

Workshop for Dakota County Communities

Planning for Resilient Cities

Tuesday June 27, 2017

Apple Valley Senior Center

14601 Hayes Rd, Apple Valley, MN 55124

Both Sessions are open to All. Choose the time that is best for you!

- 1:00 to 4:30pm - **City Staff Workshop**
- 5:00 to 6:00pm - **Networking Reception**
- 6:00 to 8:30pm - **Community Workshop**

www.allianceforsustainability.com/dakotaworkshop

Co-sponsored by the Alliance for Sustainability, Dakota County, City of Apple Valley



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

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

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

Questions? Please call - Sean Gosiewski, Alliance for Sustainability, 612-250-0389 sean@afors.org



Agenda for the Staff and Community Workshops

- **Welcome & City Updates** – **Welcome** - Apple Valley Mayor Mary Hamann Roland **City Updates** Staff, Council or Commission volunteers sharing brief updates (30 min)
- **New Resilience Planning Resources** – partners will share new planning and mapping tools, sample comp plan language & implementation resources (60 min)
 - **Energy Mapping & Planning Resources**, Diana McKeown Great Plains Institute
 - **Energy Efficiency, Renewables & EV resources** Tim Doherty, Dakota Electric
 - **Green Buildings & Districts**, John Carmody, U of MN CSBR
 - **Climate Adaptation/ Surface Water Plans** Brett Emmons or Camilla Correll, EOR
 - **Urban Forestry Strategies for Comp Plans** – Michael Orange, Orange Consulting
 - **Health/ Active Living/ Food Access** – Lil Leatham, Mary Montagne, Dakota Co., Nadja Berneche, Food Access Policy Guide & Check List
 - **MN GreenStep City Energy & Resilience Resources** - Phil Muessig, MPCA
- **Small Group Discussions (Energy, Adaptation/Water, Health)** – (60 min) explore with your peers how your city use these resources (30 min conversations x 2)
 - **New tools for Mapping current conditions** (opportunities and challenges)
 - **Example comprehensive plan goals and strategies from other cities**
 - **New implementation resources and funding strategies for your city**

Local, clean ENERGY & transportation

- **Mapping** – solar maps, residential and commercial energy use profiles
- **Setting Goals** – LOGOPEP Energy Planning Templates, city examples
- **Implementation & funding** – CERTS, Utility Programs, Sol Smart, SB 2030,

Water Quality/ADAPTATION

- **Mapping** – flood & climate risk planning and preparedness
- **Setting Goals** to mitigate risks, infrastructure & social resilience
- **Implementation & funding** –CIP budgets, Storm water fees, FEMA

Active Living, Food Access, HEALTH

- **Mapping** – health & income disparities, bike & trail connections
- **Setting Goals** – Healthy Comp Plan Check List, examples from cities
- **Implementation & funding** – Bike/Ped Funding, Food Access,

Co-sponsors - Alliance for Sustainability, MN EQB, MPCA, Dakota County, City of Apple Valley, Great Plains Institute, CEE, EOR Inc., Xcel Energy, Dakota Electric, Novel Energy, FSEER, Fresh Energy, Barr Engineering, LHB, Bolton & Menk, OneMN, MN Food Charter, U of MN, MN Design Center, CSBR, MFAN, iMatter, Valley Natural Foods





Alliance for Sustainability

Ecologically sound, economically viable, socially just and humane



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

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

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 using the resources

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, Center for Energy Environment, Evergreen Energy, Eutetics.

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

- Fresh Water Society, MPCA, DNR, Met Council, Tree Trust, EOR, Bolton & Menk, Barr, 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 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 ((Partners in Energy) <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 LoGoPEP – Local Government Project for Energy Planning</p>

Speaker & Topic Resource Contacts

Workshop Host and Facilitator

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

Local Planning Handbook and Planning Grants www.metrocouncil.org/Handbook.aspx

Energy & Climate Resilience

Brian Ross, Great Plains Institute, 612- 501-1531 bross@gpisd.net 1pm

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

Maureen Colburn, Project Manager, **LHB**, Corp. 612.752.6954 or maureen.colburn@lhbcorp.com.

LOGOPEP Energy Planning Templates www.regionalindicatorismn.com/energy-planning

Tim Doherty, Dakota Electric 651 651 206-5264 tdoherty@dakotaelectric.com

Jill Eide, Dakota Electric, 651-463-6384. jeide@dakotaelectric.com

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

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

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

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

Center for Energy and Environment www.mncee.org

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/

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

<http://www.designcenter.umn.edu/>

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

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

www.novelenergy.biz

Climate Adaptation/ Water Resources

Brett Emmons, Principal, Emmons Olivier Resources Inc. 651.770.8448 bemmons@eorinc.com

Camilla Correll, PE, Water Resources Engineer- EOR Inc. 651.770.8448 ccorrell@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

Eric Wojchik, MRTPI Senior Planner, **Metropolitan Council**, Sector Representative, Resilience Contact

651.602.1330 eric.wojchik@metc.state.mn.us <https://metrocouncil.org/Handbook/Plan-Elements/Resilience.aspx>

Healthy Food Access

Nadja Berneche, Healthy Comprehensive Planner - 651-231-6751 nadja@terrasoma.com

<http://mnfoodcharter.com/order-for-minnesota-food-charter-comp-planners-guide>

MN GreenStep Cities www.mngreensteps.org

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

Kristin Mroz, Local Government Coordinator, 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

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

Dakota County Resource People

Active Living / Dakota County Trails Master Plan Update

Kurt Chatfield, Planning Supervisor, Dakota County 952-891-7022 kurt.chatfield@co.dakota.mn.us

<https://www.co.dakota.mn.us/parks/planning>

Greenway Collaborative www.co.dakota.mn.us/parks/Planning/Greenways

<https://www.co.dakota.mn.us/parks/Planning/ParkPlans/Documents/ParkSystemPlan.pdf>

Health www.co.dakota.mn.us/Government/publiccommittees/SHIP/Pages/dakota-county-ship-strategies.aspx

Mary Montagne, Dakota County Public Health (651) 554-6119 mary.montagne@co.dakota.mn.us

Lil Leatham, Planner, Dakota County 952 891-7159 lil.leatham@co.dakota.mn.us

Healthy Dakota Initiative - <https://www.co.dakota.mn.us/Government/publiccommittees/CHA/Pages/profiles.aspx>

Healthy Comprehensive Plan Check List The most current checklist is posted in the Metro Healthy Comp Plan workgroup "Resources" area (<http://www.hennepin.us/activeliving>) on the Hennepin Co. Active Living website. The document links are below.

