Welcome to Building(s) for the Future and the “Rental Housing” breakout group. Missoula has worked to advance climate mitigation and adaptation efforts in recent years (adoption of the 100% Clean Electricity Resolution, Climate Ready Missoula plan, Zero by Fifty plan, etc). Buildings play a role in each of these efforts as they comprise 52% of our community’s carbon emissions, according to 2014 data. They are increasingly important as pressures mount for development to keep pace with community growth, and in order to meet our carbon neutrality and 100% clean electricity goals, we estimate that Missoula must reduce total building emissions 15% by 2030.

To “build for the future,” we need to consider ways to decarbonize the design, construction, operation, and deconstruction of our building stock. Over the past several months, we’ve done extensive research and received technical support from the American Council for an Energy-Efficient Economy (ACEEE) and National League of Cities on building policy and program precedents and best practices to inform our conversation. Panelists from across the country will share inspiring and innovative approaches, and our breakout group will build on their presentations to chart the path forward for how Missoula can build a more equitable, low-carbon future by focusing on ways to reduce the energy use intensity of rental housing.

Renters comprise a major demographic in our community (51% of households in the city and 42% of households in the county), and energy efficient and affordable rental housing is a crucial area of need in Missoula. With 48.2% of renters cost burdened in the city, there is little room for spending an outsized amount of income on utilities. Nationwide, renters are often in the least efficient housing and spend a disproportionate amount of their income on utilities. Furthermore, renters have less control than homeowners over their homes’ energy efficiency or  

3 Ibid.  
ability to generate renewable energy. More robust programs with stakeholder engagement of renters, property managers and landlords are urgently needed.

**Primary Strategies to Consider**

With technical assistance from the American Council for an Energy-Efficient Economy, the National League of Cities, and community members, we have identified several strategies that Missoula should consider implementing. This list is not meant to be exhaustive (we hope you will provide additional ideas!), and they are brief descriptions rather than comprehensive explanations of how such a program or policy would be designed or implemented. Where possible, we have included an estimate of the $/MT of CO$_2$ reduced to help evaluate their impact and cost. Our hope is that the following will jumpstart the group’s conversation and help all participants begin from a place of shared understanding. As you read, consider the pros and cons of each, as well as what you believe Missoula should prioritize pursuing in the next year, 5 years, and 10 years. Strategies include:

- Rental certification program with energy efficiency requirements
- Home energy disclosure at time of rent (energy use label)
- Energy savings competition
- Renewable energy for renters
- Retrofit assistance program
- Energy efficiency “bulk buy”

For an overview of all the strategies being discussed today, including the ones in this background brief, please reference Appendix A.

*Rental certification program with energy efficiency requirements*

A rental certification program would attach energy efficiency requirements to the process of acquiring or renewing a rental property owner’s certificate of occupancy or business license (such a registry program does not currently exist in Missoula.) The certification program requires local government to establish a rental property registry, and all rental properties must meet a minimum energy efficiency rate or perform a prescriptive list of actions before receiving a rental license. With financial incentives, technical assistance, and flexible compliance pathways, a rental certification program can mitigate increases in rent that may come with property improvements. The city of Bozeman identified this as a top strategy in their recent climate action plan, and Boulder, CO and Ann Arbor, MI currently have successful programs in place. According to ACEEE, 10 - 30% energy savings are possible across rental properties. It may not necessarily save renters money if the cost of the improvement is passed on to them as a rent increase, though it would result in reduced monthly utility bills as well as improved comfort inside of the home.

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Home energy disclosure at time of rent (energy use label)

Energy bills are a significant household expense, and yet prospective renters are typically unable to factor this information into their decision making. Unless a prospective renter specifically requests utility data, it is rarely provided. Requiring all units to include an energy use label at time of rent would allow tenants to make better informed decisions. A home energy label provides information about a property’s energy consumption and costs, plus recommendations for cost-effective energy saving improvements. While there are several rating systems available, the Department of Energy’s Home Energy Score has become popular because of its simplified approach that makes it easy for renters to make comparisons across properties. The same department that would manage the rental property registry (see above) could oversee this disclosure. While initial results from home energy disclosure policies in Portland, OR, Berkeley, CA, and Santa FE, NM are promising, more data is needed to assess the energy reductions that come with home energy disclosure and labeling.

