**Breakout Session on High Performance BUILDINGS**

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| **Vision & Long-Term Goals:**  New Buildings   * Net Zero Building Construction * Solar ready and EV ready building construction   Retrofits   * Weatherize & improve HVAC in single family, multi family, business   Reduce use of natural gas   * Beneficial electrification of buildings * Benefit from time of use rates for electricity * Possibility of 1/3 hydrogen in natural gas supply (generated off peak @ Nuclear plants) | **Action Benefits:**   * GHG Emissions Reduction – climate stability * Energy & cost savings for building owners & tenants * Climate Resilience, Increased comfort * Economic Development |

**High Impact Actions**

**Existing buildings - Energy Efficiency Improvements – city, commercial, multi-family**

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| **Action #1**  *Adopt an Energy Benchmarking ordinance* (See page #5) | | |
| **Examples:** B3 (Cities) & Commercial/Multifamily  **Purpose:** Owners know building energy score & invest in efficiency  **Cities Working on it:** St. Paul, Mpls, Edina, SLP  **Resources:** Energy Benchmarking Collaborative (with CEE) | **Discussion Notes:**  **Questions, Challenges, Needs** | **Next Steps:**  **Interested Cities & Leaders** |
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| **Action #2**  **Commercial and Multifamily Engagement Campaigns** (See page #5) | | |
| **Examples:** PACE  Cost share grants  Energy Assessments  Partners in Energy  **Cities Working on it:** Mpls, Edina, SLP, Bloom  **Resources:** CEE, Mpls | **Discussion Notes:**  **Questions, Challenges, Needs** | **Next Steps:**  **Interested Cities & Leaders** |
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**New Construction for Net Zero Buildings – City Owned, Commercial, Multi-Family, Single Family**

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| **Action #3**  *Adopt a Sustainable Building Policy (covering projects your city is investing in)* (See page #6) | | |
| **Examples:**  St. Paul’s Policy (10 yrs)  MPLS policy (in 2020)  **Cities Working on it:**  St. Paul, Minneapolis  **Resources:** St. Paul, Mpls, CSBR | **Discussion Notes:**  **Questions, Challenges, Needs** | **Next Steps:**  **Interested Cities & Leaders** |
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| **Action #4**  *Educating Developers on Design Assistance, PACE for new construction, Example Projects (p.6)* | | |
| **Purpose:** Impact current developments  **Cities Working on it:** Edina, Minneapolis  **Resources:** CSBR, St. Paul Port Authority | **Discussion Notes:**  **Questions, Challenges, Needs** | **Next Steps:**  **Interested Cities & Leaders** |
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| **Action #5**  *Support Legislation &/or State Policy Improvements to require better energy performance (p.8)* | | |
| **Examples:**  Legislation - Optional High Performance Building Standard – Cities Can Adopt  Update Statewide Building Code sooner  **Purpose:** Improve new building construction  **Cities Working on it:**  Mpls, St. Paul, Edina, SLP, Bloomington,  **Resources:** SLP, Mpls, Edina, CEE, Fresh Energy | **Discussion Notes:**  **Questions, Challenges, Needs** | **Next Steps:**  **Interested Cities & Leaders** |
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**Community Wide Energy Retrofits with existing homes, apartments & businesses**

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| **Action #6**  *Add required Energy evaluation in Truth in Sale of Housing (& Renting) Inspections* (page #9) | | |
| **Examples:**  Minneapolis Policy gives prioritized list of actions to take  Zero interest home weatherization loans  HES contractor bids  **Purpose:** Support sellers & buyers to invest in energy improvements  **Cities Working on it:** MPLS  **Resources:** CEE, MPLS | **Discussion Notes:**  **Questions, Challenges, Needs** | **Next Steps:**  **Interested Cities & Leaders** |
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| **Action #7**  *Comment at the MN PUC to Improve Utility Conservation Improvement Programs (CIP) p.9* | | |
| **Examples:**  Multifamily EE program  Inclusive Financing  **Purpose:** Increase equity and impacts  **Cities Working on it:**  Minneapolis  **Resources:** CEE, MN CUB | **Discussion Notes:**  **Questions, Challenges, Needs** | **Next Steps:**  **Interested Cities & Leaders** |
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**Success Measures**

