

June 29, 2022

Tamara Wilson
Minnesota Housing
400 Wabasha Street North, Suite 400
Saint Paul, MN 55102

Re: Minnesota Housing's Draft 2024-25 Qualified Allocation Plan

Dear Ms. Wilson,

We commend Minnesota Housing for its longstanding commitment to increasing the energy and water efficiency and sustainability of affordable housing, including its leadership in creating the Energy Rebate Analysis to help owners access utility-sponsored energy efficiency resources. In Minnesota Housing's 2024-25 draft Qualified Allocation Plan, we applaud the following proposed changes:

- Reinforced focus on serving those with the greatest needs, the largest barriers, the fewest choices, and lowest incomes, by simplifying and prioritizing applications for housing projects dedicated to survivors of domestic violence, individuals with disabilities, native tribes and peoples, small and rural communities, and individuals facing housing insecurity, respectively.
- Revising the category name to “Black, Indigenous, and People of Color-owned/Women-owned Business Enterprise (BIPOC/WBE).” “We believe BIPOC” is a more commonly used and representative term, which importantly names “Black” as related to but distinct from “People of Color.” Updating criteria language to be more respectful and inclusionary is a small but significant change.
- Applying new tenant screening guidance to reduce barriers across all housing types that seek funding from Minnesota Housing. The 2018 Minnesota Task Force on Housing identified that tenant screening criteria can have an unintentionally discriminatory impact and recommended strengthening protections for renters in the private market. We acknowledge and appreciate Minnesota Housing for prohibiting the disqualification of applicants on the basis of credit and rental history, as the City of Minneapolis and the City of St. Paul have done.
- Adopting the Category 6 (Materials) modification: Criterion 6.4: Healthier Material Selection from the 2020 Enterprise Green Communities as mandatory rather than optional.

Below, we list seven recommendations to help Minnesota Housing build on past success for the latest QAP, and the following information provides context for them:

According to the University of Minnesota, “Nearly one in three counties in Greater Minnesota has an average energy burden of 5 percent or higher, according to data from the U.S. Department of Energy National Renewable Energy Laboratory, compared to the national average of 3.5 percent and Minnesota statewide average of 2 percent. Some Minnesotan households spend as much as 30 percent of their income on energy.”¹ Meanwhile, the state of Minnesota is not on track to meet its own greenhouse gas reduction goals. State law aims for reductions to “all sectors producing those [greenhouse gas] emissions to a level at least 15 percent below 2005 levels by 2015, to a level at least 30 percent below 2005 levels by 2025, and to a level at least 80 percent below 2005 levels by 2050.”² The Minnesota Climate Action

¹<https://extension.umn.edu/rsdp-happenings/reducing-energy-burden-greater-minnesota#:~:text=Nearly%20one%20in%20three%20counties.statewide%20average%20of%202%20percent>.

²<https://www.revisor.mn.gov/statutes/cite/216H.02#:~:text=It%20is%20the%20goal%20of,below%202005%20levels%20by%202050>

Plan sets a goal of a “45% reduction in greenhouse gas emissions by 2030 to achieve a carbon-free future by 2050.”³ The Minnesota 2021 biennial report⁴ demonstrates that the state’s emissions have declined just 8 percent since 2005- well short of the goal of 30 percent by 2025. Since buildings in Minnesota account for 41 percent of total energy consumed in the state,⁵ reducing emissions from affordable housing is necessary to help meet the state’s goals equitably. In other states with greenhouse gas-emission reduction goals, Housing Finance Agencies are supporting climate-friendly affordable housing. For example, the Colorado Housing Finance Authority recently adopted the following guiding principle in their QAP:

To contribute to Colorado meeting its 100 percent Renewable Energy goals by 2040 and Climate Action goals to reduce greenhouse gas emissions to 26 percent below 2005 levels by 2025, 50 percent by 2030, and 90 percent by 2050:

