**Breakout Session on Energy Supply**

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| **Vision & Long-Term Goals:*** 100% zero carbon energy supply for city operations, businesses, residents by 2030
* Local renewable energy production
* Beneficial electrification – EVs, buildings
* Benefiting from the Smart Grid, time of use rates
 | **Action Benefits:*** GHG Emissions Reduction – climate stability
* Potential savings on energy bills
* Cleaner Air
* Energy Resilience
* Economic Development
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**High Impact Actions**

**Procuring Renewable Energy for City Operations**

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| **Action #1***100% Clean Power for City Operations* (See page 5) |
| **Examples:**community solar gardens, purchasing RECs—Windsource**Purpose:** Lead by example & save city $**Cities Working on it:** Mpls, Edina, SLP**Resources:** GPI Energy Procurement Cohort | **Discussion Notes:****Questions, Challenges, Needs** | **Next Steps:****Interested Cities & Leaders** |
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**Local Renewable Energy Production**

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| **Action #2***Solar Ready Building Construction—City owned buildings, businesses, multifamily* (See page 6) |
| **Example:** Sustainable Building & Purchasing Policy **Cities Working on It:**Some SolSmart cities**Resources:**Met Council, GPI, CSBR | **Discussion Notes:****Questions, Challenges, Needs** | **Next Steps:****Interested Cities & Leaders** |
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| **Action #3***Expand Rooftop Solar—Businesses, Institutions (schools), Residents (*See page 6) |
| **Purpose:**Renewable Generation in City**Cities Working on It:**SolSmart, zoning, permitsSolar feasibility studies for 50 businesses – MaplewoodSolar bulk purchase campaign Matching incentive grants – MPLS **Resources:** CERTS, MREA, MRES | **Discussion Notes:****Questions, Challenges, Needs** | **Next Steps:****Interested Cities & Leaders** |
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| **Action #4***Support Legislation (2021) to Continue Xcel Energy’s Solar Rewards* (See page #7) |
| **Resource:** Stacy Miller, City of Minneapolis | **Discussion Notes:****Questions, Challenges, Needs** | **Next Steps:****Interested Cities & Leaders** |
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**Community Wide Clean Energy Supply**

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| **Action #5***Cities commenting on Xcel’s Integrated Resource Plan (IRP) in April* (See page #7) |
| **Purpose:** Retire coal faster, limit new natural gas plants, increase distributed generation and demand response, access clean power sooner**Cities working on it:** Minneapolis, Edina**Resources:** Minneapolis, MCEA, Sierra Club, MCEA, Community Power MN, MN CUB | **Discussion Notes:****Questions, Challenges, Needs** | **Next Steps:****Interested Cities & Leaders** |
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| **Action #6***Additional Cities Helping with City of Minneapolis 100% Renewable Energy Resolution (p.#7)* |
| **Purpose:** Find affordable, legal way to access 100% clean power city-wide for all residents and businesses by 2030**Cities working on it**: Minneapolis**Resources:** Stacy Miller, Mpls– has a completed research study, planning next steps | **Discussion Notes:****Questions, Challenges, Needs** | **Next Steps:****Interested Cities & Leaders** |
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**Success Measures**

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| **Success** **Indicators** * Met Council
* Renewable energy use for city operations
* City wide electricity use
* Carbon intensity of electricity supply
* Amount of solar generation within city
 | **Past Paradigm*** Centralized Electric Power Grid
* Burning fossil fuels
* Peak demand met w/ expensive power
 | **New Paradigm*** Solar, Wind, Storage, Smart Grid
* Grid plus distributed generation
* Beneficial electrification – EVs, building heating & cooling
* Time of use rates, Demand response
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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**

Mary T'kach Ramsey County Energy Manager (651) 775-4379 mary.t'kach@co.ramsey.mn.us

Ted Redmond Maplewood Env. Commission & Pale Blue Dot 612 669-7056 tredmond@paleblue-dot.org

