****

**HIGH-IMPACT ACTIONS FOR LOW-CARBON MN CITIES**

Updated August 2022 <http://rccmn.co/high-impact-actions/>

Comments, questions or suggestions? Please Contact:

* Sean Gosiewski, Executive Director, Resilient Cities & Communities, 612 250-0389 [sean@rccmn.co](mailto:sean@rccmn.co) &
* Philipp Muessig 612 437-8415 [pmuessig@yahoo.com](mailto:pmuessig@yahoo.com) (retired, MN Greenstep Cities Coordinator)

City County Climate Action Conference [rccmn.co/city-county-climate-action-check-in-events/](http://rccmn.co/city-county-climate-action-check-in-events/)

RSVP to join us & bring a team of 3-5 or more! [https://Oct6City-County-Climate\_Action.eventbrite.com](https://oct6city-county-climate_action.eventbrite.com/)

Meet with teams from 40 cities & find practical support for your city’s next steps to implement high impact actions for low-carbon buildings, energy, transportation, resilience, equity, green jobs & zero waste

Thursday, October 6 Two Options: In-Person at the Minneapolis Central Library or & Virtual Event on Zoom

* Two Options - Afternoon 11am to 4:30pm &/or Evening 4:30pm to 8pm to attend in person or on-line
* Audience City & county staff, elected leaders, commission & community volunteers and community, nonprofit, business, utility, watershed and university implementation partners.

During Topic Break Outs on Oct 6 - for each High Impact Action -

* Experienced cities will share how they approved & are implementing the actions
* Resource people will share current resources & multi-city teams available to support cities
* Together we’ll brainstorm ways to overcome barriers that would prevent cities from taking the actions

**HIGH-IMPACT ACTIONS FOR LOW-CARBON MN CITIES**

* BUILDINGS (Residential, Commercial, Industrial, Multi-Family, Public) [www.rccmn.co/buildings/](http://www.rccmn.co/buildings/)
* TRANSPORTATION & LAND USE [www.rccmn.co/transportation/](http://www.rccmn.co/transportation/)
* ENERGY SUPPLY & SYSTEMS [www.rccmn.co/energy/](http://www.rccmn.co/energy/)
* GREEN JOBS (equitable workforce & small business development) [www.rccmn.co/green-jobs/](http://www.rccmn.co/green-jobs/)
* RESILIENCE/ ADAPTATION, CARBON SEQUESTRATION & HEALTH [www.rccmn.co/resilience/](http://www.rccmn.co/resilience/)
* WASTE REDUCTION/ ZERO WASTE [www.rccmn.co/zero-waste/](http://www.rccmn.co/zero-waste/)

BUILDINGS [www.rccmn.co/buildings/](http://www.rccmn.co/buildings/)

* Now - built environment = 47% of annual CO2 emissions (building operations 27% & building materials & construction 20% (embodied carbon) [RMI Report](https://s3.documentcloud.org/documents/20688774/report-rmi-building-electrification-fact-base-report-2019.pdf) [E21 Decarbonizing MN's Natural Gas End Uses](https://e21initiative.org/natural-gas/)
* Goal - Cut carbon pollution from buildings 50% by 2030 & become net zero by 2050
* How - Retrofit existing buildingsinsulation, air sealing, efficient HVAC, heat pumps, updated appliances. Construct low-carbon new buildings - low carbon/net zero design, materials & fuels.
* New Opportunities - Fed IIJA increased LIHEAP $. FED IRA’22 Tax Credits for heat pumps. MN Eco-Act Policies are expanding access to utility energy efficiency (CIP) programs. Large site redevelopment.
* Co-Benefits - Comfort & affordability. Climate resilience. Expanded green job & business opportunities.

