Agenda

1. Welcome and Introductions (Beth / Patty)
2. Approve Agenda and Q4 Meeting Notes (Beth / Patty)
3. Announcements
4. Election of New Co-chair Replacing Beth Tomlinson
5. 2022-2023 Work Plan Updates (Planning Team)
6. City 2023 Program Updates
   a. Presentation by Twin Cities Energy Efficiency Peer Learning Cohort
   b. Incorporation into City Recommendations for 2024-2026 CIP Triennial Plans
   c. Open discussion
2022-2023 Work Plan Updates
2023 City Program Updates
Minneapolis has multiple Home Energy Squad visit options available for residents.

While funds last, the City is offering free visits to households with a family income less than 150% AMI.

SEE IF YOU QUALIFY FOR A FREE VISIT

Regardless of income, all residents living in a Minneapolis Green Zone can access a free visit: Bottineau, Cedar-Riverside, East Phillips, Hawthorne, Marshall Terrace, McKinley, Midtown Phillips, Near North, Phillips West, Sheridan and Ventura Village.

https://www.mncee.org/mpls?energy-audits

2023: <150% AMI
2022: <100% AMI
Minneapolis Energy Efficiency Loan

The City of Minneapolis is offering a loan to help residents improve the energy efficiency of their homes.

To qualify, the borrower must have received a Home Energy Squad visit within the last 3 years. The guidelines below are subject to change at any time without notice. Loan funds are subject to availability.

APPLY NOW

SCHEDULE YOUR HOME ENERGY SQUAD VISIT

https://www.mncee.org/minneapolis-energy-efficiency-loan
2023: Now have a 2% loan for higher incomes outside of Green Zones, instead of 0% for all. Allows for more projects to be completed with current budget.

Interest rate is determined by adjusted gross income from the most recent tax return. Households with an area median income below 150% will receive a 0% APR, and households with an area median income greater than or equal to 150% and outside of the Green Zone will receive a 2% APR.

Loan Terms

- Loan amount is based on project cost.
- Term determined by loan amount.
- Interest rate is determined by adjusted gross income from the most recent tax return. Households with an area median income below 150% will receive a 0% APR, and households with an area median income greater than or equal to 150% and outside of the Green Zone will receive a 2% APR.
- No closing costs.
- Income limits are based on adjusted gross income from the most recent tax return.

<table>
<thead>
<tr>
<th>Income Limits (150% AMI)</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>$123,300</td>
<td>$140,850</td>
<td>$158,400</td>
<td>$175,950</td>
<td>$190,050</td>
<td>$204,250</td>
<td>$218,250</td>
<td>$232,350</td>
<td></td>
</tr>
</tbody>
</table>
2023: Dual Fuel “Hybrid” heating systems are now eligible. Informed by the findings of the home electrification and weatherization study, with EVAC and utility input.

Eligible Improvements

- **Attic Air Sealing**: Attic air sealing is a prerequisite for attic insulation loan eligibility.
- **Attic Insulation**: Attic insulation must be combined with attic air sealing for loan eligibility. Final insulation R-Value must be greater than or equal to R-50 when attic space allows.
- **Wall Insulation**: All external wall cavities must be filled with insulation.
- **Air Source Heat Pumps (all electric and dual fuel "hybrid" systems)**: Must meet efficiency requirements listed on the CEE Supplemental Energy Application. [Download the application](https://www.mncee.org/minneapolis-energy-efficiency-loan).
- **Solar**: This improvement is eligible if there are no recommendations at an HES visit, or after all recommendations have been completed.
- **Heat Pump Electric Water Heaters**: must be Energy Star rated.
- **Health and Safety** issues addressed when performing any of the work items above; system replacement due to combustion safety, radon and asbestos mitigation, knob and tube wiring and ventilation.
- **1 bid** is required by a properly licensed contractor.
Green Cost Share Program

Isaac Evans
Isaac.Evans@minneapolismn.gov
Green Cost Share Program

• Grants for energy efficiency, solar, and air pollution reduction projects
• Built on Leveraging (Partnerships & Funding)
• Focused on improving health and reducing greenhouse gas emissions
Who do we serve?

