

City of St. Louis Park Green Building Policy

Introduction

St. Louis Park is committed to leading in environmental stewardship. This priority is reflected in the comprehensive plan goal to achieve carbon neutrality by 2040 and by the city's Climate Action Plan, which includes seven midterm goals that will reduce the city's overall carbon emissions 55% by 2030:

- 1. Reduce energy consumption in large commercial buildings by 30 percent.
- 2. Reduce energy consumption in small- to mid-size commercial buildings by 30 percent.
- 3. Design and build all new construction to be net-zero energy.
- 4. Reduce energy consumption in residential buildings by 35 percent.
- 5. Achieve 100 percent renewable electricity.
- 6. Reduce vehicle emissions by 25 percent.
- 7. Reduce solid waste by 50 percent from business as usual.

These midterm goals guide the city's development priorities, and the city actively encourages the design and development of sustainable buildings and sites.

Sustainable development is defined as development that maintains or enhances economic opportunity and community wellbeing while protecting and restoring the natural environment upon which people depend. Sustainable development meets the needs of the present without compromising the ability of future generations to meet their own needs. Sustainable or "green" buildings incorporate numerous strategies that result in improved energy efficiencies, reduced water usage as well as increased health and productivity of occupants. Sustainable site design promotes natural settings and results in improved storm water management and reduced water usage. Together these efficiencies can result in cost savings that are beneficial for both the private and public sectors. In addition, the city will pursue policies and practices that advance sustainability using techniques that produce significant measurable results and true return on investment.

In the United States, buildings account for approximately:

- 72% of total electricity consumption
- 39% of total primary energy use
- 38% of all carbon dioxide emissions
- 170 million tons of construction and demolition waste
- 14% of total potable water consumption, or 15 trillion gallons per year

(Source: US Green Building Council)

In St. Louis Park, emissions from buildings make up 60% of all greenhouse gas emissions.

The built environment has a substantial impact on the natural environment, human health, and the economy. By adopting green building strategies, cities can maximize both economic and environmental performance. Potential benefits of green building include:



Economic benefits

- Reduce operating costs for owners and tenants
- Create, expand, and shape markets for green products and services
- Improve occupant productivity
- Optimize life-cycle economic performance
- Reduce municipal infrastructure costs

Environmental benefits

- Reduce or capture greenhouse gas emissions
- Reduce solid waste
- Enhance and protect biodiversity and ecosystems
- Improve soil health and reduce erosion
- Improve air and water quality
- Conserve water and restore natural resources

Social benefits

- Enhance occupant comfort and health
- Minimize strain on local infrastructure
- Improve site and building aesthetics
- Improve overall quality of life
- Demonstrate environmental stewardship

This Green Building Policy ("policy") promotes buildings that are energy efficient, economical to operate, environmentally responsible, healthy places to live and work that enhance the quality of life in St. Louis Park and help achieve the community's Climate Action Plan goals.

Definitions

The following definitions apply specifically to the policy.

Municipal building: Any structure owned, leased, or otherwise occupied by the city and used for a public purpose by the city.

Commercial building: A building that is used for commercial activities, including retail, office, services, and food and drink. Commercial property includes office, medical, hotels, retail, entertainment, mixed use, hotel and multifamily residential.

Industrial building: A building where products or materials are fabricated, assembled, processed or warehoused.

Multifamily residential building: A commercial residential building that contains five or more dwelling units contained within a single structure or development. Under this policy, multifamily buildings are considered commercial buildings.

Mixed-use building: A mixed use building may include any combination of two or more uses including housing, office, retail, medical, recreational, commercial or industrial. Under this policy, mixed use buildings are considered commercial buildings.

Levelized Cost of Energy (LCOE): LCOE is the cost of generating energy for a particular system. LCOE is calculated as the sum of costs over the lifetime of the system (initial investment, operations and maintenance, cost of fuel, and cost of capital), divided by the sum of energy produced over the same lifetime. The result is an electricity generation cost per unit of energy. This cost excludes all structural upgrades required, transportation, storage and taxes.



