Breakout Session on Energy Supply

Vision & Long-Term Goals:	Action Benefits:
• 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	• GHG Emissions Reduction – climate stability • Potential savings on energy bills • Cleaner Air • Energy Resilience • Economic Development

High Impact Actions

Procuring Renewable Energy for City Operations

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**

Local Renewable Energy Production

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**

Action #3 *Expand Rooftop Solar (Businesses, Institutions (schools), Residents)* See page 6.		
Purpose: Renewable Generation in City **Cities Working on It:** SolSmart, zoning, permits Solar feasibility studies for 50 businesses – Maplewood Solar bulk purchase campaign Matching incentive grants – MPLS **Resources:** CERTS, MREA, MRES	Discussion Notes: Questions, Challenges, Needs	Next Steps: Interested Cities & Leaders

Action #4 *Support Legislation (2021) to Continue Xcel Energy's Solar Rewards*		
Resource: Stacy Miller, City of Minneapolis	Discussion Notes: Questions, Challenges, Needs	Next Steps: Interested Cities & Leaders

Community Wide Clean Energy Supply

Action #5 *Cities commenting on Xcel's Integrated Resource Plan (IRP) in April*		
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

Action #6 *Additional Cities Helping with City of Minneapolis 100% Renewable Energy Resolution*		
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**

Success Measures

Success Indicators	Past Paradigm	New Paradigm
- Met Council - Renewable energy use for city operations - City wide electricity use - Carbon intensity of electricity supply - Amount of solar generation within city	- Centralized Electric Power Grid - Burning fossil fuels - Peak demand met w/ expensive power	- Solar, Wind, Storage, Smart Grid - Grid plus distributed generation - Beneficial electrification – EVs, building heating & cooling - Time of use rates, Demand response
Equity – What are our opportunities & risks? How do we address them?		

Next Steps

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

Erin Niehoff, Mpls Community Environmental Advisory Commission, Chair 612-900-7931 cowl0044@umn.edu

Dan Katzenberger, Eden Prairie Conservation Commission 612 327-4210 dan@katzenberger.org

Stacy Miller, MPLS, Staff 612 673-3110 stacy.miller@minneapolismn.gov

Resilient Cities and Communities Coalition

Collaborating to achieve (and live) a resilient future www.afors.org/resilientcities

Alliance for Sustainability

Ecologically sound, economically viable, socially just and humane

Sean Gosiewski,
Executive Director,
Alliance for Sustainability,
612-250-0389 sean@afors.org

Clean Energy Supply Resources

Resource People

- **Cameran Bailey**, SolSmart Advisor, Met Council 651.602.1212 cameran.bailey@metc.state.mn.us
- **Tara Brown** Sustainability Coordinator, City of Edina 952 826-1621 tbrown@edinamn.gov
- **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
- **Brian Ross,** Senior Program Director, Great Plains Institute, 612-767-7296, bross@gpisd.net www.betterenergy.org/ Energy Planning Tools 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/

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
- **Renewable Energy Procurement Cohort** – CERTS, GPI

Solar Possible:

Joint purchasing effort for agencies, local governments & schools

Peter Lindstrom MN CERTs, Local Government Liaison
(612) 625-9634 plindstr@umn.edu
a 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

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/ 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
- **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/

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/

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

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

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

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
- **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 establishes renewable electricity definitions, priorities, progress metrics, and next steps. City staff have created a municipal operations report on expected future electricity consumption and a follow-up blueprint on paths toward 100% renewable electricity municipal operations. Read the City's blueprint 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** 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** 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** that allow, enable or encourage appropriate renewable energy installations {*26.1*}
  - **Certify as a solar-ready community**, including an expedited permit process for residents and businesses to install solar energy systems {*26.7*}
  - **Participate with utilities** in their energy-efficiency/renewable energy programs for residential customers {*2.1*}
  - **Adopt a Property-Assessed Clean Energy** 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** 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