers	32

Goal 3: Pursue Environmental Justice	30
Accomplishments to Date	31
Empowering Environmental Justice Communities	32
3.1 Promote Climate Justice in Tribal Communities	32
3.2 Create Green Job Opportunities	33
3.3 Encourage Equitable Community Planning and Engagement	33
Healthy Housing Initiatives	35
3.4 Prevent Residential Lead Poisoning	38
3.5 Minimize Residential Radon Exposure	39
3.6 Update HUD's National Environmental Policy Act (NEPA) Policies	39
Appendix A: Abbreviations and Acronyms	42

# INTRODUCTION

#### Introduction

#### Background

Climate change is a crisis impacting communities across the United States. From severe storms and flooding, to wildfires, drought, and extreme heat or cold, Americans are already feeling its effects. As the Federal agency dedicated to creating strong, sustainable, inclusive communities and quality affordable homes, HUD is on the front lines of the nation's efforts to increase resilience to climate impacts.

HUD also plays an essential role in mitigating climate change by reducing greenhouse gas emissions, due to its portfolio of approximately 4.5 million public and assisted housing units and given its role in the development and preservation of affordable housing. HUD's spending on utilities in public and assisted housing is an estimated \$6.9 billion annually and, according to an internal analysis, consumes as much as 14 percent of the agency's total budget and produces an estimated 13.6 million metric tons of carbon emissions each year. HUD is committed to improving the efficiency of public and assisted housing to not only lower carbon emissions, but also to increase housing affordability and quality by allowing more funds to be spent on the provision of housing instead of on utilities.

HUD has significant influence over how the nation's households and communities will respond to the climate crisis. In addition to public and assisted housing, HUD provides mortgage financing for both single-family home buyers and multifamily rental housing. HUD's FHA-insured portfolio consists of 76 million single family insured loans, 11,213 multifamily insured loans (1,405,260 units), 3,825 residential healthcare facilities, and 88 hospitals with \$1.2 trillion, \$111 billion, \$33 billion, and \$6.3 billion respectively of mortgage balances (as of June 30, 2021).

Further, the Department invests billions of dollars every year in housing, infrastructure, and services in neighborhoods and cities across the U.S. through its ever-increasing role in disaster recovery and risk mitigation. This investment includes over \$89.8 billion appropriated since 1993 by Congress for Community Development Block Grant-Disaster Recovery (CDBG-DR) grants, \$15.9 billion of which is allocated for CDBG-Mitigation (CDBG-MIT) for States and local governments that experienced Presidentially-declared disasters in 2015 – 2018. These grants have driven innovation and elevated the national conversation on resilient recovery through such initiatives as Rebuild by Design and the National Disaster Resilience Competition.

The most recent National Climate Assessment from the U.S. Global Change Research Program (USGCRP)<sup>2</sup> underscores how critical HUD's climate change mitigation and adaptation work is to achieving climate justice. It shows that climate change creates new risks and exacerbates existing vulnerabilities in communities across the U.S., presenting growing challenges to human health and safety, quality of life, and economic prosperity. Though these challenges are universal, our nation's low-income families and communities of color are disproportionately impacted by climate change due to historic disinvestment and a longstanding pattern of residential segregation. For low-income households and communities of color, climate change

<sup>&</sup>lt;sup>1</sup> For the purposes of this plan, references to HUD public and assisted housing include public housing, multifamily assisted housing and Housing Choice Vouchers.

<sup>&</sup>lt;sup>2</sup> Four National Climate Assessment, https://nca2018.globalchange.gov/

exacerbates existing vulnerabilities in their communities, such as aging infrastructure and the siting of toxic waste facilities.

Responding to this crisis is core to the Department's mission, which is why HUD recently established an internal Climate and Environmental Justice Council with representation at the Assistant Secretary level as well as a staff-level Working Group. HUD's Senior Advisor for Climate Change will lead the Council with support from the Office of Environment and Energy. The Climate and Environmental Justice Council will manage the implementation and monitoring of the climate and environmental justice priorities detailed in this plan. This Council is the main body responsible for the long-term integration of climate and environmental justice into HUD's programs and operations.

#### **Policy Statement**

One of President Biden's first actions in office was Executive Order (EO) 14008, *Tackling the Climate Crisis at Home and Abroad*. It lays out a broad vision for how the Federal government can address climate change while creating economic opportunity. The Department supports the President's message that our nation has limited time to act to avoid the most catastrophic impacts of this crisis and seize the opportunity that tackling climate change presents. HUD will play a critical role in implementing this vision.

It is the policy of the Department to organize and deploy the full capacity of its offices to combat the climate crisis and implement a department-wide approach that reduces greenhouse gas emissions; increases resilience to the impacts of climate change; protects public health; delivers environmental justice; and spurs well-paying union jobs and economic growth. The Department's policy is to do so in a way that delivers on the President's commitment to environmental justice and promoting racial equity, consistent with Executive Order 13985, which requires that HUD allocate resources in a manner that addresses the historic failure of the Federal government to invest sufficiently, justly, and equally in underserved communities, particularly communities of color. HUD is committed to taking actions that address the intersection of these two policy directives.

Indeed, the Department has already taken significant steps to address climate threats and environmental injustice. HUD has adapted its programs to help communities both prepare for and respond to the effects of climate change and will continue to take comprehensive action to advance this Administration's priorities on climate adaptation and resilience, decarbonization, and environmental justice. Furthermore, HUD will help lead the Federal government's response to this unprecedented challenge consistent with the Department's unique and historic role in supporting underserved communities, investing in housing across the country, and guiding communities through post disaster recovery and rebuilding.

HUD is recommitting to tackling the climate crisis through the development of this ambitious Climate Action Plan. This plan will guide the integration of climate resilience and environmental justice into HUD's core programs and policies. The actions outlined in this plan will help communities across the nation build more resilient infrastructure, promote responsible utility consumption, create good-paying jobs, and address environmental injustices.

Moreover, HUD has affirmed its dedication to this plan's actions by centering them in the Department's current budget priorities, which highlight HUD's intent to promote climate resilience, environmental justice, and energy efficiency within its portfolio and across the

housing sector. The Department's fiscal year 2022 budget request included \$800 million in proposed funding to reduce carbon pollution, increase resilience to climate impacts, and address environmental injustice. As part of the Administration's whole-of-government approach to the climate crisis, the budget reflects HUD's commitment to expanding energy efficiency and climate resiliency in public and assisted housing. HUD's ability to further its commitment hinges upon the support of Congress through appropriation and authorization.

HUD is not alone in this effort; the Department will work with Federal partners, stakeholders, grantees, and members of the public to develop innovative solutions that equitably prepare for and adapt to climate change. The Administration has recognized the profound climate crisis facing the U.S. and the world – yet in this crisis, there is opportunity to build back better. Tackling climate change is an opportunity to improve the lives of individuals and communities across the nation through increased resilience and equity.

#### Plan Organization

In response to the policy set forth in Executive Order 14008, this Plan is organized around three overarching Climate Action Goals for programs and policies under HUD's purview:

Goal 1: Increase Climate Resilience

Goal 2: Reduce Greenhouse Gas Emissions

Goal 3: Pursue Environmental Justice

Each goal contains a number of subgoals, organized into topic areas. Each subgoal contains a table with the specific actions that HUD will undertake to achieve the primary goal. Each action will serve as a metric that, when accomplished, will move HUD closer to accomplishing its primary goal. For each of these actions, the plan identifies the method for implementing such action (e.g., rulemaking, technical assistance, coordination), the lead office(s) responsible for implementation, the implementation timeline, and the resource needs. Given that each action contains a subset of actions, HUD has detailed the common approach used for each implementation method. The implementation method summaries below give an overview of the underlying work that will be required for each type of action.

To emphasize HUD's commitment to addressing climate change, HUD will be integrating this Climate Action Plan into its agency Strategic Plan. Integrating the actions from this plan into the Strategic Plan not only underscores the importance of this work to HUD achieving its mission, but also provides a platform for HUD to track and report on the progress of achieving its climate goals.

HUD's Climate Action Plan has been developed in close consultation with the Office of Management and Budget. Under OMB's guidance, HUD has chosen a format for its plan for climate action that better fits the nature of HUD's programs and authorities and reflects the fact that HUD does not own buildings or infrastructure.

Additionally, HUD determined it was important to incorporate Environmental Justice into this plan because of the close link between climate change and issues of environmental justice. Placing environmental justice actions in the Department's Climate Action Plan allows for an integrated response to interlinked climate and environmental justice challenges and recognizes advancing environmental justice as core to HUD's mission.

**Implementation methods**: For each action, HUD has identified seven distinct implementation methods, each with specific processes and timelines according to agency procedure. These are further outlined below.

1. Research. This includes studies of problems and issues within HUD's purview, evaluations of HUD programs, and identification and evaluation of new technologies and approaches to solving problems. Studies and reports include housing and community development matters such as climate-related research on high-performance buildings, energy, and the environment. HUD's Office of Policy Development and Research (PD&R) accepts independent proposals, carries out research in-house, and contracts with external researchers to fulfill HUD's research agenda. Research projects typically take several years to complete.

