

Workshop for Hennepin, Carver & Scott County Communities

Planning for Resilient Cities



Learn in small groups with your peers about new resources available for your city's Comprehensive Planning

- **New mapping and planning tools** to assess opportunities & risks
- **Sample comprehensive plan goals/strategies** from other cities
- **Implementation resources & funding**

Community Workshop

Thurs June 8 - 6pm to 8:30pm
5pm Networking Reception
Ridgedale Library
12601 Ridgedale Dr, Minnetonka

City Staff Workshop

Friday June 23 - 10am to 1pm
(Includes Lunch)
Ridgedale Library
12601 Ridgedale Dr, Minnetonka

We invite each city to bring a team of three or more, staff, Council Members &/or Commission volunteers to participate in the break-out topic conversations on energy, water and health. **FREE Events.** Please **RSVP** at www.allianceforsustainability.com/sustainablecommunities

Local, clean ENERGY, Water Quality/ADAPTATION/, Active Living, Food Access, HEALTH and ECONOMY

We are supporting staff and volunteer teams in **50 metro communities** to include energy & resilience goals in their comprehensive plans. Questions? Call **Sean Gosiewski**, Alliance for Sustainability, 612-250-0389 sean@afors.org



Agenda for the June 8 Community/Commission and June 23 Staff Workshops

- **City Updates** – Staff, Council Members or Commission volunteers will share brief updates. Learn from cities with draft resilience plan language to share (30 min)
- **New Resilience Planning Resources** (10.30am) partners will share new planning / mapping tools, sample comp plan goals & implementation resources (60 min)
 - **Energy Mapping & Planning Resources**, Brian Ross, Great Plains Institute
 - **Business Benchmarking Pilot Program** – Leah Hiniker, Hennepin County
 - **Smart Transportation FAVES, EVs**, Tom Fischer, U of M, MN Design Center
 - **High Performance Buildings & Green Districts**, John Carmody, CSBR
 - **Climate Adaptation/ Water Resources** - Matt Metzger, PE, Barr Engineering
 - **Health/ Active Living/ Food Access/ Health Equity** – Denise Engen, Jordan Kocak, Hennepin Co., Nadja Bernachy, Healthy Comp Plan checklist
- **Small Group Discussion** 11:30am (**Energy, Adaptation/Water, Health**) – (90 min) explore how you can use these resources in your city with peers from other cities and resource staff. Enjoy three 30 minute small group conversations on

Local, clean ENERGY & transportation

- **Mapping** – solar maps, residential and commercial energy use profiles
- **Setting Goals** – LoGoPEP Energy Planning Templates, preparing for EVs
- **Implementation** – sample energy plans benchmarking, Sol Smart, SB 2030

Water Quality/ADAPTATION

- **Mapping** – flood & climate risk planning and preparedness
- **Setting Goals** – BWSR and Watershed District Requirements
- **Implementation** – multi jurisdictional projects, storm water utilities, MIDS

Active Living, Food, HEALTH/Equity

- **Mapping** – health & income disparities, bike & trail connections
- **Setting Goals** – Healthy Comp Plan Check List, examples from cities
- **Implementation** – Complete streets, Food Councils, Equity Resources

Co-sponsors - Alliance for Sustainability, MN EQB, MPCA, Hennepin, Carver and Scott Counties, GPI, EOR, CEE, LHB, Xcel Energy, Novel Energy, FSEER, LHB, Barr Engineering, Bolton & Menk, U of MN, MN Design Center, CSBR, Energy Transition Lab OneMN, MN Food Charter, iMatter, French Meadow Cafe, Birchwood Café Peace Coffee





Alliance for Sustainability

Ecologically sound, economically viable, socially just and humane

Planning for Resilient Cities

June 2017 Networking Gatherings for City Staff, City Commission & Community Volunteers

You are invited to join us! Free Workshops, [Please RSVP](#).

Sign up to participate for the date & session that works best for you. If you like, bring a team of 3 or more to participate in all 3 topics. Please RSVP at www.allianceforsustainability.com/sustainablecommunities

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



Learn in small groups with your peers from other cities in your county

- Example comp plan goals/strategies
- New Mapping and Planning Tools
- Implementation Resources

ENERGY local, clean, ADAPTATION/Water Quality, HEALTH Active Living, Food Access, Economic Inclusion

North / East Metro Workshops – with Anoka, Ramsey and Washington Counties and local watershed districts

- Thursday June 1 - Roseville Skating Center - Rose Room 2661 Civic Center Drive Roseville, MN 55113
City staff workshop 1pm to 4:30pm, Community/Commission Workshop 6pm to 8:30pm

West Metro Workshops – with Hennepin, Scott and Carver Counties and local watershed districts

- Community/Commission Workshop - Thurs June 8 - 6pm to 8:30pm, Ridgedale Library, 12601 Ridgedale Dr, Mtka
- City Staff Workshop - Friday June 23 – 10am to 1pm (with lunch) Ridgedale Library, 12601 Ridgedale Dr, Mtka

South Metro Workshops – with Dakota County and local watershed districts

- Tuesday June 27 – Apple Valley Senior Center 14601 Hayes Rd, Apple Valley, MN 55124
City Staff workshop 1 to 4:30pm, Community/Commission Workshop 6pm to 8:30pm



Agenda for the staff & community workshops

- City Updates – staff or commission volunteers will share brief updates (30 min)
- New Resilience Planning Resources – partners will share the new planning and mapping tools, sample comp plan language & implementation resources (30 min)
- Small Group Discussion (Energy, Adaptation, Health) – explore how you can use these resources in your city with peers from other cities & resource staff (90 min)

TOPIC RESOURCE PARTNERS and Workshop Co-sponsors

Sharing new Planning/Mapping Tools, Example Comprehensive Plan Language, Implementation Resources

LOCAL CLEAN ENERGY - Community Profiles, Solar Maps, LOGOPEP Case studies, Planning Templates & Wedge Tool

- Great Plains Institute, U of MN Energy Transition Lab, LHB, USGBC/ LEED for Cities, Xcel Energy - Partners in Energy, Dakota Electric, Connexus, Center for Energy Environment, Evergreen Energy, Eutetics.

ADAPTATION/ Water Quality – Climate vulnerability mapping, Surface Water Plans, MIDS, EAB response

- MPCA, Emmons Olivier Resources, Barr Engineering, Bolton & Menk, Ramsey Washington, Rice Creek, Nine Mile, Riley Purgatory, Minnehaha Watershed Districts

HEALTH/Active Living, Food Access, Equity Bike & pedestrian & food access maps, health & equity data & strategies

- Public Health staff, MN Food Charter - Food Access Planning Guide, GARE, One MN, Concordia, CURA

Co-sponsors - Alliance for Sustainability, MN EQB, MPCA, MDH, DNR, Anoka, Dakota, Hennepin, Ramsey & Washington Counties, MN CEE, EOR, GPI, LHB Corp, USGBC, Xcel Energy, Dakota Electric, LHB Corp., Bolton & Menk, OneMN, MN Food Charter, U of MN CURA, MN Design Center, CSBR, Energy Transition Lab, MFAN, iMatter, More are welcome!



Spring & Fall 2017 Resilient City Clusters with City Staff & Commissions

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

www.allianceforsustainability.com/sustainablecommunities

Spring and Fall 2017 – Resilient Cities Clusters - we are reconvening staff, elected leaders and commission volunteers from **50 metro cities** in Resilient Cities Clusters as they develop and write the **resilience** sections of their comprehensive plans to share their draft **resilience** goals and strategies for **energy**, adaptation/**water** quality & conservation and **health/economic** inclusion. **Teams from each city** will

Spring - Meet in clusters of 5 to 10 cities in **Anoka, Dakota, Hennepin** (with Carver and Scott), **Ramsey** and **Washington Counties** in June 2017 **North/East metro** (June 1), **West metro** (June 8 & 23) **South metro** (June 28)

- **Map local existing conditions** - solar resources, community wide energy use, health, weather vulnerabilities
- **Learn from cities that have already developed draft energy & resilience goals** & action strategies through Xcel's **Partners in Energy** www.xcelenergy.com/working_with_us/municipalities or the **Local Government Partners for Energy Planning Project** (LoGoPEP) with GPI, LHB, U of MN www.regionalindicatorsmn.com/energy-planning
- **Work in small groups to adapt sample goals and strategies** to the specific needs, opportunities and resident priorities for each city using energy, adaptation and health planning templates

Fall - Come back together for a metro wide session in the fall of 2017 to share with one another and further develop the **resilience** sections of city comp plans (including **energy**, adaptation/**water** & **health/equity/economic** vitality)

- **Develop implementation strategies** for their comprehensive plans including identifying new funding sources, technical advisors, community and business engagement strategies and tracking results
- **Contribute examples and case studies** that other cities can benefit from to the **local planning handbook** www.metrocouncil.org/Handbook/Plan-Elements/Resilience.aspx & www.afors.org/resilienceplanningresources/
- **Learn how to track city year to year results** using available tools including Energy Star, Regional Indicators, etc.

Metro area cities we are inviting to participate in **Resilient Cities Clusters** (by county) in 2016 to 2018 to explore together ways to include energy & resilience goals in their Comprehensive Plans in 2018. **All cities are welcome!**

<p>Hennepin County Cluster Population 1.2 million <u>Mentor GreenStep Cities</u> Minneapolis (100 Resilient Cities), Edina (Partners in Energy) St. Louis Park (LoGoPEP, PiE) Eden Prairie (LoGoPEP, PiE) Shorewood, (Partners in Energy) <u>GreenStep Cities</u> Bloomington, Brooklyn Center Crystal, Golden Valley, Hopkins, Minnetonka, New Hope, Richfield <u>Additional participating cities</u> Brooklyn Park, Dayton Excelsior, Maple Grove, Plymouth, , Greenfield, Medicine Lake, Osseo, Robbinsdale, Wayzata</p>	<p>Ramey County Cluster Population 526,714 <u>Mentor GreenStep Cities</u> St. Paul, (League of Cities) Maplewood (PiE) Falcon Heights(LoGoPEP) St. Anthony – (LoGoPEP) <u>GreenStep Cities</u> Arden Hills, Lauderdale, Mounds View, New Brighton, North St. Paul, Roseville, Shoreview, White Bear Lake <u>Additional cities that participated in 2016</u> Hugo, Little Canada, Vadnais Heights</p>	<p>Dakota County Cluster Population 408,509 <u>Mentor GreenStep Cities</u> Apple Valley, Burnsville, Eagan, Rosemount <u>GreenStep Cities</u> Hastings, Sunfish Lake Inver Grove Heights, South St. Paul <u>Additional cities that participated in 2016</u> Lakeville, Mendota Heights, West St. Paul Rice County Faribault, PiE Northfield</p>	<p>Washington County Cluster Population 246,603 <u>Mentor GreenStep Cities</u> Oakdale – (LoGoPEP) Mahtomedi (PiE) <u>GreenStep Cities</u> Cottage Grove, Lake Elmo Marine, Scandia, Forest Lake, St. Paul Park, Woodbury <u>Additional cities that participated in 2016</u> Afton, Bayport, Grant Oak Park Heights, Stillwater, Stillwater Township</p>
<p>Anoka County Cluster – Population 339,534 Columbia Heights, Fridley, Coon Rapids, Anoka, Andover, Blaine, East Bethel, Circle Pines, Linwood, Lexington, Osseo, Nowthen, St. Francis</p>	<p>Scott County Cluster – Population 339,534 Jordan, Belle Plain Elko New Market Shakopee, Prior Lake Savage</p>	<p>Carver County Cluster – Population 95,562 Chanhassen, Chaska, Victoria Carver, Waconia Norwood Young America</p>	<p>MN GreenStep Cities (bold) www.mngreensteps.org PiE – Partners in Energy LoGoPRP – Local Government Energy Planning Project</p>

Speaker & Resource Group Contacts

Planning for Resilient Cities June 23 2017 West Metro Workshop for Cities in Hennepin, Carver and Scott Counties **Follow this link for the Workshop Notes, Power Points and Presentation Videos**
www.allianceforsustainability.com/sustainablecommunities

Workshop Host and Facilitator

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

Energy

Brian Ross, Great Plains Institute, 612- 501-1531 bross@gpisd.net www.betterenergy.org

Abby Finis Great Plains Institute, 612 767-7295 afinis@gpisd.net

Leah Hiniker, Hennepin Co. Energy Management 612 543-1219 leah.hiniker@co.hennepin.mn.us

John Carmody, Senior Fellow, U of MN, Center for Sustainable Building Research, **CSBR** 612-251-1630
carmo001@umn.edu www.csbr.umn.edu

Tom Fisher, Director, Metropolitan Design Center 612-626-9068 tfisher@umn.edu www.designcenter.umn.edu/

Stacy Boots Camp, Recruitment and Outreach Coordinator | 612.244.2429 sbootscamp@mncee.org
Center for Energy and Environment www.mncee.org

Leslie Wilson, Carver Co. Product Stewardship & Green Energy 612-388-6425 lwilson@co.carver.mn.us

Katie Schmitt CEE Benchmarking Outreach and Policy Coordinator 612-741-0596 kschmitt@mncee.org

- City of Minneapolis Energy Benchmarking Ordinance www.ci.minneapolis.mn.us/environment/energy
- Mid-Sized City Building Energy Benchmarking Pilot project
www.mncee.org/resources/resource-center/webinars/mid-sized-city-building-benchmarking

Ted Redmond co-founder, Pale Blue Dot 612.669.7056 tredmond@paleblue-dot.org www.BLUEdotregister.org

- Community Wide Carbon baselines and Climate Action Planning, Climate Vulnerability Assessments

Maureen Colburn, Project Manager, **LHB**, Corp. 612.752.6954 or maureen.colburn@lhbcorp.com.
LoGoPEP Energy Planning Templates www.regionalindicatorsmn.com/energy-planning

Ross Hammond, PE – AforS Energy Advisor, 612 385-8436 ralphdthomas@comcast.net

Diana McKeown, Metro CERT Director Great Plains Institute 612-278-7158 dmckeown@gpisd.net
www.CleanEnergyResourceTeams.org