- *To support affordable housing that is constructed and certified to advanced energy performance standards, such as the Department of Energy’s Zero Energy Ready Home (ZERH) program, Passive House Institute US (PHIUS), or Passive House Institute (PHI); and/or*
- *To support affordable housing that is constructed to be Electrification-Ready for future conversion to all-electric*

The recent enactment of the Energy Conservation and Optimization (ECO) Act should result in additional resources to support energy efficiency and electrification in affordable housing that would complement QAP incentives that encourage reductions in greenhouse gas emissions. ECO increased the minimum spending requirement for utilities to fund dedicated programming for low-income customers and incentivizes electrification by allowing utilities to claim energy savings from fuel-switching toward their goals.⁶

These comments are submitted by the Midwest Building Decarbonization Coalition (MWBDC), Community Stabilization Project, Elevate, Fresh Energy, Minnesota Housing Partnership, National Housing Trust, Natural Resources Defense Council, Phius, Precipitate, RMI, Slipstream, and William Weber Consulting:

1. Require an energy consultation or audit as a condition of eligibility for Housing Credits for rehabilitation projects, which can be included as part of a capital/physical needs assessment.
2. Focus significant QAP points on existing building certifications and deep energy conservation improvements, including points for improved energy efficiency.
3. Create additional building certification pathways.
4. Require all new construction projects to be electrification-ready at a minimum and consider awarding more points for electrification of heating/cooling, hot water, and cooking.
5. Offer points for providing internet/broadband service
6. Adopt either the Category 6 (Materials) or just Criterion 6.1 *Ingredient Transparency for Material Health* as mandatory rather than optional.
7. Simplify the point allocation system for the “Enhanced Sustainability” section by consolidating the Self Scoring document and the Overlay, or at least distinguish each Tier with just one pathway.

³<https://www.house.leg.state.mn.us/dflpdf/990649f7-d9db-4ffd-a5b5-496baddbb282.pdf>

⁴<https://www.pca.state.mn.us/sites/default/files/Iraq-1sy21.pdf>

⁵<http://www.dli.mn.gov/sites/default/files/pdf/BuildingsEnergyEfficiency2020.pdf>

⁶<https://www.mw alliance.org/blog/minnesota-passes-eco-act-modern-and-expansive-update-its-ee-framework>

1. Require an energy consultation or audit as a condition of eligibility for Housing Credits for rehabilitation projects, which can be included as part of a capital/physical needs assessment.

A building assessment by a professional can reveal many repairs and improvements that are cost-effective, meaning they will reduce energy expenses in an amount greater than the cost of the work. The term “audit” generally refers to an assessment conforming to ASHRAE standards. In certain projects, a less thorough assessment and report by a certified professional can identify cost-effective measures. We encourage Minnesota Housing to require multifamily rehabilitation project teams to consult an energy efficiency professional or complete an energy audit to identify and consider all cost-effective energy savings opportunities to be included in the property’s rehabilitation scope. Minnesota’s Conservation Improvement Program (CIP) can help to accomplish this, as it is designed to “help households and businesses use electricity and natural gas more efficiently- conserving energy, reducing carbon emissions, and lessening the need for new utility infrastructure. The CIP includes energy audits and rebates for energy efficiency measures and is funded by ratepayers and administered by electric and natural gas utilities.”⁷ As of 2020, 14 states⁸ took this approach, including Missouri, Kansas, Georgia, and Maryland. For example:

- *The Missouri Housing Development Commission requires multifamily rehabilitation projects over 12-units seek an energy audit to help owners identify and consider all cost-effective energy savings improvements that could be incorporated into the property’s rehabilitation scope.*
- *The Georgia Department of Community Affairs requires rehabilitation projects to conduct energy audit to identify energy conservation measures that would result in an overall energy savings of 20% or greater over pre-retrofit levels or have a Savings to Investment Ratio (SIR) of 2.0 or greater.*

Encouraging developers to participate in a professional energy audit while applying for tax credits and other financing will allow owners to identify cost-effective energy efficiency and water efficiency upgrades that can be incorporated using newly expanded utility incentives and rebates.