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| **Success** **Indicators**  Met Council (June 2020)   * City wide natural gas use * Number of new net zero buildings * Weatherization - # of homes, apartments, businesses * Reducing number of energy burdened households | **Past Paradigm**   * Low Cost Building Construction * Split incentive between builder and building operator | **New Paradigm**   * Net Zero Building Construction * Solar & EV ready * MN SB 2030 standards * Construction with better building envelope & HVAC – via rebates, PACE, etc. * Lower energy costs for tenants, building users * District Heating/Cooling * Electrification of buildings |

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| **Equity** – What are our opportunities & risks? How do we address them? |

**Next Steps**

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| **Possible Ways Our Cities Could Work Together** | |
| **Ways Hennepin County & Met Council** can help cities | **Ways State Agencies & NGOs** can help cities |
| **State Policy** **Changes** that would help cities | **Ways cities can collaborate toward their energy supply goals?** |
| **Who’s interested in meeting up again to further explore ways our cities can collaborate to make progress on this area?**  Names/Cities: | |

**Contacts Breakout Session Co-Facilitators**

Tim Sandry, Chair, Bloomington Sustainability Commission, 952-303-9760 tmsandry@gmail.com

Leah Hiniker, Energy Manager, Hennepin County Facility Services 612-543-1219 [leah.hiniker@hennepin.us](mailto:leah.hiniker@hennepin.us)

John Dunlop, Minneapolis, MRES, Engineer/ Energy Consultant (612) 590-5538 JDunlop@RESMinn.com

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**Resilient Cities and Communities Coalition**

*Collaborating to achieve (and live) a resilient future* [www.afors.org/resilientcities](http://www.afors.org/resilientcities)

****Sean Gosiewski,

Executive Director,

Alliance for Sustainability,

612-250-0389 [sean@afors.org](mailto:sean@afors.org)

**High Performance BUILDINGS Resources**

**Resource People**

Leah Hiniker, Energy Manager, Hennepin County Facilities, 612-543-1219 [leah.hiniker@hennepin.us](mailto:leah.hiniker@hennepin.us)

Ben Rabe, Fresh Energy 651 726 7574 rabe@fresh-energy.org

Megan Hoye - Center for Energy and Environment 612-244-241 [mhoye@mncee.org](mailto:mhoye@mncee.org)

Richard Graves CSBR U of MN (651) 605-5450 rmgraves@umn.edu http://www.csbr.umn.edu/

Kurt Schultz, St. Paul, PED, Sustainable Building Policies 651 266-6590 kurt.schultz@ci.stpaul.mn.us

Brian Hoffman, St. Louis Park, Building and Energy Director:952.924.2584 bhoffman@stlouispark.org

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| **Existing buildings - Energy Efficiency Improvements – city, commercial, multi-family** |

**Action #1 Adopt an Energy Benchmarking ordinance**

**Purpose:** Inform building owners & managers of their building energy scores to motivate them to invest in energy efficiency.

**Examples:**

* **City Buildings** B3 Benchmarking <https://mn.b3benchmarking.com/>
* **Commercial/Multifamily** Energy Star Portfolio Manager

[www.energystar.gov/buildings/facility-owners-and-managers/existing-buildings/use-portfolio-manager](http://www.energystar.gov/buildings/facility-owners-and-managers/existing-buildings/use-portfolio-manager)

**Resources**

**Hennepin Co. Efficient Buildings Collaborative** with **Minneapolis, Edina, SLP** (more cities can join!

This collaborative provides cities with the platform and resources needed to make it easier to adopt and implement building benchmarking policies. GPI and Center for Energy and Environment (CEE) are partnering with Hennepin County to support a group of cities through the policy development and stakeholder engagement process. This program is available to cities statewide. [www.hennepin.us/your-government/projects-initiatives/efficient-buildings-collaborative](http://www.hennepin.us/your-government/projects-initiatives/efficient-buildings-collaborative)

* Leah Hiniker, Energy Manager, Hennepin County 612-543-1219 [leah.hiniker@hennepin.us](mailto:leah.hiniker@hennepin.us)