- [Final Healthy Comprehensive Plans Checklist \(PDF\)](#)
- [Final Healthy Comprehensive Plans Checklist \(DOCX\)](#)

Home Grown South/ Open Door Pantry

A collaborative network working on creating a more just, vibrant, and sustainable food system in and around Dakota County <http://theopendoorpantry.org/get-involved/homegrown-south/>

Casey Silver 651 605-2882 caseys@theopendoorpantry.org www.homegrownsouth.org

Homegrown South is a network of individuals, farmers, processors, composters, backyard gardeners, community gardeners, Co-op & farmers market shoppers, kids, adults, retired people- anyone who lives, works, grows, sells or cares about healthy food and having a healthy food system in the rural and suburban communities that surround the Twin Cities to the south. This network meets on a quarterly basis to discuss timely local food issues, educate ourselves on food access research and policies, and set and implement policy actions that respond to the barriers and opportunities we witness in our communities that relate to creating a healthier food system. From 2015-2018 our main goal will be to understand and influence the comprehensive planning process that informs the development of our communities over the next 20+ years.

Dakota County Solid Master Plan update (now underway)

www.co.dakota.mn.us/Environment/ReportsStudies/solid-waste-master-plan/Pages/default.aspx

Sign up for project and engagement updates at wasteless@co.dakota.mn.us.

Renee Burman, Dakota County, 952-891-7042 Renee.Burman@co.dakota.mn.us

Caroline McFadden, Dakota County, 952-891-7132 caroline.mcfadden@co.dakota.mn.us

www.co.dakota.mn.us/Environment/ReportsStudies/Pages/county-solid-waste-master-plan.aspx

Communities for a Lifetime

Jess Luce, Dakota County 651-554-6104 jess.luce@co.dakota.mn.us

www.co.dakota.mn.us/Government/publiccommittees/CFL/Pages/default.aspx

The Dakota County Communities for a Lifetime initiative brings together residents, local businesses, community organizations, cities, and county staff to create networks of vital, accessible communities.

Key Challenges and Action Steps

www.co.dakota.mn.us/Government/publiccommittees/CFL/Documents/CFLKeyChallengesActionSteps.pdf

What makes a Community for a Lifetime?

- Transportation options to help keep people mobile and independent.
- Sidewalks and paths that are walkable for transport and exercise.
- A full range of affordable housing options as needs change.
- Accessible and quality services that support older adults and caregivers in home and community settings.
- Flexible and supportive employment and volunteer opportunities, including intergenerational activities.
- Effective technology to connect people and help with life's activities.

Farmland and Natural Areas Program

Al Singer, Dakota County (952) 891-7001 al.singer@co.dakota.mn.us

www.co.dakota.mn.us/Environment/LandConservation/FNAP/Pages/default.aspx

Energy

Taud Hoopingarner, Dakota Co Director, Operations Management. 952.891.7004 Taud.Hoopingarner@co.dakota.mn.us

www.co.dakota.mn.us/Environment/Energy

- Building and maintaining energy-efficient buildings, operating fuel-efficient vehicles, and increasing recycling are just a few of the energy saving initiatives underway in Dakota County. The County's EnergyPlan.pdfEnergy Plan includes goals that focus on a variety of ongoing energy-saving priorities.
- Dakota County was the first county in the state to complete a greenhouse gas inventory, measuring the amount of greenhouse gases produced by county operations. This inventory will serve as a baseline to help guide County efforts to improve energy and fuel efficiencies, promote alternative transportation, and explore renewable energy options to reduce greenhouse gas emissions and save money.

Dakota Electric

Tim Doherty, Dakota Electric 651 651 206-5264 tdoherty@dakotaelectric.com

Jill Eide, Dakota Electric, 651-463-6384 jeide@dakotaelectric.com

Business Programs and Rebates www.dakotaelectric.com/business/programs-rebates

Residential Programs and Rebates www.dakotaelectric.com/residential/programs

Wellspring - Dakota Electric Association www.dakotaelectric.com › Home › Renewable Energy

www.dakotaelectric.com/renewable-energy/wellspring-renewable-energy

Electric Vehicles www.dakotaelectric.com/member-services/programs-rebates/for-your-home/electric-vehicle-charging/

Dakota County Emergency Planning

www.co.dakota.mn.us/HealthFamily/HandlingEmergencies/Planning/Pages/default.aspx

Prepare for Disasters & Disease Outbreaks As part of the All-Hazard Mitigation Plan, Dakota County has identified the types of hazards that are most likely to occur in the area. They include: **Natural Disasters and Severe Weather** -

Thunderstorms, Tornadoes, Extreme Heat, Extreme Cold, Winter Storms/Blizzards, Floods **Disease Outbreaks,**

Bioterrorism www.co.dakota.mn.us/HealthFamily/HandlingEmergencies/Disasters/Pages/default.aspx

Surface Water Plans Updates and Comp Plans

Cities are updating their surface water plans as part of comp plan updates. Contact the Dakota County SWCD and your Watershed Districts for their updated surface water plans, so your city can synchronize with their goals.

Dakota County Soil and Water Conservation District www.dakotaswcd.org

- 2016-2025 Comprehensive Plan www.dakotaswcd.org/pdfs/ComprehensivePlan2016to2025.pdf
- Watershed Management www.dakotaswcd.org/watershed_management.html
- Stormwater Management www.dakotaswcd.org/stormwater_management.html

Watershed Management Organizations in Dakota County

www.co.dakota.mn.us/Environment/WaterQuality/Watersheds

Watershed management organizations work to solve and prevent surface water-related problems.