HUD notes the importance of PD&R research studies to inform Department climate policy and program implementation. PD&R is committed to exploring new studies and research opportunities that will enable HUD to assess the success of the actions identified in this plan as well as expand climate and environmental justice efforts in the future depending on available resources.

- Assessment. These are short-term reviews or evaluations of specific topics that need to be addressed to implement a policy or program. Assessments are conducted in response to staff or stakeholder concerns or to determine the impact of potential policy or program changes. Assessments can take between 6 months and 2 years.
- 3. Coordination. This involves cross-program and/or interagency collaboration on initiatives or policies in which the organizations share objectives or concerns. While individual programs may have specific regulations or requirements, some objectives can be met by maximizing coordination across programs and partnering with other Federal agencies to harmonize climate-related goals and policies. Agencies can formalize coordination through Memorandums of Understanding and through participation on Federal task forces and working groups.
- 4. Rulemaking. Where program regulations require updating or modification, or when required by Congress to implement a statute, HUD implements a rulemaking process following procedures outlined in 24 CFR part 10. Rulemaking involves multiple rounds of Federal Register publications, Paperwork Reduction Act compliance, stakeholder consultation, legal and program analysis, and approval from the Office of Management and Budget. From beginning to end, rulemaking processes usually takes at least 24 months. While rulemaking itself may not require additional resources, the actions and responsibilities that stem from the rulemaking may require additional funding to implement.
- 5. Information Technology. HUD develops IT systems to improve both data collection and program monitoring or reporting. This plan identifies several IT updates needed to improve tracking, monitoring or assessing energy and climate related performance of HUD's inventory of public and assisted housing. IT solutions often take 2 to 4 years to implement.

- 6. **Guidance**. Guidance as referenced in this report may be published through a program notice, Mortgagee Letter, or guides or handbooks posted on <a href="https://example.com/hub.gov"><u>HUD Exchange</u></a> or <a href="https://example.com/www.hud.gov"><u>www.hud.gov</u></a>. Depending on the implementation requirements under statute and regulations, new guidance is based on internal program office deliberation, so it can be drafted and released in a shorter time period (e.g., 2 to 4 months).
- 7. **Technical Assistance**. Technical Assistance (TA) is the transfer of skills and knowledge to HUD customers that may need additional capacity. HUD TA is guidance which enables HUD's customers to overcome a lack of specific skills or knowledge of an associated HUD program, which results in the successful performance of and compliance with that program. TA can take many forms and can be provided directly by HUD staff or delivered by HUD TA providers through the HUD-funded TA program. HUD funds TA and capacity building activities for HUD customers through the Departmentwide Community Compass Technical Assistance program. Outside of the standard Departmentwide two-year, Congressionally funded Community Compass program, Congress often provides supplemental funding for TA tied to specific program appropriations (e.g., HOME-American Rescue Plan, CDBG-DR, CDBG-CV).

**Resource Implications:** This column in each table indicates the nature of the resources needed to implement each proposed action—whether offices can undertake proposed actions using existing resources, are anticipating using funds that were included in the President's FY22 Budget request to Congress, or will need to reprioritize existing resources.

- 1. **None.** Many of the actions identified in this plan utilize existing HUD authority and staff in the implementation and therefore do not require any additional resources.
- 2. FY 22 Budget Request. The Department has existing resources and authorities that can be deployed to increase the efficiency and resilience of HUD-funded new construction and substantial rehabilitation; however, there are meaningful gaps in the Departments existing resources that if filled, could result in more influential climate change action. Recognizing these gaps, the Department was the first ever Federal agency to have a climate-specific section in its budget request. HUD requested \$800M in its FY22 budget, across five programs, for energy and resilience. If appropriated, these new resources would be a critical component of this plan.
- 3. Reprioritize Existing Resources. For HUD funded TA, the reprioritization of existing resources may require an update to HUD TA Plans from previous years, depending on the nature of the priority adjustment and the source year of the funding identified in each case. The program office will work with the Technical Assistance Division to assess any adjustments to approved plans and ensure the proper process is followed prior to assigning TA. For forthcoming actions, these will be reflected in upcoming HUD TA Plans and Notice of Funding Opportunities (NOFO), not yet issued. For other aspects of HUD programs and TA provided directly by HUD staff, reprioritizing existing resources can occur at the program or office level through leadership approval, temporary staff rotations, and reprogramming older or expiring funds to new priorities.

**Timeline:** The timeline for each action listed in this Plan is defined by the fiscal year (FY) and quarter (Q) in which the action is expected to be initiated and completed.

# GOAL 1: Increase Climate Resilience

#### Goal 1: Increase Climate Resilience

Affordable housing (including but not limited to public and assisted housing) is increasingly at risk from both extreme weather events and sea-level rise. Recent analysis and mapping by Climate Central projects that the number of affordable housing units at risk from flooding in coastal areas will triple by 2050.<sup>3</sup> Coastal communities are especially at risk – a report from the Denali Commission found that 144 Native Alaskan Villages (43 percent of all Alaskan communities) experienced infrastructure damage from erosion, flooding, and permafrost thaw.<sup>4</sup>

A specific threat to HUD programs is the potential vulnerability of the Federal Housing Administration (FHA) Mutual Mortgage Insurance (MMI) and General Insurance and Special Risk (GI/SR) Funds to increased defaults and loss severities due to physical damage, disruptions in borrowers' ability to repay, and declining property values in vulnerable communities. Johns Hopkins researchers warn of a "potential threat to the stability of financial institutions" as global warming leads to more frequent and more severe disasters, forcing more HUD-insured and other loans to go into default as homeowners cannot or will not make mortgage payments.<sup>5</sup>

Many HUD programs help communities recover from and build resilience to climate hazards and natural disasters. HUD's disaster recovery portfolio alone accounts for the Federal government's single largest investment in recovery and resilience in low-to-moderate-income communities. While HUD already plays a major role in this space, the Department must expand its climate resilience work to increase resources for grantees and stakeholders and make it easier for them to implement climate resilient activities. HUD can accomplish its goal of increasing the resilience of communities nationwide through improving climate resources and continuing investment in areas most vulnerable to the impacts of climate threats.

Scale: Nationwide.

**Risks and opportunities**: Low-income families and communities of color are disproportionately impacted by climate change.<sup>6</sup> Without targeted intervention, this climate injustice will continue.

#### Accomplishments to Date

<u>Disaster recovery and mitigation</u>. HUD works with communities to respond to or prepare for natural disasters through two primary funding sources: CDBG-DR and CDBG-MIT. Since 1993, Congress has appropriated a total of \$89.8 billion for CDBG-DR. As of April 2021, this encompasses 137 grants awarded to 64 grantees (34 states and territories and 30 local governments). Active CDBG-DR and CDBG-MIT grants total over \$67 billion. This includes

<sup>&</sup>lt;sup>3</sup> Climate Central, Report: Coastal Flood Risk to Affordable Housing Projected to Triple by 2050, November 2020.

<sup>&</sup>lt;sup>4</sup> Denali Commission, *Statewide Threat Assessment: Identification of Threats from Erosion, Flooding, and Thawing Permafrost in Remote Alaska Communities*, November 2019. <a href="https://www.denali.gov/wp-content/uploads/2019/11/Statewide-Threat-Assessment-Final-Report-20-November-2019.pdf">https://www.denali.gov/wp-content/uploads/2019/11/Statewide-Threat-Assessment-Final-Report-20-November-2019.pdf</a>

<sup>&</sup>lt;sup>5</sup> Amine Ouazad, Matthew E. Kahn, *Mortgage Finance and Climate Change: Securitization Dynamics in the Aftermath of Natural Disasters*, <a href="http://www.ouazad.com/resources/paper\_kahn\_ouazad.pdf">http://www.ouazad.com/resources/paper\_kahn\_ouazad.pdf</a>. January 2021. See also New York Times September 27, 2019,

https://www.nytimes.com/2019/09/27/climate/mortgage-climate-risk.html

<sup>&</sup>lt;sup>6</sup> Fourth National Climate Assessment, https://nca2018.globalchange.gov/

funding to support resilient rebuilding after Superstorm Sandy in New York, New Jersey, and Connecticut; Hurricane Katrina on the Gulf Coast; and, more recently, Hurricane Harvey in Texas, Hurricanes Irma and Maria in Florida, Puerto Rico, and the U.S. Virgin Islands; and wildfires in California – as well as many other disasters.

Since 2019, HUD has allocated more than \$16 billion of CDBG-MIT funds to 22 states and local governments for activities that lessen the impact of future disasters. Fifty percent of these grant funds must benefit low- and moderate-income persons. The State of Louisiana, for example, will use its \$1.2 billion CDBG-MIT allocation to implement the Louisiana Watershed Initiative, to "fundamentally change Louisiana's approach to statewide flood mitigation activities" (<a href="https://www.watershed.la.gov/action-plan">https://www.watershed.la.gov/action-plan</a>). CDBG-MIT is a unique and significant opportunity for grant recipients to use this assistance in areas impacted by recent disasters to carry out strategic and high-impact activities that mitigate disaster risk and reduce future losses, especially for low- and moderate-income families and households.