Local Policies

Existing Public Buildings

Action 1. Efficient Public Buildings - Use the State’s B3 public building benchmarking tool to target energy-efficiency improvements. (City Operations) Resources B3 [www.b3mn.org/](http://www.b3mn.org/) [GSC BPA *1.1*](https://greenstep.pca.state.mn.us/bp-detail/81714)

Existing Commercial Buildings

Action 2. Adopt an Energy Benchmarking Ordinance - for large commercial & multifamily buildings. Join the Multi-City Team - [Efficient Buildings Collaborative](http://www.hennepin.us/your-government/projects-initiatives/efficient-buildings-collaborative)  Hennepin Co. & CEE [GSC BPA 2.3](https://greenstep.pca.state.mn.us/bp-action-detail/81752) [City of St. Paul Policy](https://www.stpaul.gov/departments/mayors-office/energize-saint-paul/energy-benchmarking-ordinance)

New Commercial & Public Buildings

Action 3. Adopt a Sustainable Building Policy - Require SB2030 for city and/or private new buildings receiving city financial/regulatory support. Multi-City Team [Efficient Buildings Collaborative](http://www.hennepin.us/your-government/projects-initiatives/efficient-buildings-collaborative), Hennepin Co. & CEE

* Resources - [SB 2030](http://www.b3mn.org/2030energystandard/) Public Buildings, [GSC 3.1](https://greenstep.pca.state.mn.us/bp-action-detail/81757) Schools [GSC 3.2](https://greenstep.pca.state.mn.us/bp-action-detail/81758), Commercial Buildings [GSC 3.3](https://greenstep.pca.state.mn.us/bp-action-detail/81759)

**Existing Residential Buildings**

**Action 4. Require** **residential Truth in Sale of Housing Inspections** & reporting that includes energy data.

* **Resources -** TISH/Energy Disclosure [www.mncee.org/energy-disclosure](http://www.mncee.org/energy-disclosure) [Minneapolis](https://www.minneapolismn.gov/resident-services/property-housing/buying-selling/tish/energy-disclosure-report/) [Bloomington](https://www.bloomingtonmn.gov/bldg/time-sale-tos-housing-inspection-program)

**Existing Commercial & Residential Buildings**

Action 5. Dedicate 1-stop Residential/Commercial improvement funding for Energy Efficiency, Heat Pumps, Solar, Electric Panel Upgrades, E.V. Chargers, etc.

* Resources [City of Minneapolis Green Cost Share](https://www2.minneapolismn.gov/government/programs-initiatives/environmental-programs/green-cost-share/)  & [4D Affordable Housing Incentive](file:///C:\Users\Sean\Documents\2021_RCC\High%20Impact%20Actions\-%09https:\www2.minneapolismn.gov\government\programs-initiatives\housing-development-assistance\rental-property\4d\) /Green Cost Share
* One Stop Follow Up - Support property owners to make recommended energy improvements with partners (follow up, financing, list of approved contractors) [Home Energy Squad Follow Up Resources](https://www.mncee.org/how-get-started),
* PACE - Engage businesses to have energy audits and to use PACE to make improvements [MinnPace](https://www.sppa.com/portfinancing/minnpace)
* Maximize Use of Federal IRA’22 Tax Credits - Educate/Engage home owners, commercial and residential building owners & developers to use new federal tax credits to weatherize buildings and install air source heat pumps, electrical panel upgrades, efficient lighting, solar, E.V. charging
  + Resource [Fresh Energy Overview](file:///C:\Users\Sean\Documents\2021_RCC\High%20Impact%20Actions\-%09https:\fresh-energy.org\game-changing-policies-in-the-inflation-reduction-act) climate-friendly tax credits in Federal Inflation Reduction Act Tax

Existing Residential Buildings

Action 6. Remove Barriers/Increase Access for Low Income Households & Renters to make energy Improvements - insulation, air sealing, appliance and HVAC replacement, heat pumps, access to E.V.s