- Black Dog Watershed Management Organization
- Eagan-Inver Grove Heights Watershed Management Organization
- Lower Mississippi Watershed Management Organization
- Lower Minnesota Watershed District
- North Cannon Watershed Management Organization
- Vermillion River Watershed Joint Powers Organization

Thank you to our Event Sponsors!

Great Plains Institute, City of Apple Valley, Dakota County, Dakota Electric, Xcel Energy, CEE, The Mulch Store, Valley Natural Foods, EOR Inc., Barr Engineering, Bolton and Menk, FSEER, Novel Energy Solutions, LHB Corp

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.

Resilience Plan elements

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

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.

INFRASTRUCTURE & ENVIRONMENT

Minimum Requirements: None.

Get More Out of Your Plan:

- Evaluate the recommended sustainability and resiliency practices adopted by other communities through the GreenStep Cities program. Consider recommending participation in GreenStep Cities as an implementation strategy in your Plan.
- Explore RELi, the new Resiliency Action List, a national ANSI pilot consensus standard containing direct value credits which are part of an accompanying Green + Resilient Finance Standard. Discover strategies to create safer, healthier and more productive communities that can better handle weather extremes, economic turbulence, and crisis conditions. RELi incorporates many sustainability approaches from various leadership standards, plus additional actions specific to resilient communities.
- The Georgetown Climate Center houses a wealth of resources additional climate adaptation information and resources that can help you get started.

ENERGY INFRASTRUCTURE AND RESOURCES

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.

Get More Out of Your Plan:

Energy Efficiency and Conservation

- Consider implementing policy options contained in the Georgetown Climate Center report, “MN Options to Increase Climate Resilience in Buildings.”
- Explore including supportive goals and policies for capturing your community’s energy efficiency resources through encouraging sustainable building design, such as Saint Paul’s Sustainable Building policy.
- Engage your energy utilities in your Plan process, specifically to develop partnership opportunities for enhancing local participation in energy efficiency and renewable energy programs. Consider recommending a formal collaboration with the utility as an implementation step, similar to the Clean Energy Partnership in Minneapolis or participating in a Partners in Energy initiative with Xcel Energy program.
- Explore adopting a commercial building benchmarking ordinance such as has been implemented by the City of Minneapolis.
- Consider Property Assessed Clean Energy (PACE) as implementation tool in your Plan. PACE is a financing tool that allows property owners to access competitive private financing through a partnership with local governments and the St. Paul Port Authority. Building owners who use PACE financing for their energy improvements pay back the financing through property taxes, as a voluntary special assessment. Consult the Authority about Joint Powers Agreement opportunities.
- Review Minnesota Housing’s “Home Fix Up Fund” to address weatherization and energy conservation in existing buildings.
- Adopt policies supporting enhanced partnership in developing local energy systems that support local generation, micro-grid development, and district heating systems that use of city rights-of-way.

Renewable Energy

- Evaluate options for implementing your policy for solar by reviewing local examples of ordinances, such as Falcon Heights’ ordinance or Rosemount’s ordinance. Include developing a solar ordinance as an implementation strategy in your plan.

- Identify areas of potential solar production in your community using the University of Minnesota’s solar mapping tool (also available on the Council’s mapping tool). This tool shows solar radiation potential taking into account shading from trees and buildings, topography, weather conditions, and the changing sun angle over the year.
- Assess best practices for addressing solar energy development in your comprehensive plan. The Minnesota Grow Solar Planning/Zoning/ Permitting Toolkit contains best practices and model ordinances that are specific for Minnesota communities.
- Solar Outreach Partnership (SolarOPs) hosts information and resources to facilitate solar energy adoption for local governments, including workshops, peer-to-peer sharing, research, and online tools and reports.
- Consider incorporating planning policy ideas and examples on energy efficiency and renewable energy from around the country and incorporate into your plan. The American Planning Association has compiled a large number of examples that provide direction on how to address energy resources in your comprehensive plan. The solar energy PAS examples and the PAS report are free of charge, the energy/climate and wind examples are available for sale at the APA website.

HEALTHY COMMUNITIES

Minimum Requirements: None

Get More Out of Your Plan:

- Explore opportunities to integrate heat island mitigation strategies into the local comprehensive plan, education and engagement efforts, and other plans and ordinances.
- Consider options for cool pavement alternatives for road construction.
- Consider expansion and maintenance of vegetated open space and green infrastructure installation to improve water quality and manage stormwater, like the City of Maplewood.
- The EPA has a number of resources that explain risks of heat island and the tools for reducing heat island effects. Consider developing policies in your Plan specific to reducing heat island risks.
- Consider conducting a Health Impact Assessment (HIA) of your existing plan as part of the development of your 2040 plan, like the City of St. Louis Park.
- Consider how your community could prepare for the health vulnerabilities to climate change identified in the Minnesota Climate Change Vulnerability Assessment prepared by the Minnesota Department of Health.
- Consult GreenStep Cities best practices #11, #12, #16, #23, and #27 regarding Healthy Community for goals and strategies that can be incorporated into your Plan.

ECONOMY & SOCIETY

- Consider planning for the most vulnerable of your population in all aspects of the comprehensive plan,
- Federal Emergency Management Agency (FEMA) approved hazard mitigation plan

Minimum Requirements: None

Get More Out of Your Plan:

- Consider alternatives to the traditional planning and public outreach process. Ideas include morning meetings, childcare, venues which are already gathering locations/events, social media, “meeting in a box”, on-line resources.
- Consider planning for the most vulnerable of your population in all aspects of the comprehensive plan, as climate can have varying impacts on vulnerable populations such as elderly, young, and impoverished populations.
- GreenStep City Best practice #24, Benchmarks and Community Engagement, provides best practices examples of how communities can set benchmarks, measure progress, communicate to residents and businesses, and foster a trust relationship with people in the community through communication and engagement.
- 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.
- Additional GreenStep Cities best practices that address the Economy and Society component of community resiliency include Best Practice #25 Green Business Development, #27 Local Food, and #28 Business Synergies.