Deconstruction: The unbuilding of a structure to salvage its reusable materials and components. *Skim*: To remove valuable components (e.g., built-in furniture, flooring, appliances) for architectural salvage prior to a scheduled demolition.

City financial assistance is defined as funds derived from the following sources:

- City of St. Louis Park
- Housing rehabilitation fund
- Reinvestment assistance program
- Revenue bonds (private activity bonds are negotiable)
- Tax increment financing (TIF) and tax abatement
- Housing Authority (HA) funds (excluding federal funding for rental assistance programs)
- Affordable housing trust fund
- Land write-downs

Land use applications that must comply with the policy (regardless of receiving city financial assistance) are:

- Projects that receive approval of a planned unit development
- Projects seeking certain points toward density bonuses offered in the zoning code

For all other definitions, see the City of St. Louis Park's city code.

Project commencement

The version of this policy in effect at the time of the application date of planning and zoning applications and/or a signed preliminary development agreement with the economic development authority and/or city shall be the applicable version. If building permits have not been issued within two years of application approvals or the building permits have expired or been canceled, the project must comply with updates to this policy. The city council may grant an extension of time beyond two years if a written request for a time extension is submitted to staff and approved by the economic development authority and/or city council. Requests for extension of time must be received by the city before the termination date.

The most significant benefits of sustainable buildings and site design are obtained when project design and construction teams take an integrated approach at a project's outset. Therefore, projects subject to this policy shall undergo a green building review with city staff and consultants at the pre-design or early schematic design stage. Such a review requires one or more coordination meetings with staff and consultants to review policy requirements and to ensure that a building's proposed design and equipment are appropriate and integrated together to meet sustainability targets.

Requirements for commercial, municipal, multifamily residential, and mixed-use buildings

Applicability

The following municipal, commercial, multifamily residential, and mixed-use building construction projects receiving or using \$200,000 or more in city financial assistance and/or receiving approval for the land use applications listed above are required to comply with this policy if they meet any of the criteria below:



- 1. Municipal construction projects (designed for ongoing occupancy) that meet either of the following thresholds:
 - A. New buildings or additions: 15,000 square feet or greater (gross)
 - B. Renovations: 50,000 square feet or greater (gross)
- 2. Commercial, multifamily residential, industrial, hotel, and mixed-use construction projects (designed for ongoing occupancy) that meet either of the following thresholds:
 - A. New buildings or additions: 15,000 square feet or greater (gross)
 - B. Renovations: 50,000 square feet or greater (gross)

All applicable projects must fulfill the following requirements, which include 1) certification under a third-party rating system and 2) compliance with the city-specific "overlay." Checklists and handouts will be supplied to provide technical assistance and help project developers and staff with monitoring compliance.

Third-party rating system

The Developer must choose for the project the current version of one of the following rating systems and levels under which to certify:

- LEED Building Design and Construction (LEED BD+C) or LEED Residential BD+C Multifamily
 - Certified Silver, Gold or Platinum; certification <u>must</u> include a minimum of 13 points within the Energy and Atmosphere: Optimize Energy Performance credit
- State of Minnesota B3 Guidelines
 - Certified Compliant (projects <20,000 gross square feet should discuss applicability of the B3 Small Buildings Method with B3 staff)
- Enterprise Green Communities (for multifamily residential rental projects only; projects must have at least one unit that will serve a resident at or below 60 % AMI)
 - o Enterprise Green Communities Certification or Certification Plus
- For affordable housing projects that are funded or have tax credits through Minnesota Housing: Minnesota Housing overlay using Enterprise Green Communities Criteria
 - o Confirmed as compliant under Enhanced Sustainability: Tier 1 or higher
- Or equivalent rating systems with prior staff approval

This menu of rating systems provides a range of options and flexibility for a given project to follow. Regardless of the rating system selected, compliance with rating systems help the city achieve the environmental, social, and public health goals within the Climate Action Plan. Buildings certified under a rating system and marketed as "green" may also attract prospective occupants.

Projects are strongly encouraged to utilize Xcel Energy and CenterPoint Energy's energy design assistance and design review programs (if eligible) to receive free consultations or customized modeling that predicts energy usage, suggests potential energy saving strategies and estimates energy cost savings. This process ensures that the building owner is informed about what energy-cost savings options exist to fully evaluate the life cycle costs of various building components. These programs may also provide equipment rebates to help bring down the capital cost of the project.