2. Focus significant QAP points on existing building certifications and deep energy conservation improvements, including points for improved energy efficiency.

To support meeting the state’s carbon emissions reduction goals, Minnesota Housing should give greater weight to “Enhanced Sustainability” with more points than currently offered. More points for the Tiers and Pathways outlined in the Overlay document will mean that more developers will prioritize the energy efficiency and building certifications, which will directly reduce emissions and the energy burden of low-income residents, as well as improve the comfort and preservation of affordable homes.

In addition to requiring rehabilitation projects to seek an audit to identify cost-effective energy savings measures, Minnesota Housing should consider awarding points to applicants who demonstrate that they will incorporate measures identified in the audit to achieve a certain level of energy savings above a pre-retrofit baseline. This will encourage developers to include measures from the audit in their rehabilitation scope and combine technologies to optimize the performance of the building as a whole. For example:

⁷ <https://mn.gov/commerce/industries/energy/utilities/cip/>

⁸ https://www.nationalhousingtrust.org/sites/default/files/page_file_attachments/2020%20State%20Strategies%20to%20Improve%20Energy%20Efficiency%20in%20LIHTC%20properties%20%281%29.pdf

- *The Maryland Department of Housing and Community Development requires an energy audit and requires all energy conservation measures with a Savings to Investment Ratio of 2.0 or greater to be included in the project scope. In addition, DHCD awards additional points to rehabilitation projects that will result in an overall energy savings of 20-30% greater than pre-retrofit levels.*

3. Create additional building certification pathways.

We recommend creating a fourth tier that would include building energy, electric-ready, and all-electric certifications. Currently, Tier 3, Pathway 2 is a more rigorous and involved process from a building science perspective than the other Tier 3 Pathways and should earn more points. We suggest moving the following building certifications and electric-ready building standards from their current pathway and into their own “Tier 4” with more points allocated: Zero Energy Ready Home (ZERH) with required solar/RECs to achieve net zero, Passive House Institute (PHI) Classic, Phius CORE, Phius ZERO, PHI Plus, PHI Premium, International Living Future Institute’s Zero Energy Petal, Zero Carbon Petal, Living Building Challenge, and GreenStar Homes Certification, which is already built into a local St. Paul funding program.⁹

The new Tier 4 should also include pathways that are achievable in rehabilitation projects. This will help ensure that rehabilitation projects are not put at a disadvantage compared to new construction projects. For example, Delaware has a similar tiered structure where New Construction projects can earn the maximum sustainability points if they achieve Passive House certification or DOE Zero Energy Ready Home certification, while acquisition/rehabilitation projects can earn the max sustainability points for achieving a HERS index rating of 75 or less.

The Phius standard is designed to achieve deep energy savings and at a cost savings both from a first cost and across the building’s life cycle. Recent experience of the Pennsylvania Housing Finance Authority (PHFA) demonstrates that building an affordable, multi-family home to Phius standards does not result, on average, in a higher construction first cost per square foot once there is significant market adoption. Other states have seen this cost-reducing rapid market adoption as a result of incentivization in the QAP. Moreover, because homes built to the Phius standard use dramatically less energy (approximately 50-60% less than the 2015 International Energy Conservation Code for HVAC-related consumption), the lifetime energy burden for low-income residents living in Phius housing is also dramatically reduced.

- *The Pennsylvania Housing Finance Agency first included Phius in its 2015 QAP, establishing a significant number of points for passive house (Phius certification) in the evaluation criteria (10 of 130 points). That year 39 multi-family projects were awarded funding of which 8 were Phius projects (26 projects were completed, of which 7 were passive house projects). As of 2021, 50 Phius multi-family projects are in various stages of development across Pennsylvania. A cost analysis by the PHFA found an important and intuitive result. The first few passive house projects were somewhat more expensive than conventional construction. By the third round of projects (in 2018), Phius projects were, on average, less expensive than conventional construction.*