Tami Gunderzik, Xcel Energy Partners in Energy Manager, 612-330-6686 tamara.gunderzik@xcelenergy.com
https://www.xcelenergy.com/working_with_us/municipalities/partners_in_energy

Ben Rabe, Senior Policy Associate. Buildings & Energy Performance, Fresh Energy 651-726-7574 rabe@fresh-energy.org
www.fresh-energy.org/

Darrell Schaapveld Owner, Four Seasons Energy Efficient Roofing 651-433-2443 darrell@fseer.com www.fseer.com ,

Rebecca Peichel Novel Energy Solutions 507-276-7795 rebecca.peichel@novelenergy.biz www.novelenergy.biz

MN GreenStep Cities www.mngreensteps.org

Philipp Muessig, MPCA, 651/757-2594 Philipp.muessig@state.mn.us

Kristin Mroz, Local Government Coordinator, MN EQB (651) 757-2793 | kristin.mroz-risse@state.mn.us

Laura Millberg, Climate Resilience Principal Planner, MPCA 651/757-2568, Laura.Millberg@state.mn.us

Resilience/Adaptation/ Water Resources

Eric Wojchik, MRTPI Senior Planner, **Metropolitan Council**, Sector Representative, Resilience Contact
651.602.1330 eric.wojchik@metc.state.mn.us <https://metro council.org/Handbook/Plan-Elements/Resilience.aspx>

Brett Emmons, Principal, CEO, Principal, Emmons Olivier Resources 651-770-8448 bemmons@eorinc.com
www.eorinc.com

Matthew R. Metzger, ENV SP, PE Senior Civil Engineer, **Barr Engineering** 952.832.2830 mmetzger@barr.com
www.barr.com

Leslie Yetka Director of Programs **Fresh Water Society** 651 313-5813 lyetka@freshwater.org www.freshwater.org

Minnehaha Creek Watershed District

Becky Christopher Lead Planner -- Project Manager (952) 641-4512 bchristopher@minnehahacreek.org
<http://minnehahacreek.org/comprehensive-water-resources-management-plan>

Nine Mile Creek Watershed District

Randy Anhorn District Administrator 952-835-2078 ranhorn@ninemilecreek.org
<https://www.ninemilecreek.org/whats-happening/water-management-plan>

Riley Purgatory Bluff Creek Watershed District

Claire Bleser Administrator, 952-607-6512, cbleser@rpbcwd.org
<http://rpbcwd.org/library/wmp>

Carver County Water Management

Brett Angell Planner 952-361-1829 bangell@co.carver.mn.us
Madeline Seveland Education Coordinator 952-361-1026 mseveland@co.carver.mn.us
Paul Moline Department of Planning & Water Management (952) 361-1825 pmoline@co.carver.mn.us

Scott County Water Management

Paul Nelson Environmental Services Program Manager 952-496-8475 pnelson@co.scott.mn.us

Hennepin County Emergency Management

Eric Waage Director (612) 596-0249 eric.waage@co.hennepin.mn.us
Bruce Kelii bruce.kelii@co.hennepin.mn.us
www.hennepin.us/residents/emergencies/emergency-management

Health/Active Living

Denise Engen, Active Living Hennepin County, 612-348-4454 Denise.Engen@hennepin.us
<http://www.hennepin.us/your-government/projects-initiatives/active-living>

- **Metro Healthy Comprehensive Plans Workgroup** Resources and links **Healthy Comprehensive Plans Checklist**

Jordan Kocak Hennepin County Bicycle and Pedestrian Coordinator **612-543-3377** jordan.kocak@hennepin.us

- Biking | Hennepin County 2040 Hennepin County Bicycle Transportation Plan
- www.hennepin.us/residents/transportation/biking

Scott County

Angie Stenson, Transportation Planner 952-496-8839 astenson@co.scott.mn.us
Jarrett Hubbard, Transportation Planner, 952-496-8012 jhubbard@co.scott.mn.us
Lindsay Aijala, BS, CHES Community Health Specialist (SHIP) 952.496.8696 laijala@co.scott.mn.us

Carver County

Caitlin Ries SHIP Coordinator cries@co.carver.mn.us
Gloria Wolf. SNAP-Ed Educator (612) 596-2125 wolfx016@umn.edu

Healthy Food Access

Nadja Bernachy, Healthy Comprehensive Plan Coordinator (651) 231-6751 nadja@terrasomma.com

- Food Access Planning Guide <http://mnfoodcharter.com/planningguide/>
- Healthy Comp Plan Check List <http://mnfoodcharter.com/planningguide/resources>

Equity

Gordon F. Goodwin, Midwest Regional Project Manager 763-258-3328 ggoodwin@thecsi.org

Government Alliance on Race and Equity, Center for Social Inclusion www.centerforsocialinclusion.org

Bruce Corrie, PhD, Concordia University, 612 321-8263 corrie@csp.edu www.OneMN.org www.chai.news

Brett Buckner, Coordinator www.OneMN.org 612-356-2520 brett1mn@gmail.com

Local Planning Handbook <http://metro council.org/Handbook.aspx?source=child>

- **Community Profiles are available** <http://lphonline.metc.state.mn.us/commportal.aspx>

PlanIt – Trainings, Webinars, Fact Sheets <https://metro council.org/Handbook/PlanIt.aspx>

Thrive MSP 2040: One Vision, One Metropolitan Region

Thrive MSP 2040 is the vision for our region over the next 30 years. It reflects our concerns and aspirations, anticipates future needs in the region, and addresses our responsibility to future generations.

<http://www.metro council.org/Planning/Projects/Thrive-2040/Thrive-MSP-2040-Plan.aspx?source=child>

The Local Planning Handbook

- **Provides clear and specific direction on what the minimum requirements are and how to meet them.**
- Provides tools, maps, and resources to make it easier to complete minimum requirements.
- Connects communities with available resources, grants, and technical assistance.
- Helps communities understand the Council review process.
- **Provides resources for value-added planning/planning beyond the minimum requirements.**
- Highlights local planning efforts across the region.



Resilience Plan – <http://metro council.org/Handbook/Plan-Elements/Resilience.aspx>

- INFRASTRUCTURE & ENVIRONMENT
- ENERGY INFRASTRUCTURE AND RESOURCES
- HEALTHY COMMUNITIES
- ECONOMY & SOCIETY

This section provides resources for communities working to integrate strategies into local comprehensive plans to be more resilient in the face of a changing climate. As communities adjust to increasingly extreme weather events, stress on public facilities, and higher costs of services, there is growing need to not only plan for these events, but to also reduce the impacts through conscious climate adaptation and resilience planning. Moreover, resiliency also considers reducing green house gas (GHG) emissions so that the extent of climate change does not exceed the capacity to adapt and become resilient.

Thrive MSP 2040 encourages planning for climate change as part of your comprehensive plan update. Climate mitigation strategies such as promoting land use and development patterns will contribute toward achieving Minnesota’s adopted greenhouse gas emissions goals. Climate adaptation strategies such as recognizing changing rainfall patterns that require additional storm water management capacity acknowledge the new and growing risks associated with climate change.

Not all consequences of climate change are environmental; societal and economic challenges will need to be addressed as well. Resiliency is having the capacity to respond, adapt, and thrive under changing conditions. Consideration of vulnerabilities - and responses to those vulnerabilities - will strengthen your community’s ability to prepare for and respond to climate impacts. Resiliency includes planning for more severe weather and prolonged heatwaves, for improved health of your residents, and planning for economic strength and diversity.

As you may recognize from these examples, many elements that your community already includes in its plan and in actions it has already undertaken, address some resiliency issues.

Energy Planning

Energy Resilience / Mitigation/ Carbon Reduction

ENERGY INFRASTRUCTURE AND RESOURCES

<http://metro council.org/Handbook/Plan-Elements/Resilience.aspx>



Minimum Requirements:

Local governments in the seven-county metropolitan area are required by state law to include an element in their Plan for protection and development of access to direct sunlight for solar energy systems.

Webinar Available - Comprehensive Planning for Solar Energy Systems

Thursday, November 10, 2016

[Webinar Video](#) | [PowerPoint Slides with Notes](#) | [Q&A Summary](#) | [Handouts](#)

<https://metro council.org/Handbook/Training/Webinars.aspx>

Get More Out of Your Plan: Energy Efficiency and Conservation AND Renewable Energy

Resilience Resources Posted at <https://metro council.org/Handbook/Resources.aspx>

Infrastructure & Environment:

- Explore RELi, the new Resiliency Action List
- Georgetown Climate Center
- Saint Paul's Sustainable Building policy
- Clean Energy Partnership
- Partners in Energy
- Commercial building benchmarking ordinance by City of Minneapolis
- Property Assessed Clean Energy (PACE) implementation by the St. Paul Port Authority
- Solar Policy Implementation Example: Falcon Heights' ordinance
- University of Minnesota's solar mapping tool
- Solar Outreach Partnership (SolarOPs)
- APA: Solar energy PAS examples
- APA: PAS report
- APA: Climate Change Report and Energy/climate Database
- APA: Wind examples (fee)
- US Department of Energy's "A Guide to Community Solar: Utility, Private, and Non-profit Project Development"



Brian Ross, Great Plains Institute, 612- 501-1531
bross@gpisd.net www.betterenergy.org
Abby Finis Great Plains Institute, 612 767-7295
afinis@gpisd.net
Maureen Colburn, Project Manager, LHB, Corp.
612.752.6954 or maureen.colburn@lhbcorp.com.
LOGOPEP Energy Planning Templates
www.regionalindicatorsmn.com/energy-planning

Tools for Local Government Energy Champions

Greetings local government leader,
Cities and counties have a very important role to play in energy planning. Minnesota's Next Generation Energy Act sets statewide goals for cutting greenhouse gas emissions, but it's clear the state can't meet those goals without targeted actions at the local level to drive innovation in energy. The Minnesota Local Government Project for Energy Planning (LoGoPEP) team has developed new tools to assist cities in energy planning and to help incorporate energy planning into your comprehensive plans.

LoGoPEP Tip #2: Energy Planning at the Local Level Just Got Easier With New Tools

Our team is pleased to announce our new, free [energy planning tools](http://www.regionalindicatorsmn.com/energy-planning) for you:
www.regionalindicatorsmn.com/energy-planning

- **Energy Planning Guide:** a basic framework for addressing energy use, energy resources, and energy development in the comprehensive plan process
www.regionalindicatorsmn.com/customer_media/pdf_documents/energyplanningguide_april2017.pdf
 - **Energy Planning Workbook:** a step-by-step guide for energy planning from defining existing conditions to setting achievable aspirational goals with proven strategies
http://regionalindicatorsmn.com/customer_media/pdf_documents/energyplanningworkbook_may2017.pdf
 - **Solar Calculator:** a tool to help you understand your available solar resources and set your own solar electricity goals
www.regionalindicatorsmn.com/customer_media/pdf_documents/SolarEnergyCalculator_May2017.xlsx
- Sample RFP** A brief guide on how to incorporate energy and/or climate resilience in a city's request for proposal. http://www.regionalindicatorsmn.com/customer_media/EnergyRFP2.pdf

The LoGoPEP team is developing more tools to help you create clear, achievable energy plans, and our expert team is working with 5 partner cities to refine them. In the coming months, we will announce more opportunities to use these tools in your city or county. Also, look for the

- Alliance for Sustainability [Planning for Resilient Cities www.afors.org/sustainablecommunities](http://www.afors.org/sustainablecommunities) and
- [Met Council](https://metro council.org/Handbook/Training/Workshops.aspx) workshops. <https://metro council.org/Handbook/Training/Workshops.aspx>



Energy Transition Lab
UNIVERSITY OF MINNESOTA
Driven to Discover™



GREAT PLAINS
INSTITUTE



LoGoPEP's work is supported by the Department of Energy, Office of Energy Efficiency and Renewable Energy (EERE), under Award Number DE- DEEE0007229. This project was made possible by a grant from the U.S. Department of Energy and the Minnesota Department of Commerce. The team includes LHB, Great Plains Institute, and University of Minnesota's Energy Transition Lab and Center for Science, Technology, and Environmental Policy.

Highlights from the LoGoPEP Energy Planning Workbook: a step-by-step guide for energy planning from defining existing conditions to setting achievable aspirational goals with proven strategies

www.regionalindicatorsmn.com/energy-planning

http://regionalindicatorsmn.com/customer_media/pdf_documents/energyplanningworkbook_may2017.pdf

Step 1: Identify Your Community's Existing Conditions In order to develop energy goals, communities first need to know their existing resources, level of energy consumption, and current portfolio of strategies. The Existing Conditions assessment should include an energy profile of the community. The energy profile can provide current and projected energy consumption, type and quantity of local, developable energy resources, and an inventory of existing energy programs and market transformation tools.

Existing Conditions: What Are Your Energy Resources? Imagine that your community discovered oil and gas reserves within city boundaries. Would it make sense to plan for how those oil and gas reserves would be developed? To enable the landowners to develop their energy reserves in a manner consistent with the community's character and desired future? Minnesota communities are now faced with exactly these questions, albeit not for new oil resources.

Distributed energy resources that Minnesota communities need to address in local plans include:

1. **Solar resources** – areas with access to sufficient direct sunlight for the production of energy
2. **Wind resources** – areas that have access to sustained wind at sufficient speeds to produce energy
3. **Biomass resources** – plants and organic matter that can be converted to useable energy
4. **Efficiency resources** – existing energy consumption that can be systematically reduced

Step 2: Setting Desired Conditions

Now the community has identified its energy resource and development existing conditions. The next step is to set desired conditions: where does the community want to be regarding energy development and use at the end of the planning horizon (usually 20 years out for a comprehensive plan)? Desired conditions are forward-looking aspirations that are generally informed by a public engagement process, that reflect the community's priorities on particular issues. Using the existing conditions as a baseline, communities should develop goals that are aspirational, yet achievable.

Use the clean energy calculator that accompanies this document to help determine goals to set around solar energy, energy efficiency, and transportation. The calculator allows cities to input energy consumption and solar resource to determine what they could reasonably achieve through efficiency and clean energy development as they relate to energy consumption.