Resilience FACT SHEET

<http://metro council.org/Handbook/Files/Resources/Fact-Sheet/RESILIENCE/Sustainability-and-Resiliency-Overview.aspx>

For building in resiliency into local planning, communities are also encouraged to:

- Implement compact development patterns and create more connected places to reduce auto-dependency and related generation of greenhouse gases.
- Identify local measures that would result in reductions in water use, energy consumption, emission of greenhouse gases;
- Identify local mitigation and adaptation strategies and infrastructure resiliency plans to protect against potential negative impacts to local economies, local resources, and infrastructure that result from more frequent or severe weather events.
- Participate in programs that evaluate and share city sustainability practices, such as GreenStep Cities and the Regional Indicators Initiative.
- Consider development or use community solar gardens.

These efforts help build the foundation for a prosperous, equitable, livable, and sustainable future for communities and the region.

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>



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

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

Dakota County

Taud Hoopingarner, Dakota Co Director, Operations Management. 952.891.7004 Taud.Hoopingarner@co.dakota.mn.us
www.co.dakota.mn.us/Environment/Energy

- Building and maintaining energy-efficient buildings, operating fuel-efficient vehicles, and increasing recycling are just a few of the energy saving initiatives underway in Dakota County. The County's EnergyPlan.pdf Energy Plan includes goals that focus on a variety of ongoing energy-saving priorities.
- Dakota County was the first county in the state to complete a greenhouse gas inventory, measuring the amount of greenhouse gases produced by county operations. This inventory will serve as a baseline to help guide County efforts to improve energy and fuel efficiencies, promote alternative transportation, and explore renewable energy options to reduce greenhouse gas emissions and save money.

Dakota Electric

Tim Doherty, Dakota Electric 651 651 206-5264 tdoherty@dakotaelectric.com

Jill Eide, Dakota Electric, 651-463-6384 jeide@dakotaelectric.com

Business Programs and Rebates www.dakotaelectric.com/business/programs-rebates

Residential Programs and Rebates www.dakotaelectric.com/residential/programs

Wellspring - Dakota Electric Association www.dakotaelectric.com › Home › Renewable Energy

www.dakotaelectric.com/renewable-energy/wellspring-renewable-energy

Electric Vehicles www.dakotaelectric.com/member-services/programs-rebates/for-your-home/electric-vehicle-charging/

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

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.

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

SLP 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

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

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

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

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>

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](http://www.xcelenergy.com/Community/Community_Protects/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 MPCA

Novel Energy Solutions

Rebecca Peichel Novel Energy Solutions Sales Manager

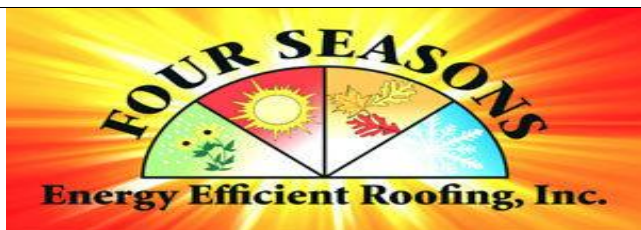
507-276-7795

rebecca.peichel@novelenergy.biz www.novelenergy.biz

- **Roof Top Solar Projects**
- **Community Solar Gardens**
- **Financing**
- **Project Design**
- **Project Management and Installation**

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.

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.



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.

DURO-LAST®
THE WORLD'S BEST ROOF®
Environmentally Friendly Commercial Roofing at its Finest
<http://fseer.com/products/duro-last/>

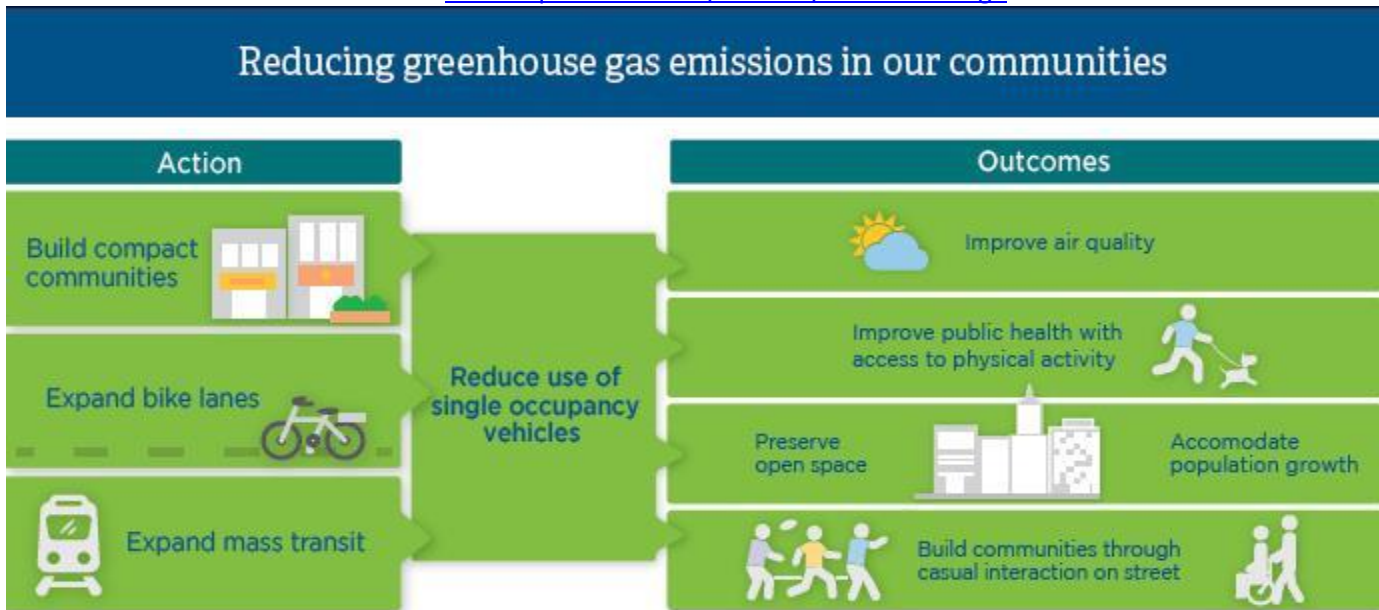
Capture All the Advantages of Environmentally Friendly Roofing