**Action #2 - Commercial and Multifamily Engagement Campaigns**

**Purpose:** Support owners of larger commercial and multifamily properties to implement energy efficiency improvements

**Examples**

* **Partners in Energy** Lake Street Energy Challenge, Edina, Eden Prairie, St. Louis Park, Bloomington, Maplewood, St. Paul, Faribault, Northfield, <https://www.xcelenergy.com/working_with_us/municipalities/partners_in_energy>
* **St. Louis Park St- Roadmap to Achieve Carbon Neutrality by 2040** Emily Ziring, Sustainability Coordinator, 952-924-2191 [EZiring@stlouispark.org](mailto:EZiring@stlouispark.org)

[www.betterenergy.org/blog/minnesotas-st-louis-park-creates-ambitious-roadmap-achieve-carbon-neutrality-2040/](http://www.betterenergy.org/blog/minnesotas-st-louis-park-creates-ambitious-roadmap-achieve-carbon-neutrality-2040/)

* **Minneapolis Green Business Cost share grants –** Luke Hollenlamp 673-2349 [luke.hollenkamp@minneapolismn.gov](mailto:luke.hollenkamp@minneapolismn.gov) [www.minneapolismn.gov/environment/greencostshare](http://www.minneapolismn.gov/environment/greencostshare)
* **MinnPACE** financing for commercial energy improvements<https://www.minnpace.com>
* **Utility Multi Family Programs** <https://www.cleanenergyresourceteams.org/multifamily-efficiency-programs-benefit-building-owners-and-tenants>
* **Energy Smart - helps businesses become more energy efficient.** [www.mnchamber.com/your-opportunity/energy-smart](http://www.mnchamber.com/your-opportunity/energy-smart)
* **Twin Cities Small Business Energy Initiative (GPI)** [www.betterenergy.org/blog/opportunities-to-increase-small-business-engagement-on-energy/](http://www.betterenergy.org/blog/opportunities-to-increase-small-business-engagement-on-energy/)

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| **New Construction for Net Zero Buildings – City Owned, Commercial, Multi-Family, Single Family** |

**Action #3 - Adopt a Sustainable Building Policy** (covering projects your city is investing in)

**Examples & Resources**

**U of MN Center for Sustainable Building Research** <http://www.csbr.umn.edu/>

**City of Minneapolis – Sustainable Building Policy** is being developed in 2020 building upon St. Paul’s policy while adding specific requirements for

* + **City Buildings**
  + **Commercial**
  + **Multi-family –** private and nonprofit
  + **Single Family** (Passive House standard) <http://minneapolismn.gov/sustainability/buildings-energy/WCMSP-215225>
* **Contact:** Luke Hollenlamp Sustainability Program Coordinator 673-2349 [luke.hollenkamp@minneapolismn.gov](mailto:luke.hollenkamp@minneapolismn.gov) [www.ci.minneapolis.mn.us/sustainability/index.htm](http://www.ci.minneapolis.mn.us/sustainability/index.htm)
* **Minneapolis declares climate emergency, plans sustainable building policy** City needs to double down on its greenhouse gas reductions, officials said. Star Triune DECE 2, 2019 By Miguel Otárola <http://www.startribune.com/minneapolis-declares-climate-emergency-announces-sustainable-housing-policy/565709652/>
* **Green Building Options Checklist** [www.minneapolismn.gov/mdr/greenbuilding/index.htm](http://www.minneapolismn.gov/mdr/greenbuilding/index.htm)

**City of St. Paul – Sustainable Building Policies**

* **Contact:** Kurt Schultz**,** City of St. Paul**,** PED, 651 266-6590 [kurt.schultz@ci.stpaul.mn.us](mailto:kurt.schultz@ci.stpaul.mn.us)

<https://www.stpaul.gov/departments/planning-economic-development/economic-development/sustainable-building-policy>