Energy savings competition

An energy savings competition could encourage local businesses, homeowners, and renters to reduce their energy consumption. Program design of such competitions varies greatly, and Missoula would need to engage all relevant stakeholders when identifying the details of a Missoula based competition. Generally speaking, competitions measure the change in participants' energy use from before the competition to during the competition and provide prizes to winners, utilizing online software to engage participants and track results via a public leaderboard or dashboard. Missoula would not be the first Montana community to design an energy savings competition: Bozeman, MT hosted the “Energy Smackdown” competition in 2015.

In a review of energy savings competitions, they were found to achieve, on average, a 5% reduction in electricity usage. If paired with other incentives that could make whole home retrofits possible, energy savings could be much more substantial. Rutland NeighborWorks in Vermont spearheaded a program that allowed 5% of residences to undergo a comprehensive

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6 City of Bozeman, MT, “Bozeman Climate Plan” (City of Bozeman, MT, 2020).
8 Ibid.
retrofit, which led to 30% savings in each household.\textsuperscript{12} For an energy savings competition to be most effective, it needs to be paired with other resources, such as robust customer service: a recent study by Vine and Jones found that competition alone was not sufficient to achieve energy usage reductions.\textsuperscript{13}

\textit{Renewable energy for renters}

Increasing renters’ access to clean energy can be accomplished via Missoula’s 100% clean electricity efforts, specifically:

- **Solar-ease expansion.** Solar-ease is the community campaign to encourage residents and businesses to go solar. It has so far not focused on landlords and tenants, though this could be an opportunity for expansion of existing outreach efforts. Because the landlord would incur the initial capital costs and the benefits would be reaped by the tenants through lower utility bills, a green lease (a lease that helps align tenant and landlord interests for investments in energy efficiency) would likely need to be developed in order to better share costs between the landlord and tenant.

- **Green Tariff.** A green tariff is a mechanism that has been used in a number of other states with regulated utility markets (like Montana’s) to meet customers’ demands for new renewable energy on a large scale. It’s important to note that in utility jargon, the word “tariff” does not mean “tax,” it simply refers to a rate that customers pay for electricity. NorthWestern Energy is currently working with stakeholders, including Missoula City and County, to develop a green tariff that will (if successful) result in the development of new large-scale renewable energy systems in the state of Montana that NorthWestern customers will have the option of buying into through their utility bills.

- **Utility owned community solar.** The City, County, and NorthWestern Energy have been discussing the possibility of developing a solar project in the Missoula area that would be available for any NorthWestern customer in Missoula County to buy into. The rate structure would be similar to the green tariff (above).

\textit{Retrofit assistance program}

A retrofit assistance program would be a new local government program for homeowners and landlords that provides grants or low-interest rate loans to perform energy efficiency upgrades. Size and terms of the grants or loans would be determined at a later stage, though existing programs in Boulder, CO Minneapolis, MN, Milwaukee, WI, Dallas, TX and Chicago, IL focus on both the health and safety upgrades that are needed before energy efficiency upgrades are possible, as well as the energy efficiency upgrades themselves. They also often include no-sell or affordability covenants for those accepting the funds in order to preserve existing affordable housing. Programs should be designed in tandem with, and promoted to, low-income residents who are unable to access traditional financing for efficiency projects. Funding for such a program could come from a variety of sources, such as Community Development Block Grants

\textsuperscript{12} Ibid.
\textsuperscript{13} Ibid.
(CDBG), HOME Investment Partnerships Program (HOME), Missoula’s Affordable Housing Trust Fund or other local funds. ACEEE estimates 20 - 25% residential energy savings can result from this type of program, and it is especially impactful for improving the health, comfort, and safety of marginalized residents.