**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

**Clean Energy Supply Resources**

**Resource People**

* **Mary T'kach** Ramsey County Energy Manager (651) 775-4379 mary.t'kach@co.ramsey.mn.us
* **Cameran Bailey**, SolSmart Advisor, Met Council 651.602.1212 cameran.bailey@metc.state.mn.us
* **Barbara Jacobs** Energy Transition Lab, U of MN energy storage, 612-626-9541 jaco0270@umn.edu <https://energytransition.umn.edu/>
* **Luke Hollenlamp** City of Minneapolis, Sustainability, 673-2349 luke.hollenkamp@minneapolismn.gov
* **Stacy Miller**, City of Minneapolis, Energy Policy Staff 612 673-3110 stacy.miller@minneapolismn.gov
* **Ted Redmond**, Pale Blue Dot, 612-669-7056 tredmond@paleblue-dot.org Solar feasibility studies, climate adaptation planning, climate action planning [www.bluedotregister.org/community-services/#Resilient-Cities](http://www.bluedotregister.org/community-services/#Resilient-Cities)
* **Brian Ross,** Senior Program Director, Great Plains Institute, 612-767-7296, bross@gpisd.net [www.betterenergy.org/](http://www.betterenergy.org/) Energy Planning Tools [www.regionalindicatorsmn.com/energy-planning](http://www.regionalindicatorsmn.com/energy-planning) Solar Development Technical Assistance for Local Communities [www.betterenergy.org/blog/new-program-offers-solar-development-technical-assistance-local-communities/](http://www.betterenergy.org/blog/new-program-offers-solar-development-technical-assistance-local-communities/)

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| **Procuring Renewable Energy for City Operations** |

**Action 1. Procuring 100% clean power for City Operations** – Community Solar Gardens, Purchasing RECS – Wind Source

**Purpose:** lead by example, save city money

**Cities working on it**: Mpls, Edina, SLP,

**Resources**:

* **Community Solar Gardens –** <https://www.cleanenergyresourceteams.org/solargardens>
* **Solar Possible** - [www.cleanenergyresourceteams.org/joint-procurement-solar-energy](http://www.cleanenergyresourceteams.org/joint-procurement-solar-energy)
* **Renewable Energy Procurement Cohort** – CERTS, GPI

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|  | **Solar Possible:** **Joint purchasing effort for agencies, local governments & schools**Peter Lindstrom MN CERTs, Local Government Liaison (612) 625-9634 plindstr@umn.edua cooperative purchasing effort to facilitate more state agencies, local governments, and schools using solar on their facilities. |
| <https://www.cleanenergyresourceteams.org/joint-procurement-solar-energy>Collaborative procurement is an effective approach to reduce barriers, learn together, and drive projects to successful completion. This initial effort will be geared toward jurisdictions in Xcel Energy territory |

**Renewable Energy Procurement Network.** GPI and CERTs have designed a renewable energy procurement network to help cities navigate various barriers to renewable energy adoption. This network will explore challenges cities are facing and work toward solutions to enable cities to increase access to renewable energy in their communities. This network will kick-off with an all-day Bootcamp with national experts from the World Resource Institute and the Rocky Mountain Institute who will cover renewable energy procurement options and facilitate discussions to help cities determine pathways to cleaner electricity. <https://www.betterenergy.org/blog/exploring-renewable-energy-procurement-options-with-cities/> Contact: **Abby Finis,** Great Plains Institute, 612-767-7295, afinis@gpisd.net

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| **Local Renewable Energy Production** |

**Action 2. Accelerate Solar-ready building construction - city buildings, businesses, multifamily**

**Adopt a Sustainable Building Policy** (when the city is putting $ into a project) [www.csbr.umn.edu/](http://www.csbr.umn.edu/) and a

**Sustainable Purchasing Policy** – that requires new city-owned buildings to meet certain standards <https://www.pca.state.mn.us/preventing-waste-and-pollution/sustainable-government-purchasing/developing-a-sustainable-purchasing-policy>

* **St. Paul** **Sustainable Building Policy - Kurt Schultz,** St. Paul PED, 651 266-6590 kurt.schultz@ci.stpaul.mn.us [www.stpaul.gov/departments/planning-economic-development/economic-development/sustainable-building-policy](http://www.stpaul.gov/departments/planning-economic-development/economic-development/sustainable-building-policy)
* **Minneapolis Sustainable Building Policy** – **Luke Hollenlamp** Sustainability Program Coordinator 673-2349 luke.hollenkamp@minneapolismn.gov in development in 2020 – (1) City Buildings, (2) Commercial, Multifamily, Single Family/ Passive House Standard [www.startribune.com/minneapolis-declares-climate-emergency-announces-sustainable-housing-policy/565709652/](http://www.startribune.com/minneapolis-declares-climate-emergency-announces-sustainable-housing-policy/565709652/)