* The City of Saint Paul and the Saint Paul Housing and Redevelopment Authority adopted [sustainable development policies](http://www.sustainablebuildingpolicy.umn.edu/saintpaul/) for public and privately developed buildings receiving more than $200,000 in public financing.
* [Download the guidebook](http://www.stpaul.gov/DocumentCenter/View/73970) on building sustainably.
* Adopted sustainability policies for: [New municipal and HRA owned buildings](https://www.stpaul.gov/DocumentCenter/View/16690)  
  [Private Development receiving more than $200,000 in public financing](https://www.stpaul.gov/DocumentCenter/View/16691)
* City staff are available to assist developers who are required to follow the policy and any other developers interested in building sustainably. For projects that are not required to comply with either of the above two policies, the Saint Paul PED/HRA [*Sustainability Initiative*](https://www.stpaul.gov/DocumentCenter/View/16692) will apply.

**Action #4 - Educate & Engage Developers to build high performance new multifamily and commercial building using existing incentives**

**Examples/Resources**

**St. Paul Port Authority** – energy efficient & Net Zero commercial building construction

* **Monte Hillman** St Paul Port Authority (651) 204-6237 [mmh@sppa.com](mailto:mmh@sppa.com)
* **Net Zero Prototype** <https://www.sppa.com/net-zero-prototype-unveiled>
* **October 2019 Workshop Video** Understanding Net Zero in the Commercial Real Estate Sector

<https://www.youtube.com/watch?v=GKbQymjzLb4&list=UU40XglUFrbEIr3I-9kqrvDQ&index=20>

**MN ULI – Re-Development Ready Guide** <https://minnesota.uli.org/get-involved/advisory-services/best-practice-resources/redevelopment-ready-guide-2/>

**Xcel – Energy Design Assistance (EDA)** during project design, review of architectural plans - Maximize the saving opportunities in your construction designs by receiving free, comprehensive services to identify energy and cost-saving strategies for your new construction or major renovation projects [www.xcelenergy.com/programs\_and\_rebates/business\_programs\_and\_rebates/new\_construction\_and\_whole\_building/energy\_design\_assistance](http://www.xcelenergy.com/programs_and_rebates/business_programs_and_rebates/new_construction_and_whole_building/energy_design_assistance)

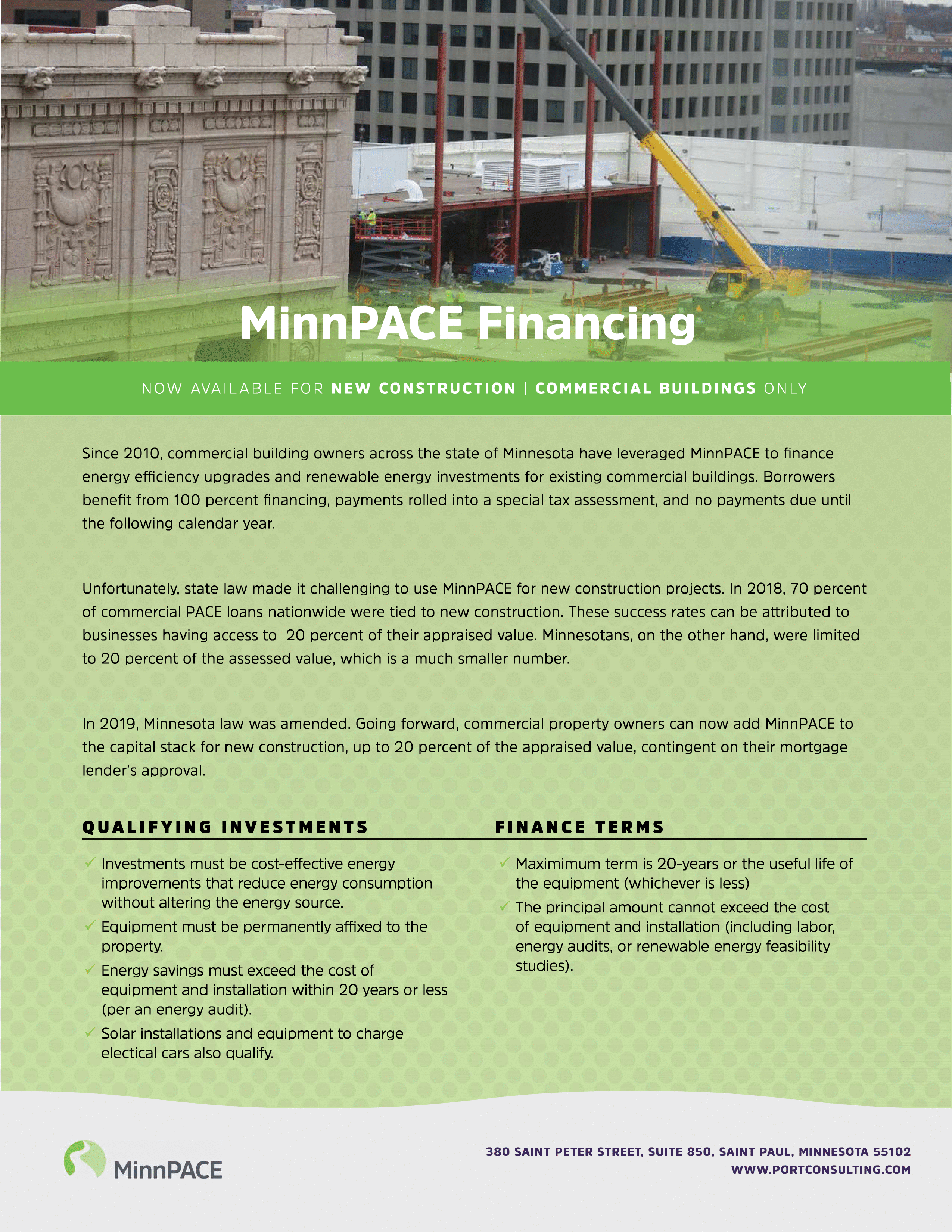
**City of Edina** - proactively working with developers on affordable housing– **Contact** Stephanie Hawkinson Affordable Housing Development Manager 952-833-9578 [shawkinson@edinamn.gov](mailto:shawkinson@edinamn.gov)