⁹<https://www.stpaul.gov/DocumentCenter/View/7/Building%20Policy%20for%20Private%20Development.PDF>

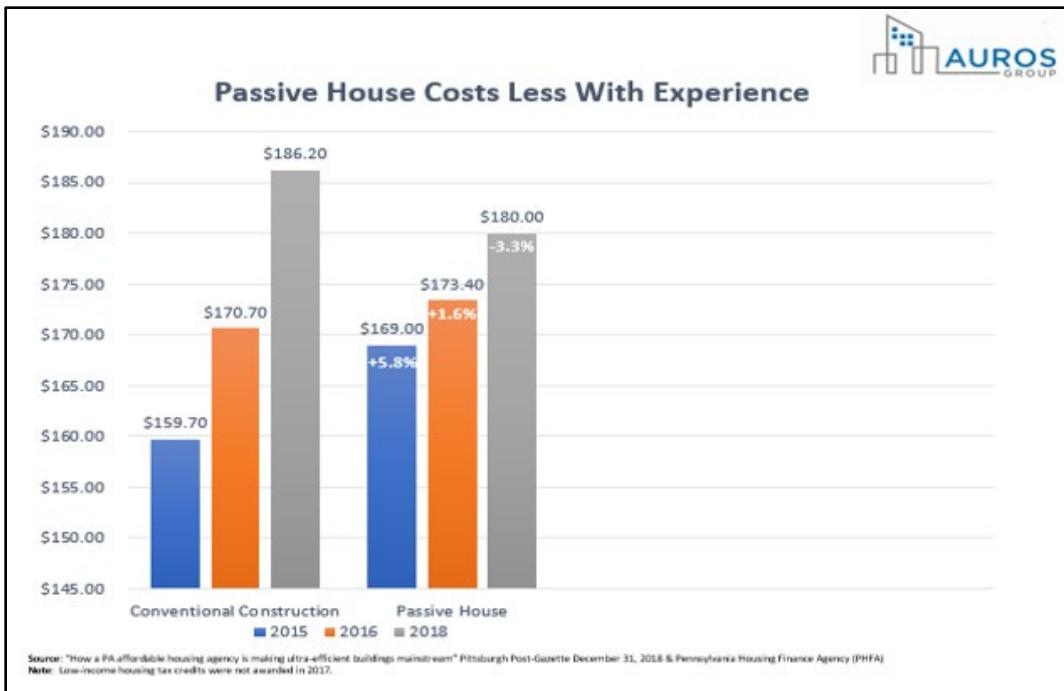


Figure 1: Cost Comparison between Passive House and Non-Passive House Projects¹⁰

4. Require all new construction projects to be electrification-ready at a minimum and consider awarding more points for electrification of heating/cooling, hot water, and cooking.

Moving to all-electric homes powered by increasingly clean electricity will deliver enormous climate, health, and economic benefits to communities across Minnesota and allow states to tackle a major source of indoor and outdoor air pollution. Moreover, high-efficiency electric solutions, like heat pumps for space heating and cooling, are efficient and cost-effective and lead to more comfortable indoor temperatures and better access to affordable heating and cooling.¹¹ At least 39% of households in Minnesota— 1.1 million — could save \$421 million a year on energy bills if they used efficient, electric heat pump furnaces and water heaters instead of their current appliances. Of the households that would save by electrifying, 51% are low- and moderate-income.¹² Also, outdoor air pollution from Minnesota's direct building emissions led to 852 premature deaths in 2017 costing the state over \$495 million annually.¹³

Another often overlooked component of electrification is the elimination of gas-burning stoves.¹⁴ Even before the COVID-19 pandemic, we spend about 90 percent of our time indoors, meaning indoor air quality heavily influences health. Elevated levels of nitrogen dioxide¹⁵ and carbon monoxide¹⁶ are associated with gas stoves but *not* electric stoves. Studies show that gas flames without any cooking activities emit twice as many small particles (PM2.5) as electric stoves.¹⁷ These negative effects are also more harmful to more vulnerable residents- a comprehensive