* Collaborate with CAP agency & partners to engage more low-income households & renters with Energy Efficiency & Assistance Programs - Utility based & expanded Federal/State Energy Assistance,
* Resources [MN Community Action Partnership/Directory](https://minncap.org/) [CEE Multifamily Buildings](https://www.mncee.org/multifamily-buildings) [MN Energy Assistance Program](https://mn.gov/commerce/consumers/consumer-assistance/energy-assistance/) [MN Citizen’s Utility Board](https://cubminnesota.org/)
* Participate in Centerpoint’s Tariff on Bill Energy Efficiency Pilot (if approved by PUC) to expand renter EE Participation in your city. Contact [City of Minneapolis Sustainability Office](https://www2.minneapolismn.gov/government/departments/coordinator/sustainability/)/Clean Energy Partnership

City/County Coordinated Investments

**New Commercial & Residential Buildings**

Action 7. Make the most of Transit Oriented Development (TOD) and Large Site Redevelopments to advance affordability & equity, complete neighborhoods, net zero construction, district energy, ground source heat pumps, solar, transit, bike/ped, shared E.V.s, storm water/ecological restoration, community spaces

* Resources [*MN Design Center*](https://design.umn.edu/minnesota-design-center)*,* Guide [Addressing the Sustainability Gap in the Development Review Process](https://greenstep.pca.state.mn.us/sites/default/files/2021-09/Addressing%20the%20Sustainability%20Gap_FINAL%202021.pdf)
* Large Sites - Ford Site, Hillcrest, Rice Creek Commons, Towerside, Brooklyn Center Opportunity Site, etc.
* TOD Corridors - BRT: A Line, Orange Line, Red Line LRT: Green Line, Blue Line Passenger Rail corridors

Advancing State & Federal Policies New Commercial & Large Multi-Family Buildings

**Action 8. Support Improvements to State Building Efficiency Standards** & optional local stretch building code

* Support Legislation requiring MN state level energy building standards to upgrade every 3 years to match new model standards Better Buildings for MN (6 cities) [www.betterbuildingsmn.org/](http://www.betterbuildingsmn.org/) [Blog Post](https://betterenergy.org/blog/why-minnesota-cities-need-better-building-codes-to-achieve-energy-and-climate-goals/)
* Support legislation allowing Cities to adopt a Stretch Building Code for Commercial Buildings [Link](https://energynews.us/2022/03/24/minnesota-cities-want-permission-to-move-faster-than-state-on-energy-codes/)
* Update Intl. model energy codes - City Building Inspectors participating w ICC every 3 years [MEEA Blog](https://www.mwalliance.org/blog/energy-code-development-adoption-and-compliance-benefits-regularly-updated-codes)

TRANSPORTATION & LAND USE [www.rccmn.co/transportation/](http://www.rccmn.co/transportation/)

Overview

* Now - Transportation is the #1 emitter of greenhouse gas (GHG) emissions in Minnesota. In 2016, Minnesota generated 154.2 million tons of CO2e with 40.3 million tons of CO2e (26%) coming from the transportation sector. MNDOT [Pathways to Decarbonizing Transportation Report](http://www.dot.state.mn.us/sustainability/pathways.html)
* Goal - cut GHG’s from transportation 50% by 2030 & become net zero by 2050.
* How - Update Zoning for Compact/Mixed Use Development, Complete Streets & Neighborhoods, Transit Corridor Investment/TOD, E.V. Access/Car Sharing, Update Parking Policies, Mobility Hubs, Expand E.V. Fleets & Busses, Build Out E.V. Charging Network, Electrify Medium & Heavy Duty Vehicles, Travel Demand Management, Hybrid Commuting, Re-Focus Transportation Investments to reduce VMT & GHGs & expand access, equity, safety & resilience
* New Opportunities - Federal IIJA Transportation Funds, Federal IRA’22 E.V. Tax Credits
* Co-Benefits - clean air, livable, complete neighborhoods, reduced commute time & costs, resilience and increased access, health, safety, equity & community connections

Local Policies

Land Use

Action 9. Compact Development Adopt policy that demonstrably increases overall city residential and/or commercial density. Resource [GSC BP#7](https://greenstep.pca.state.mn.us/bp-detail/81719)

Action 10. Update Zoning to Enable Transit Oriented Development & Complete Neighborhoods - Adopt mixed-use by-right zoning, along with TIF districts, to increase complete neighborhoods. [GSC BPA#8](https://greenstep.pca.state.mn.us/bp-detail/81720)