CDBG-DR grants are also a significant source of Federal support for building resilience, particularly in low- and moderate-income areas. HUD has long required CDBG-DR grantees to implement certain climate-related measures as part of recovery (e.g., elevation of structures in the flood plain, green building standards) and many CDBG-DR grantees have implemented additional forward-looking investments in resilience. The State of New Jersey, for example, has used \$200 million of funding from its Hurricane Sandy CDBG-DR grant to increase the energy resilience of many of its hospitals, allowing for continued operations in the event of future power disruptions.

Additionally, HUD obligated nearly \$1 billion of funding through the National Disaster Resilience competition, funding 13 innovative resilience projects across the country. This includes initiatives in Virginia to foster the development of businesses focused on resilience <sup>7</sup> and to increase California's resilience to wildfires. HUD has also obligated \$930 million for regional flood mitigation projects in New York, New Jersey, and Connecticut through Rebuild by Design.

While CDBG-DR and CDBG-MIT grants are not permanently authorized, after more than 20 years of supplemental appropriations to fund the awards, CDBG-DR is one of the largest sources of funding for recovery and resilience building, and the largest source that primarily benefits persons with low and moderate income.

<u>Flood resilience</u>. HUD has implemented program-specific policies to increase climate resilience, particularly related to flooding. For example, residential new construction and substantial improvements funded with CDBG-DR assistance are now required to elevate two feet above base flood elevation. Similarly, the Federal Housing Administration (FHA) Office of Multifamily Housing (MF) recently updated its standards to require new construction projects in 100-year floodplains to elevate two feet above base flood elevation. FHA MF has extended the same limitations that apply in Coastal High Hazard Areas (V Zones) to all areas within the Limit of

<sup>&</sup>lt;sup>7</sup> RISE Coastal Community Resilience Challenges, https://riseresilience.org/

<sup>&</sup>lt;sup>8</sup> California Department of Housing and Community Development, National Disaster Resilience Competition. https://www.hcd.ca.gov/community-development/disaster-recovery-programs/ndrc.shtml

<sup>&</sup>lt;sup>9</sup> Rebuild by Design, Hurricane Sandy Design Competition, <a href="http://www.rebuildbydesign.org/our-work/sandy-projects">http://www.rebuildbydesign.org/our-work/sandy-projects</a>

Moderate Wave Action (LiMWA) for new construction and substantial rehabilitation, with lesser but still significant limitations on existing properties. HUD will continue this effort by assessing and initiating a modernization of its floodplain management regulations in 24 CFR part 55, potentially extending increased flood protection across all HUD programs.

Community Development Block Grants (CDBG). CDBG is both a flexible and widespread program, reaching over 1,200 local governments in all states and territories. The program's scope and promotion of community-specific solutions make CDBG a powerful tool for climate resilience. As a condition for funding, CDBG grantees are required to submit a Consolidated Plan every three to five years. In 2016, HUD promulgated the rule *Modernizing HUD's Consolidated Planning Process to Narrow the Digital Divide and Increase Resilience to Natural Hazards.* <sup>10</sup> This rule requires jurisdictions to incorporate resilience to natural hazard risks and a discussion of how climate change will increase those risks into their Consolidated Plan. The rule also requires CDBG grantees to address the impacts of climate change on low- and moderate-income residents. HUD plans to create additional resources and guidance around this rule to help grantees better incorporate climate change adaptation into their regular planning process.

HUD Climate Communities Initiative. HUD, in partnership with local leaders, is announcing a suite of resources, support, and tools to help cities respond to equitably the climate crisis. This includes the HUD Community Resilience Toolkit, a user-friendly guide to help Community Planning and Development (CPD) grant recipients learn how current and future natural hazard risks may impact their community and how to reduce said risks, as well as implementation models, peer-to-peer learning opportunities, stakeholder engagement with underserved communities, and direct support to a cohort of climate cities. With the suite of flexible block grant funding that local governments already receive, this concerted effort will help cities focus climate action on the needs of the most vulnerable and further climate justice.

Indian Housing Community Development Block Grant (ICDBG). The ICDBG Program provides eligible grantees with direct grants for use in developing Indian and Alaska Native communities, including the provision of decent housing, a suitable living environment, and economic opportunities, primarily for low- and moderate-income persons. The ICDBG provides single purpose grants which are awarded on a competition basis as well as imminent threat grants which are awarded first come, first served to lessen or eliminate problems which pose an imminent threat to the health and safety of Tribal residents.

#### Climate Risk Data

#### 1.1 Collect Data and Map Risk

Implementing offices: Housing, PD&R, CPD, FHEO

**Description**: Collect complete and accurate building-level data across HUD programs to map existing climate risks and environmental justice concerns. Comprehensive and modernized data collection can help inform how to best address climate impacts to protect HUD-assisted assets and their occupants, with a focus on underserved communities, tribal communities, communities of color, and individuals with disabilities. Accurate and easily available data will enable HUD,

13

<sup>&</sup>lt;sup>10</sup> 81 FR 90997 (Dec. 16, 2016).

grantees, borrowers, and the public to conduct vulnerability assessments and develop resilience plans addressing climate impacts.

Office	Action	Implementation Method	Resource Implications	Timeline
FHA MF, PIH	Review current building-level data to ensure accuracy and facilitate mapping of the portfolio's climate risk	Assessment, IT Solution	Requested in the President's FY22 Budget	FY22 Q3 – FY23 Q3
Housing	Procure data sources to enable modeling for climate risks	IT Solution	Reprioritize Existing Resources	FY22 Q3 – FY23 Q4
FHA SF	Identify additional data elements during underwriting and servicing for all FHA insured mortgages	Assessment	None	FY22 Q2 – FY23 Q4
OEE, FHEO, PIH, Housing	Implement vulnerability assessments for multifamily properties, including a consideration of equity and the impact on relevant protected class groups	Technical Assistance	Reprioritize Existing Resources	FY22 Q4 – ongoing
PD&R	Assess feasibility of expanding existing HUD planning applications to include climate risk data	Assessment	None	FY22 Q1 – FY22 Q3
PD&R	Assess HUD's research and capacity-building needs related to climate risk of underrepresented communities for inclusion in HUD's 2022-25 Learning Agenda	Assessment	None	FY22 Q1 – FY22 Q2

#### 1.2 Conduct Research on Climate Resilience

Implementing Offices: PD&R, FHEO

**Description**: HUD's Office of Policy Development and Research's research agenda will include new studies to assess the effectiveness of current building efficiency codes and recovery programs and to identify resilience best practices. This research will inform and encourage HUD policy makers, grantees, and stakeholders to adopt stricter building requirements, improve programs, and invest in climate resilience.

Office	Action	Implementation Method	Resource Implications	Timeline
PD&R	Assess HUD's research and capacity-building needs related to building efficiency and resiliency codes for inclusion in HUD's 2022-25 Learning Agenda	Research	None	FY22 Q3 – FY23 Q1
PD&R	Assess HUD's research and capacity-building needs related to buyouts and resettlement for inclusion in HUD's 2022-25 Learning Agenda	Research & Guidance	None	FY22 Q2 – FY22 Q4

PD&R	Conduct cost effectiveness research of CDBG-DR resilience funding and generate guidance on best practices, vulnerability assessments, and evaluative framework	Research & Guidance	None	FY23 Q1 - FY24 Q1
PD&R	Provide resources and expertise to the Advanced Research Projects Agency – Climate (ARPA-C) at the Department of Energy for research on housing, climate adaptation, and resilience	Research, Coordination	Requested in FY22 Budget	FY22 - ongoing

#### **Mortgage Financing**

1.3 Reduce Climate-Related Financial Risk Implementing Offices: PD&R, Housing, FHEO

**Description**: HUD mortgage financing programs, primarily its insurance programs, enable billions of dollars of capital to fund the purchase, refinance, construction, and rehabilitation of single- and multifamily housing, assisted housing, and healthcare facilities around the country. Per the Executive Order on Climate-Related Financial Risk (EO 14030), HUD is collaborating with the Departments of Veterans Affairs and Agriculture to consider approaches to better integrate climate-related financial risk into underwriting standards, loan terms and conditions, and asset management and servicing procedures. HUD is also exploring market strategies to incentivize both energy and water efficiency and climate-resilient building practices.