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



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

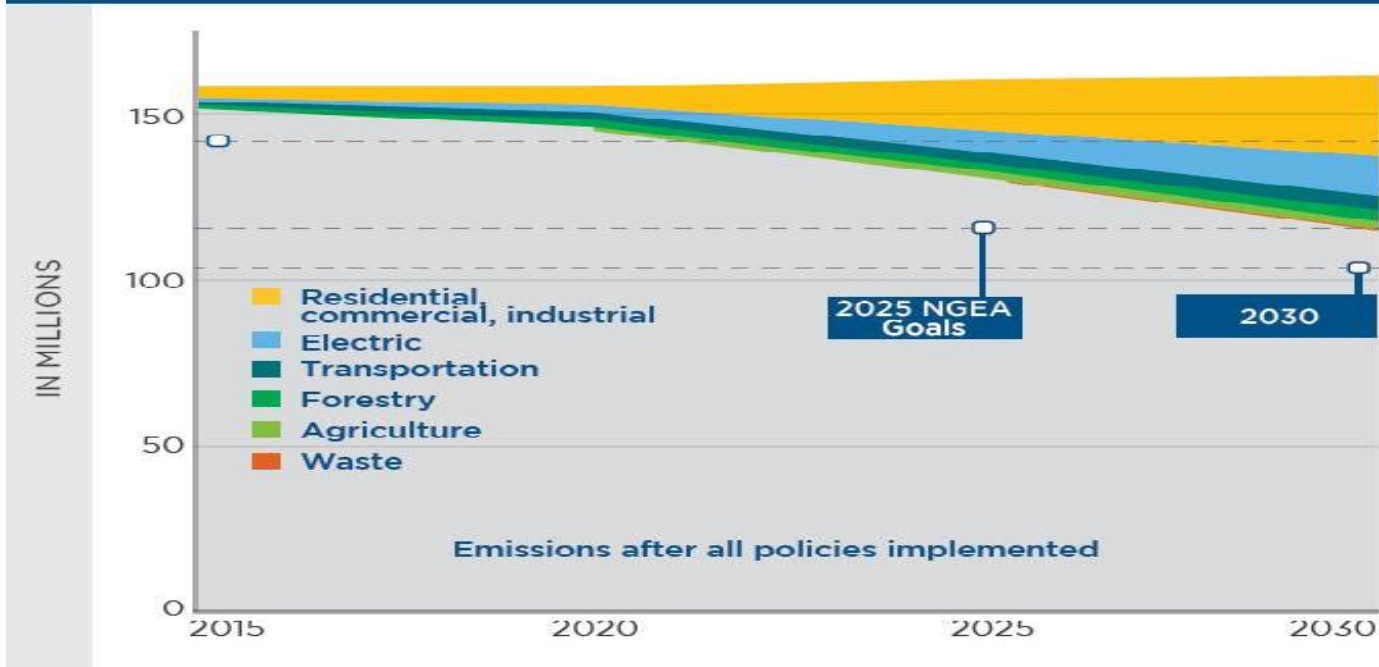
Climate solution and Economic Opportunities – to get our state back on track to achieve our goals to reduce CO2 economy wide 30% by 2025. Let’s help Minnesota continue being a leader in achieving the ambitious CO2 reduction goals adopted by the State of MN and through the U.N. Paris Climate Accord in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

1) **Climate Strategies Report 2016** (5 MB) https://www.eqb.state.mn.us/sites/default/files/documents/CSEO_EQB.pdf

2) **CSEO Policy Option Documentation** (55 MB)

<https://www.eqb.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)

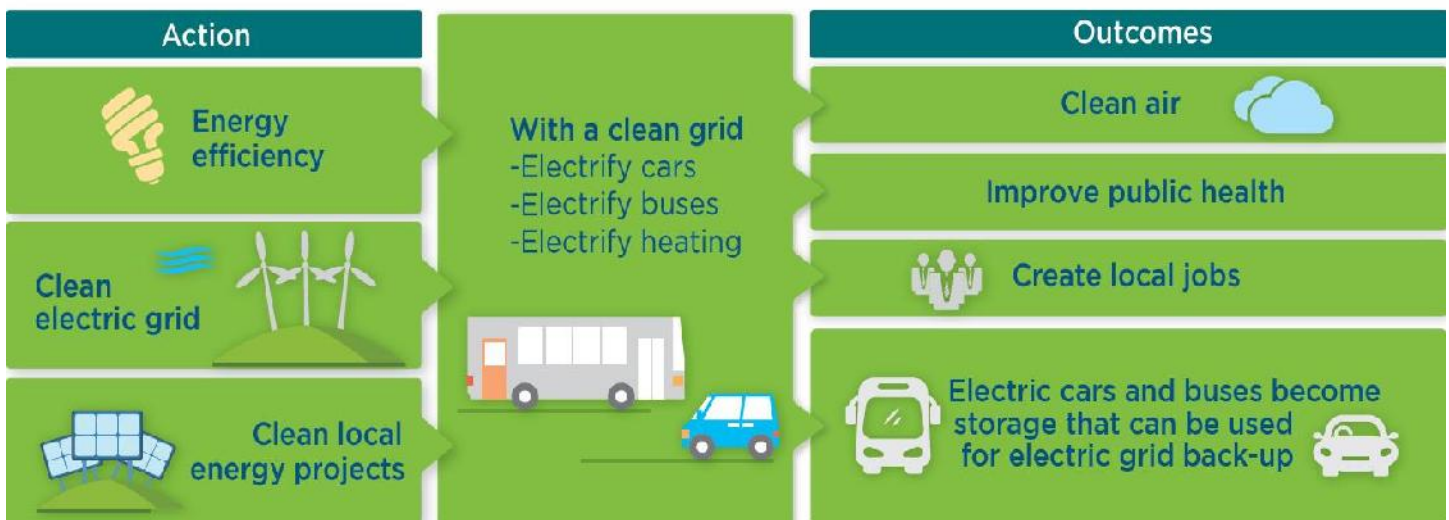


Long-term Strategies – These policies are critical for reaching Minnesota’s 2050 goals, but they require more time for development. Generally, these policies reduce the use of single-occupancy internal combustion vehicles and protect or increase carbon stores in soils and trees.