Desired conditions will vary greatly depending on the type of community, the type of local energy resources, and existing energy use patterns. Communities should consider setting energy goals in the following categories:

- **Broad energy or climate protection goals**
- **Address specific energy resources, such as total renewable energy resources use or goals specific to particular resources; solar, wind, biomass, efficiency**
- **Development or technology specific goals, such as a goal to increase the use of alternative fuel vehicles or improve multi-family housing energy efficiency to a standard higher than building code**
- **Energy goals that capture co-benefits of clean energy use; improving equity, creating local jobs, improving habitat or water quality**

Examples of Desired Conditions Some examples of desired conditions (goal language) include:

Broad energy or climate protection goals

- **Example** - Reduce greenhouse gas emissions 80% by 2050, from a 2005 baseline, to match the State of Minnesota GHG reduction goals.

Address specific energy resources

- **Example** - Secure 50% of the community's electric energy from renewable energy sources, including 10% of its electricity from local renewable energy resources, and 100% of municipal building electricity by 2030.

Technology specific goals,

- **Example** - Identify potential industrial combined heat and power (CHP) opportunities in existing businesses and proposed industrial sites, and develop economic development to encourage development of CHP.

- **Example** - Increase fuel economy of city vehicle fleet 20% by 2025, and by 40% by 2040.
- **Example** - Install electric vehicle charging stations in every public and private parking lot or ramp by 2030.

Energy goals that capture co-benefits of clean energy use;

- **Example** - Increase participation of low- and moderate-income housing in the utility’s energy efficiency programs so that 80% of buildings will have made improvements by 2040.
- **Example** - Assess critical public facilities for potential for “renewable energy plus storage” installations to improve the resiliency of these facilities.

State of Minnesota Energy Goals

Many communities adopt the Minnesota energy or greenhouse gas (GHG) reduction goals. Minnesota has set a mandatory 80% GHG emission reduction target by 2050, from a 2005 emission baseline.

- The 2025 GHG reduction target is a 30% reduction from 2005 baseline.
- For renewable energy, Minnesota set an aspirational solar energy target equal to 10% of electric retails sales by 2030. Source: MN Dept. of Commerce, MN Pollution Control Agency

Step 3: Selecting Strategy Priorities

Now the community has identified its existing conditions for energy resource and development and has identified its desired conditions for energy resource development. The third component of including energy in the comprehensive plan is identifying how to get from where you are, to where you want to be; what are the strategies for realizing your desired goals?

Strategies are the tools in the local toolbox that communities use to achieve desired outcomes: programs, regulations, operational procedures, and public investments. Many local government officials and staff believe that local government has little opportunity to affect energy use and development. But the tools that local governments have at their disposal for achieving energy goals are quite extensive and varied. Fortunately, local governments don’t have to create new kinds of tools; local government merely have to adapt existing tools to energy goals. The following framework provides a decision-making process for understanding and prioritizing local energy strategies:

Tool Category	Tool Description	Energy Strategy Examples
Encouragement	Public engagement and educational efforts to encourage private sector residents and businesses to take action consistent with the desired goals.	<ul style="list-style-type: none"> • Co-promotion of utility efficiency or renewable energy incentives • Creation and dissemination of energy efficiency educational materials • Engage community in energy goal setting exercise, such as Partners in Energy
Incentives	Financial or regulatory inducements to encourage private sector actions consistent with the desired goals.	<ul style="list-style-type: none"> • Enabling PACE financing • Regulatory incentives within zoning • Expedited permitting • Technical assistance for private sector developments to incorporate net-zero or solar-ready designs
Regulation	Zoning, ordinances, licensing, permitting standards that are designed to require actions consistent with the desired goals.	<ul style="list-style-type: none"> • Requiring energy efficiency or renewable energy within PUD ordinances • Energy benchmarking ordinance • Removing zoning barriers to renewable energy • Adopting an energy stretch code (SB 2030)
Public Demonstration, Leadership	Public investment in and demonstration projects using local energy resources	<ul style="list-style-type: none"> • Participation in GESP • Installing solar on public buildings • Adopting net-zero energy standards for public facilities • Sponsoring a community solar garden for community residents and businesses

Center for Sustainable Building Research, CSBR,

John Carmody, Senior Fellow, 612-251-1630 carmo001@umn.edu

Extending SB 2030 to new construction with private buildings

B3 Guidelines and Sustainable Building 2030 www.b3mn.org

http://www.csbr.umn.edu/programs/green_building/sb2030.html

The B3 tools and programs are designed to help make buildings more energy efficient and sustainable. The B3 Guidelines, Sustainable Building 2030 Energy Standard and related tools form a connected network of performance standards and measures intended to support sustainable design as a means to reduce energy expenditures, enhance the health, well-being and productivity of the building occupants, and improve the quality of the natural environment. All of these can contribute to high-performance buildings with lower life cycle costs. To move toward ensuring these outcomes, the guidelines attempt to quantify the human, community, environmental, and life-cycle economic costs and benefits for each project. The B3 Guidelines and the SB 2030 Energy Standard are requirements for State of Minnesota General Obligation Bond Funded projects and set standards and track the performance of a project from early design through operation.

City of St. Paul Sustainable Building Policy

Kurt Schultz City of St. Paul 651-266-6590 kurt.schultz@ci.stpaul.mn.us

Department of Planning and Economic Development

www.stpaul.gov/departments/planning-economic-development/economic-development/sustainable-building-policy

- According to the U.S. Green Building Council, "Buildings in the United States are responsible for 39% of CO2 emissions, 40% of energy consumption, 13% water consumption and 15% of GDP per year, making green building a source of significant economic and environmental opportunity. Greater building efficiency can meet 85% of future U.S. demand for energy, and a national commitment to green building has the potential to generate 2.5 million American jobs." It's important to do our own part here in Saint Paul to improve our building stock to reduce environmental impact and improve the economy.
- The City of Saint Paul and the Saint Paul Housing and Redevelopment Authority adopted sustainable development policies for public and privately developed buildings receiving more than \$200,000 in public financing.
- Download the guidebook on building sustainably.

U of MN Metropolitan Design Center <http://www.designcenter.umn.edu/>

Tom Fisher, Director, Metropolitan Design Center U of MN 612-626-9068 tfisher@umn.edu

John Carmody, Senior Fellow, CSBR, 612-251-1630 carmo001@umn.edu

- **Transportation** – sharing implications of autonomous vehicles and electric vehicles, smart cities, transit oriented development
- **Large site redevelopment** – (with Ever Green Energy) small group conversations with city staff on how cities can incorporate multiple sustainability and resilience elements into large-site redevelopment projects.

The Minnesota Design Center (MDC) addresses urban issues in the Twin Cities region and beyond, helping communities realize opportunities in their built and natural environment that stimulate economic prosperity, encourage social vitality, and enhance human and environmental health.

The Direct Design Technical Assistance (DDTA) program remains the leading outreach program at the Minnesota Design Center. First funded in 2003, thanks to generous grant support by the McKnight Foundation's Communities and Regions Program, the DDTA program provides urban design assistance to community partners.

The DDTA program has three major objectives:

- To assist cities, non-profits and communities in achieving livable and sustainable development goals related to public space, transportation and land use linkages, economic and policy strategies, and development design options.
- To help communities and decision-makers create the 21st Century city and metropolitan region and to identify the regulatory barriers and outdated assumptions in the way of doing so.
- To involve members of regional or local government planning and transportation agencies early on in the design assistance process and engage them as participants in dialogues about sustainable and livable communities..

Energy Implementation Resources

Metro Region | Clean Energy Resource Teams

Metro CERT empowers communities and their members to adopt energy efficiency and renewable energy technologies and practices www.cleanenergyresourceteams.org/regions/metro

Great Plains Institute www.betterenergy.org

Brian Ross, Great Plains Institute, 612- 501-1531 bross@gpisd.net

Abby Finis Great Plains Institute w. 612-767-7295 C: 612-245-4070 afinis@gpisd.net

City of St. Paul – Climate Action Plan www.stpaul.gov/news/energy-energy-conservation

Anne Hunt, Environmental Policy Director (651) 266-8520 Anne.Hunt@ci.stpaul.mn.us

Jim Giebel, Energy Coordinator, 651-266-6138 Jim.Giebel@ci.stpaul.mn.us

Ana Vang, Policy Associate, **Mayor's Office**, Climate Action Planning, 651-266-8536 Ana.Vang@ci.stpaul.mn.us

www.stpaul.gov/departments/mayors-office/mayors-priorities/sustainable-saint-paul/climate-action-planning

Center for Energy and Environment

Stacy Boots Camp Recruitment and Outreach Coordinator | 612.244.2429 sbootscamp@mncee.org

212 North 3rd Ave #560 | Minneapolis, MN 55401 www.mncee.org

The Center for Energy and Environment (CEE) is a nonprofit organization helping Minnesotans save energy and money for over 35 years. Currently CEE is working on the following programs with cities and utilities:

One-Stop Efficiency Shop lighting program, Home Energy Squad, Residential and Commercial Financing, Engineering Services

City of Minneapolis Commercial building benchmarking ordinance

Commercial Building Benchmarking and Transparency

In Minneapolis, large commercial buildings make up almost 50% of the city's energy use. This provides a tremendous opportunity for identifying areas with the largest potential for energy savings. In February of 2013, the Minneapolis City Council adopted ordinance 47.190 requiring commercial buildings 50,000 square feet and over and city-owned buildings 25,000 square feet and over to annually benchmark their energy consumption and report this information to the City. This ordinance will allow building owners and the City to track energy and water usage year to year to determine opportunities for improvement, recognize high performers, and determine progress towards the City's Climate Action Plan goals. <http://www.ci.minneapolis.mn.us/environment/energy>

Hennepin County Pilot Project for Suburban Communities to adopt Commercial building benchmarking ordinances

- **Leah Hiniker**, Hennepin Co. Energy Management 612 543-1219 leah.hiniker@co.hennepin.mn.us

- **Katie Schmitt** CEE Benchmarking Outreach and Policy Coordinator 612-741-0596 kschmitt@mncee.org

Mid-Sized City Building Energy Benchmarking - This workshop was designed to inform local governments about the benefits and opportunities of private building energy benchmarking in small to medium-sized cities, and to answer questions and present tools to help communities take action.

<https://www.mncee.org/resources/resource-center/webinars/mid-sized-city-building-benchmarking>

<https://www.slideshare.net/mnceeInEx/midsize-city-benchmarking-workshop-hennepin-county-process>

MN ENERGY STAR Challenge!

<http://mnenergystarchallenge.com>

Abby Finis Great Plains Institute w. 612-767-7295 C: 612-245-4070 afinis@gpisd.net

- A statewide program that offers incentives directly to building owner who seek certification. There is also the community partner piece where will work closely with one community to come up with a plan to reach out to businesses in their community to become ENERGY STAR certified.
- Article from Finance & Commerce explaining the Challenge: <http://finance-commerce.com/2015/08/new-effort-pushes-energy-star-rating-for-buildings>

Partners in Energy Program An Xcel Energy Community Partnership

Tami Gunderzik, Xcel Energy Partners in Energy Manager, 612-330-6686 tamara.gunderzik@xcelenergy.com

https://www.xcelenergy.com/working_with_us/municipalities/partners_in_energy

Since you're committed to empowering energy sustainability, renewability, efficiency and environmental programs for your community, we would like to be your energy partner. Join our Partners in Energy program to engage your community in a collaborative effort that will enable you to meet your energy goals.

Partners in Energy is a two-year community support program involving more than electric and/or gas services to your municipalities, residents and businesses. It's not a program, service or product that you need to buy. We team up with your community energy visionaries to develop custom action plans and provide implementation support services to help you meet your energy objectives - that will engage and inform your community.

City of Edina, Partners in Energy www.edinamn.gov/index.php?section=partnersinenergy

- Tara Brown Sustainability Coordinator, City Of Edina 952-927-8861 tbrown@edinamn.gov
- **City of Edina, Minnesota: Partners in Energy's Electricity Action Plan** Aug 5, 2016 - Approved. www.edinamn.gov/index.php?section=pressroom_pressreleases&prrid=1225
- **City of Edina, Energy Working Groups** The Edina Energy & Environment Commission's new energy-related work groups will be implementing the Partners in Energy Plan www.edinamn.gov/index.php?section=energy-working-groups

St. Louis Park Partners in energy

Shannon Pinc Sustainability Coordinator, City of St. Louis Park 952 924-2191 spinc@stlouispark.org

www.stlouispark.org/webfiles/file/Env&Sust%20Commission/st_louis_park_energy_action_plan_final_draft.pdf

City of Eden Prairie: Energy

www.edenprairie.org/community/sustainable-eden-prairie/energy

Improving energy efficiency and promoting clean energy usage and development in residential, commercial and industrial buildings is important to the long-term sustainability of our community.

Residents and businesses committed to managing their energy use can save money while also minimizing the negative effects that energy production can have on the environment.

- **Partners in Energy** Eden Prairie is participating in Xcel Energy's Partners in Energy program, designed to support communities as they develop and implement a strategic energy plan unique to their energy needs. www.e-p.org/community/sustainable-eden-prairie/energy/partners-in-energy

Shorewood, MN Partners in Energy

Julie Moore, City of Shorewood Communications/Recycling Coordinator, 952-960-7906 jmoore@ci.shorewood.mn.us

Partners in Energy Program - Maplewood

<http://maplewoodmn.gov/1180/Partners-in-Energy>

Energy Action Plan Approved April 27, 2015

On April 27th, the Maplewood City Council approved the Partners in Energy - Energy Action Plan titled Energize Maplewood!: A Community Action Plan for Carbon Neutrality (PDF).