**Action 3. Expand Rooftop Solar with businesses, schools, residents**

**Purpose**: Expand renewable energy generation within your city

**Cities working on it:** many cities are participating with SolSmart and Bulk Purchasing programs

**Adopt SolSmart policies & ordinances**

* **Become designated as a solar-friendly community** <https://www.cleanenergyresourceteams.org/become-designated-solar-friendly-community>
* **Grow Solar - Local Government Solar Toolkit** <https://www.betterenergy.org/wp-content/uploads/2018/03/MinnesotaToolkitFeb2018_Award-Banner_Web-Version_0.pdf>
* **Cameran Bailey**, SolSmart Advisor, Met Council 651.602.1212 cameran.bailey@metc.state.mn.us
* **Brian Ross,** Senior Program Director, Great Plains Institute, 612-767-7296, bross@gpisd.net

**Provide Solar Feasibility Studies** to businesses & institutions with the biggest roof tops in your city

**Maplewood Case Study – Providing Solar feasibility studies for 50 businesses**

* + **Shann Finwall** Environmental Planner 651-249-2304 shann.finwall@maplewoodmn.gov <https://www.cleanenergyresourceteams.org/laying-foundation-solar-re-energize-maplewood>
	+ **Ted Redmond**, Pale Blue Dot, 612-669-7056 tredmond@paleblue-dot.org <http://palebluedot.llc/carbon-copy/2018/12/13/re-energize-maplewood-solar-potentials-study>

**Solar bulk purchasing campaigns**

**Midwest Renewable Energy Association** <https://www.midwestrenew.org/solargroupbuy/>

**Grow Solar Twin Cities**  Offered by MREA with support from Twin Cities communities, our solar group buy program provides home and business owners the opportunity to pool their solar buying power to secure significant discounts <https://www.growsolar.org/solar-twin-cities/> **Eric Rehm** MREA Solar Finance Manager (612) 845-3467 ericr@midwestrenew.org

**MN Solar United Neighbors** [**https://www.solarunitedneighbors.org/minnesota/**](https://www.solarunitedneighbors.org/minnesota/)

**Provide Businesses Solar Matching Incentive grants**

* **City of Minneapolis Green Cost Share Program** with funds from Xcel/Centerpoint utility franchise fees revenue. Contact **Luke Hollenlamp** Sustainability Program Coordinator 673-2349 luke.hollenkamp@minneapolismn.gov <http://www.minneapolismn.gov/environment/greencostshare>

**Action 4. Support Legislation** (in 2021) **to continue Xcel Energy’s Solar Rewards**

**Solar Rewards Program**

[www.xcelenergy.com/programs\_and\_rebates/residential\_programs\_and\_rebates/renewable\_energy\_options\_residential/solar/available\_solar\_options/on\_your\_home\_or\_in\_your\_yard/solar\_rewards\_for\_residences](http://www.xcelenergy.com/programs_and_rebates/residential_programs_and_rebates/renewable_energy_options_residential/solar/available_solar_options/on_your_home_or_in_your_yard/solar_rewards_for_residences)

**Resources** – Fresh Energy, MCEA, Sierra Club, MRES, MNSEIA

**Contact:** **Stacy Miller**, City of Minneapolis, Energy Policy 612 673-3110 stacy.miller@minneapolismn.gov

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| **Community Wide – Clean Energy Supply** |

**Action 4. Cities commenting on Xcel’s Integrated Resource Plan (IRP) in April**

**Purpose:** Access community-wide clean power sooner. Retire coal faster, limit new natural gas plants, increase distributed generation and demand response

**Next Steps –** in April/May **Stacy Miller** and **Tara Brown** will offer several webinars to support additional cities to participate in contributing additional comments once Xcel provides their updated IRP in April

* **Minneapolis - Stacy Miller**, Energy Policy 612 673-3110 stacy.miller@minneapolismn.gov
* **Edina - Tara Brown** Sustainability Coordinator, 952 826-1621 tbrown@edinamn.gov

**Resources**: Minneapolis, Fresh Energy MCEA, Sierra Club, MCEA, Community Power MN, MN CUB

* **Xcel** <https://www.xcelenergy.com/company/rates_and_regulations/resource_plan_overview>
* **Fresh Energy** <https://fresh-energy.org/tag/xcel-energy/>
* **Sierra Club** [www.sierraclub.org/minnesota/blog/2019/05/report-card-xcel-energy-s-2019-resource-plan-preview](http://www.sierraclub.org/minnesota/blog/2019/05/report-card-xcel-energy-s-2019-resource-plan-preview)
* **MCEA** <http://www.mncenter.org/energy-cases--advocacy.html>
* **MN CUB** <http://cubminnesota.org/make-your-voice-heard-cleaner-cheaper-electricity-for-xcel-customers/>
* **Community Power** <http://www.communitypowermn.org/xcel_irp>