Office	Action	Implementation Method	Resource Implications	Timeline
PD&R	Assess HUD's research and capacity-building needs related to economic threats of climate change to housing finance ecosystem for inclusion in HUD's 2022-25 Learning Agenda	Assessment	None	FY22 Q3 – FY23 Q2
PD&R	Assess HUD's research and capacity-building needs related to benefits and fair housing implications of including climate risk in FHA underwriting for inclusion in HUD's 2022-25 Learning Agenda	Assessment	None	FY22 Q1 – FY22 Q2
FHA	Identify and assess approaches to integrate climate-related financial risk into underwriting standards, loan terms and conditions, and asset management and servicing procedures	Assessment	None	FY22 Q2 – FY23 Q4
FHA SF, OHP	Consider using reduced Mortgage Insurance Premiums to incentivize	Assessment	None	FY22 Q2 – FY23 Q4

	property owners to adopt higher building standards			
FHA SF	Review and update the standards for Manufactured Housing to allow the use of stretch ratios for a Manufactured Home that is certified as ENERGY STAR	Guidance	None	FY22 Q1
FHA SF	Review and update program standards and documentation requirements for underwriting, repairs, and escrow to make it easier for lenders and borrowers to understand and use the Single Family 203(k) Program for Energy Retrofits and Climate Mitigation	Assessment, Guidance, Rulemaking	None	FY22 Q4 – FY25 Q2
FHA SF	Assess the benefits and risks of introducing a new loan product, Resilience and Energy Assistance Loan (REAL) Title 1 Property Improvement Program, to provide low-cost financing for consumers making climate hazard mitigation and energy efficiency improvements	Assessment	Reprioritize Existing Resources	FY22 Q2 – FY25 Q1
FHA MF	Assess benefits and risks of expanding the Green MIP Program to encourage climate resilience actions. Expansion could include incentives for climate resilience actions such as creating defensible space in fireprone areas; building or retrofitting to withstand extreme weather; or mitigating for flood risk	Assessment	Reprioritize Existing Resources	FY22 Q4 – FY23 Q4
Ginnie Mae	As part of an overall environmental, social, and governance (ESG) strategy, enhance (i) analytical capabilities for environmental assessments; (ii) securities disclosures that create value for investors utilizing ESG metrics, and (iii) pooling, issuance and reporting flexibilities to support FHA, VA, USDA and PIH program innovations having ESG aspects	IT Solution	Reprioritize Existing Resources	FY22 Q2 – FY23 Q4
Ginnie Mae	Until such time that the new platform goes into production, Ginnie Mae will explore how current capabilities can be leveraged in current form, or with some level of modification, to support shorter term goals of supporting environmental justice initiatives that may be pursued by FHA, VA, USDA	Assessment	None	FY22 Q1 – FY23 Q4

and PIH. Securities disclosures are routinely enhanced to meet the everevolving demands of MBS investors and Ginnie Mae will explore opportunities to target increased ESG data disclosure with a goal of	
generating greater investor demand for securities supporting ESG objectives.	

#### **Disaster Recovery and Resilience**

1.4 Update CDBG-DR Grant Requirements to Promote Resilience and Environmental Justice Implementing Offices: CPD

**Description**: With over \$67 billion in active grants, CDBG-DR and CDBG-MIT funds are arguably the Federal Government's largest investment in resilience and addressing environmental injustice in some of the nation's most vulnerable areas. 2020 was the sixth consecutive year in which there were ten or more weather and climate disaster events impacting the United States that caused more than a billion dollars in damage. The sheer scale of these events illustrates the importance of HUD's disaster recovery work. A more holistic integration of resilience and environmental justice principles into the CDBG-DR program will ensure that communities recovering from disasters are more resilient in the future. A commitment to environmental justice means ensuring equal protection from environmental and health hazards and providing all people a meaningful opportunity to participate in the decision-making process to achieve a healthy environment.

Office	Action	Implementation Method	Resource Implications	Timeline
CPD	Finalize the CDBG-DR implementing notices to reflect climate priorities and describe policies and requirements that can foster resilient projects and promote environmental justice.	Guidance	None	FY22 Q1 – FY22 Q2

#### 1.5 Enable a Sustainable Recovery for Puerto Rico and the U.S. Virgin Islands

Implementing Office: CPD

**Description**: Collaborate with Puerto Rico and the U.S. Virgin Islands (USVI) to support targeted resilience plans and innovative energy solutions for their sustainable long-term recovery.

Office	Action	Implementation Method	Resource Implications	Timeline
OEE	Work with the DOE, Puerto Rico Field Office and Public Housing Authority (PRPHA)	Coordination, Technical Assistance, Assessment	None	FY22 Q2 – FY23 Q1

	PowerOasis solar plus battery storage pilot			
DRSI	Collaborate with grantees on their work with Federal partners (DOE, DOI, FEMA) to implement required actions in the Federal Register Notice providing \$2 billion for resilient CDBG-DR Electrical Power Systems for Puerto Rico and USVI	Coordination, Guidance	None	FY22 Q1 – FY22 Q3
DRSI	Provide technical assistance to Puerto Rico and USVI to deliver the clean energy and green building programs outlined in their CDBG-DR and CDBG-MIT Action Plans	Coordination, Technical Assistance	None	FY22 Q1

#### 1.6 Strengthen Flood Resilience Standards

Implementing Offices: CPD

**Description**: Implement EO 13690, Establishing a Federal Flood Risk Management Standard and a Process for Further Soliciting and Considering Stakeholder Input, by implementing the Federal Flood Risk Management Standard (FFRMS) and updating HUD's floodplain management regulations in 24 CFR part 55. (EO 13690 was revoked in 2017 by EO 13807, but was recently reinstated through EO 14030, Climate-Related Financial Risk.) This rulemaking will focus on increasing flood resilience, clarifying processes and standards, promoting environmental justice concerns in floodplain decision-making, improving fiscal security, and minimizing adverse impacts to the beneficial functions of floodplains and wetlands.

Office	Action	Implementation Method	Resource Implications	Timeline
OEE	Update floodplain management and wetlands protection regulations in 24 CFR part 55 to implement FFRMS and otherwise increase flood resilience standards in HUD projects	Rulemaking	None <sup>11</sup>	In Progress – FY23 Q1
Department- wide	Develop a training series for HUD grantees and update HUD's online tools to reflect updated policy	Technical Assistance, IT Solution	Reprioritize Existing Resources	FY22 Q4 – FY23 Q2

#### **Capacity Building**

1.7 Provide Climate Resilience and Environmental Justice Training

Implementing Offices: PD&R, PIH, CPD, FHEO

**Description**: Before HUD can advance its work on climate adaptation, mitigation, and environmental justice, it will be necessary for HUD staff, grantees, and stakeholders to have a

<sup>&</sup>lt;sup>11</sup> Although there may be resource implications for implementing any rulemaking, the full resource implications cannot be known until the rule has been drafted. Therefore, the resource implications for rulemaking apply only to the resources required to draft and publish the rule.

baseline understanding of climate resilience and environmental justice. HUD will begin to create spaces, both formal and informal, for mutual learning around climate change and its impacts. This learning culture will also focus on environmental justice issues impacting low-income communities, communities of color, individuals with disabilities, and other protected classes.

Office	Action	Implementation Method	Resource Implications	Timeline
Department-wide	Facilitate trainings for grantees and partners that includes climate adaptation and environmental justice, incorporating climate risk in their areas	Technical Assistance	None	FY22 Q4 – ongoing
PIH, CPD, FHEO	Conduct trainings and provide information to PHAs on adaptation and mitigation activities	Technical Assistance	None	FY22 Q4 – ongoing

#### 1.8 Create Community Resilience and Sustainability Resources

Implementing Office(S): PD&R, CPD, FHEO, Field Policy and Management (FPM)

**Description**: Design the next generation of best practices, case studies, and tools developed from HUD research studies and collaboration with other Federal agencies and HUD stakeholders. These resources will be dynamic, user-friendly, and inclusive.

Office	Action	Implementation Method	Resource Implications	Timeline
PD&R	Generate case studies and guidance on resilience planning, disaster recovery, strategic funding strategies, and land use planning for HUD customers	Guidance, Technical Assistance	None	FY22 Q1 – ongoing
PD&R, FHEO	Collaborate with Home Innovation Research Labs to create a series of residential resilience guidelines for homebuilders and developers. Guidelines will incorporate the latest resilience construction techniques and best practices presented in a practical, user-friendly format	Coordination, Guidance	None	FY21 Q1 – FY22 Q3
CPD	Develop a tool and webinar series for HUD customers on the need to incorporate resilience measures and stronger building codes when rebuilding after a disaster	Technical Assistance	None	FY22 Q1 – FY22 Q4
CPD	Conduct grant "launch" and program implementation technical assistance to CDBG-MIT grantees	Technical Assistance	None	FY22 Q2 – ongoing

	who are working to implement hazard mitigation projects			
CPD	Work with HUD CDBG-DR and CDBG grantees to improve resilience decision making using science-based tools	Technical Assistance	None	FY22 Q2 – ongoing
CPD. FPM	Collaborate with local climate city leaders to facilitate peer-to-peer learning opportunities, stakeholder engagement, and direct support as part of the HUD Climate Communities Initiative	Technical Assistance	Reprioritize Existing Resources	FY22 Q1 – ongoing
CPD, FHEO	Organize and expand online library of resources, trainings, and toolkits for climate resilience and environmental justice. Resources will include a range of on-demand webinars and trainings, as well as toolkits, implementation guides, and best practices	Technical Assistance	Reprioritize Existing Resources	FY22 Q2 – ongoing
OLHCHH	Collaborate with the Centers for Disease Control and Prevention on its Building Resilience Against Climate Effects (BRACE) grant program	Guidance	None	FY22 Q1 – ongoing

## GOAL 2: Reduce Greenhouse Gas Emissions

#### Goal 2: Reduce Greenhouse Gas Emissions

HUD has a portfolio of approximately 4.5 million public and assisted housing units (including 2.2 million market-rate apartments occupied by Housing Choice Voucher households) and plays a key role in the development and preservation of affordable housing. HUD's annual outlays on utilities in this portfolio (primarily subsidizing energy and water costs for both property owners and tenants) account for as much as 14 percent of the agency's total budget and, according to an internal HUD analysis, consume enough on-site energy to produce an estimated 13.6 million metric tons of carbon emissions. HUD spends at least \$6.9 billion on utilities across the components of its portfolio: 36 percent or \$2.49 billion in multifamily assisted housing; 30 percent or \$2.02 billion in public housing; and 34 percent or \$2.35 billion for Housing Choice Voucher utility allowances.