Not *just* for businesses
Green Cost Share Program – Project Categories

**Solar**
- Standard solar applications open to eligible properties.
- Plurality of kWh savings in the program

**Solar Group Buy**
- Developers and other groups aggregating together primarily small residential projects.
- Plurality of properties in GCS

**4d Energy Efficiency**
- Only open to properties in 4d affordable housing incentive program.
- Higher incentives than standard energy efficiency projects.

**Energy Efficiency**
- Open to all eligible properties
- Growing percentage thanks to increased partnerships with CEE, MN Chamber, and other.

**Innovative**
- Focused on air pollution reduction and supporting newer carbon reducing technologies.
- Only a handful of projects a year.

**Automotive Refinishing**
- Focused on VOC reductions through switching to water-based paint.
- Looking to ramp up in context of new City ordinance.
# Green Cost Share Program – Eligibility by Property and Project Type

<table>
<thead>
<tr>
<th>Project Type</th>
<th>Single Family Owner Occ</th>
<th>Rental (1-2 units)</th>
<th>Rental (≥ 3 units)</th>
<th>Non-Profit</th>
<th>Business/Commercial</th>
<th>Industrial</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solar Energy</td>
<td>If in Group Buy</td>
<td>If in 4d* Program</td>
<td>Eligible</td>
<td>Eligible</td>
<td>Eligible</td>
<td>Eligible</td>
</tr>
<tr>
<td>Energy Efficiency</td>
<td>New* If &lt;80% AMI</td>
<td>New* If &lt;80% AMI</td>
<td>Eligible</td>
<td>Eligible</td>
<td>Eligible</td>
<td>Eligible</td>
</tr>
<tr>
<td>4d Energy Efficiency</td>
<td>-</td>
<td>If in 4d* Program</td>
<td>If in 4d* Program</td>
<td>If in 4d* Program</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Innovative Pollution Reduction</td>
<td>-</td>
<td>Eligible</td>
<td>Eligible</td>
<td>Eligible</td>
<td>Eligible</td>
<td>Eligible</td>
</tr>
<tr>
<td>Automotive Pollution Reduction</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Eligible</td>
<td>Eligible</td>
<td>Eligible</td>
</tr>
</tbody>
</table>
Green Cost Share Program – 2023 Incentives

The following incentives are based on the total project cost of the energy saving or pollution reduction component of a project.

<table>
<thead>
<tr>
<th>Project Type</th>
<th>Base Rate</th>
<th>Environmental Justice Rate</th>
<th>Income-qualified Housing Rate</th>
<th>Other Special Rate(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4d Energy Efficiency</td>
<td>City Match + Utility Rebates = 70% match up to $50,000</td>
<td>—</td>
<td>—</td>
<td>City Match + Utility Rebates = 90% match up to $50,000 if LIRE Qualified</td>
</tr>
<tr>
<td>Automotive Pollution Reduction</td>
<td>75% match up to $50,000</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Energy Efficiency</td>
<td>20% match up to $20,000</td>
<td>30% match up to $30,000</td>
<td>40% match up to $40,000</td>
<td>25% up to $75,000 for benchmarked buildings</td>
</tr>
<tr>
<td>Innovative Pollution Reduction</td>
<td>45% match up to $100,000</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>

The following incentives are based on the annual estimated kilowatt hour production of a solar array.

| Solar Energy & Solar Group Buy        | $0.20 per kWh up to $50,000                                              | $0.35 per kWh up to $50,000 | $0.40 per kWh up to $50,000 | —                                                                                   |
# Green Cost Share Program – What do the different rates mean?

<table>
<thead>
<tr>
<th>Incentive Category</th>
<th>How to Qualify</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Base Rate</strong></td>
<td>Any eligible property.</td>
</tr>
<tr>
<td><strong>Environmental Justice Rate</strong></td>
<td>Any eligible property in; 1. A Minneapolis Green Zone 2. A Minneapolis Great Street Eligible Priority Area</td>
</tr>
<tr>
<td><em><em>New</em> Income-qualified Housing Rate</em>*</td>
<td>Any eligible property or person qualified for an Income-qualified housing or utility support program. For example: 1. 4d Affordable Housing Incentive Program (solar) 2. Low Income Rental Classification (LIRC) 3. Income Qualified Solar*Rewards 4. Minnesota Energy Assistance Programs 5. Affordable housing provider (&lt;80% AMI)</td>
</tr>
<tr>
<td><strong>4d Special Rate</strong></td>
<td>For 4d properties going through the Low-Income Rental Efficiency Program.</td>
</tr>
<tr>
<td><strong>Energy Benchmarked Building</strong></td>
<td>Available to commercial and multifamily residential buildings greater than 50,000 square feet under the city’s Energy Benchmarking ordinance</td>
</tr>
</tbody>
</table>
Program Updates and Results
Program Results – All Properties (2012-2022)