¹⁰"How a PA Affordable Housing Agency is Making Ultra-Efficient Buildings Mainstream" Pittsburgh Post-Gazette, December 31, 2016 & Pennsylvania Housing Finance Agency

¹¹<https://www.nrdc.org/experts/alex-hillbrand/thinking-buying-air-conditioner-consider-heat-pump>

¹²<https://map.rewiringamerica.org/states/minnesota-mn>

¹³<https://rmi.org/health-air-quality-impacts-of-buildings-emissions#MI>

¹⁴<https://pubs.acs.org/doi/10.1021/acs.est.1c08298>

¹⁵<https://cfpub.epa.gov/ncea/isa/recordisplay.cfm?deid=194645>

¹⁶<https://www.epa.gov/indoor-air-quality-iaq/carbon-monoxides-impact-indoor-air-quality>

¹⁷<https://www.osti.gov/biblio/172959>

meta-analysis concluded that children living in homes with a gas stove are 42% more likely to experience asthma symptoms and 24% more likely to be diagnosed with asthma by a doctor compared to those living in homes with electric stoves.¹⁸ Additionally, lower-income communities and racial-ethnic minorities in the US are systemically exposed to disproportionately high levels of pollutants.¹⁹ For example,²⁰ residential gas combustion is a large source of relative PM_{2.5} exposure disparities for Black, Hispanic, and Asian Americans.²¹ And although ventilation is always recommended as a partial solution, it cannot eliminate air pollutant exposure because some buildings do not have kitchen ventilation. Of those that do, many exhaust hoods don't reduce pollution to healthy levels, and instead just recirculate pollution without removing it, and are seldom used when needed.²²

With these science-based insights including the knowledge that a third of Minnesotans bear a greater energy burden than the national average, we recommend requiring that all new construction projects be made electric-ready at a minimum, and all-electric ideally, rather than a ten-point award, and to award more points for electrified space heating, cooling, hot water, and cooking. We view these as necessary measures to begin the housing market's gradual transition toward cost-effective electrification.²³ Because electrification should not come at the expense of higher tenant energy burdens, incentives should lead owners toward high-efficiency heat pumps (air-source and ground-source) and similar technologies, and Minnesota Housing should work cooperatively with energy assistance partners like LIHEAP for the same reasons. MN Housing should also work closely with local Housing Authorities to ensure that Utility Allowances reflect these high-efficiency electric appliances, especially in rehab projects. A higher point allocation than the two-point award reflected on page 30 of the Overlay would further incentivize the electrification of heating and cooling. Massachusetts and Connecticut each provide three additional points for electrification of heating, cooling, and hot water, and we suggest Minnesota can and should do at least the same. This incentive should include high-efficiency electric heat pumps and not electric resistance heat sources, as they are not an efficient technology and do not demonstrate the same level of cost-effectiveness through cold Minnesota winters as heat pumps do.

5. Offer points for providing internet/broadband service

The COVID-19 pandemic illuminated a number of inequities that already existed in the affordable housing industry, not the least of which is the “digital divide” or the gap between demographics and regions that have access to modern information and communications technologies and those that do not.²⁴ Building and rehabilitating affordable housing buildings through the implementation of federal tax credits should incentivize quality, long term housing investments that not only give residents a place to live, but also a place to prosper. In a technological age where virtual full or part-time work and school is now commonplace and an increasing number of home devices access the internet, we believe the most equitable process for allocating these dollars involves providing at least the infrastructure for internet/broadband connectivity, and we thank Minnesota Housing for requiring that in your Building Design Standards.²⁵ There are examples of state QAPs allocating points for providing the actual service, as in Ohio:

¹⁸<https://academic.oup.com/ije/article/42/6/1724/737113>

¹⁹<https://www.lung.org/clean-air/outdoors/who-is-at-risk/disparities>

²⁰<https://rmi.org/insight/decarbonizing-homes/>

²¹<https://www.science.org/doi/10.1126/sciadv.abf4491>

²²https://www.aceee.org/files/proceedings/1990/data/papers/SS90_Panel4_Paper20.pdf#page=1