<http://maplewoodmn.gov/DocumentCenter/View/12810>

Shann Finwall, Environmental Planner, City of Maplewood 651-249-2304 shann.finwall@maplewoodmn.gov

City of Minneapolis Climate Action Goals

Climate Change Mitigation: Reducing Greenhouse Gas Emissions

<http://www.minneapolismn.gov/sustainability/climate-action-goals/index.htm>

- Minneapolis Climate Action Plan
- Minneapolis Greenhouse Gas Emissions Tracking
- Energy System Transformation Strategy
- Modeling Results: 80% Greenhouse Gas Emissions Reduction by 2050 Minneapolis

In 1989, Minneapolis joined the City of Saint Paul in an effort to be among the first cities in the world to develop comprehensive plans to reduce greenhouse gas (GHG) emissions.

2012: Minneapolis set a target to reduce citywide greenhouse gas emissions by 15 percent by 2015 and 30 percent by 2025 using 2006 as a baseline. Minneapolis tracks and reports on greenhouse gas emissions annually to show progress on its emissions reduction goal.

2013: The Minneapolis City Council adopted the Climate Action Plan which contains a comprehensive set of emissions reduction strategies in three areas: buildings and energy, transportation and land use, and waste and recycling.

2014: Minneapolis was one of 16 communities chosen as a Climate Action Champion by the White House and U.S. Department of Energy. Minneapolis won the designation because of its commitment to clean energy, including such actions as leveraging its energy utility franchise agreements to establishment of a first-of-its-kind in the nation City-utility Clean Energy Partnership, as well as the Minneapolis Climate Action Plan and greenhouse gas emissions reduction targets of 15 percent by 2015, 30 percent by 2025, and 80 percent by 2050.

Minneapolis Clean Energy Partnership www.mpls-cleanenergypartnership.org

- This first-in-the-nation agreement brings together the City of Minneapolis, Xcel Energy and CenterPoint Energy in support of the City's Climate Action Plan

Minneapolis selected to join 100 Resilient Cities Network

Kate Knuth, Chief Resilience Officer, City of Minneapolis, kate.knuth@minneapolismn.gov

www.ci.minneapolis.mn.us/news/WCMSP-180680

May 26, 2016 - Mayor Betsy Hodges welcomed an announcement today from 100 Resilient Cities – Pioneered by The Rockefeller Foundation (100RC), selecting Minneapolis to join the 100RC Network to build urban resilience.

Minneapolis' Resilience Challenge | 100 Resilient Cities

www.100resilientcities.org/cities/entry/minneapolis-resilience-challenge

Former legislator Kate Knuth hired as Minneapolis' chief resilience officer

www.startribune.com/former-state-legislator-kate-knuth-hired-as-minneapolis-chief-resilience-officer/429460473

A former Minnesota legislator has been hired as Minneapolis' chief resilience officer, a new position that coordinates the city's work on urban challenges from housing affordability to climate change.

Kate Knuth will join a network that includes dozens of chief resilience officers around the world, in cities that have joined the Rockefeller Foundation's 100 Resilient Cities project.

Green Zones Policy - City of Minneapolis – adopted April 17, 2017,

www.ci.minneapolis.mn.us/sustainability/policies/green-zones

- Green Zones Mapping Tool - www.ci.minneapolis.mn.us/sustainability/policies/WCMSP-187876

Local Energy Efficiency Self Scoring Tool.

American Council for an Energy-Efficient Economy (ACEEE)

- This is the same tool that ACEEE uses to score cities for their annual *City Scorecard* and they will walk you through the process to see how it works and to use in your own communities. They'll also touch on ways that NGOs can and have used the scoring tool to nudge their cities into action.
- Creating your own city scorecard is a great way to analyze how your city is doing and how it could improve, but some of these questions and measurements can seem daunting. Join us next Tuesday to learn more about how to score your city and use that information to make the case for more energy efficient efforts!
- More info at : <http://aceee.org/blog/2015/12/score-your-community-s-efficiency>

You can also download the Self-Scoring tool (an XCEL file) at <http://aceee.org/research-report/u1511>

Community Solar Gardens | Clean Energy Resource Teams www.cleanenergyresourceteams.org/solargardens

Metro Council leading collaboration to spur community solar – with 31 local jurisdictions

Local governments in the Twin Cities metro area soon will have the opportunity to subscribe to solar energy generated at one or more proposed community solar gardens procured through a collaboration of the Metropolitan Council, Hennepin and Ramsey counties, the City of Minneapolis, Metro CERTs, and the Great Plains Institute www.metrocouncil.org/News-Events/Communities/Newsletters/Metro-Council-leading-collaboration-to-spur-commun.aspx

Consumer Friendly Community Solar Pledge <http://fresh-energy.org/communitysolarpledge/>

Pollinator Pledge | Fresh Energy www.fresh-energy.org/tag/pollinator-pledge Urge solar developers to create habitats for bees and other pollinators in Minnesota when you take the Pollinator Pledge.

Minnesota leads on solar for pollinators and crops 2016 was the first year of Minnesota's solar bloom — but there's plenty more to come. While even more solar sites are planned to be built in the years ahead, tens of millions of native flowers and short-growing meadow grasses will be taking root under and around the panels. Look for black-eyed susans to develop faster than the rest, followed by purple prairie clover, partridge pea, butterfly weed, and more. <https://fresh-energy.org/tag/pollinators/>

Find out how your area can have more pollinator-friendly solar by inviting Fresh Energy to present to your church, civic, or business group. Contact Rob Davis, davis@fresh-energy.org or 651 726 7565.

Energy Innovation Districts in Ramsey County

Ever-Green Energy www.ever-greenenergy.com/services

Jenae Batt Senior Communications Specialist 651.925.8170 | M: 651.769.5212 jenae.batt@ever-greenenergy.com
305 St. Peter Street, Saint Paul, MN 55102 **District Energy St. Paul** - www.districtenergy.com

Rice Creek Commons, Energy Resilience Advisory Board - guide and develop the energy vision for Rice Creek Commons through the creation of a Policy White Paper and Energy Integration Resiliency Framework.

<http://ricecreekcommons.com/energy/energy-resilience-advisory-board>

Ford Site: A 21st Century Community - Energy & Sustainability –

- www.stpaul.gov/departments/planning-economic-development/planning/ford-site-21st-century-community

Energy Innovation Corridor – St. Paul Green Line

www.xcelenergy.com/Community/Community_Projects/Community_Resources/Energy_Innovation_Corridor

MN Background - Resilience & Climate Mitigation and Adaptation

- **In 2007 the State of MN adopted a goal to reduce CO2 emissions by 80% by 2050** – passed by the Legislature, signed by Gov. Pawlenty www.house.leg.state.mn.us/hinfo/newlawsart2007-0.asp?storyid=608
- **We are not on track to meet this goal** www.mprnews.org/story/2015/02/06/climate-change-enough
- **Governor Dayton is making it a priority to get back on track to meet this goal**
www.eqb.state.mn.us/sites/default/files/documents/EQB%20Climate%20Change%20Communications.pdf
- **The Metropolitan Council has adopted the State's climate action goals** as part of our THRIVE MSP regional vision. www.metrocouncil.org/METC/files/ee/ee4d94c3-0c0a-42d0-b9d5-8bde8512b571.pdf
- **Cities can now help MN achieve its climate change mitigation and adaptation goals** by including CO2 reduction plans & climate resilience plans as part of their comprehensive plan updates
<http://metrocouncil.org/Handbook/Plan-Elements/Resilience.aspx>

Minnesota joins 'Climate Alliance' to uphold Paris pact to reach its goal to be 80% carbon free by 2050.

<https://www.mprnews.org/story/2017/06/05/minnesota-joins-climate-alliance-to-uphold-paris-pact>

Gov. Mark Dayton on Monday joined a group of governors who are committing their states to upholding the Paris climate deal's emissions cuts despite President Trump's decision last week to withdraw the U.S. from the pact.

- Organized as the U.S. Climate Alliance, member states aim to reduce emissions by at least 26 percent from 2005 levels and meet the federal Clean Power Plan targets.

- "President Trump's withdrawal will cause serious damage to our environment and our economy," Dayton said in a statement. "Nevertheless, Minnesota and other states will show the world what we can achieve by working together to conserve energy, to use cleaner and renewable energy, and to leave a livable planet to our children and grandchildren."

After White House announcement, Minnesota will proceed with its own climate change strategy

www.startribune.com/minnesota-will-proceed-with-its-own-climate-change-strategy/425826963


With a plan adopted in 2007, the state has been a national leader in pursuing an aggressive plan to reduce emissions. No matter the Paris Climate Agreement, Minnesota officials said Thursday that the state’s march to reducing greenhouse gas emissions will go on.

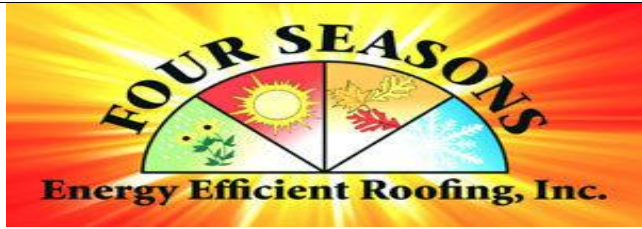
With a plan adopted in 2007, the state has been a national leader in pursuing an aggressive plan to reduce emissions of the chemicals that cause climate change. And though Minnesota has missed its targets in recent years, President Trump’s controversial decision to pull the United States out of the global climate deal struck last year won’t change what has been slow and steady progress, state environmental officials said Thursday. The president’s decision does, however, put future climate change leadership squarely in the hands of state and local governments rather than in, D.C.

“As damaging as this decision will be, it will not deter our efforts here in -Minnesota,” said Gov. Mark Dayton, echoing the reaction of many of the state’s elected officials. “We will show the world what we can achieve by working together to conserve energy, to use cleaner and renewable energy, and to leave a livable planet to our children and grandchildren.”

In effect, Thursday’s announcement means that instead of following the lead of the federal government, the state will look to local communities to tackle climate change, state officials said.

“It’s now going to be bottom up,” said David Thornton, an assistant commissioner at the Minnesota Pollution Control Agency.

	<p>Rebecca Peichel Novel Energy Solutions Sales Manager 507-276-7795 rebecca.peichel@novelenergy.biz www.novelenergy.biz</p> <ul style="list-style-type: none"> - Roof Top Solar Projects - Community Solar Gardens - Financing - Project Design - Project Management and Installation
<p>Founded in 2012 by Cliff Kaehler, Ralph Kaehler, and Bill Holzer, Novel Energy Solutions works to make inexpensive clean energy available to farms, companies, non-profit organizations, and individuals alike.</p> <p>We understand that changing government policies and rapid technological developments can make even a small clean energy project appear overwhelming. Our experienced team is here to help you make sense of available clean energy technologies, utility incentives, government programs, and financing options. We will assist you in devising and implementing a clean energy plan that will both reduce your carbon footprint and save you money.</p>	



Darrell Schaapveld Owner,
Four Seasons Energy Efficient Roofing
 Marine on St Croix, MN
 651-433-2443 darrell@fseer.com
www.fseer.com ,

Duro-Last® boasts over 30 years of reliability and durability in the commercial roofing industry. Their proprietary roofing systems are expected to last as long as 35 – 40 years, decades longer than the majority of other roofing systems. The Duro-Last® formula has remained unchanged since 1978, featuring impressive stats: Duro-Last® Roofing System is a strong, reinforced thermoplastic single-ply membrane, PVC or CPA, perfect for commercial and industrial buildings with flat or low-sloped roofs. It can be the base roof for Solar photovoltaic (PV) panels or green roofs.



Capture All the Advantages of Environmentally Friendly Roofing

Offering long-lasting and recyclable materials, Four Seasons has been recognized for our environmentally excellent practices. Beyond using responsible methods and materials, our team is here to help with additional energy-saving measures. Learn more about how to gain energy savings through solar panels, incentives programs, utility benefits, and more. <http://fseer.com/products/energy-efficiency/>

Lower Your Utilities Cost - Roofs like Duro-Last® provide excellent energy benefits that reduce necessary use of utilities like air conditioning. The Duro-Last® Cool Zone roofing system® is a “cool roof” – one with high solar reflectance and high thermal emittance. These qualities minimize the heat that comes into your building from the roof and keep your building cooler. Our cool roofs exceed California’s Title 24 requirements with 88% solar reflectance and 87% thermal emittance. By beating this stringent standard, we prove again that Duro-Last® is the world’s best roof.

Maintenance and Material End-of-Life Four Seasons Energy Efficient Roofing recycles all possible materials – pallets, paper, Styrofoam insulation, plastic, stones from ballasted roofs, etc. from roofing projects?