Transportation

Action 11. Adopt a complete streets policy that includes green infrastructure. Resource [GSC BP#11](https://greenstep.pca.state.mn.us/bp-detail/81723)

Action 12. Continually increase bike/walk/transit infrastructure funding. Resource [GSC BP#11](https://greenstep.pca.state.mn.us/bp-detail/81723)

Action 13. Reduce or eliminate parking minimums. Resource GSC [New Approaches to Parking Management.](https://greenstep.pca.state.mn.us/sites/default/files/2021-11/New%20Approaches%20to%20Parking%20Management%20-%20Oct%202021.pdf)

Action 14. Price curb and structured parking. Resource GSC [New Approaches to Parking Management.](https://greenstep.pca.state.mn.us/sites/default/files/2021-11/New%20Approaches%20to%20Parking%20Management%20-%20Oct%202021.pdf)

Action 15. Adopt a travel demand management &/or transit-oriented development ordinance. [GSC BP#14](https://greenstep.pca.state.mn.us/bp-detail/81742)

Action 16. Adopt make-ready EV conduit standards for parking lots and/or commercial/multi-family. Resource [Drive Electric MN Becoming E.V. Ready](https://driveelectricmn.org/becoming-ev-ready/) Sample Ordinances

City/County Coordinated Investments

Action 17. Coordinated VMT Reduction - City & County representatives meeting to coordinate & align county transportation investments and city land use policies to reduce VMT, expand access, equity, safety, mode shifts, (transit, bike, ped, telework, hybrid commuting) E.V. car sharing, mobility hubs, shared & advanced mobility and make the most of Transit Oriented Development & large site re-developments.

* Resources [MN Climate Action Framework](https://climate.state.mn.us/minnesotas-climate-action-framework)  [Met Council Transportation Advisory Board](https://metrocouncil.org/Council-Meetings/Committees/Transportation-Advisory-Board-TAB.aspx), [Hennepin Co. VMT Reduction Goal](https://www.hennepin.us/climate-action/what-hennepin-is-doing)  [County Streets for People](https://www.ourstreetsmpls.org/countystreets) MNDOT [STAC Recommendations](http://www.dot.state.mn.us/sustainability/advisory-council.html)
* Coordinate City/County/Community planning for road improvements (mill & overlays, reconstruction) to advance complete streets, bike/ped. safety, transit access, 3 to 4 conversions, green infrastructure, flood mitigation. Resources [GSC BP#11.6](https://greenstep.pca.state.mn.us/bp-action-detail/81807), [Richfield Sweet Streets](https://www.richfieldsweetstreets.org/), [Hennepin Co Complete/Green Streets Policy](https://www.hennepin.us/completestreets), [Ramsey Co Road Maintenance](https://www.ramseycounty.us/residents/roads-transportation/road-maintenance/general-road-maintenance) & [Active Living Ramsey Communities](https://www.ramseycounty.us/residents/parks-recreation/active-living)

Action 18. City-County Coordinated E.V. Infrastructure planning & investments and vehicle procurement to expand City & County E.V. Fleets, E.V. Charging Infrastructure, E.V. Car Sharing and Electric Busses. Resources [MNDOT E.V. Infrastructure Planning](https://talk.dot.state.mn.us/ev-infrastructure-plan) [Drive Electric MN/Cities Charging Ahead](https://driveelectricmn.org/cities-charging-ahead)

Advancing State & Federal Policies

Action 19. Support sustained transit & transportation investments (federal, state, metro & county) & monitor & re-prioritize transportation investments to reduce VMT & GHGs & expand electrification, access & equity. Resources [Move MN](https://www.movemn.org/), [Federal IIJA $ in MN](https://www.dot.state.mn.us/congressional/iija/index.html)[,](https://www.movemn.org/) [Bus Fleet Electrification](https://www.metrotransit.org/electric-buses) & [Plan](https://www.house.leg.state.mn.us/comm/docs/VTAD3Cx1zkKBXGNaC8eRkg.pdf), [Met Council Transit Project Plans](https://metrocouncil.org/Transportation/Projects/Transit-Projects.aspx)