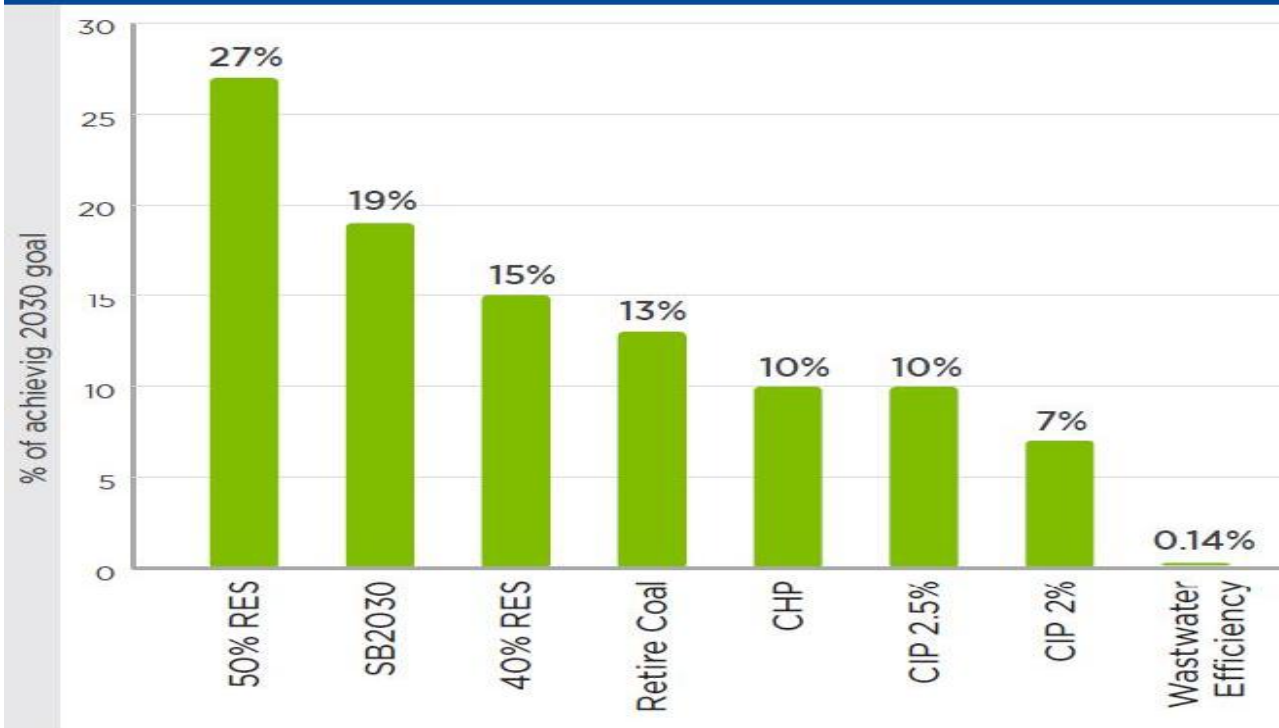
Policy options	2030 annual in-state GHG reduction (CO ₂ e-tons)	% Reduction towards 2030 target	NPV costs/savings 2015-2030 (\$2014MM)	Average annual employment (full- and part-time)
Transit and multimodal travel	0.28	1	-330	450
Compact development in urban areas	1	2	-425	220
Electric vehicles on 100% 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

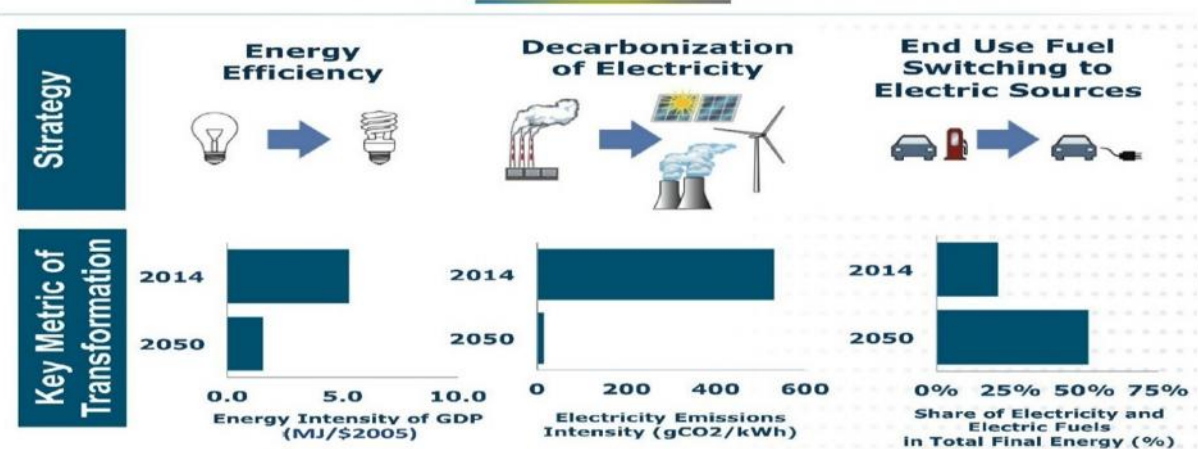


US Deep De-carbonization Project US Report <http://usddpp.org/>

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



Pathways to Deep Decarbonization in the United States, Mixed case results

Adaptation



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

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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