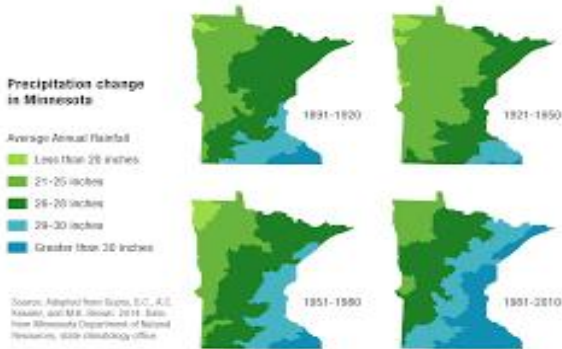
- Installation of an energy efficient Duro-Last® Roofing System can reduce landfill waste because over 90% of the existing roof doesn’t have to be torn off — the new roof can be overlaid?
- Energy-efficient roofs are more environmentally friendly, offer significant tax rebates and utility discounts and, in many cases, pay for themselves



Matthew R. Metzger, ENV SP, PE Senior Civil Engineer 952.832.2830 mmetzger@barr.com

Nathan Campeau, PE (952) 832-2854 ncampeau@barr.com

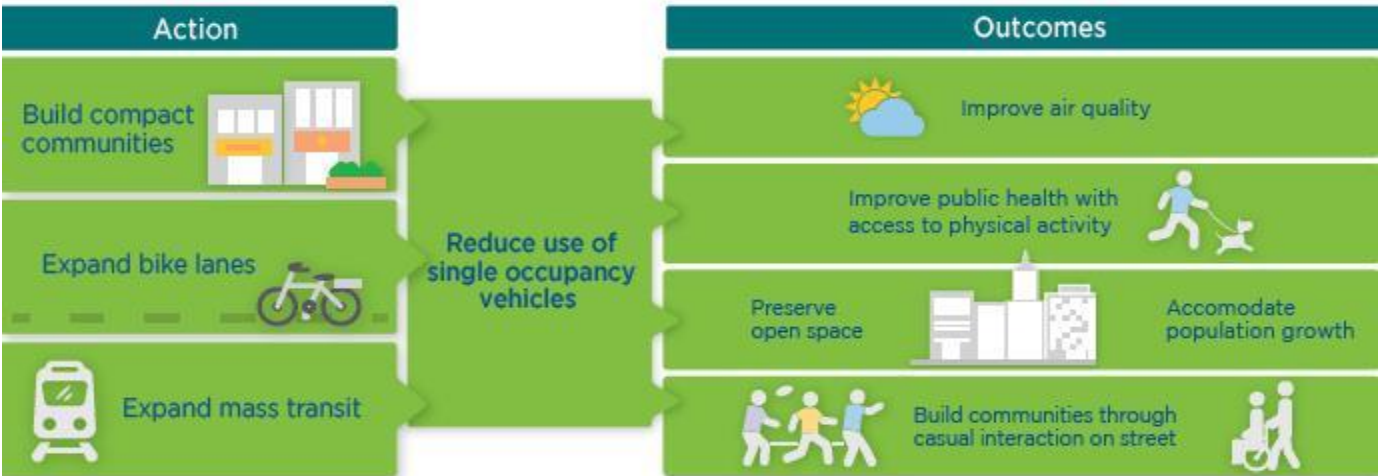
Fred Rozumalski [952-832-2733](tel:952-832-2733) FRozumalski@barr.com



Technical resource partner with the Nine Mile and Riley Purgatory Bluff Creek MPCA Pilot Project supporting 5 west metro cities to start doing climate vulnerability assessment and mitigation planning with

- Bloomington
- Edina
- Hopkins
- Eden Prairie
- Chanhassen

Reducing greenhouse gas emissions in our communities

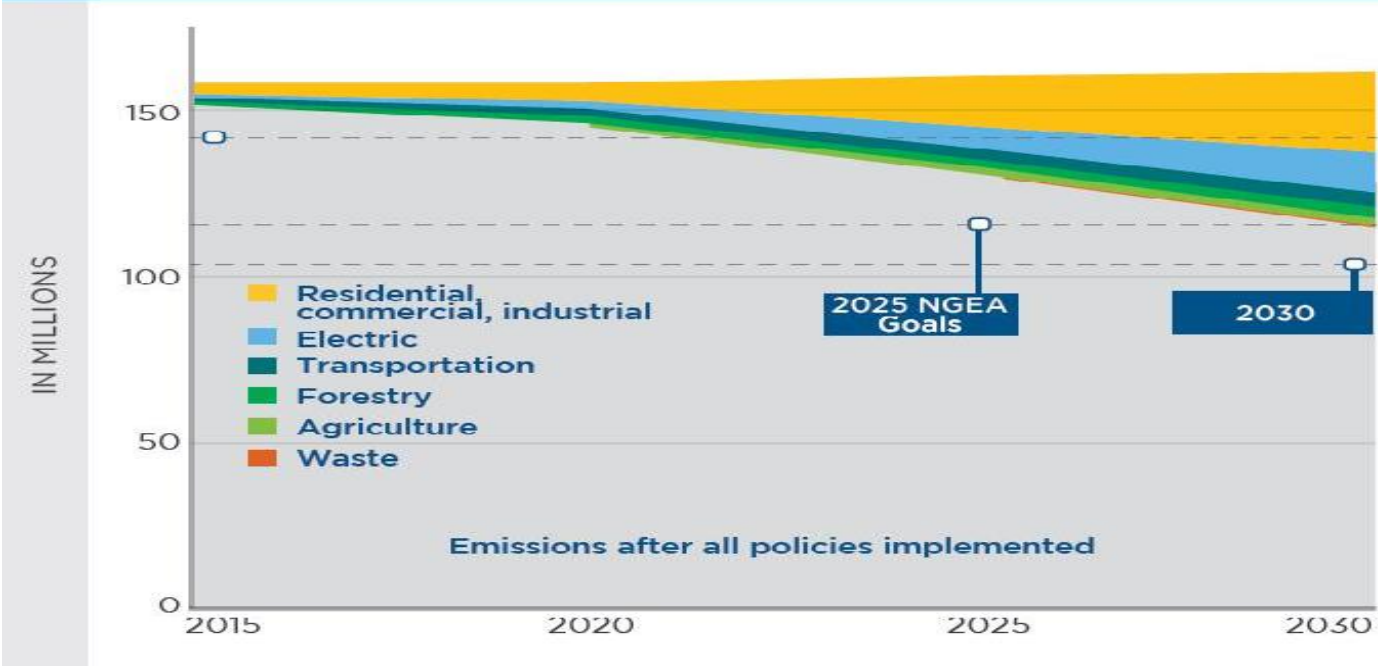


In July 2016 the **Minnesota Environmental Quality Board** released the updated **MN Climate Action Plan -**
www.egb.state.mn.us/content/climate-change

Climate solution and Economic Opportunities – to get our state back on track to achieve our goals to reduce CO2 economy wide 30% by 2025. Let’s help Minnesota continue being a leader in achieving the ambitious CO2 reduction goals adopted by the State of MN and through the U.N. Paris Climate Accord in December 2015.

- 1) **Climate Strategies Report 2016** (5 MB) https://www.egb.state.mn.us/sites/default/files/documents/CSEO_EQB.pdf
- 2) **CSEO Policy Option Documentation** (55 MB)
<https://www.egb.state.mn.us/sites/default/files/documents/CCS%20Appendix%20with%20policy%20details%20and%20results.pdf>

Emissions reductions from CSEO policy options (CO2-e short tons)



Immediate Action – These policies result in immediate reduction of greenhouse gas emissions. They account for 64 to 79% of the emissions reductions that could be made between now and 2030. All the immediate action policies focus on the electric sector.

Policy options	2030 annual in-state GHG reduction (CO ₂ e-tons)	% Reduction towards 2030 target	NPV costs/savings 2015-2030 (\$2014MM)	Average annual employment (full- and part-time)
Increase the renewable electricity standard to 50%	14	27	-404	1,820
Increase the renewable electricity standard to 40%	8	15	-620	1,510
Retire and repower coal plants	7	13	752	310
Increase energy efficiency requirements 2.5%	5	10	-1,882	1,560
Increase energy efficiency requirements 2%	4	7	1,272	N/A
Combined heat and power (CHP)	5	10	-1,112	2,330
Zero energy building codes (SB2030)	10	19	-2,050	2,750
Wastewater treatment facilities energy efficiency	0.07	0.14	-56	80

NPV Costs/Savings 2015-2030 (\$2014MM)

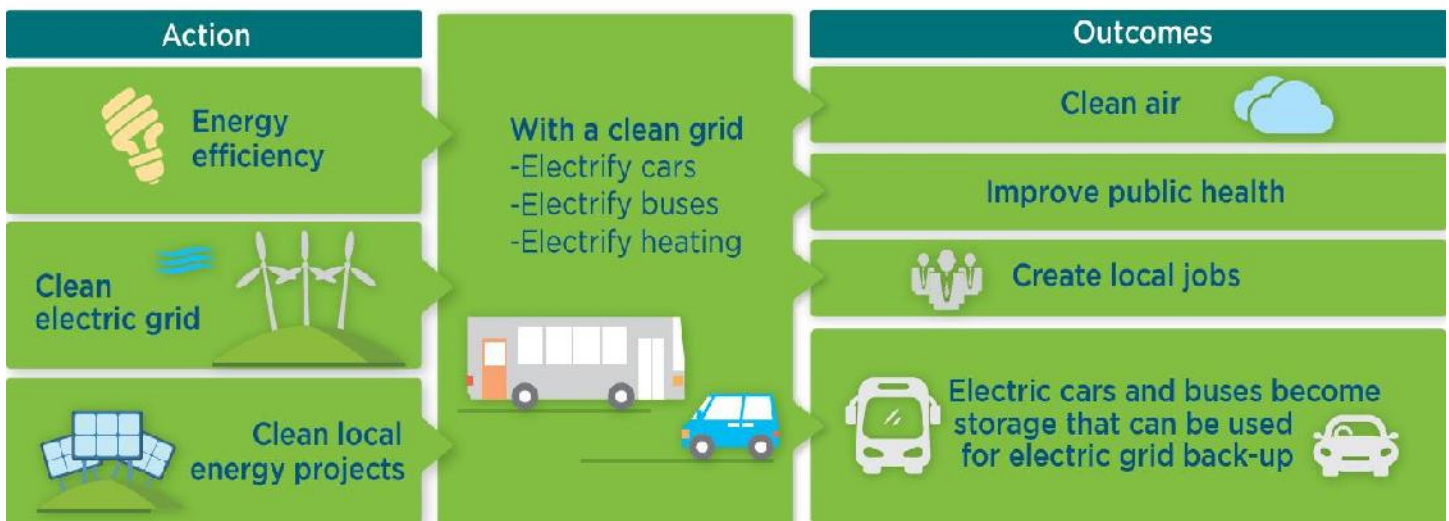


Long-term Strategies – These policies are critical for reaching Minnesota’s 2050 goals, but they require more time for development. Generally, these policies reduce the use of single-occupancy internal combustion vehicles and protect or increase carbon stores in soils and trees.

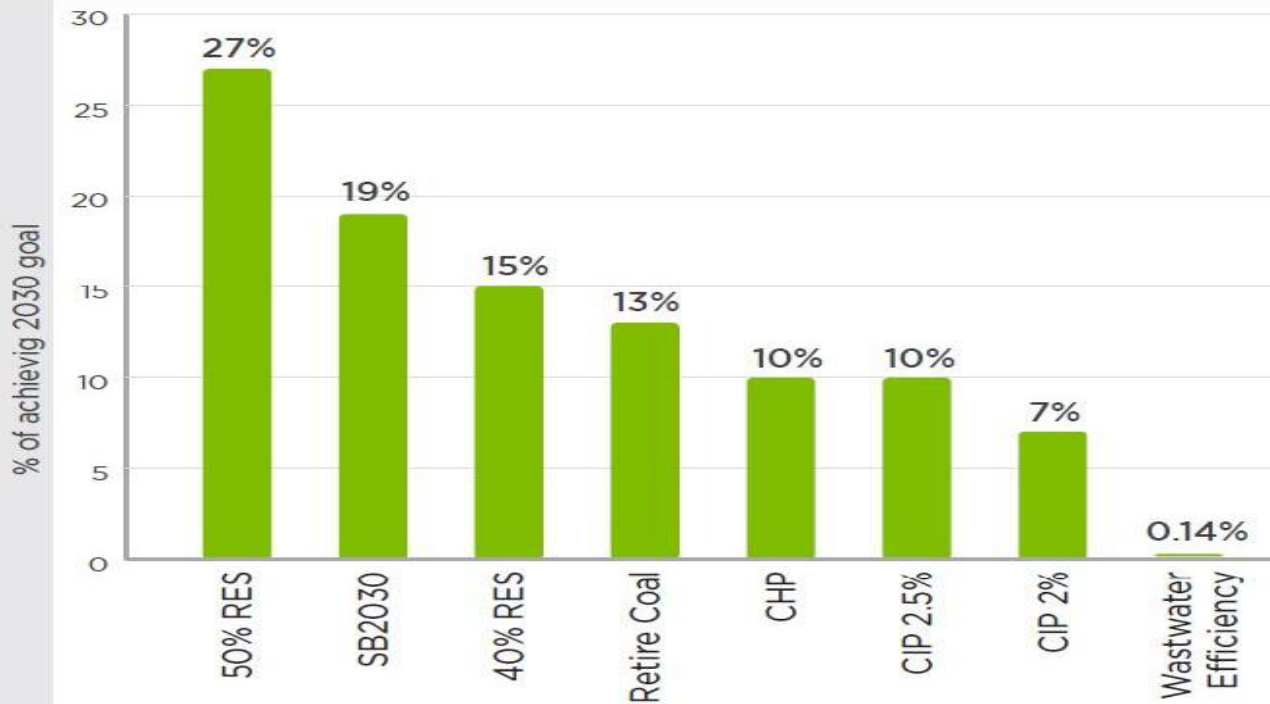
Policy options	2030 annual in-state GHG reduction (CO ₂ e-tons)	% Reduction towards 2030 target	NPV costs/savings 2015-2030 (\$2014MM)	Average annual employment (full- and part-time)
Transit and multimodal travel	0.28	1	-330	450
Compact development in urban areas	1	2	-425	220
Electric vehicles on 100% renewable energy	1	3	3,000 *	-1,220
Community and urban forests	1	1	1,806	4,180
Forest health	2	4	187	-210
Increased conversion of row crops to perennial crops	2	3	-2,104	-490
Increased use of cover crops	1	1	-1,346	230
Re-use, composting, and recycling	0.17	0.31	-817	2,750
Source reduction	0.06	0.12	-277	60

*assumes little change in the price of an electric vehicle

What could 2050 and 80% greenhouse gas reduction look like?