In order to meet the Administration's goal of lowering economy-wide net greenhouse gas pollution by 50-52 percent by 2030<sup>14</sup>, HUD must significantly improve the energy performance of HUD-assisted and FHA-insured assets while scaling up deployment of renewable energy. HUD will accomplish this goal by increasing investments in climate and energy retrofits of existing housing, incentivizing green building design in new construction, and proactively advancing climate mitigation and adaptation strategies across HUD programs.

In addition to spurring significant reductions in carbon emissions associated with public and assisted housing, these actions will advance economic equity by reducing utility costs for HUD assisted and FHA insured stakeholders and creating green job opportunities in disadvantaged communities. HUD must also explore incentivizing or otherwise assisting communities to implement land use changes that allow for denser, transit-oriented housing development that reduces households' reliance on cars, by far the largest source of greenhouse gas emissions in the transportation sector, which is itself the greatest contributor to economy-wide emissions since surpassing the electricity generation sector in 2017.<sup>15</sup> These land-use changes will simultaneously help to address exclusionary policies that have resulted in racial disparities in wealth, public health, and economic opportunity (see Goal 3 below).<sup>16</sup>

Scale: Nationwide.

<sup>&</sup>lt;sup>12</sup> Preliminary internal HUD estimate of carbon emissions, March 2021. Assisted multifamily and Housing Choice Voucher unit counts from *Characteristics of HUD-Assisted Renters and Their Units in 2017* (2020) and public housing unit counts from PIC database were used to estimate total BTU consumption for each subsidy type by Census Division, using per-household annual BTU consumption rates from the Residential Energy Consumption Survey (RECS).

HUD, Achieving Utility Savings in HUD-Assisted Housing: Progress Report to Congress, September 2019
 FACT SHEET: President Biden Sets 2030 Greenhouse Gas Pollution Reduction Target Aimed at Creating Good-Paying Union Jobs and Securing U.S. Leadership on Clean Energy Technologies, April 2021,
 www.whitehouse.gov.

<sup>&</sup>lt;sup>15</sup> Data Highlights: Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2019, Environmental Protection Agency.

<sup>&</sup>lt;sup>16</sup> Cecilia Rouse, Jared Bernstein, Helen Knudsen, and Jeffery Zhang, "Exclusionary Zoning: Its Effect on Racial Discrimination in the Housing Market," June 17, 2021, www.whitehouse.gov.

**Risks and opportunities**: Up to 14 percent of HUD's budget is tied up in utility payments. Investing in substantially lowering the budget impact of utilities will lower the per-household subsidy for public and assisted housing, freeing up resources to allow HUD to serve more low-income families while improving health and comfort for existing residents. In addition, 67 percent of low-income households in the U.S. face a high energy burden. Black, Hispanic, Native American, and older adult households, as well as families residing in low-income multifamily housing, manufactured housing, and older buildings experience disproportionately high energy burdens.<sup>17</sup> Without targeted intervention, this climate injustice will continue.

#### Accomplishments to Date

HUD has a demonstrated history of promoting clean energy and energy efficiency investments through voluntary leadership and incentive programs, as well as mandatory above-code building standard requirements. Current and previous energy and water conservation initiatives demonstrate the potential for achieving energy savings and carbon reduction with the right mix of incentives, direct financial support, and/or technical assistance. This includes the following initiatives.

Renew300. Under the Obama Administration, HUD launched the Renew300 Initiative, aimed at significantly increasing the adoption of solar and renewable energy in federally assisted housing properties through on-site installations or community solar. A 300-Megawatt (MW) target was established to take advantage of millions of square feet of federally subsidized roofs with on-site or community generation potential. More than 80 affordable housing owners committed to the installation of 344 MW of renewable energy using technical assistance though Renew300.

The Green Mortgage Insurance Premium (Green MIP) provides a strong incentive for FHA multifamily borrowers to adopt one of several approved green building standards. A total of \$38.2 billion in multifamily mortgage insurance for green projects has been endorsed for 1,413 developments with 281,000 units of multifamily housing since the Green MIP was introduced in 2016. Green MIP borrowers must also commit to benchmarking utilities and achieve a minimum 75 Energy Star score in the Environmental Protection Agency's (EPA) Portfolio Manager.

Benchmarking. HUD's primary benchmarking initiative is the Multifamily Better Buildings Challenge, part of the DOE's Better Buildings Challenge. Its goal is to support participating partners who have made a commitment to reducing their portfolio-wide energy consumption by at least 20 percent over 10 years through the use of better utility usage data collection and tracking methods. There are 92 Multifamily BBC partners, accounting for approximately 553,400 units of public and assisted housing (accounting for 23 percent of those programs' units). As of 2020, 70 percent of multifamily partners are successfully benchmarking, producing actionable data on over 400,000 multifamily units. As a result, the multifamily program has facilitated over 21 trillion British thermal units (Btus) of documented energy savings.

<sup>&</sup>lt;sup>17</sup> Ariel Drehobl, Lauren Ross, and Roxana Ayala, *How High Ar Household Energy Cost Burdens? An Assessment of National and Metropolitan Energy Burden across the United States*, September 2020, American Council for an Energy-Efficient Economy.

<sup>&</sup>lt;sup>18</sup> HUD Office of Multifamily Housing, Internal Green MIP Report, Through 2021, Quarter 2.

<u>Energy Incentives in Public Housing Operating Fund</u>. Energy incentives including Add-On Subsidy (AOS), Resident Paid Utility (RPU), and Frozen Rolling Base (FRB) are used to incentivize investment for energy and water efficiency measures and renewable energy through the Public Housing Energy Performance Contract (EPC).

Rental Assistance Demonstration (RAD). All RAD conversions undertake an environmental review to assess the site and proposed activities for hazards to the residents, including lead, asbestos, radon, or flooding. PHAs and owners undergoing RAD conversion are required to mitigate any environmental risks that arise from the environmental review. For rehab and new construction projects, PHAs complete a green Capital Needs Assessment (CNA) that provides a detailed analysis of energy-saving alternatives and other green building components and are required to utilize the most energy- and water-efficient options that are financially feasible. At minimum, PHAs or owners must use Energy Star®, WaterSense® or Federal Energy Management Program (FEMP)-designated products and appliances.

HUD has also adopted innovative program provisions to ensure that owners have incentives to undertake cost-effective energy and water efficient improvements, regardless of whether utilities are paid by the owner or by the tenant. All projects are strongly encouraged to use building components that improve air quality and/or reduce environmental impact if doing so would incur little or no cost premium. Public Housing projects converting with any new construction construction must meet or exceed the latest IECC or ASHRAE codes that are adopted by HUD.

They are also encouraged to meet or exceed the requirements for Energy Star for New Homes or Energy Star for Multifamily High-Rise buildings and to use industry-recognized green building certifications such as the US Green Building Council's LEED Rating System, Enterprise Green Communities Criteria, the National Green Building Standard, Green Globes, GreenPoint Rating, EarthCraft, Earth Advantage, Passive House, or Living Buildings. In addition, HUD has required above-code building standards in the Capital Fund Program, Choice Neighborhoods Program, the Section 202 Supportive Housing for the Elderly program for new construction, and recent CDBG-DR grants.

#### **Benchmarking and Data Collection**

In order to achieve significant reductions in greenhouse gas pollution, HUD must be able to measure the performance of its portfolio, prioritize investments in energy and water conservation, and track savings over time. To do this, HUD will need to collect and analyze comprehensive data on utility consumption and expenditures as well as building characteristics and investments in energy efficiency and renewable energy. OEE will provide cross-agency coordination to ensure alignment between program office actions and the enterprise-wide data collection and analysis that are required to meet HUD's greenhouse gas reduction goals.

#### 2.1 Assess Current Data Collections

Implementing Offices: PIH, Housing, PD&R, CPD

**Description**: Assess current data collections and identify alternative data sources where necessary to improve data collection on energy- and hazard mitigation. In order to meet the ambitious goal of cutting greenhouse gas pollution across public, assisted, and FHA-insured housing by 50-52 percent by 2030, HUD needs to have a full accounting of all utility consumption and expenditures in its portfolio. The first step will be to analyze current data collections and identify gaps and deficiencies.