<https://www.edinamn.gov/624/Affordable-Housing>

* **City of Edina Updated Policy on New Multifamily Housing** [hwww.edinamn.gov/DocumentCenter/View/6195/Policy-on-New-Multi-family-Affordable-Housing-PDF](https://www.edinamn.gov/DocumentCenter/View/6195/Policy-on-New-Multi-family-Affordable-Housing-PDF)

**Saint Paul Port Authority** <https://www.sppa.com/energy-financing/minnpace>

**MinnPACE - Now available for new construction** projects to access 20% of the future value of the property up front to invest in improved HVAC and building envelope, to be paid off by the building owner over 10 years based on the energy savings. (based on bank approval) **Contact** Michael Linder at 651-204-6236 or [mjl@sppa.com](mailto:mjl@sppa.com) <https://www.minnpace.com> /

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**Action #5 - Support Legislation &/or State Policy Improvements to require better energy performance**

**Purpose:** Improve new building construction

**Cities working on it:** SLP, MPLS, Edina, Eden Prairie, Bloomington, Rochester, etc.

* Kurt Schultz, St. Paul, PED, Sustainable Buildings 651 266-6590 [kurt.schultz@ci.stpaul.mn.us](mailto:kurt.schultz@ci.stpaul.mn.us)
* Brian Hoffman, SLP, Building and Energy Director: 952.924.2584 [bhoffman@stlouispark.org](mailto:bhoffman@stlouispark.org)
* Stacy Miller, Energy Policy, City of Minneapolis 612 673-3110 [stacy.miller@minneapolismn.gov](mailto:stacy.miller@minneapolismn.gov)

**Technical Resource People**

* Justin Fay Policy Director, Fresh Energy 651 294 7147 [fay@fresh-energy.org](mailto:fay@fresh-energy.org)
* Ben Rabe, Fresh Energy 651 726 7574 [rabe@fresh-energy.org](mailto:rabe@fresh-energy.org)
* Megan Hoye - Center for Energy and Environment 612-244-241 [mhoye@mncee.org](mailto:mhoye@mncee.org)
* Richard Graves CSBR U of MN (651) 605-5450 rmgraves@umn.edu http://www.csbr.umn.edu/