Energy efficiency “bulk buy”

A bulk buy program is when a local government makes a bulk purchase of high efficiency products (heat pumps, LED light bulbs, etc.) and then provides them to citizens at a below market cost to fill gaps in existing rebate and incentive programs. This could reduce the upfront cost of high efficiency heating and lighting systems for landlords interested in owning more efficient properties, or tenants interested in making simple energy efficient improvements. Such a purchase could be made in collaboration with other Montana cities to drive down cost and amplify benefits. Ann Arbor, MI recently identified it as a top strategy to meeting their city’s carbon neutrality goal, with an estimated cost of $3.92/MT of CO\textsubscript{2} reduced and strong health, economic, and equity co-benefits.

Foundational Strategies to Consider

Each of the primary strategies are more feasible when paired with one or more of the foundational strategies below. As you evaluate the primary strategies above, consider these foundational strategies and what they would need to look like or include in order for Missoula to be successful. Foundational strategies include:

- Expand available financing options (variety of forms)
- 1-stop energy shop for residential and commercial properties
- Workforce development
- Expand access to low carbon and high efficiency materials

Expand available financing options (can take a variety of forms)

- **Private financial institutions** can offer (or expand their offerings of) financial products for energy efficiency, renewable energy, and electrification.
- **Utilities** can offer on-bill financing or on-bill repayment. In on-bill financing, the utility incurs the cost of the upgrade and it is repaid in monthly installments on the bill. On-bill

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16 Bozeman has identified “Increase energy efficiency in existing buildings” as a top strategy in their recent climate plan. For more information, see: City of Bozeman, MT, “Bozeman Climate Plan” (City of Bozeman, MT, 2020).
18 Ibid.
repayment is the same except that a third-party provides the up-front capital for the improvement.

- **The City of Missoula**, as a charter city, can establish PACE financing where a clean energy improvement is paid for via property taxes. The repayment is attached to the property rather than the individual. **Missoula County** may also be able to establish a similar program tied to property taxes.

**1-stop energy shop for residential and commercial properties**

Technical assistance will be central to high compliance or participation rates for any of the above policies and programs. A 1-stop energy shop would centralize incentives and technical assistance to make it as easy as possible to implement energy efficiency measures. For example, a property owner could contact a 1-stop shop to schedule an energy audit, after which they would be connected to contractors to implement recommended upgrades and receive assistance identifying and applying for applicable incentives and financing options. Additionally, a 1-stop shop could raise community awareness about key issues such as electrification. For example, gas stoves are immensely popular. Recent research, however, has shown there are serious indoor air quality and health impacts associated with cooking with a gas stove.19 Additionally, climate science underscores the importance of moving away from gas and propane infrastructure and towards all-electric systems for cooking, heating, and cooling. 1-stop shops are typically pursued in partnership with the local utility, though Missoula may be able to create a 1-stop shop independently with appropriate funding.

**Workforce development**

The policies and programs, if pursued, will likely increase demand for a skilled workforce of energy service companies and contractors who can perform high-quality building audits and retrofits. Missoula will need to pursue partnerships between local energy efficiency businesses, Missoula College, and other relevant stakeholders to develop a robust clean energy workforce, as well as provide training opportunities for those already in the industry. Workforce development programs can and should diversify the clean energy workforce and support the hiring and training of those typically not employed in these jobs.

**Expand access to low carbon and high efficiency materials**

Building materials are constantly evolving. As low-carbon, high efficiency materials (cross laminated timber, high efficiency windows, etc.) become more cost effective, it will be easier to incorporate them into projects. Additionally, this is a potential opportunity for supporting local entrepreneurs that focus on the manufacturing and distribution of these materials.