Office	Action	Implementation Method	Resource Implications	Timeline
FHA SF	Identify additional data elements during underwriting and servicing for single-family FHA insured mortgages	Assessment	None	FY22 Q2 – FY23 Q4
PIH	Assess utility data collection and analysis and identify deficiencies	Assessment	None	FY22 Q3 – FY23 Q1
PD&R, OEE, PIH	Compare and analyze data reported from the Better Buildings Challenge and data reported through Form 52722	Assessment	None	FY23 Q1 – FY24 Q1

#### 2.2 Improve Utility Data Reporting and Tracking

Implementing Offices: Housing, PIH, CPD, PD&R, OCIO

**Description**: In 2016, PIH and Multifamily Housing proposed utility benchmarking requirements for their portfolios of public and assisted housing that will play a foundational role in achieving HUD's emission reduction goals. Both program offices will reevaluate the proposed rules in light of public comments and determine how to proceed toward the adoption of this crucial requirement. Separately, Multifamily Housing proposes to fund utility benchmarking for a majority of units in the Multifamily-assisted portfolio through the Green and Resilient Retrofit Program (GRRP).

Concurrent with reevaluation of approaches to benchmarking, HUD will work to assess existing data collections and take steps to address identified gaps and deficiencies and create a more effective agency-wide data architecture consistent with Data Governance principles established under the leadership of the Chief Data Officer and OCIO Enterprise Architect. These efforts will include developing agency-wide data standards for utility management and risk mitigation such that all data collections across programs can contribute to an enterprise-wide analysis of climate risks and carbon reduction opportunities. The data on building performance and energy usage HUD collects as part of these actions will be critical to HUD's Equitable Decarbonization Roadmap discussed in 2.3, Publish Actionable Analysis on Greenhouse Gas Reduction.

Office	Action	Implementation Method	Resource Implications	Timeline
FHA SF	Develop capacity to collect third party data such as utility data to enable HUD to assess effectiveness of single-family energy investments	IT Solution	None	FY23 Q4 – FY25 Q3

PIH	Migrate HUD Forms 52722 and 52723 to the Operating Fund Web Portal	IT Solution, Guidance	Reprioritize Existing Resources	FY22 Q1 – FY24 Q3
CPD, FHA, PIH	Develop enterprise - wide minimum data standards for utility management and risk mitigation	Coordination	None	FY22 Q1 – FY22 Q3
FHA MF, PIH, OEE	Formulate and implement an updated enterprise-wide approach to utility benchmarking	Rulemaking, TA	Requested in FY 22 Budget	FY22 Q1 – FY24 Q1
CPD, OCIO, FHA, PIH	Pursue Portfolio Manager interoperability solutions	IT solution	Reprioritize Existing Resources	FY22 Q2 – FY24 Q4

#### 2.3 Publish Actionable Analysis on Greenhouse Gas Emissions Reduction

Implementing Offices: PIH, OEE

**Description**: HUD will work to provide new data products and data analysis that help program offices and grantees better understand their utility consumption and energy efficiency and renewable energy opportunities nationwide.

Office	Action	Implementation Method	Resource Implications	Timeline
PIH	Publish utility data dashboards for PHAs and HUD	IT solution, policy	Reprioritize Existing Resources	FY23 Q1 – FY23 Q2
OEE	Develop scope for a High- Performance Building Database in partnership with DOE	Coordination	Reprioritize Existing Resources	FY22 Q2 – FY24 Q1
OEE	Develop updated approach to modeling carbon reductions and energy savings	Research	None	FY22 Q3 – FY24 Q2
Department- wide	Publish an Equitable Decarbonization Roadmap establishing a path for HUD's portfolio to meet the Nation's climate commitments equitably	Assessment	Reprioritize Existing Resources	FY22 Q1 – FY23 Q1

#### **Green Building Requirements and Incentives**

2.4 Update Codes and Standards Implementing Offices: CPD, Housing, PD&R, PIH

**Description**: Some HUD funding sources, including Choice Neighborhoods, CDBG-DR, and CDBG-MIT, have set minimum above-code Energy Star New Home or green building standards for new construction. Other programs, such as RAD, encourage adoption of these above-code green building standards. HUD will take steps to strengthen these green building standards and update minimum HUD new construction standards to align with IECC and ASHRAE 90.1 standards contingent on an affordability analysis as required by statute.

Office	Action	Implementation Method	Resource Implications	Timeline
OEE, FHA. PIH	Update Minimum Energy Standards through rulemaking	Rulemaking	None	FY23 Q3 – FY25 Q1
OEE	Evaluate voluntary stretch energy and/or resilience codes	Assessment	None	FY22 Q4 – FY23 Q2
OMHP	Consult with DOE on updating the building and energy efficiency standards for manufactured homes	Coordination, Rulemaking	None	FY22 Q1 – FY23 Q1

#### 2.5 Align Incentives with Efficiency

Implementing Offices: PD&R, CPD, OLHCHH, Housing, FHEO

**Description**: Existing utility subsidies in HUD public and assisted housing programs do not encourage or discourage recipients from taking steps to make their buildings more energy and water efficient. Program offices will take every opportunity to shift incentives toward energy- and water-saving investments in an equitable manner consistent with civil rights requirements and identify persistent barriers that require congressional action.

Office	Action	Implementation Method	Resource Implications	Timeline
Department- wide	Establish points for climate mitigation and adaptation measures in competitive Notices of Funding Opportunity (NOFOs), where appropriate	Coordination	None	FY22 Q1 – FY24 Q1
PIH	Implement Small Rural Frozen Rolling Base program	Technical Assistance	Reprioritize Existing Resources	FY23 Q1 – FY23 Q4
PIH	Initiate an Energy Performance Contracting (EPC) Innovation Pilot to encourage new strategies and approaches to utilizing the EPC Program	New Resource	Requested in the President's FY22 Budget	FY23 Q1 – FY24 Q4
PIH	Implement the Public Housing Rapid Return Utility Conservation Program, offering competitive grants to fund	New Resource	Requested in the President's FY22 Budget	FY23 Q1 – FY24 Q4

	capital investments to reduce utility consumption			
PIH	Target resources to make Indian Housing Block Grant- assisted housing more energy efficient and resilient, and to reduce energy and water consumption and utility burden	New Resource	Requested in the President's FY 22 Budget	FY23 Q2 – ongoing
PIH	Expand Choice Neighborhoods grants to support energy efficient and resilient design	New Resource	Requested in the President's FY 22 Budget	FY22 Q2 – ongoing
OEE	Coordinate with DOE to qualify HUD-assisted properties for DOE weatherization assistance	Coordination	None	FY22 Q1 – FY24 Q4
OEE, OLHCHH	Streamline and harmonize income eligibility requirements among HUD-funded rehab and lead hazard control programs, and DOE and HHS/LIHEAP-funded weatherization assistance programs	Coordination	None	FY22 Q1 – FY22 Q2
OLHCHH	Award cooperative agreements for joint interventions by OLHCHH Lead Hazard Reduction grantees and DOE Weatherization Assistance Program subgrantees to improve residential energy efficiency	New Resource	Requested in the President's FY22 Budget	FY22 Q1 – ongoing
OEE, OLHCHH	Pilot a model for integrating Lead Hazard Control, HOME/CDBG rehab, HHS and DOE weatherization funds	Coordination, Assessment	None	FY22 Q2 – FY23 Q3
FHA SF	Assess single family mortgage programs to identify opportunities to incentivize energy efficiency	Assessment	None	FY22 Q2 – FY23 Q4
FHA MF	Create the Green and Resilient Retrofit Program to combine direct loan subsidy and competitive grants to support energy efficiency and climate resilient improvements in assisted multif amily properties	New Resource	Requested in the President's FY 22 Budget	FY 22 Q1 – ongoing
Housing	Strengthen energy and resilience investments in RAD conversions	New Resource	Requested in the President's FY 22 Budget	FY22 Q2 – FY22 Q4

PIH	Award funds to Tribes for energy and water efficiency retrofits	New Resource	Requested in the President's FY22 Budget	FY22 Q1 – FY24 Q3
OEE	Create working group with program offices to assess current programmatic barriers to energy efficiency, including utility allowance methodologies	Coordination, Assessment	None	FY22 Q2 – FY24 Q1

#### **Capacity Building**

#### 2.6 Deliver Education and Training

**Description**: HUD program offices will provide educational materials and training to increase utilization of existing incentives for energy efficiency and resilience improvements among grantees, borrowers, and other program beneficiaries.

Implementing Offices: Housing, PIH, PD&R, CPD

Office	Action	Implementation Method	Resource Implications	Timeline
FHA SF	Develop stakeholder education strategy regarding tools and resources FHA offers to finance energy-related improvements and to mitigate climate hazards	Technical Assistance	Reprioritize Existing Resources	FY22 Q2 – FY24 Q4
FHA SF	Make necessary updates to training and marketing materials to ensure lenders and consumers are aware of flexibility of FHA's 203(k) program	Technical Assistance	None	FY22 Q2 – FY24 Q4
FHA SF	Develop and deliver training to ensure single family appraisers are aware of approaches for valuing energy- and hazard- mitigation-related improvements into valuation	Technical Assistance	Reprioritize Existing Resources	FY22 Q2 – FY24 Q4
PIH	Update guidance, and training for EPC, Energy Incentive Programs, and other programs, to support rural communities' energy efficiency hazard risk reduction efforts	Guidance, Technical Assistance	None	FY22 Q1 – FY23 Q3
CPD	Deliver training to spur adoption of Health@Home Rehabilitation Guidelines by HUD grantees	Technical Assistance	None	FY22 Q1 – FY23 Q1
PD&R	Collaborate with DOE to hold HUD-wide training and informational forum on energy efficiency	Training	None	FY21 Q4 – FY22 Q1

#### 2.7 Foster Innovation and Remove Barriers

Implementing Offices: CPD, PD&R, PIH

**Description**: PHAs and owners of HUD-assisted multifamily housing face a unique collection of barriers to energy and water conservation. The multifamily portfolio has a greater range of building types and systems than in any other building sector, there are potentially hundreds of different utility accounts per building, access to financing is limited by program rules, and organizations often lack the staff capacity to plan and implement a portfolio-wide investment strategy. HUD offices, often in partnership with the Department of Energy, will add to the current state of knowledge and find new strategies and solutions to help HUD grantees overcome these barriers.