ENERGY SUPPLY & SYSTEMS - [www.rccmn.co/energy/](http://www.rccmn.co/energy/)

Overview

* Now - Electricity generation GHG emissions in MN have decreased by 29% since 2005 staying on track to meet Next Generation Energy Act Goals. [MN Dept. of Commerce 2021 Report](https://www.house.leg.state.mn.us/comm/docs/AAYTL-lh2ESTKKWGtQeWxg.pdf) Xcel Energy’s [Updated IRP](https://fresh-energy.org/highlights-for-clean-energy-and-climate-in-xcels-final-long-range-plan) includes plans to become carbon-free.
* Goal - Cut carbon pollution from electricity generation, transmission & use 50% by 2030 & become net zero by 2050 while growing clean electricity supply as we electrify buildings and transportation.
* How - Increase grid scale solar, wind & storage. Distributed solar. City procurement. Community solar. Energy efficiency. Low carbon heating. Upgrading electric grid. [MN Climate Action Framework.](https://engage.dnr.state.mn.us/our-mn-climate-energy-buildings)
* New Opportunities - Wind & Solar Federal tax credits extended through 2030. New Federal IRA’22 opportunities for tribal communities & rural electric coops. Energy Storage, Smart Grid & Meters, Demand Response, Time of Use Pricing, Micro Grids.
* Co-Benefits - Reduced cost & air pollution. Grid resilience. Local Economic development. Electrifying buildings and transportation expands electricity sales and spreads out grid improvement costs.

Local Policies

Action 20. Continually increase City use of renewable energy [GSC BP#15.2](https://greenstep.pca.state.mn.us/bp-detail/81725)

Action 21. Adopt City purchasing policy that prioritizes energy-efficient, low-impact products and services [GSC BP#15](https://greenstep.pca.state.mn.us/bp-detail/81725)

Action 22. Certify as a solar-ready community [GSC BP#26.7](https://greenstep.pca.state.mn.us/bp-detail/81736) [MN Sol Smart Cities Guide](https://www.cleanenergyresourceteams.org/become-designated-solar-friendly-community)

Action 23. Adopt a PACE resolution to facilitate commercial/industrial EE/RE financing [GSC BP#26.3](https://www.minnpace.com/) [MinnPace](https://www.minnpace.com/)

Action 24. If a Muni, adopt accelerating targets for RE generation/purchases I.E.: [Rochester Public Utilities Goals](http://blog.rpu.org/?p=1914)

Action 25. Support municipal, residential & commercial solar installation (community solar, solar group buys, solar feasibility studies) [GSC BP#26](https://greenstep.pca.state.mn.us/bp-detail/81736)  Promote resident/business purchases of clean energy [GSC BP#26.2](https://greenstep.pca.state.mn.us/bp-detail/81736)

City/County Coordinated Investments

**Action 26.** Cities, county, community & utility representatives meeting to plan ways to meet local 100% renewable energy access goals & produce renewable natural gas (anaerobic digestion, methane capture) **Resources**: [Partners in Energy](https://xcelenergycommunities.com/) [Partnership on Waste & Energy|Hennepin |Ramsey|Washington](https://recyclingandenergy.org/partnership-about-us/) , [Minneapolis Clean Energy Partnership](https://mplscleanenergypartnership.org/)

Advancing State & Federal Policies

**Action 27.** Support MN legislation to extend the [solar rewards program](https://programs.dsireusa.org/system/program/detail/5417) and expand [solar on schools](https://mn.gov/commerce/industries/energy/solar/solar-for-schools/).