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### Appendix A: Overview of Strategies

<table>
<thead>
<tr>
<th>Tool Name</th>
<th>Other Possible Outcomes (in addition to low-carbon buildings)</th>
<th>Implementation Lever</th>
<th>Could advance objectives of...</th>
<th>$/MT of CO₂ Estimate</th>
<th>Legality</th>
<th>Selected Precedents</th>
<th>Groups Discussing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expand financing</td>
<td>• Economic development</td>
<td>Public private partnership</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>Clearwater Credit Union, People’s Gas in IL, Alabama Power</td>
<td>ALL</td>
</tr>
<tr>
<td>One-Stop shop</td>
<td>• Greater coordination</td>
<td>Public private partnership</td>
<td>N/A</td>
<td>N/A</td>
<td>Fire Trust of Oregon and Energy Works of Fort Collins, CO</td>
<td>ALL</td>
<td></td>
</tr>
<tr>
<td>Workforce development</td>
<td>• Economic development</td>
<td>Public private partnership</td>
<td>N/A</td>
<td>N/A</td>
<td>Philadelphia, PA, Minneapolis, MN, and Raleigh, NC</td>
<td>ALL</td>
<td></td>
</tr>
<tr>
<td>Expand access to materials</td>
<td>• Economic development</td>
<td>Public private partnership</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
<td>ALL</td>
<td></td>
</tr>
<tr>
<td>Home energy label ordinance</td>
<td>• Increased consumer awareness • Economic development</td>
<td>Local ordinance</td>
<td>N/A</td>
<td>N/A</td>
<td>Minneapolis, MN</td>
<td>OWN, RENT, SUB</td>
<td></td>
</tr>
<tr>
<td>Residential energy conservation ordinance (RECO)</td>
<td>• Increased consumer awareness • Economic development</td>
<td>Local ordinance</td>
<td>N/A</td>
<td>N/A</td>
<td>Burlington, VT, San Francisco, CA, and Berkeley, CA</td>
<td>OWN</td>
<td></td>
</tr>
<tr>
<td>Energy savings competition</td>
<td>• Increased community awareness</td>
<td>Public private partnership</td>
<td>N/A</td>
<td>N/A</td>
<td>Bozeman, MT, Fargo, ND</td>
<td>OWN, RENT, INNOV, LARGE</td>
<td></td>
</tr>
<tr>
<td>Retrofit assistance program</td>
<td>• Preserve affordable housing • Economic development</td>
<td>New local government program</td>
<td>N/A</td>
<td>N/A</td>
<td>Boulder, CO, Minneapolis, MN, Milwaukee, WI, and Dallas, TX</td>
<td>OWN, RENT</td>
<td></td>
</tr>
<tr>
<td>Energy efficiency “bulk buy”</td>
<td>• Economic development</td>
<td>New local government program</td>
<td>$4/MT</td>
<td>N/A</td>
<td>Ann Arbor, MI</td>
<td>OWN, RENT, SUB, LARGE</td>
<td></td>
</tr>
</tbody>
</table>

All home sales and rental leases must disclose the unit’s energy report card at time of sale or lease.

RECOs require prospective sellers or buyers to perform a set of low-cost energy efficiency improvements. These ordinances could result in 10 - 20% energy savings for the average home.

An energy savings competition encourages owners and renters to reduce their energy consumption, while building momentum and awareness at the ground level for greater energy awareness.

A retrofit assistance program would be a new local government program for homeowners and landlords that provides grants or low-interest rate loans for energy efficiency upgrades. They often include no-sell or affordability covenants to preserve affordability. Programs should be designed in tandem with, and promoted to, low-income residents.

A bulk buy program is when a local government makes a bulk purchase of high efficiency products (heat pumps, LED light bulbs, etc.) and provides them to citizens at a below market cost to fill gaps in existing rebate and incentive programs.
### Other Possible Outcomes (in Southern California Edison)

Local adoption of stretch code... $30/MT

Group Codes

- Regulatory
- Programmatic
- Blueprint
- Construction
- Operation
- Next Life (Decon/Rehab)

### Building energy performance standards (BEPS)

Sets energy or emissions standards that large multifamily and commercial buildings must meet by a certain date. Typically includes a long term policy goal as well as interim goals that must be met along the way.

- **Economic development**
- **Local ordinance**
- **$8/MT**

**Groups Discussing**

- Reno, NV, St. Louis, MO, Washington state
- LARGE

### Energy use disclosure ordinance (benchmarking and transparency)

Require large building projects to disclose their energy use via an online data portal. This lays the groundwork for higher performance, as well as collects data to inform better decisions.