**Pathways to Advancing Energy Standards in New Commercial Buildings:**

**Option 1 - New Legislation - Optional Advanced Performance Building Standard MN Cities Can Adopt –**

* <https://www.pca.state.mn.us/sites/default/files/tdr-fg15-01.pdf>

**Option 2 - Update MN Statewide Building Energy Code sooner**

* <https://www.energycodes.gov/adoption/states/minnesota>

**Resources in development** We would like to learn about your city’s interest in joining our efforts to allow local jurisdictions to pursue a higher energy standard for commercial and multifamily buildings. Moreover, we would like to work with you to learn what would be helpful for promoting this effort internally. Please note that we will be distributing the items below to cities in the coming weeks.

* Sample resolution in support of allowing cities the option to adopt an advanced commercial and multifamily energy standard
* Key talking points to help explain our initiative to internal and external colleagues
* A conference call for city leadership and government affairs staff to offer an overview of the effort and provide an opportunity for feedback, coordination, and questions.

**Next Steps - State-Led Stakeholder Process** We think it is important for you to know that cities are not working alone on this effort. Governor Tim Walz has directed Commerce Commissioner Steve Kelley and Labor & Industry Commissioner Nancy Leppink to convene a broader stakeholder workgroup to discuss how to assist cities in their efforts to reduce emissions from new and renovated buildings.  A voluntary advanced energy standard for buildings is central to their discussion.  At the conclusion of their five-meeting process, a report will be drafted and presented to the Governor for consideration.  Cities are represented in this process by Craig Johnson with the League of Minnesota Cities, Brian Hoffman (Saint Louis Park), and Kurt Schultz (Saint Paul). We will keep you posted on developments.

**Keeping in communication in 2020 -** We will continue to communicate about this effort into the 2020 session as needed. Feel free to request that we add or remove names from this distribution list by replying to this email.Thank you for your interest in improving energy efficiency and resilience in commercial and multifamily buildings! Please feel free to contact anyone on the planning team with your thoughts or questions.

Stacy Miller on behalf of the Planning Team, Ellen Biales, Bloomington, Tara Brown, Edina, Kevin Bright, Rochester, Brian Hoffman, Saint Louis Park, Kurt Schultz, Saint Paul

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| **Community Wide Energy Retrofits with existing homes, apartments & businesses** |

**Action #6 - Add required Energy evaluation in Truth in Sale of Housing (& Renting) Inspections**

**Purpose: Support sellers & buyers to invest in energy improvements**

**Example  
City of Minneapolis Truth in Sale of Housing (TISH) Energy Disclosure Report Requirement**

<http://www.minneapolismn.gov/ccs/ccs_tish>

**Contact** Luke Hollenlamp 673-2349 [luke.hollenkamp@minneapolismn.gov](mailto:luke.hollenkamp@minneapolismn.gov)

As of January 15, 2020, Truth in Housing evaluators have begun collecting additional information on the energy efficiency of a home. This data will be used to create an Energy Disclosure Report which is located at the end of the full Truth in Housing report. The goal of this new initiative, passed in ordinance by the City Council in February 2019, is to provide homeowners and prospective buyers with the general energy performance of a home. The report will also give recommendations on what could be done to improve the energy efficiency.

A **energy score of 0-100** will be generated from the **following 4 key areas** looked at for the **energy disclosure report: (1) Attic Insulation, (2) Wall Insulation (3) Single Pane Windows without Storms (4) Heating System** Unlike the rest of the Truth in Housing report, there will be no required repairs related to the energy disclosure report. **Frequently Asked Questions** <http://www.minneapolismn.gov/www/groups/public/@cped/documents/webcontent/wcmsp-222012.pdf>

**Minneapolis** - Zero interest home weatherization loans (with MN CEE) with the interest rate brought down through funds provided by the clean energy franchise fee

**City of Minneapolis 2018 Franchise Fee Increase for Climate and Energy Action**

<http://www.minneapolismn.gov/www/groups/public/@citycoordinator/documents/webcontent/wcmsp-206063.pdf>

2.8 Million from the clean energy franchise fee annual revenues to maintain (not decrease) important climate programming including

* Green cost share grants for businesses
* Low cost home energy audits and
* Zero interest home weatherization loans
* Green work force development and an inclusive financing pilot project.

