



MARYLAND BUILDING ENERGY TRANSITION IMPLEMENTATION TASK FORCE

Serena C. McIlwain, Secretary, Maryland Dept. of the Environment, Co-Chair
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Subgroup Consensus Recommendations Full Text

The Building Energy Transition Implementation Task Force (“Task Force”) had four subgroups: Limited-Income Housing covered and not covered by Building Energy Performance Standards (BEPS), Market-Rate Housing not covered by BEPS, Small Commercial and Institutional Buildings not covered by BEPS, and Large Buildings covered by BEPS. The full text of the recommendations from each subgroup is below, as agreed upon by the respective subgroup, and presented to the full Task Force during the September 28th and October 12th meetings. This information can also be found in slide show format on the Task Force webpage as meeting materials for the September 28th meeting. These recommendations have been summarized in the Task Force report in the Additional Recommendations section.

Limited Income Consensus Recommendations

Version: September 29, 2023

Whole Building Retrofit and Decarbonization

- The Department of Housing and Community Development (DHCD) manages a one stop shop (OSS) providing an entry point for all programs serving limited income housing and affordable properties, including naturally occurring affordable housing. (DHCD to manage most of these programs and integrates collaboration with all other programs.) OSS can take a whole-home approach, meaning addressing other barriers, providing audits and electric load studies, covering “soft” and upfront costs such as technical assistance for project design, energy audits, panel upgrades, and facilitating weatherization-first approach.
 - For example, [DCSEU Retrofit Accelerator](#), Philadelphia and GHHI models.
 - Accessed with portals specific to customer type, including landlords and individual homeowners: Single family vs multifamily, other unique sets of participants with unique challenges.
 - Provide “navigators” to assist affordable housing with applying and completing energy efficiency/electrification programs in compliance with the BEPS compliance extension rules.
 - Includes: Rehabilitation (including health and safety), electrification, weatherization, resilience, and maybe renewables.
 - Services like financing support.



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- Hub to have engagement capacity to provide active and ongoing partnerships with community groups for outreach related to the Hub.
- Connected with MEA's Hub.
 - Allow the Hub to serve as a consolidated entry point for current and future programs to reduce market confusion and barriers to entry for building owners serving the Limited Income Housing sector.
 - *Comments:*
 - *Clarification needed around Hub and MCEC interaction.*
 - *Cultural competence importance.*
 - *Active partnerships with community groups for outreach important.*

Prioritization and Target-Setting

- Prioritize investments in retrofits over new construction.
- Incorporate climate commitments and BEPS considerations into all housing investments.
- New construction investments should prioritize the LI market and be energy efficient, healthy, resilient, and all-electric and build on existing program certification standards.
 - Examples: [New York State Energy Research and Development Authority \(NYSERDA\) Buildings of Excellence Competition](#) and [Massachusetts Green Bank for Affordable Housing](#)
- Guard against net cost shifting to limited income residents (for instance residents who pay for their electricity and previously had heat included in rent)
- Prioritize funding for affordable housing, including naturally occurring affordable.
- Define decarbonization broadly to include health and resilience.
- The [Green and Healthy Task Force](#) should set a clear and transparent statewide minimum limited income decarbonization target (e.g. xx units decarbonized by xx date) that all departments and stakeholders can work towards. Target to be aligned with the state's climate goals, BEPS, and timeline.
- Ensure that funding is provided to owners of subsidized and naturally occurring buildings serving limited income customers.
 - Provide funding for decarbonization for LI MF owners at the time of property recapitalization,
 - Incorporate climate commitments and BEPS considerations into housing subsidy awards, such as the [DHCD Qualified Allocation Plan \(QAP\) process](#)

State Programs



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- Given ongoing and expected increases in state program needs towards limited income housing programs that “leave no one behind” and related decarbonization efforts by a variety of state agencies, the Maryland Department of Budget and Management should add additional staffing and budget needed to meet demands from the General Assembly and the Governor.

Funding Avenues

- Allow Medicaid to fund decarb for health benefits.
- Phase out subsidies that currently exist for gas equipment, projects, or infrastructure and redirecting towards electrification needs of Limited Income communities.
 - Example: STRIDE (funded by utility ratepayers)

Other

- Invest in existing workforce development programs targeted at frontline communities.
 - Provide technical assistance to the educational institutions supporting apprenticeship, workforce, and training programs.
- Invest in incentivizing contractors to 1) serve Limited Income (LI) housing market and 2) create good jobs for people from Maryland’s frontline communities.
 - Employ tax credits, training support, subsidies, or similar.
 - Resources to contractors such as training and hiring support to establish an inclusive workforce to support limited income.
 - Referral program since contractor may not know about LI - part of one-stop shop/navigator role/ But not make things too complicated.
 - Connect with private manufacturers to jointly invest in training facilities for the manufacturing and installation of products used in building decarbonization to create workforce opportunities for frontline Maryland communities.
- Make sure programs do not require up-front payment from residents to be reimbursed later (e.g. avoid post-construction rebates)
- Align with Justice 40, Inflation Reduction Act, HUD Section 3 Requirements, workforce standards (e.g. U.S. Workforce Innovation and Opportunity Act, [WIOA](#))
- Invest in limited income housing without regard to metering configuration, housing type, system type, or utility customer class.