GREEN JOBS - equitable workforce & small business development [www.rccmn.co/green-jobs/](http://www.rccmn.co/green-jobs/)

Overview

* Now - [Clean Jobs Midwest Report](https://www.cleanenergyeconomymn.org/)  (2022) [MN Energy Efficiency Workforce Gap Analysis](https://www.mncee.org/sites/default/files/report-files/MN-Energy-Efficiency-Workforce-Gap-3-1-19.pdf) (2019) [MN Clean Energy Economy Profile Report](file:///C:\Users\Sean\Documents\2021_RCC\High%20Impact%20Actions\-%09https:\mn.gov\commerce\policy-data-reports\energy-data-reports\%3fid=17-116031) (2014) MN Climate Action Framework [Clean Economy](https://engage.dnr.state.mn.us/our-mn-climate-clean-economy)
* New Opportunities - Workforce Training Provisions in the Federal IIJA Act [CED Policy Brief](https://www.ced.org/reports/policy-brief-workforce-training-provisions-in-the-infrastructure-investment)

Local Policies

Action 28. Establish purchasing preferences/scoring that support local, Minority, Disability, and Women-Owned businesses and, working with a local business association, develop a list of locally-produced products and suppliers for common purchases. [GSC BPA# 15.3](https://greenstep.pca.state.mn.us/bp-detail/81725) [MN OES](https://mn.gov/admin/government/sustainability/), [Contracting for Equity: Local Governments](https://www.racialequityalliance.org/resources/contracting-equity-best-local-government-practices-advance-racial-equity-government-contracting-procurement/)

City/County Coordinated Investments

Action 29. County Workforce Development Board brings together, cities, employers, schools, unions, utilities & minority contractors to plan ways to wisely invest IIJA Workforce Development funds to expand equitable access to green workforce development, hiring, business development & contracting opportunities Example: [St. Paul/Ramsey Co./ Unions/Chamber](http://rccmn.co/green-jobs/) Resources: [MN Workforce Development Board](https://mn.gov/deed/gwdb/about/gwdb/), Local [Workforce Development Boards](https://www.careerforcemn.com/local-workforce-development-boards), [MN WIOA Plan](https://mn.gov/deed/about/what-we-do/objectives-plans/wioa.jsp) , Study: [Four proven ways to invest new federal IIJA fund](https://www.americanprogress.org/article/proven-state-and-local-strategies-to-create-good-jobs-with-iija-infrastructure-funds/)s to create good jobs, boost equity, and support good value.

RESILIENCE/ ADAPTATION, CARBON SEQUESTRATION & COMMUNITY HEALTH [www.rccmn.co/resilience/](http://www.rccmn.co/resilience/)

Overview

* Now & Future - MN is experiencing changes to its highly variable climate with shorter winters, fewer cold extremes, and more heavy and extreme precipitation resulting in repeated freeze-thaw cycles, a longer growing season, and new invasive species. In the future MN will face heat extremes and drought, with diminished air quality from increased wildfire smoke, higher levels of ozone & more pollen [BP#29](https://greenstep.pca.state.mn.us/bp-detail/81730)
* Goals - Increase Community Resilience, Protect Infrastructure, Expand Urban Forests, Sequester Carbon
* How - Plan and prepare for extreme weather, adapt to changing climatic conditions, and foster stronger community connectedness & social & economic vitality. [GSC BP29](https://greenstep.pca.state.mn.us/bp-detail/81730) Strengthen emergency preparedness, build resilient infrastructure, weatherize buildings, maintain tree cover, natural areas & working lands.
* New Opportunities [Fed IIJA funds for MN](https://www.senate.mn/storage/scrfa/IIJA-FIB-12-21-21.pdf) Water Infrastructure, Weatherization, Resilient transportation
* Co-Benefits - cost savings, health & well-being, community connections, soil health, storm water infiltration, habitat, carbon sequestration, recreation, agriculture, green jobs.
* Resources - GSC BP29 [Climate Adaptation and Community Resilience](https://greenstep.pca.state.mn.us/bp-detail/81730) MN Climate Action Framework,

[Resilient Communities](https://engage.dnr.state.mn.us/our-mn-climate-resilient-communities) , [Climate Smart Natural & Working Lands](https://engage.dnr.state.mn.us/our-mn-climate-lands) , [Hennepin Co Natural Resources Plan Update](https://www.hennepin.us/natural-resources-plan)