Minneapolis Utility Franchise Agreements [www.minneapolismn.gov/energyfranchise/index.htm](http://www.minneapolismn.gov/energyfranchise/index.htm)

**Home Energy Squad enhanced visits** [www.mncee.org/solutions/homes/home-energy-squad-enhanced/](http://www.mncee.org/solutions/homes/home-energy-squad-enhanced/)

* **Contact:** Stacy Boots Camp. Residential Program Outreach & Recruitment Coordinator. 612-244-2429 [sbootscamp@mncee.org](mailto:sbootscamp@mncee.org)
* CEE HES staff provide - qualified bids from approved contractors to do the work
  + Access to low cost financing from CEE

**Action #7 - Comment at the MN PUC to Improve Utility Conservation Improvement Programs (CIP)**

* **Especially to improve multi-family residential programs and low income access.**

**Resources** <https://www.mncee.org/policy/minnesota-energy-dockets/>

* **City of Minneapolis** Stacy Miller, 612 673-3110 [stacy.miller@minneapolismn.gov](mailto:stacy.miller@minneapolismn.gov)
* **Center for Energy and Environment** Mike Bull. Director of Policy (612) 335-5858 [mbull@mncee.org](mailto:mbull@mncee.org)
* **MCEA** Carolyn Berninger Energy Policy (651) 287-4878 [cberninger@mncenter.org](mailto:cberninger@mncenter.org) [www.mncenter.org](http://www.mncenter.org)
* **City of Minneapolis – Inclusive (On Bill) Financing Study** <https://energytransition.umn.edu/projects/inclusive-finance-for-residential-efficiency/>

5 High-Impact **Buildings Policy Options** for Low-Carbon Cities

<https://greenstep.pca.state.mn.us/page/ordinances>

**Please send your suggestions and additions to**

Phil Muessig, MPCA, MN Greenstep Cities Coordinator, 651-757-2594, [Philipp.muessig@state.mn.us](mailto:Philipp.muessig@state.mn.us)

**Building Policy Options**

* For existing buildings
  + [**Use the State’s B3**](https://greenstep.pca.state.mn.us/bestPracticesDetail_actions.cfm?bpid=1&aid=714) public building benchmarking tool to target energy-efficiency improvements {*1.1*}
  + [**Require commercial building energy benchmarking**](https://greenstep.pca.state.mn.us/bestPracticesDetail_actions.cfm?bpid=2&aid=723) (using Hennepin Co. registry) to incentivize energy- efficiency improvements averaging 1.7% per year {*2.3*}
  + [**Require Truth-in-Housing**](https://greenstep.pca.state.mn.us/bestPracticesDetail_actions.cfm?bpid=2&aid=723) residential reporting to incentivize and better price more energy-efficient housing {*2.3*}
  + [**Dedicate residential/commercial improvement**](https://greenstep.pca.state.mn.us/bestPracticesDetail_actions.cfm?bpid=2&aid=726) funding for energy efficiency and renewables {*2.6*}
* For new buildings
* [**Require the Sustainable Buildings 2030**](https://greenstep.pca.state.mn.us/bestPracticesDetail_actions.cfm?bpid=3&aid=731) state energy standard for city, and/or commercial/industrial, and/or residential properties that {*3.3*}
  + receive city financial support, and/or
  + require city regulatory approval (planned unit developments, conditional use permits, rezonings, variances)

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Options selected from a review of:

* *Best Practice Actions* and *City Action Reports* (MN GreenStep Cities program: 2019) at <https://greenstep.pca.state.mn.us>
* *Climate Solutions and Economic Opportunities* (MN Environmental Quality Board: 2017) at <https://www.eqb.state.mn.us/content/climate-change>
* *High Impact Practices* (Urban Sustainability Directors Network: 2019) at <https://www.usdn.org/public/page/6/Projects>
* *Drawdown Solutions* (Project Drawdown: 2017) at<https://www.drawdown.org/solutions-summary-by-rank>