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Important considerations

- Limited Income sector will require majority of funding to be no upfront costs without having to leverage debt (i.e., not post-project rebates) - this is true for LI homeowners and NOAH housing and off-cycle subsidized housing.
- Financing products must be flexible to align with property lifecycle (15-year refinancing periods for subsidized housing)
- Community and contractor partnerships will be key for outreach and enrollment.
- Health and safety and other complementary projects will be common - e.g. removing mold before weatherizing, upgrading wiring before electrifying.

Market Rate Residential Consensus Recommendations

Version: September 19, 2023

Strategy Priorities

- End state funding and utility incentives for fossil fuels (e.g., end incentives for efficient gas-fired systems) and transition rapidly towards beneficial electrification, electric efficiency, and envelope/weatherization measures.
 - Establish a method for determining whether there are narrow exceptions where there are not viable alternatives for specific building and market sectors.
- Take legislative and regulatory action to accelerate transition away from fossil fuel use in buildings.
 - (Example: Maryland Public Utilities Article 7-211)
 - Adopt a market transformation approach, with a multi-pronged focus on shifting building technology markets to make low-carbon solutions the default (as opposed to an approach focused primarily on deploying incentives building by building).

Incentives

- Enhance EmPOWER and other efficiency incentive programs to drive rapid decarbonization:
 - Explicitly allow incentives for fuel switching from fossil fuels to electric in EmPOWER programs.
 - Add GHG savings goals to EmPOWER.
 - Include not just electrification, but also a continued and expanded focus on weatherization and other non-electrification efficiency



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projects.

- Streamline and improve incentives at all points of the supply chain.
- Implement state programs that expand availability of EmPOWER to businesses and residents that are not served by a participating utility, so they are not left behind (~100,000 customers / ~4% of all electric accounts in state)
- Ensure EmPOWER audits examine electrification-readiness and provide incentives for non-equipment costs that help buildings become electrification ready, such as electrical supply heavy-ups.
- Ensure quality installations through consistent system commissioning h. Explore innovative solutions for supporting transition in event of system failure.

Accessibility

- The MEA Climate Transition and Clean Energy Hub created by the Climate Solutions Now Act (9–2010) can create new engagement opportunities for market rate building owners, including single family and multifamily.
 - May help clarify federal program requirements.
- Develop streamlined retrofit accelerator concierge service to provide one-stop-shop for homeowners to upgrade homes.
- Ensure incentives and programs can be accessed by entities other than building owners, including renters, condo boards, common ownership communities, builders, and trades.

Workforce Development

- Increase workforce development, including improved training and apprenticeship programs that align with requirements of the 45L (homes) and 179d (commercial/large multifamily) tax incentives.
 - Example institutions: nonprofit organizations, community colleges, other

Financing

- Scale up the green bank by equitably raising and appropriating the millions of dollars needed each year through 2045.
- With input from the Public Service Commission, explore requirements for utilities to provide ratepayers with on-bill repayment options and [Inclusive Utility Investment a](#). *(Careful analysis needed for any new program, including relating to consumer protection and cost-benefit analysis. Affordable source of capital that may include federal offerings or new state bonding or funding)*



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- Maryland should ensure or incentivize private capital providers to include energy, greenhouse gas emissions, or financial saving guarantees to customers for loans or financing.
- Provide appropriate consumer protections related to lending products and on-bill financing.
- Offer statewide residential home energy improvement loan program that is easy to use, coordinated closely with incentive programs for customers and contractors, and includes credit enhancements that expand affordable access to moderate-income and other households without existing access to affordable home improvement capital.

Tax Incentives

- The Comptroller's Office should report to the General Assembly and the Governor on potential tax incentive options to encourage homeowners to decarbonize.
- The state should ensure alignment between state and federal incentives to the maximum extent possible.

Utility data and rates

- With input from the Public Service Commission consider requirements for utilities to:
 - Include greenhouse gas information in bills and other communications following GHG accounting rules set by the PSC.
 - Use meter data to identify and target customers for fuel switching and/or weatherization and efficiency upgrades in focus on those who would most benefit from the upgrades and have the biggest climate impact.
 - Consider decarbonization impacts during electric and gas rate design. d. Adopt and promote rates that support efficient use of electricity in connection with building electrification (e.g. peak load management, demand response, time of use pricing), including consideration of opt-out options.
 - Consider treatment of cost causation to ensure equitable distribution of costs for interconnections and service upgrades supporting electrification.