- 1,141 properties in total
- $10.8 million total invested
- 21.19 MW-DC Solar Installed
- 4.6 million kWh annually
- 435,000 therms saved annually
- Estimated about $141 million lifetime savings
Program Results – Environmental Justice

2018-2022

- Number of LI Housing Units Served
  - 2018-2022: 3,734
  - 2022: 576

- Total Spending
  - 2022: $1.53 million

2022

March 13, 2023
Program Updates – Strategy Evolution

Objective: Adapt the program scale easily and leverage as much outside funding as possible.

1. Ease access to GCS funding by working with partners to administer GCS funds alongside their own.
   - Energy Smart (master contract)
   - CEE One-Stop (master contract)
   - New* ARPA Green Zone Weatherization RFP

2. Leverage and apply for additional funding to scale the program.
   - Inflation Reduction Act
     - Point of Sale Rebates (change what we incentivized)
     - Grant opportunities
   - Eco Act (change what we incentivized)
   - ARPA funding (Phase I and II)
   - Energy Efficiency and Conservation Block Grant (EECBG)

3. Incorporate weatherization into other City work with GCS funding.
   - Health has energy expertise to administer and be stewards of funding while working with internal partners.
   - Lead and Healthy Homes Weatherization
   - CPED Home Improvement Loan Program
   - Regulatory Services – Housing Inspectors

March 13, 2023
<table>
<thead>
<tr>
<th>Contact Details</th>
<th>Can Help with</th>
</tr>
</thead>
</table>
| **City of Minneapolis: Green Cost Share**  
Isaac Evans  
Isaac.evans@minneapolismn.gov  
612-849-5349 |  
- Explaining types of projects that may qualify  
- Connecting to program partners  
- Program application process  
- Reviewing solar proposals  
- Assistance with city processes (Spanish & English) |
| **City of Minneapolis: Green Cost Share**  
Firye Bediye  
Firehiwot.bediye@minneapolismn.gov  
612-368-7154 |  
- Explaining types of projects that may qualify  
- Connecting to program partners  
- Program application process  
- Assistance with city processes |
Strategies for Equitable Energy Efficiency Program Design Report
Strategies for Equitable Energy Efficiency Program Design

A toolkit for two high-priority populations in the Twin Cities: Black homeowners and property owners renting to Latinx households
Project Team

Citizens Utility Board of Minnesota
Carmen Carruthers
Brian Edstrom
Hannah Hoeger
Annie Levenson-Falk

Efficiency for Everyone
Marti Frank, PhD

TerraLuna Collaborative
Edwin Nelson

University of Minnesota Chan Lab
Gabe Chan, PhD
Erica Blevins

City of Minneapolis
Kelly Muellman

Community Power
Timothy DenHerder-Thomas
Steering Committee Members

- Rebekah Billings, CenterPoint Energy
- Metric Giles, Community Stabilization Project
- David Hueser, Xcel Energy
- Rebecca Olson, Center for Energy and Environment
- Dan Roberts, Sustainable Resource Center
- Becky Timm, Nokomis East Neighborhood Association
- Ethan Warner, CenterPoint Energy
- Kimberley Washington, Neighborhood Hub
High Priority Communities

Communities with higher than expected energy burdens:

- **Black homeowners in North Minneapolis and surrounding suburbs**
- Black renters in urban and suburban areas
- **Latinx households, mostly renters, in East St. Paul and South Minneapolis**
- Hmong and other non-white households, mostly renters, in west St. Paul
- Mostly white, low/moderate income homeowners in outer-ring suburbs and rural areas
- Mostly white, low/moderate income renters in Carver and western Scott Counties
### Black Homeowners in North Minneapolis and Surrounding Suburbs