- **Increased data transparency**
- **Local ordinance**
- **$17-46/MT**

**Groups Discussing**

- Seattle, WA, Fort Collins, CO, and Philadelphia, PA
- LARGE

### High performance standards for new buildings via zoning

In contrast to a BEPS, which applies to existing buildings, there is an opportunity to mandate higher performance standards for new buildings via zoning. The City or County could mandate buildings over a certain size adhere to higher performance standards (such as LEED certification or Energy Use Intensity benchmarks).

- Economic development
- **Zoning**
- N/A

**Groups Discussing**

- Boston, MA, Cambridge, MA
- LARGE

### Mandatory retrocommissioning and/or tune-ups

Requires large buildings to perform a prescribed set of operations and maintenance improvements designed to reduce building energy use every 5 years. Rather than require a certain standard be met (like BEPS), it requires a set of actions be taken.

- Economic development
- **Local ordinance**
- **$27/MT**

**Groups Discussing**

- Seattle, WA, Philadelphia, PA, Los Angeles, CA
- LARGE

### Voluntary stretch code

A stretch code is a code or alternative compliance path that is more aggressive than base code. The state of Montana allows localities to adopt voluntary stretch energy building codes. They are most effective when paired with incentives.

- Increased training
- **Local adoption of stretch code**
- N/A

**Groups Discussing**

- Santa Monica, CA
- LARGE
<table>
<thead>
<tr>
<th>Tool Name</th>
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<th>Groups Discussing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Density bonus</td>
<td>• Increased density</td>
<td>Zoning</td>
<td>N/A</td>
<td>Austin, TX, Seattle, WA</td>
<td>INCENT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reduced parking requirements</td>
<td>• Greater walkability</td>
<td>Zoning</td>
<td>N/A</td>
<td>Flagstaff, AZ, Denver, CO, State of CA</td>
<td>INCENT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Impact and/or permit fees reduced</td>
<td>• Reduced revenue for local government</td>
<td>Zoning</td>
<td>N/A</td>
<td>St. Petersburg, FL, San Diego, CA</td>
<td>INCENT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Permit process expedited</td>
<td></td>
<td>Zoning</td>
<td>N/A</td>
<td>Albuquerque, NM, Salt Lake City, UT, Chula Vista, CA, Miami, FL</td>
<td>INCENT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Property tax abatement</td>
<td>• Reduced revenue for local government</td>
<td>Zoning</td>
<td>N/A</td>
<td>Virginia Beach, VA, Cincinnati, OH, Cleveland, OH, Baltimore, MD</td>
<td>INCENT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TIF made available</td>
<td>• Increased conversations about TIF</td>
<td>Missoula Redevelopment Agency</td>
<td>N/A</td>
<td>Chicago, IL</td>
<td>INCENT</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Key**

- **Type of Tool**
  - Incentive/Financial
  - Regulatory
  - Programmatic
  - Blueprint
  - Construction
  - Operation
  - Next Life (Decon/Rehab)

- **Building Stage**
  - Feasibility Analysis
  - Construction
  - Operation
  - Next Life (Decon/Rehab)

- **Feasibility Analysis**
  - Move ahead
  - Some reservations

- **Group Codes**
  - OWN - Owner Occupied Housing
  - RENT - Rental Housing
  - SUB - Low Carbon Subdivisions
  - LARGE - Large Buildings
  - INNOV - Promotion + Innovation
  - INCENT - Developer Incentives

- **Legality**
  - N/A

- **Selected Precedents**
  - Austin, TX, Seattle, WA
  - Flagstaff, AZ, Denver, CO, State of CA
  - St. Petersburg, FL, San Diego, CA
  - Albuquerque, NM, Salt Lake City, UT, Chula Vista, CA, Miami, FL
  - Virginia Beach, VA, Cincinnati, OH, Cleveland, OH, Baltimore, MD
  - Chicago, IL

- **Groups Discussing**
  - INCENT