Percent of achieving 2030 goal



US Deep De-carbonization Project

US Report <http://usddpp.org/>

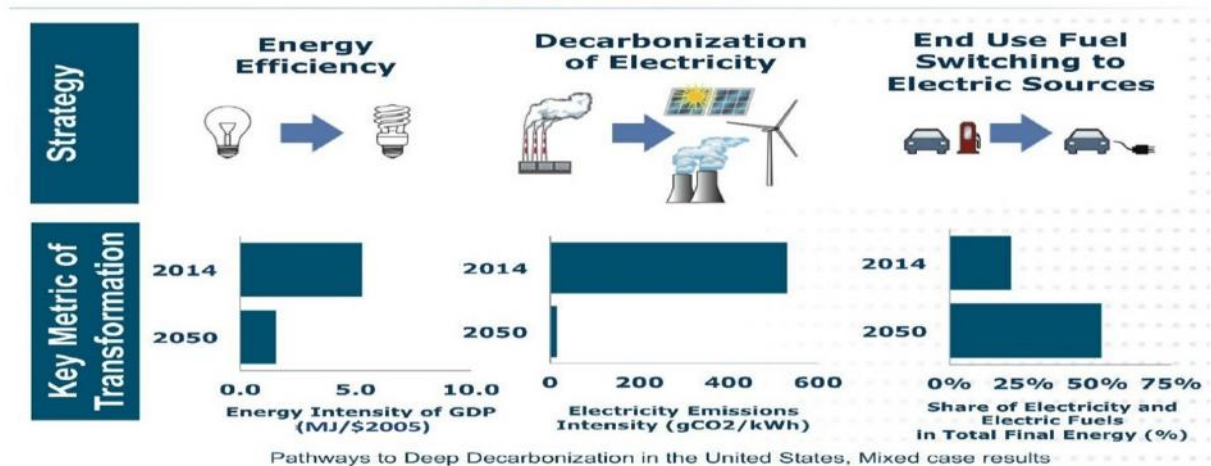
City Examples Fort Collins/ RMI <http://blog.rmi.org>

Minneapolis <http://www.minneapolismn.gov/sustainability/climate/>

Siemens Study for Minneapolis

<https://w3.siemens.com/topics/global/en/sustainable-cities/Documents/Siemens-CyPT-City-Performance-Tool.pdf>

Three Pillars of Deep Decarbonization Required in All Cases





Resilience/ Climate Adaptation

Climate Change | MN Environmental Quality Board www.eqb.state.mn.us/content/climate-change

- Citations for Minnesota and Climate Change: Our Tomorrow Starts Today (189 KB PDF)
- Climate Change One Pagers (6 MB PDF) Use these to print individual topics.

Adapting to Climate Change in MN -- 4-p summary, including 6 projected climate trends with confidence levels:

<https://www.pca.state.mn.us/air/adapting-changing-climate>

Adapting to a changing climate

<https://www.pca.state.mn.us/air/adapting-changing-climate>

- Climate change is already occurring in Minnesota and is affecting our state's environmental, economic, and social systems.
- Adaptation is a complement to mitigation.

Climate adaptation is developing and implementing strategies, initiatives and measures to help human and natural systems cope with and become more resilient to climate change impacts.

Climate change mitigation emphasizes reducing greenhouse gas emissions with the goal of limiting the magnitude or progression of climate change. While it is important to continue to mitigate climate change by reducing emissions to avoid calamitous change, we also need to adapt to changes that are already occurring.

Climate change will affect ecosystems, infrastructure, and sectors of our economy. The impacts on these systems will depend on their sensitivity to climate change and their ability to adapt. The goal of adaptation is to increase natural and societal resilience to climate change.

For more information about climate adaptation, contact Paul Moss, MPCA Climate Adaptation Coordinator, at paul.moss@state.mn.us or 651-757-2586.

Reports

- Adapting to Climate Change in Minnesota 2017 Report of the Interagency Climate Adaptation Team (p-gen4-07c)
- Summary of Adapting to Climate Change in Minnesota 2017 Report (p-pgen4-07d)
- Adapting to Climate Change in Minnesota - 2013 Report of the Interagency Climate Adaptation Team
- Adapting to Climate Change in Minnesota - Preliminary Report of the Interagency Climate Adaptation Team (2010)
- 2016 Climate Adaptation Planning Survey Report (p-gen4-12)

Met Council Resilience Resources Posted at

<https://metro council.org/Handbook/Resources.aspx>

Healthy Communities:

- Stormwater Management: City of Maplewood
- Stormwater Management: USEPA: Heat island effects
- Stormwater Management: GreenStep Cities Best Practices
- GreenStep City Best practice #24, Benchmarks and Community Engagement
- FEMA's fact sheet for Integrating Hazard Mitigation into the Comprehensive Plan
- GreenStep Cities best practices #25 Green Business Development, #27 Local Food, and #28 Business Synergies

TOOL KITS

- **Adapting to Climate Change in MN** www.pca.state.mn.us/index.php/view-document.html?gid=15414
- **U.S. Climate Resilience Toolkit** <http://toolkit.climate.gov/get-started/step-1-identify-problem>
- **MN Greenstep City Best Practice 29 - Climate Adaptation and Community Resilience:** Plan and prepare for extreme weather, adapt to changing climatic conditions, and foster stronger community connectedness and social and economic vitality. <http://greenstep.pca.state.mn.us/bestPractices.cfm>

MN Annual Conference - Climate Adaptation Conference: Transforming Awareness into Action

January 28, 2016 Posted Presentations 2016 <https://www.wrc.umn.edu/climate-2016-0>

<https://www.wrc.umn.edu/news-events/climateadaptationconference>

Best Practice 29: Climate Adaptation and Community Resilience <http://greenstep.pca.state.mn.us/bestPractices.cfm>

Overview: Plan and prepare for extreme weather, adapt to changing climatic conditions, and foster stronger community connectedness and social and economic vitality.

Leadership & Strategy: Integrate climate resilience into planning and budgetary processes. | Hazard mitigation planning | Comprehensive planning and safe growth | Capital budget planning

Health & Wellbeing: Prepare to maintain public health and safety, while also taking a preventive approach. | Identify vulnerable populations | Designate community safe shelter | Provide outreach and incentives to reduce risk on private properties

Economy & Society: Help vulnerable residents improve their prosperity. Build social connectedness. | Training and job placement services | Affordable shared community spaces | Engagement and culturally-specific services/mentoring

Infrastructure & Environment: Protect facilities and infrastructure. Reduce urban heat island effect. | Protect buildings and infrastructure from flash flooding/extreme weather damage | Install green/cool roofs and pavements, trees and other vegetation | Improve local grid with distributed renewable power and microgrids

Sustainable Best Practices: Make long-term investments using sustainable best practice actions. | Energy savings, air quality, active living | Green and gray infrastructure, water conservation | Green building and complete streets



Brett H. Emmons, PE, ENV SP, LEED AP

EOR: water | ecology | community

d: 651.203.6003 bemmons@eorinc.com

Olivia McGuire, P. Eng., ENV SP

Water Resources Engineer omcguire@eorinc.com

Water - Watersheds and Water Resources www.eorinc.com/water.php

ECOLOGY - ecosystems + natural resources www.eorinc.com/ecology.php

COMMUNITY - civil engineering, landscape architecture, + planning www.eorinc.com/community.php

Case Studies - Self-Assessment of Edina Road Reconstruction & St. Paul's West Side Flats Redevelopment

http://www.betterenergy.org/files/EnvisionandEdina_St.PaulWestSideFlats.pdf



Urban Canopy & Comp Plans -- Met Council expert guidance for embedding effective green infrastructure goals, policies & actions:

HOW TO ENHANCE URBAN CANOPY THROUGH ORDINANCE & COLLABORATION FOR COMPREHENSIVE PLANS

Michael Orange, Principal ORANGE Environmental, LLC

While it is easy to appreciate the beauty of trees and landscaping, the quantifiable environmental, economic, and health benefits are not as easy to grasp. When the values of trees are weighed against their purchase and maintenance, the benefits outweigh the costs by a margin of about three to one. Comprehensive plans should embed effective green infrastructure goals, policies, and implementation tools into practice in the following ways:

<https://metrocouncil.org/Handbook/PlanIt/Files/Expert-Article-Urban-Forest.aspx>

1. "You don't know what you got 'till it's gone" - Urban Forest Inventory and Goals:

a. Inventories: Community inventories of public green infrastructure should include at minimum species, location, size, and condition, and ideally, records of major maintenance activities (e.g. treatments for infestations, pests, and diseases). The parks section of your comprehensive plan should include urban forest canopy goals. Fortunately, several excellent tools are now available to estimate canopy cover.¹

b. Plant diversity goals: Cities should utilize the 5-10-15 guideline to increase species diversity. The rule suggests the urban tree population (and major development sites) include no more than 5% of any one species, 10% of any one genus, or 15% of any family.

2. Development Review Process:

a. Mother Nature ignores property lines: A city's control tools must account for both on and off-site impacts. Construction activities and changes to drainage can damage trees and destroy living soils.

3 b. Do it right the first time: A common misperception is that there is little difference between soil and dirt and between a mature tree and a new tree. As scientist, Peter Wohlleben writes, "There are more life forms in a handful of soil than people on the planet. A mere teaspoon contains many miles of fungal filaments. All of these work the soil, transform it, and make it so valuable for the trees."⁴ It is crucial during land altering activities to preserve as much as possible all healthy soils and high-quality trees (i.e. trees that are healthy, large, and properly located). As for new trees, put the right tree in the right place.

3. Emerald Ash Borer infestation: Ash trees constitute 20-40% of the public trees in the region's cities, and the Emerald Ash Borer (EAB) infestation will kill every unprotected ash tree. The EAB beetle is the most economically costly forest insect ever to invade the U.S. Some essentials to manage the infestation include:

a. Save the best and replace the rest: Scientific advancements since the start of the infestation show that the preservation of high-quality ash trees and replacement of the other ash trees is the most economically and environmentally sound policy.

b. EAB management plan: Cities must prepare EAB plans to address the sheer scale of the work ahead and the average management cost of \$800,000 to \$1.5 million.⁵

1 Refer to the references at the end of the Model Landscape Ordinance prepared for the GreenStep Cities Program. 2 The general rule used to be 10-20-30, but it implies the acceptability of suffering the loss of 20% of our urban canopy since both of the commonly planted ash species are highly susceptible to the Emerald Ash Borer infestation.

3 **The Model Landscape Ordinance** mentioned above has suggested ordinance language to address these issues. 4 Wohlleben, Peter, *The Hidden Life of Trees*, p. 86. 5 Refer to the Model Emerald Ash Borer Management Plan (available upon request from this article's author).

c. **Intercity collaboration:** The beetle ignores municipal boundaries.6 Scientific studies show that a regional or, ideally, a statewide EAB management strategy is more cost-effective and better for the environment than a city-by-city approach. Cities should collaborate with their neighbors to implement consistent, science-based management plans. A fuller appreciation of the importance of our green infrastructure can lead to urban forests that deliver the substantial benefits that were the long-range hope of those who planted the saplings.

How the Local Water Management Plans and the Resilience Plan Element Fit Together.

The **Local Water Management Plan** is **required** by statute (for BWSR) ; whereas, much of the **Resilience Plan** Element (apart from solar requirements) are **optional**. You can find more information on surface water requirements here. <https://metro council.org/Handbook/Plan-Elements/Water-Resources.aspx>

Local water management plans are reviewed by the Council as part of the local comprehensive planning process prior to their approval by the appropriate watershed organization(s) and adoption by the community. The updated Minnesota Rules Chapter 8410 now require that all local water management plans must be updated any time after December 31, 2016 and prior to December 31, 2018. Local Water Management Plans must be submitted to the Council for review and the appropriate watershed organization(s) for approval.

However, we are **encouraging communities to consider integrating resilience planning into their local water plan** by folding some of the **water quality** and **water supply** planning into their **overall resilience** efforts.

I'm currently working with water professionals regarding the link between water planning and land use planning. Expanded and better defined communication between these professionals can allow for more meaningful policies and implementation strategies in the Comprehensive Plan that connect water and land use planning, respectively, thereby fostering a more resilient community.

Eric Wojchik, MRTPI Senior Planner | Sector Representative | Local Planning Assistance, Resilience Contact
651.602.1330 eric.wojchik@metc.state.mn.us

- **Resilience** <https://metro council.org/Handbook/Plan-Elements/Resilience.aspx>
- **Water Resources** <https://metro council.org/Handbook/Plan-Elements/Water-Resources.aspx>

Local Watershed and County Contacts – for Surface Water Planning

Minnehaha Creek Watershed District

Becky Christopher Lead Planner -- Project Manager (952) 641-4512 bchristopher@minnehahacreek.org
<http://minnehahacreek.org/comprehensive-water-resources-management-plan>

Nine Mile Creek Watershed District

Randy Anhorn District Administrator 952-835-2078 ranhorn@ninemilecreek.org
<https://www.ninemilecreek.org/whats-happening/water-management-plan>

Riley Purgatory Bluff Creek Watershed District

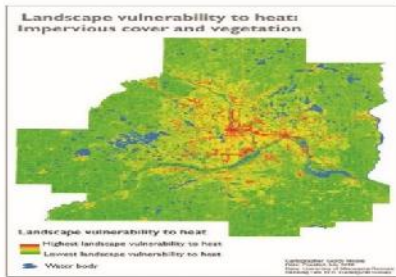
Claire Bleser Administrator, 952-607-6512, cbleser@rpbcwd.org
<http://rpbcwd.org/library/wmp>

cc. Matthew R. Metzger, ENV SP, PE Senior Civil Engineer 952.832.2830 mmetzger@barr.com

Metropolitan Council Climate Vulnerability Assessment resources – available in Sept 2017

Contact - Eric Wojchik, Met Council, Local Planning Assistance 651.602.1330 eric.wojchik@metc.state.mn.us

<https://metro council.org/News-Events/Planning/Newsletters/Council-ramps-up-technical-support-as-communities.aspx>



The determined vulnerability will guide the Council and communities to better plan for infrastructure improvements that can withstand, for example, extreme precipitation which may cause localized flooding; or, a projected vulnerability may help a community focus its enhancement of community forest in neighborhoods vulnerable to urban heat island effect.

Climatic trends in the region show an increased incidence of heat and flood related events; therefore, Council staff is limiting this study to extreme climatic events related to heat and water. The study will focus principally on adaptation rather than mitigation. Mitigation deals primarily with efforts to reduce or prevent emission of greenhouse gases, while adaptation seeks to lower the risks posed by the consequences of climatic changes through, for example, placement of infrastructure outside of flood-prone areas.

The CVA analysis will focus on Metropolitan Council assets and facilities (including parks and trails) but will also generally analyze the built environment of the 7-county metro area.

PURPOSE AND LIMITATIONS

The purpose of the CVA is to prompt a discussion about the many ways extreme weather events can affect both communities as a whole and Metropolitan Council assets. Consistently, literature details that communities are most resilient to extreme weather events when they work together across disciplines and boundaries. As such, the ultimate goal of this project is for the CVA to be used as a screening tool and communication channel between the Council and communities and as a benchmarking tool between communities.