Local Policies

**Action 30.** [Adopt, budget for & achieve urban tree canopy](https://greenstep.pca.state.mn.us/bestPracticesDetail_actions.cfm?bpid=16&aid=808) coverage & diversity goals [GSC BP#*16.3*](https://greenstep.pca.state.mn.us/bp-detail/81726)

* Diversify trees on boulevards/city land [GSC BP16.4](https://greenstep.pca.state.mn.us/bp-detail/81726) , Provide Incentives for Tree Planting on Private Property

**Action 31.** **Adopt a** [**Tree Preservation Ordinance**](https://www.mnstac.org/treeordinances.html) **&/or** [**Model Landscape Ordinance for a Municipal Zoning Code**](https://greenstep.pca.state.mn.us/media/8)**(GS GSC BP**[**3.1**](https://greenstep.pca.state.mn.us/bp-action-detail/81757)**,**[**3.3**](https://greenstep.pca.state.mn.us/bp-action-detail/81759)**,**[**3.5**](https://greenstep.pca.state.mn.us/bp-action-detail/81761)**,**[**7.5**](https://greenstep.pca.state.mn.us/bp-action-detail/81784)**,**[**10.4**](https://greenstep.pca.state.mn.us/bp-action-detail/81800)**,**[**10.6**](https://greenstep.pca.state.mn.us/bp-action-detail/81920)**,**[**16.5**](https://greenstep.pca.state.mn.us/bp-action-detail/81777)**)** topics covered include soil and tree health, biodiversity, water infiltration, irrigation, sun and wind orientation, parking lots, and industrial buffer yards

**Action 32.** **Protect public buildings and natural/constructed infrastructure** to reduce physical damage and sustain their function during extreme weather events. [GSC BPA# 29.5](https://greenstep.pca.state.mn.us/bp-action-detail/81916)

* **Edina** [Living Streets Policy](https://www.edinamn.gov/DocumentCenter/View/1199/Living-Streets-Plan-PDF?bidId=), [Flood Risk Reduction Strategy](https://www.edinamn.gov/DocumentCenter/View/9367/Flood-Risk-Reduction-Strategy_final?bidId=) , [Homeowner Education on Flooding & Drainage](https://www.edinamn.gov/371/Flooding-and-Drainage)

City/County Coordinated Investments

Action 33. Expanding tree canopy through coordinated county-city investments - focus on equity & heat islands

* Met Council [Growing Shade Tool](https://metrotransitmn.shinyapps.io/growing-shade/)  [Climate Vulnerability - Localized Flooding & Extreme Heat Maps](https://metrocouncil.org/Communities/Planning/Local-Planning-Assistance/CVA.aspx)

Action 34. Integrating Resilience in infrastructure through coordinated county-city investments (Fed IIJA Funds)

Action 35. Update & co-implement County-Wide All Hazard Mitigation (emergency preparedness) & Natural Resources Plans with county, cities, community based organizations

* Address climate risks (flooding, heat, air quality, backup power). Preserve & restore natural resources & manage invasive species. Strengthen community connections (CERT Teams, Resilience Hubs)
* Learn about & give feedback to strengthen [Hennepin County’s Natural Resources Plan](https://www.hennepin.us/natural-resources-plan) during our [Oct 6, City County Climate Action Conference](http://rccmn.co/city-county-climate-action-check-in-events/)  afternoon & evening Resilience sessions.

Action 36. Address cumulative air quality impacts (and heat islands) in priority areas through City-County-Community Collaboration.

* In areas with high asthma & heart disease rates, conduct cumulative air quality impact studies and plan & implement actions to reduce point source & mobile source air pollution, electrify busses & heavy vehicles, prevent highway expansion, mitigate air pollution through tree planting and reach out to households experiencing asthma to improve indoor air quality & boost health care participation.