²³<https://www.nrel.gov/docs/fy17osti/68214.pdf>

²⁴<https://cs.stanford.edu/people/eroberts/cs181/projects/digital-divide/start.html>

²⁵<https://www.mnhousing.gov/sites/multifamily/buildingstandards>

Ohio QAP

4. *Design Features.* Development will include one or more of the following features for residents. Scoring: (can select multiple, up to a total of 5 points)

- a. Dishwasher and garbage disposal = 1 point
- b. **High-speed internet access = 4 points**
- c. Washer/dryer hookup = 2 points
- d. Lease Addendum allowing for pet ownership = 2 points
- e. Interior and exterior security cameras = 2 points
- f. Private patio or balcony = 5 points
- g. Additional storage space = 5 points
- h. Secured parking = 5 points

Features must be new to the development as part of this proposal, or if already existing at the property, being improved, replaced, or renovated as part of the proposal. Applicants must also submit estimated costs for the selected item(s) and a narrative describing the feature(s) and why they were selected for the development.

6. Adopt either the Category 6 (Materials) or just Criterion 6.1 *Ingredient Transparency for Material Health* as mandatory rather than optional.

The Materials category supports healthier indoor environments by using an integrated approach to the root cause and sources of harmful exposures. Low-wealth communities suffer disproportionately from indoor environmental exposures, which are linked to poor health outcomes, including asthma, especially in children. Additionally, low-wealth individuals are likely to live in communities with higher levels of toxic pollution and in proximity to facilities that are sources of hazardous emissions. Together these many environmental exposures contribute to the significant health disparities observed in low-wealth and communities of color. So, we recommend adopting Category 6 from the 2020 Enterprise Green Communities, or at least Criterion 6.1, into the Minnesota Overlay as mandatory rather than optional.

Criterion 6.1: Ingredient Transparency for Material Health has four compliance options so that those responsible for the design, construction, and operation of buildings can and should exercise their right to make informed decisions about what chemicals and what health hazards they want to avoid. The public disclosure of material contents provides the information necessary to make responsible decisions to avoid known and potential hazards to building occupants, workers, and fenceline communities.

7. Simplify the point allocation system for the “Enhanced Sustainability” section by consolidating the Self Scoring document and the Overlay, or at least distinguish each Tier with just one pathway.

With regard to our earlier comment that the goal of reducing carbon emissions requires a renewed commitment to energy efficiency, building performance, and electrification, we have concern that the organizational system involving a QAP, a Self-Scoring guide, A Multifamily Intended Methods Worksheet, and an Overlay document creates a complex and potentially confusing structure that may dissuade developers from pursuing the depth and extent of sustainability measures that they otherwise would with a simpler structure. We recommend simplifying the system so that the points available for Enhanced Sustainability are in one location and/or that each tier have its own pathway based on the logic that a streamlined process will lead to more frequent and deeper conservation measures.

To be more specific, we suggest creating a Preservation Tier focused exclusively on rehabbing/retrofitting existing units with rents at or below the county 30-50% MTSP, keeping Tier 3, Pathway 1: SB 2030, keeping Tier 3, Pathway 3: 2020 Enterprise Green Communities Certification Plus, and creating a fourth tier with building certifications and deeper energy conservation measures as mentioned in our Recommendation #3, with more points allocated in proportion to each certification's required level of building performance.

On behalf of the Midwest Building Decarbonization Coalition (MWBDC), Community Stabilization Project, Elevate, Fresh Energy, Minnesota Housing Partnership, National Housing Trust, Natural Resources Defense Council, Phius, Precipitate, RMI, Slipstream, and William Weber Consulting, we truly appreciate the opportunity to comment on the 2024-2025 draft Qualified Allocation Plan, and your time and attention to fielding and incorporating our and others' public comments. Thank you.

Sincerely,

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