Office	Action	Implementation Method	Resource Implications	Timeline
CPD	Support DOE Multifamily Solar Collaborative to address barriers and implement community solar in affordable multifamily housing	Coordination	None	FY22 Q1 – FY23 Q4
PD&R	Assess HUD's research and capacity-building needs related to health and safety compliance of older manufactured housing units for inclusion in HUD's 2022-25 Learning Agenda	Assessment	None	FY22 Q4 – FY24 Q2
PD&R	Assess HUD's research and capacity-building needs related to submetering and sale of renewable energy for inclusion in HUD's 2022-25 Learning Agenda	Assessment	Reprioritize Existing Resources	FY22 Q4 – FY24 Q2
CPD	Partner with DOE on Low- Carbon Pilot and launch of 50 percent Carbon Reduction Challenge	Coordination	None	FY22 Q1 – FY23 Q4

# GOAL 3: Pursue Environmental Justice

#### Goal 3: Pursue Environmental Justice

Addressing climate and environmental justice is at the core of HUD's mission to create strong, sustainable, inclusive communities. Environmental justice means ensuring equal protection from environmental and health hazards and providing equal and meaningful opportunity to participate in the decision-making process to achieve a healthy environment. In this plan, HUD commits to a variety of actions to empower communities to achieve climate resilience, facilitate economic opportunities, and eliminate health risks caused by environmental injustices. HUD has established environmental justice as a budget priority, ensuring that both HUD staff and its external stakeholders are aware of the significance of avoiding and reversing environmental inequities.

HUD strongly supports the Administration's whole-of-government effort to ensure that at least 40 percent of overall Federal investments in climate and clean energy are delivered to disadvantaged communities. Because of its unique focus on supporting low-income communities, HUD anticipates that most of its programs already exceed this goal. Nonetheless, HUD will strive to maximize investments in low-income communities, communities of color, and other disadvantaged and historically underserved communities.

Scale: Nationwide.

**Risks and opportunities**: Low-income communities and communities of color experience disproportionately large impacts from climate change and environmental hazards due to a history of disinvestment and discrimination. Without targeted intervention, these environmental inequities will widen.

#### Accomplishments to Date

Affirmatively Furthering Fair Housing. In addition to barring housing discrimination, the Fair Housing Act requires HUD and its grantees to administer programs and activities relating to housing and urban development in a manner that affirmatively furthers the purposes of the Fair Housing Act. This means taking meaningful actions that not only overcome patterns of segregation but foster inclusive communities free from barriers that restrict access to opportunity based on protected characteristics. Specifically, Affirmatively Furthering Fair Housing (AFFH) means implementing concrete changes that, taken together, address significant disparities in housing needs and in access to opportunity. These actions would replace segregated living patterns with truly integrated and balanced living patterns, transform racially or ethnically concentrated areas of poverty into areas of opportunity, and foster and maintain compliance with civil rights and fair housing laws.

On July 31, 2021, HUD's interim final rule to restore certain definitions related to AFFH and certifications incorporating those definitions became effective. Program participants covered by the rule certify that they will comply with the obligation to AFFH, consistent with the restored definitions. Program participants may voluntarily engage in fair housing planning to support their certifications, and HUD provides technical assistance and support to assist program participants in carrying out their obligation to AFFH, including by supporting funding recipients that carry out this voluntary fair housing planning process. HUD intends to undertake a separate rulemaking to build upon and further improve the 2015 AFFH rule by instituting a new fair housing planning process and framework to achieve material, positive change that affirmatively furthers fair housing.

Partnership with EPA's Superfund program. Since 2017, EPA and HUD have been engaged in a coordinated effort to address potential Superfund site-related exposure to residents of HUD Public Housing and multifamily assisted housing. This effort has helped EPA prioritize site work to protect communities located within Superfund site areas while also helping to inform future decisions and coordination with HUD. HUD and EPA continue to refine this analysis both to inform the interagency workgroup's ongoing effort to review HUD-assisted properties that may be at risk for site contamination and to reach the goal of providing accurate data to the public. Next steps and goals for this effort are discussed in section 3.4 below.

Radon protection. HUD's Offices of Housing, Multifamily Housing, and Healthcare have existing radon policies that are leading the mortgage insurance industry. HUD's Office of Multifamily Housing received the AARST Policy Leadership Award for "Leadership in Establishing and Implementing Effective Radon Risk Reduction Policies that Save Lives" in September 2019. Multifamily and Healthcare continuously refine radon policy in the MAP guide, 232 Handbook and the RAD program in coordination with HUD's Office of Healthy Homes, EPA, and the ANSI-AARST standards.

#### **Empowering Disadvantaged Communities**

3.1 Promote Climate Justice in Tribal Communities

Implementing Offices: PIH, PD&R

**Description**: HUD recognizes the unique legal and political relationship that exists between the United States and Tribal governments. The Department also recognizes the history of environmental inequities that has created barriers to achieving climate resilience in Tribal communities. HUD intends to help Tribal communities achieve safe, resilient housing and infrastructure through improved access to data, technical support, and funding opportunities.

Office	Action	Implementation Method	Resource Implications	Timeline
PD&R, ONAP	Assess HUD's research and capacity-building needs related to exclusion of Tribal Lands and communities in national climate, weather, utility, geological and infrastructure data for inclusion in HUD's 2022-25 Learning Agenda, and Coordinate with National Labs to address exclusions	Coordination	None	FY22 Q1 – FY23 Q1
PD&R, ONAP	Assess HUD's research and capacity-building needs related to Sustainable Construction in Indian County for inclusion in HUD's 2022-25 Learning Agenda.	Assessment, Guidance	None	FY22 Q1 – FY23 Q1
ONAP	Build capacity of Tribes and Federal agencies to develop efficient, coordinated environmental reviews and strengthen environmental	Technical Assistance	None	In progress – FY24 Q1

	compliance through the Tribal Housing and Related Infrastructure Interagency Task Force, led by HUD's Office of Native American Programs			
ONAP	Provide technical assistance to HUD customers to support sustainable, net zero/next generation building that is reflective of Tribal cultures and supports job creation	Technical Assistance	Reprioritize Existing Resources	FY22 Q3 – FY23 Q3

#### 3.2 Create Green Job Opportunities

Implementing Offices: PIH, CPD

**Description**: Invest in the creation of green jobs in partnership with PHAs and local workforce partners. Many HUD programs are subject to requirements in section 3 of the Housing and Community Development Act of 1968, which requires that employment and other economic opportunities generated by Federal financial assistance for housing and community development programs be directed, to the greatest extent feasible, toward low- and very low-income persons, particularly those who are recipients of government assistance for housing. HUD has an opportunity to guide and empower Section 3 compliance that supports green workforce development in the communities that HUD serves.

Office	Action	Implementation Method	Resource Implications	Timeline
CPD, PIH	Provide direct technical assistance to help PHAs and local workforce partners leverage Section 3 training and improve green economy employment outcomes through the newly created Building Futures pilot	Technical Assistance	None	FY21 Q3 – FY23 Q1
CPD, PIH	Based on experience in the Building Futures pilot, identify best practices and possibilities to scale up the program	Assessment	None	FY23 Q1 – FY23 Q2
PIH	Leverage EPC (including EPC Innovation Pilot Program) and Small Rural Frozen Rolling Base Programs to support investment and green jobs at the public housing level	Rulemaking, Guidance	None	In progress – FY23 Q4

#### 3.3 Encourage Equitable Community Planning and Engagement

Implementing Offices: FHEO, PD&R, CPD

**Description**: Provide resources and technical support to help communities improve equity in both community planning and community engagement. HUD will seek to include best practices related to removing barriers to and promoting the development of affordable housing in areas with low environmental hazards, providing meaningful access for individuals with Limited English Proficiency (LEP) and effective communication for individuals with disabilities, and advancing equity with selection criteria that avoid disproportionate allocations based on race other protected characteristics.