Resources [MPCA Air Quality](https://www.pca.state.mn.us/air), [MDH Air Quality, Climate & Health](https://www.health.state.mn.us/communities/environment/climate/air.html),

* MPCA [Interactive Map Areas of EJ Concern](https://www.pca.state.mn.us/about-mpca/mpca-and-environmental-justice), [MN DOT Sustainability & Public Health](https://www.dot.state.mn.us/sustainability/),
* [City of Mpls Health Dept. Air Quality](https://www2.minneapolismn.gov/government/programs-initiatives/environmental-programs/air-quality/) [Minneapolis Green Zones](https://www2.minneapolismn.gov/government/departments/coordinator/sustainability/policies/green-zones-initiative/), [Our Streets Minneapolis/i94](https://www.ourstreetsmpls.org/rethinking_i94)
* [Hennepin Co. Climate Action Plan](https://www.hennepin.us/climate-action) (p. 22) [Hennepin Co. Public Health Climate Action Committee](https://www.hennepin.us/climate-action/what-hennepin-is-doing/public-health-climate-committee)
* [MN EJ Table](https://www.facebook.com/mnejtable/)/Frontline Communities, [MCEA](https://www.mncenter.org/), [Clean Air MN](https://environmental-initiative.org/our-work/clean-air-minnesota/)

WASTE REDUCTION/ ZERO WASTE <http://rccmn.co/zero-waste/>

Overview

* Now - Solid Waste contributes 3% of direct MN GHG emissions. [MPCA 2018 Data](https://www.pca.state.mn.us/air/greenhouse-gas-emissions-data) [EPA](https://www.epa.gov/sites/default/files/2021-04/documents/us-ghg-inventory-2021-chapter-7-waste.pdf)  Life- cycle GHGs in products we use (especially food) are greater. [MPCA Consumption-based emission inventory](https://www.pca.state.mn.us/air/consumption-related-emissions)
* Goal - Zero Waste Vision - diverting 90% or more of all discarded materials from landfills and incinerators.
* How Reduce, Reuse, Recycle. Increase recycling rates. Organics Recycling. EPR. Anaerobic Digestion.
* Co-Benefits - Save money & life cycle emissions, compost/healthy soil, air & water quality, green jobs.

Local Policies

Action 37. Adopt policies to demonstrably increase materials reuse and/or organics collection, commercial food waste prevention [GSC BP#22](https://greenstep.pca.state.mn.us/bp-detail/81733)

Action 38. Adopt a construction and demolition waste ordinance that requires reuse/recycling [GSC BP#22.8](https://greenstep.pca.state.mn.us/bp-action-detail/81874)

OPTIONAL - Initiate Organized Collection - Improve/organize residential trash, recycling and organics collection by private and/or public operations and offer significant volume-based pricing on residential garbage and/or incentives for recycling. [GSC BP#22.7](https://greenstep.pca.state.mn.us/bp-detail/81733)

City/County Coordinated Investments

**Action 39.** **Update County-Wide Solid Waste Master Plan** & expand city/county/community implementation partnerships to set and achieve ambitious waste diversion/zero waste goals.

* MN statute requires metro counties to prepare master plans every six years that identify strategies to meet the recycling goals and objectives in the state’s [Metro Area Solid Waste Management Policy Plan](https://www.pca.state.mn.us/waste/metropolitan-solid-waste-management-policy-plan).
* Learn about & give feedback to strengthen [Hennepin County’s Draft Zero Waste Plan](http://www.hennepin.us/solidwasteplanning) During our [Oct 6, City County Climate Action Conference](http://rccmn.co/city-county-climate-action-check-in-events/)  Zero Waste session [www.beheardhennepin.org/zero-waste-future](http://www.beheardhennepin.org/zero-waste-future)

Advancing State & Federal Policies

Action 40. Support State-Level Extended Producer Responsibility (EPR) Legislation

* Partnership on Waste & Energy [MN EPR Timeline](https://recyclingandenergy.org/partnership-epr-for-packaging/) [2022 Legislative Platform](https://recyclingandenergy.org/legislative-platform/)