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SUBJECT: Missoula Residential Climate Action Strategies

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This memo is intended to help inform the City of Missoula's residential climate change mitigation strategy. Climate Smart Missoula (CSM) and the City of Missoula have created a menu of potential policies and programs and started to evaluate the feasibility and potential outcomes of these options. To further this work, the American Council for an Energy-Efficient Economy (ACEEE) has compiled a list of additional policies for the City to consider, evaluated them on the same criteria used by the City and CSM, and provided several case studies for each option. ACEEE has also investigated how the City can better evaluate the potential outcomes of the policies and programs it considers.

ADDITIONAL POLICIES TO CONSIDER ADDING TO THE MENU

ACEEE has compiled a list of additional residential climate action policies and programs for Missoula to consider. These strategies are listed below in order of their average per building energy savings potential:

- *Building energy (or emissions) performance standards (BEPS)*. Sets energy or emissions standards for larger multifamily and commercial buildings. ACEEE projects that energy savings of 30% are possible in buildings undergoing comprehensive retrofits to comply with these standards.ⁱ
- *Retrofit incentive and direct install measure programs*. Provides homeowners and landlords with energy efficiency or renewable energy offerings that complement those provided by utilities or other local organizations. Whole-home and whole-building energy efficiency retrofit incentive programs have reported energy savings on the order of 20-25%.ⁱⁱ
- *Rental certification energy efficiency requirements*. Involves attaching energy efficiency requirements to the process of acquiring or renewing a rental property owner's certificate of occupancy or business license. In applicable buildings, energy savings of 10-30% are possible.ⁱⁱⁱ
- *Residential energy conservation ordinance (RECO)*. Requires prospective property sellers or buyers to perform a set of energy efficiency improvements. These ordinances could result in 10-20% energy savings for the average home, but savings will vary based upon required measures.^{iv}
- *Mandatory retro-commissioning (RCx) and/or tune-ups of multifamily buildings*. Requires multifamily facilities staff or contractors to perform a prescribed set of operations and maintenance improvements designed to reduce building energy use. An ACEEE report found that past retro-commissioning programs can achieve whole-building energy savings of 5-15%.^v
- *Marketing campaign for utility incentives*. Leverages relationships with homeowners and landlords to open opportunities for utility efficiency programs to reach customers with high energy-savings potential. Energy savings from marketing campaigns will vary based upon the offerings they promote.

While we have provided estimates of each initiative's per building energy savings potential, the City of Missoula should carefully consider how the above actions may ultimately contribute to community-wide energy savings. Certain residential building types targeted by an initiative may not occupy a substantial share of the housing stock, and it is likely that only a share of targeted buildings are candidates to benefit from retrofits. Furthermore, policies and programs may face funding or compliance limitations that will limit their reach.

It is also critical that the City of Missoula consider how the policies and programs they adopt can further social equity, addressing existing disparities of resources, access, and power that exist for socially marginalized groups such as those with low-incomes, people of color, those experiencing housing insecurity, youth, the elderly, immigrants, non-English speakers, and people with disabilities. Our analysis of data collected for our forthcoming *The 2020 City Clean Energy Scorecard* reveal that cities are employing four strategies to achieve equitable outcomes for these groups through their residential policies and programs:

- Expanding marginalized people's rights and access to information regarding energy use, costs, and savings opportunities
- Integrating energy efficiency requirements and planning into existing affordable housing programs and including housing affordability requirements for city-supported energy-efficient housing developments
- When implementing community-wide energy efficiency requirements, supporting affordable housing providers and low-income homeowners with funding, technical assistance, and modified or extended compliance periods
- Offering loans or grants to rehabilitate or retrofit properties that are coupled with homeowner no-sell and landlord affordability covenants

In presenting our recommendations, we identify opportunities for these approaches to be integrated into the City of Missoula's actions. For more on how cities can adopt a framework of social equity in their work, consult the Urban Sustainability Directors Network's [Equity in Sustainability](#) guide.

Table 1 displays our recommendations for initiatives Missoula can add to the existing CSM menu. The table follows the convention used in the original CSM policy menu (provided as Appendix A) and details each policy's type, implementation lever, potential non-energy outcomes, feasibility considerations, and case studies. Please note that we are unable to assess the legal implications of adopting a specific policy or program, as this is beyond our expertise. All policies and programs listed here have the potential to improve overall housing quality and lead to positive health and wellbeing outcomes. For more on these benefits, consult ACEEE's Health and Environment Program [resources](#). We have included more detailed information about the research underlying the listed outcomes and feasibility considerations in subsequent sections of this memo.

Table 1. Additional policies for the CSM residential climate action menu

Policy (type)	Possible non-energy outcomes	Implementation lever	Actions to consider for increasing feasibility	Case study resources	Commercial sector applicability
BEPS (regulatory)	Lower operating costs, increase property values, improve building resilience	Local ordinance	<p>Build up to a BEPS over time with steps such as extensive stakeholder engagement, energy/carbon challenges, benchmarking</p> <p>Provide or support the development of financial incentives and financing to assist with compliance, especially for affordable housing providers</p> <p>Support affordable housing providers with technical assistance and extended compliance periods</p> <p>Consider allowing owners to purchase renewable energy credits (RECs) or emissions offsets to assist with compliance</p>	<p>Washington DC, New York City, St. Louis</p>	Yes
Retrofit incentive and direct install measure programs (incentive)	Lower operating costs, increase property values, preserve housing affordability, reduce energy burdens, reduce water use	New local government program	<p>Consider a variety of funding sources. Typical sources include CDBG, HOME, utility franchise fees or settlement funds, or local taxes/fees</p> <p>Encourage energy efficiency upgrades through existing affordable housing rehabilitation loan or grant programs</p> <p>Require no-sell and affordability covenants to preserve overall housing affordability for low-income residents</p> <p>Use program to fill gaps in utility incentive offerings</p> <p>Address health and safety repairs that must be completed before efficiency upgrades are made</p> <p>Target marketing to marginalized residents and the organizations supporting them</p> <p>Work to build broad community support if allocating city funds</p>	<p>Dallas, Milwaukee, Chicago, Boulder, Minneapolis</p>	Yes

Policy (type)	Possible non-energy outcomes	Implementation lever	Actions to consider for increasing feasibility	Case study resources	Commercial sector applicability
Rental certificate energy efficiency requirements (regulatory)	Lower operating costs, increase property values, reduce renter and low-income energy burdens, reduce water use	Local ordinance	<p>Integrate into existing rental registration or business licensing program.</p> <p>Give owners flexibility. Permit several years for compliance. Consider prescriptive as well as performance compliance paths. Allow for some exemptions.</p> <p>Ensure any list of prescriptive energy actions includes a wide range of low-cost capital and operational improvement options to ease compliance burdens on landlords and mitigate against rent increases.</p> <p>Provide or support the development of financial incentives and financing to assist with compliance, especially for affordable housing providers</p> <p>Support affordable housing providers with technical assistance</p>	Boulder, Ann Arbor	No
RECO (regulatory)	lower operating costs, increase property values, reduce water use	Local ordinance	<p>Ensure a list of prescriptive energy actions includes a wide range of low-cost options, including both physical upgrades and retuning options, to ease compliance</p> <p>Provide low-income homeowners with financial incentives and financing to assist with compliance</p>	San Francisco, Berkeley, Burlington	No