Disclosure and Education

- Implement disclosure of home energy performance (e.g., Home Energy Score / ENERGY STAR score) and energy audit results in sales and rentals of residential properties.
 - Include in MLS listings, costar, etc. – early disclosure to impact decision-making.
- Proactive outreach and education for consumers on electrification opportunities,



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including:

- Disclosure and education at time of equipment maintenance to support planning for equipment replacements
- Education for service providers and contractors, tied to licensing requirements
- *[WHO should do this – needs to be addressed?]*

Small Commercial & Institutional Buildings Consensus Recommendations

Version: September 22, 2023

Strategy Priorities

- End state and utility incentives for fossil fuels by Jan 1, 2025, and transition towards beneficial electrification, electric efficiency, and envelope/weatherization measures.
 - Establish a method for determining whether there are narrow exceptions where there are not viable alternatives, or the cost differentials are too large.
 - Discussion: For school buildings, operational funding is necessary.
- Appropriate resources needed through 2045 to scale up the MEA Climate Transition and Clean Energy Hub created by the Climate Solutions Now Act. Simplify programs statewide and make them easier to use.

Data Analysis

- MDE should conduct more detailed analysis on the makeup of smaller commercial (35k sq. ft) and institutional buildings to better understand the needs of this sector.
- Conduct a gap analysis of decarbonization costs and available incentives specific to the small commercial and institutional sectors.
- Identify underserved, equity-priority institutional and smaller commercial building types (e.g. houses of worship, non-profits, community centers, clinics, etc.) or underserved/overburdened priority areas that need deeper support and funding that can cover the full capital costs of the transition.

Energy Efficiency Incentives

- Enhance EmPOWER and other efficiency incentive programs to drive rapid decarbonization including a focus on building envelope, passive strategies, and non-



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equipment costs (e.g., panel upgrades, heavy-ups, structural improvements needed to enable heat pumps, etc.)

- Prioritize under-resourced building groups and locations for funding, and increase funding for those groups to cover a higher percentage of project costs (rather than just trying to cover a small incremental cost and relying on long term paybacks)
- Ensure proper systems commissioning and provide support for long term maintenance of efficient equipment.
- Include covering of soft costs and administrative costs (e.g., pre-design costs and engineering studies, administrative requirements for program application, etc.) needed to make projects financeable.
- Consider need for structural incentives that help with processing (e.g., expedited permitting)

Tax Incentives

- The Comptroller's Office should report to the General Assembly and the Governor on potential tax incentive options to encourage small commercial and institutional buildings to decarbonize.
- The state should layer and align state and federal incentives to the maximum extent possible (e.g., x% on top of federal tax incentive percentage). Minimize complexity in filing for state programs by leveraging federal application materials. Explore ways the state incentives could fill gaps in eligibility for federal incentives.
- Review historic preservation rules and incentives for alignment with decarbonization, including providing a process to consider exceptions from historic preservation rules for equipment changes that deliver deep energy and emissions savings.

Workforce Development

- Increase workforce development, including improved training and apprenticeship programs that align with Justice 40 initiative and the requirements of 179d tax incentives.
- Align with federal workforce programs including [WIOA](#) (Workforce Innovation and Opportunity Act) and HUD Section 3 programs, and link to state programs to prevent duplication.
- Work with the Department of Labor and existing trade programs and buttress and expand them, including to more locations.

Financing



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- Scale up the state green bank functions at the Maryland Clean Energy Center by equitably raising and appropriating funding as needed each year through 2045.
- Examine commercial PACE program, expand to all counties, and explore adjustments to make it work better.
- With input from the Public Service Commission, explore requirements for all utilities to provide ratepayers with on-bill repayment options and [Inclusive Utility Investment](#)
- Make energy efficiency as a service (EaaS), performance contracting, etc. more accessible and flexible for smaller commercial buildings.

School Decarbonization

- Require schools to benchmark and report energy use on a school-by-school basis. Include school buildings in state BEPS and provide sufficient financial support and training for compliance.

Disclosure and Education

- Proactive outreach and education for building owners on electrification opportunities
- Require utilities include greenhouse gas information in bills and other communications, following GHG accounting rules set by the PSC.

Large Buildings (Covered by BEPS) Consensus Recommendations

Version: September 19, 2023

Grow the MEA Clean Energy Transition Hub

- Appropriate the millions of dollars needed each year through 2045 to scale up the MEA Climate Transition and Clean Energy Hub created by the Climate Solutions Now Act (9–2010). The Hub will:
 - collaborate with the community.
 - provide technical assistance.
 - develop case studies.
 - catalyze peer learning networks.
 - help the market to understand 1) legal requirements, including BEPS and building codes, 2) labor standards, and 3) federal, state, and local decarbonization incentives.
 - assist with workforce development.