<table>
<thead>
<tr>
<th>Neighborhood</th>
<th>Est. # of homes</th>
<th>Mean Income</th>
<th>Energy Burden</th>
</tr>
</thead>
<tbody>
<tr>
<td>North Minneapolis/St. Anthony (#1405)</td>
<td>4,714</td>
<td>$54,545</td>
<td>8.1%</td>
</tr>
<tr>
<td>Brooklyn Center/Golden Valley/New Hope/Robbinsdale (#1404)</td>
<td>1,556</td>
<td>$60,142</td>
<td>7.1%</td>
</tr>
</tbody>
</table>

Data: American Community Survey (2017), US Census
Latinx Renters in East St. Paul and South Minneapolis

<table>
<thead>
<tr>
<th>Neighborhood</th>
<th>Est. # of homes</th>
<th>Mean Income</th>
<th>Energy Burden</th>
</tr>
</thead>
<tbody>
<tr>
<td>East Saint Paul (#1303)</td>
<td>6.149</td>
<td>$60,713</td>
<td>5.4%</td>
</tr>
<tr>
<td>Southeast Minneapolis (#1406)</td>
<td>9.097</td>
<td>$53,823</td>
<td>6.0%</td>
</tr>
</tbody>
</table>

Data: American Community Survey (2017), US Census
Energy Stories
Black Homeowners
Black Homeowner Learnings

“My furnace went out earlier this week on the below-zero day, so it was super cold. But we got it fixed, it was under Service Plus. It was covered.”

“I had an emergency, it was over a weekend. I Googled. I called three or four different plumbers. The one who did the work is the one who would come out. Some don’t even come to North Minneapolis.”
Black Homeowners Learnings, Cont.

“I get overwhelmed by the whole process and the financial piece of it. [Discretionary efficiency upgrades] are low priority when you have other issues you have to take care of.”

“If there would be someone who could walk alongside me, who I could call, who I know, and they can be held accountable, that would ease my mind a lot.”

“Most of what they were recommending I couldn’t afford to do.”
Energy Stories
Rental Property Owners in East St. Paul and South Minneapolis
Rental Property Owners Learnings

“If it’s an optional thing to do, cost is a huge consideration. So the most recent window project I did, I believe that was either a full grant or at least a 50% cost sharing. I wouldn’t probably have been able to do that without the program.

“If it’s not broken, I don’t mess with it.”

“I never ignore financial incentives.”
Emergency vs Non-Emergency

A Framework for Decision Making and Program Design
Program Ideas 1 & 2 for Black Homeowners

Emergency Decision
1) Leverage the equipment service plans
   ~or~
2) Provide Personalized Support
   • Promote efficient equipment
   • Technical assistance identifying suitable replacement
   • Help with managing costs (sufficient rebate, repayment plan)
Program Idea 3 for Black Homeowners

Non-Emergency Decision
Launch Integrated Advisor Service
• Build on Home Energy Squad and Energy Advisor Service
• Help prioritize, plan, and pay for improvements over time
Program Idea 1 for Property Owners

Emergency Decision
Target Emergency Replacements

- Focus outreach on rental property service providers
- Cover the full cost of upgrading to the efficient model
Program Idea 2 for Property Owners

Non-Emergency Decision
Encourage Discretionary Upgrades

- Offer generous incentives
- Make it easy for property owners
Next Steps

- Share with interested parties
- Determine processes to study further
- Identify opportunities to implement recommendations
  - Community led efforts
  - Local government championed efforts
  - Utility Triennial Plan updates
- Continued coordination and communication
City Recommendations for 2024-2026 CIP Triennial Plans
Common Themes for Both Partner Plans

We encourage:

• Beneficial electrification, including heat pumps
• Expanding the popular Home Energy Squad
• Categorical eligibility for customers living in Green Zones for income qualifying programs
• Higher appliance incentives for both renters and property owners
• Program coordination to take advantage of federal funding
Common Themes for Both Partner Plans

We recommend developing two plans:

– Proactive Replacement Plan to assist customers in choosing higher efficiency equipment before aging equipment fails

– Reactive Replacement Plan to assist customers in choosing higher efficiency equipment after it fails
Adjourn