**Action 5. Additional cities helping with City of Minneapolis 100% Renewable Energy Resolution**

**Find affordable, legal way to access 100% clean power city-wide for all residents & businesses by** **2030** The Minneapolis City Council and Mayor Jacob Frey adopted goals on April 27, 2018 for Minneapolis to move to 100% renewable electricity: for municipal facilities and operations by 2022 and citywide by 2030. These goals serve as a strategy to meet the City’s aggressive greenhouse gas emission reduction and climate change goals by moving away from fossil fuels. The resolution responds to overwhelming scientific consensus that climate change is a real and existential threat to human civilization and is caused primarily by the combustion of fossil fuels. The City opposes the rollback of climate policy at the federal level and reaffirms its ongoing commitment to the goals of the Paris Climate Agreement.

The [resolution](http://lims.minneapolismn.gov/Download/RCA/4338/100%20renewables%20resolution%20final.pdf) establishes renewable electricity definitions, priorities, progress metrics, and next steps. City staff have created a municipal operations [report](http://lims.minneapolismn.gov/Download/RCA/1608/wcmsp-203626.pdf) on expected future electricity consumption and a follow-up [blueprint](https://lims.minneapolismn.gov/Download/RCA/2357/Blueprint%20for%20renewable%20by%202022%20final.pdf) on paths toward 100% renewable electricity municipal operations. Read the City’s [blueprint](https://lims.minneapolismn.gov/Download/RCA/2357/Blueprint%20for%20renewable%20by%202022%20final.pdf) for achieving this goal. These commitments came about with advocacy from the Sierra Club and iMatter. <http://www.minneapolismn.gov/sustainability/buildings-energy/WCMSP-210721>

**Resources**: **Stacy Miller**, City of Minneapolis, Energy Policy Staff 612 673-3110 stacy.miller@minneapolismn.gov

8 High-Impact **Energy Supply 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

**Energy Supply Policy Options**

* For city operations
	+ [**Increase renewable energy**](https://greenstep.pca.state.mn.us/bestPracticesDetail_actions.cfm?bpid=15&aid=799)purchases/installed generation capacity over time to meet a net-zero greenhouse gas goal; purchases via community solar gardens, renewable energy credits or other means; generation via solar panels and anaerobic digestion, on city buildings and at waste-water treatment plants {*15.2*} and {*26.5*}
	+ [**Adopt a sustainable purchasing policy**](https://greenstep.pca.state.mn.us/bestPracticesDetail_actions.cfm?bpid=16&aid=798)that prioritizes energy-efficient, low-impact products and services, such as electric vehicles, for city operations {15.1} and {13.3}
* For community-wide
	+ [**Adopt wind energy and/or biomass ordinances**](https://greenstep.pca.state.mn.us/bestPracticesDetail_actions.cfm?bpid=25&aid=868)that allow, enable or encourage appropriaterenewable energy installations {*26.1*}
	+ [**Certify as a solar-ready community**](https://greenstep.pca.state.mn.us/bestPracticesDetail_actions.cfm?bpid=25&aid=884), including an expedited permit process for residents and businesses to install solar energy systems {*26.7*}
	+ [**Participate with utilities**](https://greenstep.pca.state.mn.us/bestPracticesDetail_actions.cfm?bpid=2&aid=721)in their energy-efficiency/renewable energy programs for residential customers {*2.1*}
	+ [**Adopt a Property-Assessed Clean Energy**](https://greenstep.pca.state.mn.us/bestPracticesDetail_actions.cfm?bpid=25&aid=870)resolution to facilitate commercial energy-efficiency / renewable energy financing {*26.3*} <https://greenstep.pca.state.mn.us/best_practice_action/promote-financing-and-incentive-programs-such-pace-clean-energy>
	+ [**Assess district energy/co-generation**](https://greenstep.pca.state.mn.us/bestPracticesDetail_actions.cfm?bpid=25&aid=873) system options on a periodic basis for feasibility {*26.6*}
	+ **Adopt (if a municipal utility)** accelerating targets for renewable energy generation to meet a net-zero greenhouse gas goal {*6.5*} <https://greenstep.pca.state.mn.us/best_practice_action/purchase-energy-used-city-government-municipal-utility-green-tags-community>

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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>