NEXT STEPS

Metropolitan Council staff are in the process of building capacity for the project in a number of ways:

- Finalize CVA Report and Local Planning Handbook tools by early 2017;
- Rollout and CVA training for communities in 2017;
- Socio-economic Climate Vulnerability Assessment to be completed between January to May 2017.

FOR MORE INFORMATION

For more information, contact Eric Wojchik, Senior Planner, at 651-602-1330 or at eric.wojchik@metc.state.mn.us

<p>Metropolitan Council 200 Robert Street North Saint Paul, MN 55101 metro council.org</p>	<p>Met: 651.602.1000 T: 651.291.6004 Public Information: 651.602.1500 public.information.metro council.org</p>	<p>September 2016</p> 
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COMMUNITY RESILIENCE PLANNING WORKSHOPS Building Resilience for a Changing Climate



For questions, please contact Leslie Yetka (651-313-5813; lyetka@freshwater.org), Steve Woods (651-3135811; swoods@freshwater.org), Jen Kader (651-313-5807; jkader@freshwater.org)

What is this? Current science indicates our precipitation and temperature patterns are changing in Minnesota, and will continue to do so in the future. These changes will have significant impacts on our natural resources, our built infrastructure, human health, and our societies. Community Resilience Planning Workshops are a way to engage communities and watersheds in planning for climate change and resilience, a valuable component of municipal comprehensive plans and local water management plans.

Why should I participate?

- You will understand climate-related changes that are already happening, what is predicted to continue, and how your community is vulnerable to these changes
- You will generate valuable information on local vulnerabilities, strengths, priorities, and strategies to increase resilience that can be included in municipal comprehensive plans and local water management plans
- You will engage in participatory planning and mapping exercises that are designed to enhance the quality, legitimacy, and capacity of information generated, the decisions made, and the people involved
- You will network with neighboring communities and watershed districts to foster collaboration in planning and implementation of your resilience plan

How do I get involved? By attending the following:

Kickoff Core Team Meeting - a meeting of core watershed and municipal staff charged with planning logistics of the community resilience workshops, and most importantly, who to invite

Resilience Planning Workshop #1 a workshop designed to use collaborative planning & participatory mapping exercises to identify climate-related hazards of concern, with local infrastructure, social, and environmental risks

Resilience Planning Workshop #2 - a workshop designed to focus on community or watershed level strategies to reduce vulnerabilities and enhance strengths related to climate resilience, including priorities and timelines

Final Core Team Meeting a final wrap-up of outputs and outcomes leading to a final report that can be incorporated into municipal and local water management plans



BOLTON & MENK

Real People. Real Solutions.

Nick C Meyers, GISP GIS Project Manager
612-597-7027 nickme@bolton-menk.com

www.Bolton-Menk.com

Tim Olson, P.E., CFM, Water Resources Engineer

timol@bolton-menk.com

Haila Maze Senior Planner 651-434-5743

hailama@bolton-menk.com



BOLTON & MENK

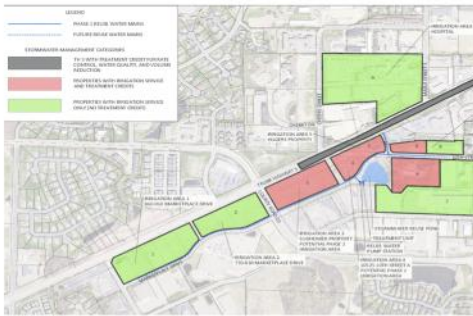
Real People. Real Solutions.



Clear Lake Water Quality Project

Forest Lake, Minnesota

Bolton & Menk presented a new design concept to increase pollutant removal through an innovative treatment train approach with multiple uses of iron enhanced sand filtration technology. A flow diversion channel, rock gabion weir with iron enhanced sand filtration core, bioretention floodplain, and perched iron enhanced sand filter maximized the opportunity for runoff treatment. A total phosphorus reduction goal of 140 pounds per year was established, with the project providing over 70% of that goal.



TH 5 Stormwater Reuse

Waconia, Minnesota

Bolton & Menk presented a stormwater reuse design that met all Carver County Watershed Management Organization and NPDES requirements. In addition, the reuse system reduced the City's demand on portable water supply by using reuse water for irrigation. The annual volume of reuse water provided is estimated at 5.6 million gallons. By providing a regional system, adjacent properties can fully utilize the entire area instead of dedicating a portion to stormwater management.



The ARTery

Hopkins, Minnesota

The multimodal focused, art centric ARTery project links the SWLRT station to historic Mainstreet in Hopkins. Focusing on sustainability and placemaking, the project incorporates green stormwater infrastructure improvements, decorative high efficiency lighting, and durable long lasting materials that give a nod to the historical industrial use of the area. The art work is also an opportunity to showcase various types of media and also educate the public on sustainable solutions.



Clocktower Plaza - Mainstreet

Hopkins, Minnesota

Along with permeable pavers surrounding the overstory trees, the urban plaza captures downspout drainage from the adjacent buildings and redirects the water into an underground grid within the tree trenches to add in tree watering. Any surface water that may fall within the plaza is sheet drained across two permeable paver bands to reuse the surface water for tree growth and reduce the volume of water entering the storm sewer network.



Brett H. Emmons, PE, ENV SP, LEED AP

EOR: water | ecology | community

d: 651.203.6003 bemmons@eorinc.com

Olivia McGuire, P. Eng., ENV SP

Water Resources Engineer omcguire@eorinc.com

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COMMUNITY - civil engineering, landscape architecture, + planning www.eorinc.com/community.php

Case Studies - Self-Assessment of Edina Road Reconstruction & St. Paul's West Side Flats Redevelopment
http://www.betterenergy.org/files/EnvisionandEdina_St.PaulWestSideFlats.pdf

Emergency Preparedness

Local Planning Handbook - Resilience - Economy and Society

<https://metrocouncil.org/Handbook/Plan-Elements/Resilience.aspx>

Many local governments have a Federal Emergency Management Agency (FEMA) approved hazard mitigation plan in order to be eligible for federal disaster mitigation assistance funds. Consider integrating your hazard mitigation plan into your comprehensive plan to help you assess your community's vulnerabilities and incorporate resiliency into your plans. FEMA's fact sheet called [Integrating Hazard Mitigation into the Comprehensive Plan](#) provides a good starting point.

Building Community Resilience by Integrating Hazard Mitigation into the Local Comprehensive Plan

Many local governments have a Federal Emergency Management Agency (FEMA) approved hazard mitigation plan in order to be eligible for federal disaster mitigation assistance funds. Consider integrating your hazard mitigation plan into your comprehensive plan to help you assess your community's vulnerabilities and incorporate resiliency into your plans. FEMA's fact sheet called [Integrating Hazard Mitigation into the Comprehensive Plan](#) provides a good starting point
<https://www.fema.gov/media-library-data/20130726-1908-25045-9918/factsheet1.pdf>

Hennepin County Emergency Management

Eric Waage Director (612) 596-0249 eric.waage@co.hennepin.mn.us

Bruce Kelii bruce.kelii@co.hennepin.mn.us

www.hennepin.us/residents/emergencies/emergency-management

www.hennepin.us/~media/hennepinus/your-government/get-involved/documents/em-roles-background.pdf?la=en

- We work before, during and after trouble strikes, to protect the residents of Hennepin County.
- Some of the dangerous conditions we monitor include dam breakage, extreme heat, fires, flooding, hazardous materials spills, infectious disease outbreaks, thunderstorms, tornadoes and winter storms, acts of terrorism or other man-made disasters
- Emergency Management also coordinates and maintains public and private disaster resources in the county, and works with other emergency officials and volunteers to prepare for and respond to emergencies. The county's role is a partnership with each city in the county.
- Every city has an Emergency Operation Plan that meets state and federal requirements. Hennepin County Emergency Management responds to crises when a city emergency manager, mayor or other city official requests county resources. All emergencies happen locally, and the initial response also is handled locally.

FEMA Local Mitigation Planning Handbook and Grants

www.fema.gov/hazard-mitigation-planning-resources www.fema.gov/media-library/assets/documents/31598

The Local Mitigation Planning Handbook (Handbook) is the official guide for local governments to develop, update and implement local mitigation plans. While the requirements under §201.6 have not changed, the Handbook provides guidance to local governments on developing or updating hazard mitigation plans to meet the requirements under the Code of Federal Regulations (CFR) Title 44 – Emergency Management and Assistance §201.6, Local Mitigation Plans for

FEMA approval and eligibility to apply for FEMA Hazard Mitigation Assistance grant programs. It also offers practical approaches, tools, worksheets and local mitigation planning examples for how communities can engage in effective planning to reduce long-term risk from natural hazards and disasters.

Cooling Centers - Interactive Map <http://www.hennepin.us/residents/health-medical/cooling-centers>

Public Health Emergencies Marcee Shaughnessy 612-596-7064 marcee.shaughnessy@hennepin.us
www.hennepin.us/residents/emergencies/public-health-emergencies

FEMA Community Emergency Response Team (CERT)
www.fema.gov/community-emergency-response-teams

CERT educates individuals about disaster preparedness for hazards that may impact their area and trains them in basic disaster response skills, such as fire safety, light search and rescue, team organization, and disaster medical operations.

Bloomington , Chaska, Eden Prairie, Falcon Heights, Hopkins, Minneapolis , Plymouth, Richfield, Shakopee, St Louis Park, West Metro **Register a CERT Program** -- join over 2,600 registered CERT programs and register today!

Active Living

MN Department of Health Ellen Pillsbury, Active Transportation Coordinator, MDH 651-201-5493 ellen.pillsbury@state.mn.us www.health.state.mn.us/divs/hpcd/chp/cdr/physicalactivity/activetrans.html

Active Living Hennepin County

Denise Engen, Active Living Hennepin County, 612-348-4454 Denise.Engen@hennepin.us
<http://www.hennepin.us/your-government/projects-initiatives/active-living>

Metro Healthy Comprehensive Plans Workgroup

Resources and links

- Final Healthy Comprehensive Plans Checklist (PDF)
- Final Healthy Comprehensive Plans Checklist (DOCX)
- Draft Logic Model for Healthy Comprehensive Plans Workgroup (PDF)
- Logic Model Template (DOCX)

2040 Hennepin County Bicycle Transportation Plan

Jordan Kocak Hennepin County Bicycle and Pedestrian Coordinator 612-543-3377 jordan.kocak@hennepin.us
Get the bike map, 2040 bike plan, and learn how the county is investing in bicycling
www.hennepin.us/residents/transportation/biking

Hennepin County Complete Streets Policy

<http://www.hennepin.us/your-government/projects-initiatives/complete-streets>

Bike Plans <http://activelivingbydesign.org/>

Minneapolis Bike Plan <http://www.minneapolismn.gov/bicycles/WCMS1P-135610>

Carver County Trail Plan www.co.carver.mn.us/departments/public-works/parks-recreation/parks-trails/regional-trails

Scott County Trail Plan www.scottcountymn.gov/981/Trails
www.scottcountymn.gov/628/Transportation-Planning-Programs

Edina Living Streets <http://edinamn.gov/index.php?section=LivingStreets>

Bike Alliance of MN - Dorian Grilley, (651) 387-2445 dorian@bikemn.org www.bikemn.org

Local Bicycle Advocates - www.bikemn.org/advocacy/local-bicycle-advocates

- **Bloomington Bicycle Alliance** - www.facebook.com/BloomingtonBicycleAlliance/
- **Our Streets Minneapolis** www.ourstreetsmpls.org/webikempls
- **Richfield Bike Advocates** <https://bikerichfield.org/>



Minnesota Food Access Planning Guide

Download a free copy at
<http://mnfoodcharter.com/planningguide/>

For more information please contact
Nadja Berneche Healthy Comprehensive Planning (651)-968-3899 nadja@terrasoma.com

The Need
 Changing food system.
 Changing demographics, economy, and development trends.
 Knowledge gap between food and planning.
 Comprehensive planning process in the metro.
 A need to focus on equity.

Purpose
 Bridge the Knowledge gap between planners and food systems advocates by providing an overview of the food system and planning. Provide tools and language to facilitate policy, systems, and environmental change.
 Empower planners
 Empower food systems advocates

Food Access Planning Guide
 Part I. provides an overview of both food and planning issues by highlighting important background information, legal/law considerations and impacts, and trend information.
 Part II. provide model comprehensive plan language as a resource to ease the process of adoption and implementation of food policy and E changes for local and regional governments and agencies

- Stragegy Areas**
- Land Use
 - Housing
 - Transportation
 - Economic Development
 - Farmland Preservation
 - Food Production
 - Food Aggregation + Processing + Distribution
 - Healthy Food Retail
 - Pollinators

- GET A COPY** <http://mnfoodcharter.com/planningguide/>
- **Download the Food Access Planning Guide**
 - **WATCH THE WEBINAR** - Working with MN Local Governments to Increase Access to Healthy Food: Part III – Integrating Food Access into Local Planning
 - **DOWNLOAD THE TOOLKIT** - Make sure healthy food access and equity are part of your community’s long-range plan by leveraging the new Minnesota Food Charter Food Access Planning Guide. This toolkit can help!

LOCAL TOOLS TO INTEGRATE HEALTH

- Heathy Comp Plan Check List** [http://mnfoodcharter.com/planningguide/resources/Healthy Comprehensive Planning: A Checklist \(.doc\)](http://mnfoodcharter.com/planningguide/resources/Healthy%20Comprehensive%20Planning%20-%20A%20Checklist%20.doc)
[Healthy Comprehensive Planning: A Checklist \(.pdf\)](http://mnfoodcharter.com/planningguide/resources/Healthy%20Comprehensive%20Planning%20-%20A%20Checklist%20.pdf)

Healthy Food Access
<http://publichealthlawcenter.org/topics/healthy-eating>

MN Food Charter <http://mnfoodcharter.com/resources/>

Metro Food Access Network MFAN members envision a safe, just, and healthy food system for all. The mission of MFAN is to leverage collective capacity of partners to advance equitable access to healthy food for all Twin Cities metro residents. <https://sites.google.com/a/umn.edu/mfan/about-us>

Home Grown Minneapolis Food Council www.ci.minneapolis.mn.us/sustainability/homegrown/index.htm
Metro Food Access Network - Comprehensive Planning Action Team

<https://sites.google.com/a/umn.edu/mfan/work-groups/retail-food-access>

Contact - **Nadja Berneche** Healthy Comprehensive Planning (651)-968-3899 nadja@terrasoma.com

The Comprehensive Planning Action Team currently aligns with the following Minnesota Food Charter strategy: Include healthy food access as an important component of local governments' overall infrastructure and transportation planning. Partners: The Comprehensive Planning Action Team consists of about 10-15 partners representing funding agencies, local public health, and various nonprofit and grassroots organizations.

