

Education, Outreach, and Workforce Development

Does the subgroup feel that buildings will be able to comply with the targets with the existing workforce?

CONSIDER: Challenges, Existing Resources, Needs

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No - rate of conversion of square feet of commercial and multifamily units for heat and hot water is very high.

Currently no, cost will be a huge challenge and want to undertake a project by individual owners

Streamline the permit process and get the permitting offices onboard with the new programs so there is no bottleneck in the process

What analysis has been completed to determine manufacturer production capacity of the heat pumps?

No, there is a significant shortage in the trade workforce currently.

No, we will have to train more people. Could we train high school graduates in the governor's service year program?

Design considerations and operating skills need to be better understood

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yes, as long as training is provided to remove technology bias

Modify the electrical code, allow for insulating over older wires

No, it's already challenging to find quality vendors to do retrofit work

mostly yes, though more qualified electricians may be needed - limitations more related to funding

we will need to develop programs within the public schools and the community college systems to help channel students into the trades and IT sectors

Existing workforce is not enough; Concern w/lack of skilled trades education in Fred Co behind 10+ yrs in preparing for future. Barriers: (e.g. transportation, language, etc.)

Do heat pumps have lower maintenance needs compared to replacement systems? This could be a non-energy/carbon/\$ benefit to emphasize if so.

need training of design professionals, convincing them to move away from the easy answer of gas heat

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Revise MDE interpretation to be consistent with Land Use Article Sec 4-210 making clear a solar panel is impervious for SWM, for zoning, etc

Building/facility engineers are critical to operating buildings efficiently. This is a rapidly aging sector that may not be focused on efficiency, BAS, etc.

Incentives are needed to generate the additional workforce that is needed

Yes, unless high unregulated energy makes the target impossible

Create electrification vendor network similar to utility service provider network to implement EE programs

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Education is needed for the building owners as well to understand the targets and how to comply

Workforce seems to be most comfortable suggesting and installing equipment they are most familiar with

Finance

What financing gaps exist in the market? What building types are likely to use financing if it were available?

CONSIDER: Challenges, Existing Resources, Needs

Provide for State confidentiality provisions for businesses participating (.. MDE should only release aggregated data and the like)

Government should prepare to provide significant financing, subsidies for the most difficult to convert, least-cost effective buildings.

State and local law should be amended to expand the current commercial PACE to include residential PACE (with appropriate consumer safeguards)

future non-monetary benefits are difficult to monetize at the building level.

All- gov't, comm, inst, etc Gaps- covering cost for electrification beyond heat pump; ie new panel, etc.

Small to Medium projects are challenging--these are often paid for via cash reserves and done while a building is in operation, so revenue is likely to stay flat post-install

MEA grants. MDHCD loans, tax credits, utility incentives are all possible funding avenues

Exempt from transfer and recording when at least 50% of the new debt will be used for improvements to reduce GHG emissions

Provide opportunities for private equity to finance or provide long term leasing, similar to the electrification efforts in Ithaca

Gaps exist in low-income private housing. Funds should be used to help landlords make the switch.

Why

Understanding what financing is available and resources to navigate process to secure

Allow reporting to MDE by secure and confidential means, including not over the Internet and by paper copy

Work closely with Fannie Mae and Freddie Mac to entice investors to invest in Maryland with special loan programs

Enact a state and local government 100% property tax credit for buildings achieving LEED Zero Energy certification (or the like, as regulated by the MD Green Building Council)

More green investing resources need to be accessible in the state. Conventional financing packages even with government support may not work for all owners

Counties may impose personal property tax, and state law should provide newly installed GHG reducing personal property is exempt from that county tax.

Additional resources are needed to support long-term leasing and financing, either through the green bank or private equity. Private equity is being used in Ithaca for electrification.

Alter the existing state and local regulatory schemes to make commercial PACE faster, easier, and cheaper and use state grants to 'buy down' private PACE loans

There are incentives in the market currently that will become more and more limited- BGE programs have limited annual funding. Most buildings will need funding help.

need to develop effective partnerships with the private sector -- there is plenty of capital available but some backstop or from government entities may

Cause the land beneath solar panels to be assessed for real estate taxes at the lowest tax rate and the solar panel structures to be exempt from tax

also need to consider amount of in-house resources owners may have - single building owner versus large portfolio or organization

Bill financing through utilities

Increase/leverage IRA green bank financing

Exempt from transfer and recording tax net zero energy buildings (i.e., LEED Zero Energy or the like, per MD Green Building Council) through 2029

need to consider owner types - developer, non-profit, commercial, local govt - as they have different financing mechanisms

Cost of compliance for difficult to mitigate buildings can be lowered through use of offsets, credits and / or a prescriptive pathway.

many incentives assist with equipment but don't address expenses needed to upgrade electrical service & bldg infrastructure

first costs are high and often the responsibility of building occupants rather than the owner.

Gaps exist for low-income privately owned housing. Funds should be used to alleviate costs for these property owners.

Consider the cost shift dilemma in multifamily when centralized systems on the owner meter are converted to individual tenant systems (there are answers)

Clarify the requirement of landlord/ tenant exchange of energy and related GHG emission data and make exchange requirements reciprocal

Incentive Alignment

How should the state align federal and state incentives to maximize available funds for decarbonization?

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The regulations should provide that a LEED Zero Energy certified building satisfies that statute's net zero requirement by 2040

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Enhance recently expanded federal 179D tax deduction of \$5 per sq ft with state per sq ft grants to reduce costs of new federal prevailing wage and apprentice requirements

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Make federal 179D tax deduction more efficacious and more valuable with a state tax "credit" with the same qualifications as the federal deduction

Make more valuable the updated federal 45L tax credit eligible for new or substantially reconstructed homes

Look at what projects can deliver most impact and prioritize across different agencies to accelerate

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Make application easy and minimize reporting- funds often not used due to cumbersome reporting

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Financing through utility incentive programs for targeted energy savings measures

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Look for projects that deliver the most carbon reduction and prioritize alignment of incentives to accelerate

Property Tax Exemptions for efficient building upgrades could help expedite payback periods

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Respect building life cycle and monetizing events in BEPS compliance schedule.

Electric Load Studies need to be offered to all large buildings to assist with electrification--many owners do not know if there is capacity to shift energy load from gas to electricity

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Combine weatherization programs to the deck of options that would allow buildings to operate more efficiently

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Eligibility of state/EmPOWER incentives should align with IRA incentive eligibility

Work with banks to understand the implications of government incentives so they examine project risk and align/offer financing options accordingly

Technical guidance or support on layering incentives. You have to hire someone to navigate these complex applications.

make sure incentives and recommendations don't end up working against electrification, as some utility programs do now

Need access to utility usage data, especially difficult in multifamily

Gap analysis between common incentives like HUD Green MIP and higher performance levels

encourage 100% depreciation of new systems and energy related building shell improvements

There should be tax incentives for participating in programs like LEED, BOMA BEST, Etc that focus on sustainability and energy reduction.

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Technology

What decarbonization technology or approaches need more support (incentives, programs, education, etc) to gain wide adoption for non-BEPS buildings?

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