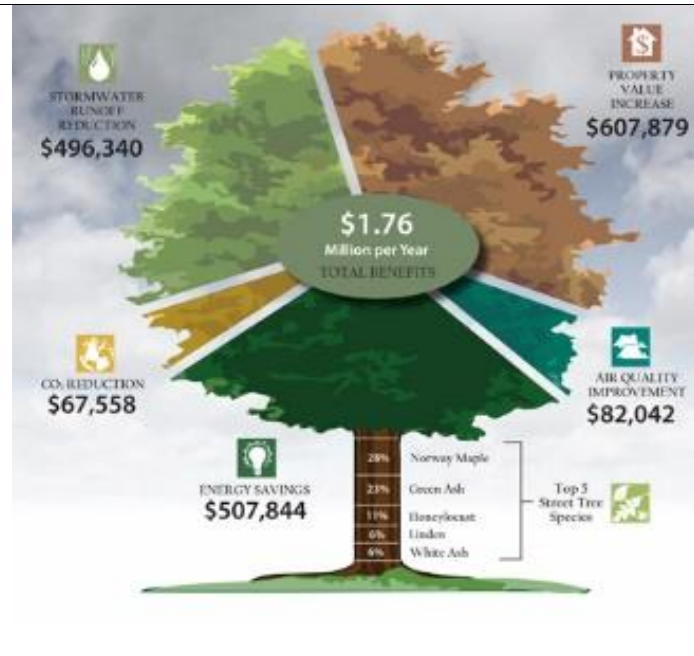
http://www.betterenergy.org/files/EnvisionandEdina_St.PaulWestSideFlats.pdf

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://metro council.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 Wohllleben, 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

Dakota County Soil and Water Conservation District www.dakotaswcd.org

- 2016-2025 Comprehensive Plan www.dakotaswcd.org/pdfs/ComprehensivePlan2016to2025.pdf
- Watershed Management www.dakotaswcd.org/watershed_management.html
- Stormwater Management www.dakotaswcd.org/stormwater_management.html

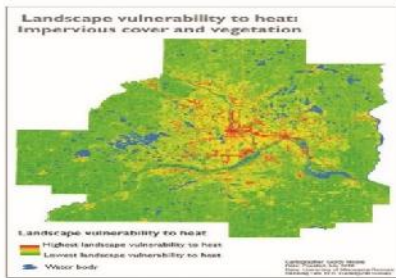
Watershed Management Organizations www.co.dakota.mn.us/Environment/WaterQuality/Watersheds

Watershed management organizations work to solve and prevent surface water-related problems.

- Black Dog Watershed Management Organization
- Eagan-Inver Grove Heights Watershed Management Organization
- Lower Mississippi Watershed Management Organization
- Lower Minnesota Watershed District
- North Cannon Watershed Management Organization
- Vermillion River Watershed Joint Powers Organization

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>Main: 651.602.1300 Toll: 801.291.5001 Public Information: 651.602.1500 public.information@metc.state.mn.us</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

Emergency Preparedness

Local Planning Handbook - Resilience - Economy and Society

<https://metro council.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>

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.

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.

Register a CERT Program -- join over 2,600 registered CERT programs and register today!

Dakota County Emergency Planning

www.co.dakota.mn.us/HealthFamily/HandlingEmergencies/Planning/Pages/default.aspx

Prepare for Disasters & Disease Outbreaks As part of the All-Hazard Mitigation Plan, Dakota County has identified the types of hazards that are most likely to occur in the area. They include: **Natural Disasters and Severe Weather** -

Thunderstorms, Tornadoes, Extreme Heat, Extreme Cold, Winter Storms/Blizzards, Floods **Disease Outbreaks,**

Bioterrorism www.co.dakota.mn.us/HealthFamily/HandlingEmergencies/Disasters/Pages/default.aspx

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/cdrp/physicalactivity/activetrans.html

Active Living / Trail Planning

Kurt Chatfield, Planning Supervisor, Dakota County 952-891-7022 kurt.chatfield@co.dakota.mn.us
www.co.dakota.mn.us/Government/publiccommittees/SHIP/Pages/dakota-county-ship-strategies.aspx

Bike Plans

www.co.dakota.mn.us/parks/Planning/ParkPlans/Documents/ParkSystemPlan.pdf

www.co.dakota.mn.us/parks/Planning/ParkPlans/Pages/lebanon-hills-master-plan.aspx

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

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

Transportation Forward www.transportationforwardmn.org/events-and-volunteer

- Show your support for new investments in better transportation options.
- Contact Andrea Kiepe, Campaign Organizer, at 651-789-1406 or email info@transportationforwardmn.org

Healthy Communities

Healthy Communities

www.co.dakota.mn.us/Government/publiccommittees/SHIP/Pages/dakota-county-ship-strategies.aspx

Mary Montagne, Dakota County Public Health (651) 554-6119 mary.montagne@co.dakota.mn.us

Lil Leatham, Planner, Dakota County 952 891-7159 lil.leatham@co.dakota.mn.us

Healthy Dakota Initiative - <https://www.co.dakota.mn.us/Government/publiccommittees/CHA/Pages/profiles.aspx>

Healthy Comprehensive Plan Check List The most current checklist is posted in the Metro Healthy Comp Plan workgroup "Resources" area (<http://www.hennepin.us/activeliving>) on the Hennepin Co. Active Living website. The document links are below.

- [Final Healthy Comprehensive Plans Checklist \(PDF\)](#)
- [Final Healthy Comprehensive Plans Checklist \(DOCX\)](#)

Communities for a Lifetime

Jess Luce, Dakota County 651-554-6104 jess.luce@co.dakota.mn.us

www.co.dakota.mn.us/Government/publiccommittees/CFL/Pages/default.aspx

The Dakota County Communities for a Lifetime initiative brings together residents, local businesses, community organizations, cities, and county staff to create networks of vital, accessible communities.