Office	Action	Implementation Method	Resource Implications	Timeline
PD&R, FHEO	Generate guidance on best practices for community land use and site planning, including zoning reforms and transit-oriented development, that promote energy efficiency and hazard mitigation	Research, Guidance	None	In progress – FY23 Q3
CPD, FHEO	Create a Citizen Participation and Engagement Toolkit for CDBG-DR and CDBG-MIT grantees. This online, interactive toolkit will help to ensure whole community recovery and resilience by providing information and resources to help grantees bring in the "whole" community to the conversation, specifically historically disadvantaged populations and protected classes	Technical Assistance	None	In progress – FY22 Q3
FHEO	Consider expanding Citizen Participation and Engagement Toolkit to other programs and audiences	Assessment	None	FY22 Q4 – FY24 Q1
CPD, FHEO	Publish guidance on how to incorporate use of Social Vulnerability Index (SOVI) and similar data into Consolidated Plan development and grantee priority setting	Guidance	None	FY22 Q3 – FY22 Q4
PD&R, FHEO	Assess practices that advance equitable implementation of disaster recovery resilience funding and generate guidance on best practices	Assessment, Guidance	None	FY23 Q1 – FY24 Q1
CPD	HUD's Office of Block Grant Assistance is assessing ways to provide specialized TA, best practices and guidance to field office staff and grantees around the existing required zoning element of the Consolidated Plan	Assessment, Guidance, TA		FY22 Q1 – FY23 Q1

#### **Healthy Housing Initiatives**

#### 3.4 Prevent Residential Lead Poisoning

Implementing Offices: OLHCHH, PD&R, PIH, CPD, Housing

**Description**: HUD is a leader in increasing awareness of lead poisoning prevention and reducing childhood lead exposure. HUD will continue to prioritize comprehensive reductions in Americans' exposure to lead pollution in their homes by addressing lead contamination in soil, air, water, and paint. This includes expanding HUD's existing lead control programs as well as continuing an ongoing partnership with EPA to assess and remediate potential health risks to residents of public and assisted housing both within and near Superfund site boundaries.

Office	Action	Implementation Method	Resource Implications	Timeline
OLHCHH	Update the soil-lead hazard standard for OLHCHH Lead Hazard Reduction Program grants by working with the EPA to identify a lower, more protective "action level" than the current standard	Guidance	None <sup>19</sup>	FY22 Q3 – FY23 Q3
OLHCHH, PD&R	Assess HUD's research and capacity-building needs related to lead risk and geospatial products for inclusion in HUD's 2022-25 Learning Agenda	Assessment	Reprioritize Existing Resources	FY22 Q1 – FY23 Q3
PIH	Issue policy guidance, provide technical assistance, and monitor public and voucher housing to further compliance with lead-based paint safety regulations	Guidance, Technical Assistance	None	FY22 Q1 – FY24 Q1
PIH	Launch competitive Lead-based Paint Capital Funds program for PHAs to test and abate lead paint	Guidance	FY22 Budget Request	FY22 Q4 – FY24 Q4
OLHCHH	Develop plans and implement Justice40 pilot in Lead Hazard Control and Healthy Homes Grants	Assessment, Guidance	None	FY22 Q1 – FY23 Q1
OEE, PIH, Housing, OLHCHH	Continue ongoing partnership with EPA to identify and investigate Public Housing and Multifamily assisted housing in which lead pollution and other contaminants of concern from NPL sites could impact residents' health	Coordination, Assessment	None	FY21 Q2 – FY22 Q4
CPD, PIH,	Where contamination is found in HUD-assisted housing, work across	Coordination, assessment	None	FY21 Q4- FY23 Q4

<sup>&</sup>lt;sup>19</sup> Although there may be resource implications for implementing any rulemaking, the full resource implications cannot be known until the rule has been drafted. Therefore, the resource implications for rulemaking apply only to the resources required to draft and publish the rule.

Housing, OLHCHH	Federal, Tribal, State, and Local agencies and nongovernmental organizations to help the impacted community identify available resources and appropriate solutions to eliminate hazards and improve residents' overall health			
PD&R, CPD, PIH, Housing, OLHCHH	Collaborate with EPA's Office of Brownfields and Land Revitalization, as well as State and Tribal Response Programs, to ensure cross-agency alignment with respect to changing climate conditions and brownfields policies	Coordination	None	FY23 Q1 – FY24 Q1

#### 3.5 Minimize Residential Radon Exposure

Implementing Offices: OLHCHH, CPD, Housing, PIH

**Description**: Coordinate across programs to develop targeted policy, guidance, and technical assistance to HUD customers to minimize radon exposure in the Nation's housing stock.

Office	Action	Implementation Method	Resource Implications	Timeline
OLHCHH, CPD, PIH, Housing	Deliver radon training series and guidance materials to HUD customers covering topics including radon basics, regulatory requirements, and testing and mitigation best practices	Technical Assistance	None	FY22 Q1- FY23 Q4
OEE, OLHCHH	Develop a simple departmental radon policy clarifying current regulatory minimums	Guidance	None	FY21 Q4- FY22 Q1
CPD, PIH	Develop program-specific radon policies for grantees and PHAs	Guidance	None	FY22 Q1- FY22 Q43
OEE, OLHCHH, PIH, Housing	Refine departmentwide radon testing and mitigation standards by rule	Rulemaking	None	FY22 Q1- FY24 Q4

#### 3.6 Update HUD's National Environmental Policy Act (NEPA) Policies

Implementing Offices: CPD, PIH, Housing

**Description**: Revise HUD's environmental review policies to ensure consideration of climate-and environmental justice-related hazards and health risks in all proposed site selection and placement of new assistance activities. HUD will update its NEPA-implementing regulations, guidance materials, and online tools to specify how HUD and grantees will consider climate-related hazards and environmental justice concerns in environmental reviews prepared pursuant to 24 CFR parts 50 and 58. This effort will reflect diverse concerns and resources, including guidance from the White House Council on Environmental Quality (CEQ), recent

evaluations of the potential health risks from lead and radon in public and assisted housing, and the particular impacts of climate change on vulnerable communities. CPD will work closely with program offices across the department to define program-specific policies and standards.

Office	Action	Implementation Method	Resource Implications	Timeline
OEE	Follow up on HUD's 2014 Climate Adaptation Plan and CEQ guidance by updating guidance on how to assess climate resilience and environmental justice when completing Environmental Assessments under 24 CFR parts 50 and 58	Guidance	None	FY22 Q1 – FY22 Q3
OEE	Revise HUD's environmental regulations – including 24 CFR parts 50, 55, and 58 – to better integrate strategies to mitigate climate- and EJ-related hazards and health risks in HUD-assisted activities	Rulemaking	None	FY22 Q1- FY23 Q4
CPD, PIH, Housing	Update Program guidance on environmental review procedures to include analysis of climate mitigation measures, adaptation strategies, and environmental justice	Guidance	None	FY22 Q2- FY23 Q4
CPD	Develop a training series for HUD customers and update HUD's online tools to reflect updated policy	Technical Assistance, IT Solution	None	FY22 Q3- FY23 Q4
CPD, PIH, Housing, FHEO	Extend ongoing efforts to improve environmental review compliance across HUD programs through improved guidance, technical support, and monitoring	Guidance, Technical Assistance	None	Ongoing

# APPENDIX D

#### Appendix A: Abbreviations and Acronyms

AFFH	Affirmatively Furthering Fair Housing
AOS	Add-On Subsidy
ASHRAE	American Society of Heating, Refrigerating and Air-Conditioning Engineers
BBC	Better Buildings Challenge
Btus	British thermal units
CDBG	Community Develop Block Grant
CDBG-DR	Community Development Block Grant Disaster Recovery program
CDBG-MIT	Community Development Block Grant Mitigation program
CEQ	White House Council on Environmental Quality
CFR	Code of Federal Regulations
CNA	Capital Needs Assessment
CPD	Office of Community Planning and Development
DOE	U.S. Department of Energy
DOI	U.S. Department of Interior
DRSI	Disaster Recovery and Special Issues Division
EEH	Energy Efficient Home
EJ	Environmental Justice
EO	Executive Order
EPA	Environmental Protection Agency
EPC	Energy Performance Contract
FEMA	Federal Emergency Management Agency
FFRMS	Federal Flood Risk Management Standard
FHA MF	Federal Housing Administration, Multifamily Housing
FHA SF	Federal Housing Administration, Single-Family Housing
FHEO	Office of Fair Housing and Equal Opportunity
FPM	Office of Field Policy and Management
FRB	Frozen Rolling Base

FY	Fiscal Year
GAO	Government Accountability Office
GHG	Greenhouse Gas
GI/SR	General Insurance and Special Risk
ннѕ	U.S. Department of Health and Human Services
HUD	U.S. Department of Housing and Urban Development
IECC	International Energy Conservation Code
IT	Information Technology
LiMWA	Limit of Moderate Wave Action
MIP	Mortgage Insurance Premium
ММІ	Mutual Mortgage Insurance
MW	Megawatt
NEPA	National Environmental Policy Act
NIST	National Institute of Standards and Technology
NPL	National Priorities List
OCIO	Office of the Chief Information Officer
OEE	Office of Environment and Energy
OLHCHH	Office of Lead Hazard Control and Healthy Homes
ONAP	Office of Native American Programs
PD&R	Office of Policy Development and Research
PHA	Public Housing Authority
PIH	Office of Public and Indian Housing
Q	Quarter
RAD	Rental Assistance Demonstration
REAL	Resilience and Energy Assistance Loan
RPU	Resident Paid Utility
SOVI	Social Vulnerability Index
TA	Technical Assistance
USVI	U.S. Virgin Islands