Homegrown Minneapolis <http://www.minneapolismn.gov/sustainability/homegrown/>

Tamara Downs Schwei Homegrown Minneapolis Local Food Policy Coordinator (612) 673-3553

Tamara.DownsSchwei@minneapolismn.gov

The Saint Paul - Ramsey County Food and Nutrition Commission Nadja Bernachy, Healthy Comprehensive Plan Coordinator (651) 231-6751 nadja@terrasomma.com
www.stpaul.gov/departments/mayors-office/committees-boards-and-commissions/food-and-nutrition-commission

Homegrown South - www.theopendoorpantry.org/get-involved/homegrown-south/Healthy The Open Door Pantry - Homegrown South is a network of food producers, hunger relief agencies and the community **Casey Silver** Food Access & Equity Manager 952 693-6842 caseys@theopendoorpantry.org

Good Food Access Fund www.change.org/p/help-us-make-healthy-food-available-to-all-minnesotans

Farmer Legal Action Group www.flaginc.org

Land Stewardship Project www.landstewardshipproject.org

Organic Consumers Association www.organicconsumers.org

Pollinator Friendly Alliance www.pollinatorfriendly.org

Farmland Protection - the Minnesota Department of Ag www.mda.state.mn.us/protecting/farmlandprotection.aspx

MN Agricultural Land Preservation Statutes www.mda.state.mn.us/protecting/farmlandprotection/statutes.aspx

MN Agricultural Land Preservation Program www.mda.state.mn.us/protecting/farmlandprotection/aglandpres.aspx

APA -Planning4Health resources www.planning.org/nationalcenters/health/

Design for Health – http://designforhealth.net/wp-content/uploads/2012/12/BCBS_ISFood_090107.pdf

Center for Prevention - Minnesota - Health in All Policies

www.centerforpreventionmn.com/what-we-do/our-current.../health-in-all-policies

Minnesota Public Health Association - Health in All Policies Resources www.mpha.net/page-1624363

MN Dept of Health - adopted Health in All Policies (HiAP) resolution

relevant HiAP research and references. www.health.state.mn.us/tracking/hia/using.html

Advancing Health Equity www.health.state.mn.us/divs/chs/healthequity

The Center for Earth, Energy and Democracy

Green Zones <http://ceed.org/section/green-zones/>

Economic Competitiveness & Economic & Racial Equity

www.metrocouncil.org/Handbook/Plan-Elements/Economic-Competitiveness.aspx

Making the Case that we are all one Region – that our success and prosperity are linked

One MN To engage and empower Minnesotans to establish racial, social and economic equity for all Minnesotans.

Sustainable Shared Prosperity www.onemn.org www.chai.news

Bruce Corrie, PhD, Concordia University, 612 321-8263 corrie@csp.edu www.chai.news

Brett Buckner, Coordinator www.OneMN.org 612-356-2520 brett1mn@gmail.com

Greater MSP: Minneapolis Saint Paul Economic Development We serve MSP by promoting job creation, providing regional marketing and assisting in business recruitment and expansion www.greatersp.org

Wilder Foundation – MN Compass Demographic Information www.mncompass.org

Priorities - Itasca Project <https://www.theitascaproject.com/priorities.html>

- **MSP Regional Indicators Dashboard** (2015) a set of shared, objective metrics to track the Greater MSP region's overall success on critical measures.
- **Socioeconomic Disparities: Employers' role in closing the gaps** (2015)

Greater MSP: Minneapolis Saint Paul Economic Development <https://www.greatersp.org>

Minneapolis Saint Paul Regional Workforce Innovation Network www.mspwin.org

Metropolitan Economic Development Association (MEDA) www.meda.net

Growth and Justice www.growthandjustice.org

<http://www.growthandjustice.org/facts.fixes/economic/workforce-equity-for-a-competitive-economy>

Career Pathway Investment www.growthandjustice.org <http://www.startribune.com/learning-is-a-local-thing-as-minnesota-initiatives-show/320343871>

Equity / Economic Inclusion

Equity Advisory Committee - Metropolitan Council

Cedrick Baker, Equity Program Manager, 612-373-3924 cedrick.baker@metc.state.mn.us

<https://metrocouncil.org/Council-Meetings/Committees/Equity-Advisory-Committee.aspx>

Dave Gorski, City of St. Paul, Department of Human Rights & Equal Economic Opportunity 651-266-8918

dave.gorski@ci.stpaul.mn.us

www.stpaul.gov/departments/human-rights-equal-economic-opportunity

CURA Twin Cities Gentrification Project Summary <http://www.cura.umn.edu/gentrification>

Met Council Reports

Diving Deeper: Understanding Disparities between Black and White Residents in the Twin Cities Region

<https://metrocouncil.org/getdoc/03bd679d-21a4-455b-af7a-15309b0c71ae/Diving-Deeper-Understanding-Disparities-Between-B.aspx>

CHOICE, PLACE AND OPPORTUNITY An equity assessment of the Twin Cities region

www.metrocouncil.org/Planning/Projects/Thrive-2040/Choice-Place-and-Opportunity.aspx

A Region That Sees Racism as a Threat to Its Economy Minnesota's Twin Cities, one of the most prosperous areas in the nation, is reckoning with its inequities. The Atlantic ALEXIA FERNÁNDEZ CAMPBELL OCT 26, 2016

www.theatlantic.com/business/archive/2016/10/a-region-that-sees-racism-as-a-threat-to-its-economy/505490/

Alliance for Metropolitan Stability www.metrostability.org

ISAIAH | Faith in Democracy www.isaiahmn.org

Twin Cities Local Initiatives Support Corporation www.tclisc.org

NEXUS Community Partners Larry Hiscock, Transitway Engagement <http://nexuscp.org/our-work/what-we-do>

2016 Educational Equity in Action www.gap.umn.edu/About/edequityinaction.html

SEATTLE CITY COUNCIL Resolution 31577 -- Passed in 2015

Title: A RESOLUTION confirming that the City of Seattle's core value of race and social equity is one of the foundations on which the Comprehensive Plan

<https://seattle.legistar.com/LegislationDetail.aspx?ID=2269342&GUID=B0DDC78F-6CEC-4E8C-9A1B-CB913457D663&Options=&Search>

Government Alliance on Race and Equity

Gordon F. Goodwin, Midwest Regional Project Manager 763-258-3328 ggoodwin@thecsi.org

Government Alliance on Race and Equity, Center for Social Inclusion www.centerforsocialinclusion.org

- Yearlong learning cohort with cities and counties in MN <http://racialequityalliance.org/tools-resources/>

Advancing Racial Equity and Transforming Government: A Resource Guide for Putting Ideas into Action."

<http://racialequityalliance.org/2015/10/22/resource-guide>

Resource Guides http://racialequityalliance.org/newsite/wp-content/uploads/2015/02/GARE-Resource_Guide.pdf

Advancing Racial Equity and Transforming Government: A Resource Guide to Put Ideas into Action (October, 2015)

Racial Equity Toolkit: An Opportunity to Operationalize Equity (October, 2015)

http://racialequityalliance.org/newsite/wp-content/uploads/2015/10/GARE-Racial_Equity_Toolkit.pdf

- **Contracting for Racial Equity:** Best Local Government Practices that Advance Racial Equity in Government Contracting and Procurement (November, 2015)
- **Public Sector Jobs:** Opportunities for Advancing Racial Equity (June, 2015)

Policy Link www.policylink.org/focus-areas/equitable-economy

Resources for our region achieve equitable growth without displacement

- **Equity in Place** www.metrostability.org
- **Inclusive Transit Oriented Development** - www.tclisc.org
- **Corridors of Opportunity** www.corridorsofopportunity.org
- **Transformative Equitable Development series** Alliance for Metropolitan Stability www.metrostability.org
- **Equitable Development Scorecard** — Harrison Neighborhood Association www.hnampis.org/scorecard



Planning for Equitable Development, including Land Use, Housing, Parks, Transportation
In partnership with the Government Alliance on Race and Equity (GARE)
<https://metro council.org/Handbook/Training/Workshops.aspx>
 When: **Tuesday, June 27, 2017** | 8:30 a.m. - 12:30 p.m.
 Where: Amherst H. Wilder Foundation, Auditorium A and B
 451 Lexington Parkway North, Saint Paul
 3.5 CM credits provided.

Gordon F. Goodwin, Midwest Regional Project Manager 763-258-3328 ggoodwin@thecsi.org

Government Alliance on Race and Equity, Center for Social Inclusion www.centerforsocialinclusion.org

Integrating racial equity into the plan for growth in communities increases the likelihood that benefits and burdens will be equitably distributed. We must plan for people and our environment. Land use policies drive the creation of communities, and housing, parks and transportation are all critical for creating equitable communities. This session will continue exploring ways to use a Racial Equity Analysis in comprehensive planning. Local experts will provide insights on effective principles and practices for engaging communities for the process. Panel representatives will be present from:

- The Alliance for Metropolitan Stability
- Neighborhood Leadership and Organizing Program (NLOP) of the Center for Urban Regional Affairs at University of MN
- Metro Transit Everyday Equity Fellows Program

SOLID WASTE PLAN UPDATES

County Solid Waste Master Plan Updates and City Solid Waste Planning

Solid Waste Plan Updates

- **MPCA - Metropolitan Solid Waste Management Policy Plan**
- The MPCA is revising the Metropolitan Area Solid Waste Management Policy Plan (policy plan) that is due to be completed December 31, 2016. The draft policy plan is on public notice and open for comment through September 16, 2016. www.pca.state.mn.us/waste/metropolitan-solid-waste-management-policy-plan

Carver County Solid Waste Master Plan Update

www.co.carver.mn.us/departments/public-services/environmental-services/about-us/studies-reports

Hennepin County Solid Waste Master Plan www.hennepin.us/solidwasteplanning

- Hennepin County is developing its 2018 Solid Waste Management Master Plan to reach the goal of recycling 75 percent of waste by 2030.
- **Provide input** - If you are a resident of Hennepin County, take our survey www.surveymonkey.com/r/CDWPPB7 to provide your feedback.

Scott County Solid Waste Master Plan Update www.scottcountymn.gov/709/Solid-Waste-Management

Eureka Recycling <http://www.eurekarecycling.org/>

The Mulch Store <http://www.mulchstoremn.com/>

Recycling Association of Minnesota <https://recycleminnesota.org>

Minnesota Composting Council www.mncompostingcouncil.org

Minnesota's Upcycling, Rental & Repair Hub | ReUSE MN <https://www.reusemn.org/>



Alliance for Sustainability

Ecologically sound, economically viable, socially just and humane



Consulting Services available for Cities and Communities

from the Alliance for Sustainability and our partners

www.allianceforsustainability.com/consulting

For more information please contact

Sean Gosiewski, Executive Director Alliance for Sustainability, 612-250-0389

sean@afors.org www.afors.org

Ted Redmond, co-founder, Pale Blue Dot 612.669.7056 trdmond@paleblue-dot.org

www.BLUEdotregister.org

- Community Wide Carbon Base Line Analysis
- Community Wide Climate Action Planning
- Sustainability and the Natural Step Framework Workshops
- Community engagement and meeting facilitation using the Technology of Participation
- Community Energy, Resilience and Sustainability Planning with a team of experienced consultants.
- In-house sustainability trainings for inter-departmental work teams and citizen commissions.
- Support for cities launching new Environment & Sustainability Commissions
- Community Engagement Tools for Energy Conservation, Water Quality, Recycling, Composting

OUR TEAM

Overall Sustainability & Natural Step Framework Workshops

Terry Gips President, Sustainability Associates 612 374-4765 terrygips@comcast.net

www.sustainabilityassociates.com

Sustainability Commissions, Community Engagement, Interdepartmental Teams

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

Carbon Baselines, Climate Action Planning, Net Zero Energy Building Design

Ted Redmond, Architect, , Pale Blue Dot 612.669.7056 redmond@paleblue-dot.org www.BLUEdotregister.org

Environmental Assessments, Sustainability, Community Engagement

Kari Cantarero 402 301-3492 kari.cantarero@gmail.com www.linkedin.com/in/kari-cantarero-08268017

Water Resources, Resilience/Sustainability –

Brett H. Emmons, PE, ENV SP, LEED AP Co-Founder, Owner and Principal EOR: water | ecology | community
d: 651.203.6003 o: 651.770.8448 bemmons@eorinc.com www.eorinc.com

Bike Ped Infrastructure Planning

Steve Clark 651 767-0298 stevenci151@gmail.com

www.linkedin.com/in/stephen-clark-25554710b

Zero Waste Planning

John Madole 612 281-5179 johnmadole@johnmadole.com <http://johnmadole.com/>





Thanks for considering [making a gift](#) supporting the [Alliance for Sustainability](#) today for our work with citizen and youth leaders, city staff and local elected leaders in 50 metro cities to support them to envision and work together to build **equitable, resilient, healthy and thriving** communities powered by **renewable energy**.
<http://allianceforsustainability.com/donate/>

Sean Gosiewski, Executive Director 612-250-0389 sean@afors.org
Alliance for Sustainability, In the GreenWay Building, 2801 21st Ave S. Suite 100, Minneapolis, MN 55407
www.allianceforsustainability.com [Facebook](#) [Twitter](#)
Linking citizens, congregations and cities for sustainable communities!