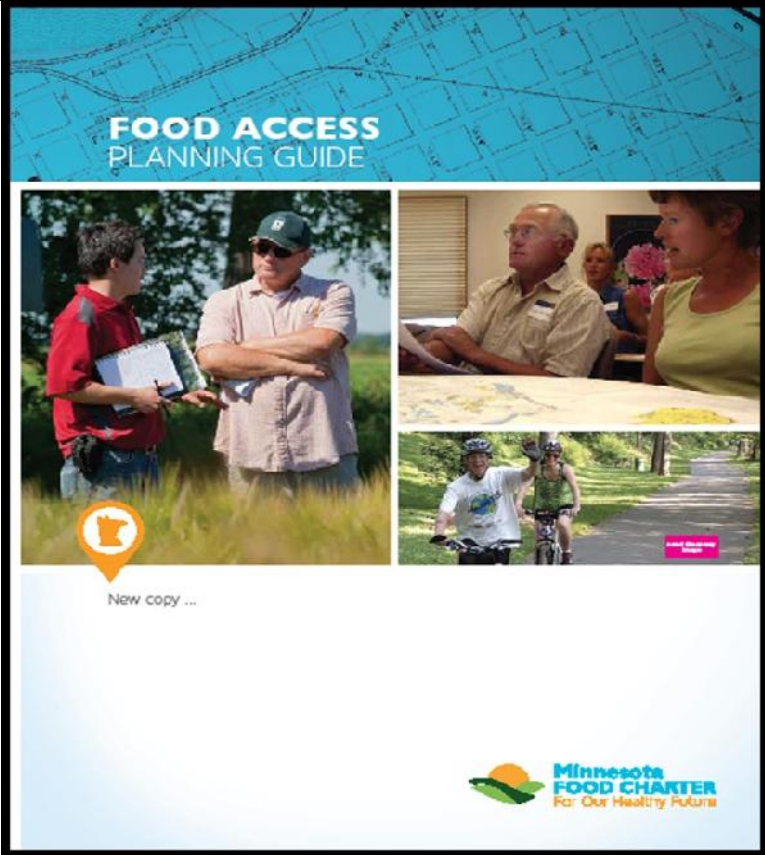
Key Challenges and Action Steps

www.co.dakota.mn.us/Government/publiccommittees/CFL/Documents/CFLKeyChallengesActionSteps.pdf

What makes a Community for a Lifetime?

- Transportation options to help keep people mobile and independent.
- Sidewalks and paths that are walkable for transport and exercise.
- A full range of affordable housing options as needs change.
- Accessible and quality services that support older adults and caregivers in home and community settings.
- Flexible and supportive employment and volunteer opportunities, including intergenerational activities.
- Effective technology to connect people and help with life's activities.

Farmland and Natural Areas Program Al Singer, Dakota County (952) 891-7001 al.singer@co.dakota.mn.us
www.co.dakota.mn.us/Environment/LandConservation/FNAP/Pages/default.aspx



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.

Puurpose

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 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

Home Grown South/ Open Door Pantry

A collaborative network working on creating a more just, vibrant, and sustainable food system in and around Dakota County <http://theopendoorpantry.org/get-involved/homegrown-south/>
Casey Silver 651 605-2882 caseys@theopendoorpantry.org www.homegrownsouth.org
Homegrown South is a network of individuals, farmers, processors, composters, backyard gardeners, community gardeners, Co-op & farmers market shoppers, kids, adults, retired people- anyone who lives, works, grows, sells or cares about healthy food and having a healthy food system in the rural and suburban communities that surround the Twin Cities to the south. This network meets on a quarterly basis to discuss timely local food issues, educate ourselves on food access research and policies, and set and implement policy actions that respond to the barriers and opportunities we witness in our communities that relate to creating a healthier food system. From 2015-2018 our main goal will be to understand and influence the comprehensive planning process that informs the development of our communities over the next 20+ years.

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

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

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



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

Economic Competitiveness & Economic & Racial Equity

www.metro council.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>

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/>

Equity / Economic Inclusion

Equity Advisory Committee - Metropolitan Council

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

<https://metro council.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://metro council.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.metro council.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.metro stability.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.metro stability.org
- **Inclusive Transit Oriented Development** - www.tclisc.org
- **Corridors of Opportunity** www.corridorsofopportunity.org
- **Transformative Equitable Development series** Alliance for Metropolitan Stability www.metro stability.org
- **Equitable Development Scorecard** — Harrison Neighborhood Association www.hnampls.org/scorecard

SOLID WASTE PLAN UPDATES

County Solid Waste Master Plan Update 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

Dakota County Solid Master Plan update (now underway)

www.co.dakota.mn.us/Environment/ReportsStudies/solid-waste-master-plan/Pages/default.aspx

- Sign up for project and engagement updates at wasteless@co.dakota.mn.us.
- Renee Burman, Dakota County, 952-891-7042 Renee.Burman@co.dakota.mn.us
- Caroline McFadden, Dakota County, 952-891-7132 caroline.mcfadden@co.dakota.mn.us
- www.co.dakota.mn.us/Environment/ReportsStudies/Pages/county-solid-waste-master-plan.aspx

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.bluedotregister.org/resilient-cities-support

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

The core mission of this collaborative team is to assist local governments, community organizations, and the public in understanding and improving their environmental impact, level of sustainability, and overall community resilience. Plans which look to improve these metrics frequently represent economic development potential, improved community livability, and a community more attractive to investment and growth.

- 🌱 Service supporting Minnesota GreenStep Cities requirements.
- 🏠 Service supporting Minnesota Metropolitan Council Comprehensive Plan requirements.

PROGRAM DEVELOPMENT + SUPPORT

- 🌱 Greenhouse Gas (GHG) Inventories
- 🌱 GHG Reduction Planning
- 🌱 Climate Action Planning
 - Climate Risk Assessment
 - Sustainability Action Planning
- 🌱 Community Resilience Assessments
- 🌱 Urban Tree Canopy Survey
 - Sequestration Potentials Study
- 🏠 Community-Wide Energy Planning
- 🏠 Renewable Energy Reserves/Potentials Study
 - Solar Energy (Site, Campus, Community)
 - Wind Energy (Site, Campus, Community)
 - Biomass Energy (Site, Campus, Community)
 - Energy Efficiency (Site, Campus, Community)
- Climate Economy Potentials Study

EDUCATION AND ENGAGEMENT

- Sustainability / Climate Community Ed
- 🌱 Community Outreach Support
 - Design Thinking Community Engagement
 - Sustainability Behavior Change Communications
 - Community Action Toolkit
 - Community Action Social Media Engagement Tool
 - Video and Infographic Content

OUR TEAM

- Terry Gips** President, Sustainability Associates 612 374-4765 terrygips@comcast.net
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- Steve Clark** Bike Ped Infrastructure Planning 651 767-0298 stevenci151@gmail.com
- John Madole** Zero Waste Planning 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/>

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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!