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<https://mde.maryland.gov/programs/air/ClimateChange/Pages/BETITF.aspx>



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- maintain a curated list of recommended industrial and professional certifications by project type.
- provide support to residential buildings.
- serve as a matchmaker among building operators, service providers, and capital markets.

Decarbonization Contractors Program

- The Maryland Energy Administration with the Department of General Services 1) pre-qualify contractors, 2) monitor service quality including by receiving customer complaints 3) remove contractors from the pre-qualified list if needed, and 4) provide example pricing for residential and commercial decarbonization projects. Participation in this process would be completely optional for both building owners and contractors.
 - Coordination could be done with the MEA Hub, intergovernmental contracts, and regional partners.

DHCD MEEHA Support

- Provide additional funding for the Maryland Department of Housing and Community Development's (DHCD) [Multifamily Energy Efficiency and Housing Affordability \(MEEHA\) program](#) to pay for owner representatives/project managers incented to help oversee every aspect of efficiency and decarbonization projects. This assistance is helpful for owners with limited capacity to have someone help shepherd projects from start to finish.

Workforce Development

- The Maryland Department of Labor works with the MEA, large and small employers, schools, community colleges, training programs, nonprofits, and labor unions to establish and provide long-term subsidies to apprenticeship programs targeted at providing to people from frontline Maryland communities the skills needed to decarbonize buildings. Apprenticeships must be designed so that they meet state and federal requirements including the section 179d tax deduction and other tax incentives in the Inflation Reduction Act (IRA). Any state tax incentives should be aligned with federal labor requirements.
- To fill career pipelines, invest state funds in mapping the trades that are needed today and will be needed through 2045 to decarbonize Maryland buildings and the career pathways that the Maryland workforce can follow to grow their skills and salaries. Highlight trades that will be in particularly short supply. Target

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these interactive career maps to youth, returning citizens, veterans, former fossil fuel workers, and the public directly online and via channels including school and career counselors. Connect skill seekers to vocational programs.

Tax Incentives

- The Comptroller's Office should recommend to the General Assembly and the Governor on potential long-term tax incentives to encourage owners to decarbonize buildings covered by BEPS and being renovated, including office-to-residential conversion. The recommendation would respond to the urgency of the climate crisis and consider simplicity in program design; performance metrics; consolidation of existing incentives; alignment with federal, state, and local incentives; and long-term costs and benefits, including relating to financial, social, and environmental factors.

Utilities and Building Decarbonization

- With input from the Public Service Commission and consideration of the Task Force's top two principles (drive early action and equity), consider requirements for utilities to:
 - Provide ratepayers with on-bill repayment options ([Inclusive Utility Investment](#), utility provided financing, and/or 3rd-party on-bill-repayment)
 - Provide owners with user-friendly, set-it-and-forget-it [access to aggregated whole building utility data](#) to enable owners to comply with benchmarking and BEPS requirements and to qualify for federal tax incentives and rebates. PSC should hold utilities accountable for promptly and automatically uploading to benchmarking platform [accurate](#) and timely data.

Priorities

- Swift action commensurate with the urgency of the climate crisis and the state's 2045 climate commitment
- Prioritize equity and housing security. So,
 - Prioritize funding to improve affordable housing and enable it to comply with BEPS to prevent displacement.
 - Avoid regressive incentives (e.g. tied to value of property instead of to societal benefits)
 - Prioritize creation of high road jobs, pathways to the middle class, and opportunities for frontline communities



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- Consolidate incentive and other programs, align agencies, and prevent stove piping. A small number of broad programs are easier for people to navigate than many narrow programs.
- Streamline the process of applying for incentives and minimize reporting. Cumbersome reporting often deters people from applying.
- Focus incentives early in building planning cycle for maximum cost effectiveness: pre-construction and specially pre-design, e.g. incentivize electric load studies.
- Incentive electricity demand management
- Partially fund investments through:
 - Redirect state and utility funding away from fossil fuels (e.g., efficient gas systems) and towards electrification and efficiency measures
 - Maryland Department of the Environment trust fund supported by fees associated with non-compliance under BEPS beginning in 2031.
 - Incentive programs should be compatible with and incent.
 - design-build-operate-and-maintain (DBOM) and energy-as-a-service contracts with service level agreements.
 - To the extent practical, align state and utility incentives with BEPS and with federal incentives from all federal agencies (including DOE, EPA, IRS, HUD, FHA Green MIP, Freddie Mac, and Fannie Mae)
- Factor in non-equipment costs (e.g., soft costs, envelope improvements, panel upgrades, heavy ups, structural improvements to enable heat pumps)
- These priorities should be followed by all programs, including PSC and utility programs.