Proof of registration and continued compliance with the rating system selected must be provided at meetings with city staff. City financial assistance may be withheld in the event of noncompliance.



St. Louis Park Overlay

In addition to certification with any one of the rating systems listed above, projects complying with the policy must also meet and document additional requirements (the "overlay"). The overlay reflects the most important values of St. Louis Park: energy efficiency, renewable energy, waste reduction, and stewardship of natural resources. The items listed below are required regardless of the rating system selected but may overlap with mandatory or optional points available in some rating systems (noted).

1. Renewable energy (RE)

Not required for projects certifying under the State of Minnesota B3 Guidelines; renovation projects may also be exempted with staff approval.

Complete an analysis of onsite solar sufficient to offset two percent of predicted energy demand.

- A. If the design phase calculator determines that the levelized cost of energy (LCOE) from a proposed system is equal to or less than the combined price of grid and/or fossil fuel-supplied energy and carbon, installation of an onsite system meeting two percent of the project's anticipated energy demand (electricity and natural gas combined) is required. Renewable Energy Credits must be retained by the building owner.
- B. If the analysis determines that solar is not technically feasible due to shading, orientation or other technical constraints, or that the LCOE is greater than the combined price of grid and/or fossil fuel-supplied energy and carbon, the developer is required to subscribe the project to a utility green power subscription program or power purchase agreement for a minimum of one year at a level that meets 100 percent of the project's anticipated energy demand and the RE requirement is considered met.

See handout for more details on the steps required to complete the RE analysis and a list of commercial solar installer directories.

BENEFITS: Additional clean energy on the grid; potential to lower electricity bills for building owners and tenants.

2. Building electrification

Examine the cost and feasibility of ground-source heat pumps, cold climate air-source heat pumps and/or variable refrigerant flow systems to provide heating and cooling to the building. *Installation is optional.*

BENEFITS: Eliminates greenhouse gas emissions from the extraction and transportation of natural gas; prepares building loads to be powered entirely with carbon-free electricity as the grid transitions; improves indoor air quality and occupant health; eliminates cost of natural gas infrastructure.

3. Electric vehicle service equipment

Install cost-effective electric vehicle charging infrastructure to serve both short and long-term parking needs.

See handout for more details on the EVSE requirement.

BENEFITS: Future-proofs building for coming increase in EV sales and leases; marketable feature for prospective tenants.



- 4. Waste reduction and management
 - A. Deconstruction and salvage
 - i. Create a material conservation plan that includes a plan to adaptively reuse an existing structure or salvage and reuse materials from an existing structure being demolished or deconstructed onsite depending on applicability of sections ii and iii below.
 - ii. If a residential dwelling constructed prior to December 31, 1955 (according to building records on file) is currently on the site of the planned new construction/addition or if the residential dwelling has been designated as a historic resource subject to demolition review, the residential building must be fully deconstructed. Building and architectural materials may be sold, donated, or reused on site. State and county funds may be available to subsidize the cost.
 - iii. Any commercial building (of any construction year) <u>or</u> residential dwellings constructed after December 31, 1955 (according to building permit records on file) currently on the site of the planned new construction/addition must be skimmed for salvage of any reusable architectural materials (e.g. doors, molding, fixtures, tiles, cabinets). Salvaged material may be sold, donated, or reused on site. State and county funds may be available to subsidize the cost.
 - B. Construction waste management

Not required for projects certifying under the State of Minnesota B3 Guidelines

- i. Create a construction waste management plan that specifies construction materials to be diverted from disposal by efficient usage, recycling, reuse, manufacturer's reclamation, or salvage for future use, donation or sale.
- ii. At least 75% of nonhazardous construction and demolition waste must be diverted from landfill. The percentage of materials diverted can be calculated by weight or volume, but not both. For the purposes of this section, construction materials and waste include, but are not limited to (1) all materials delivered to the site and intended for installation prior to the issuance of the certificate of occupancy, including related packaging; (2) construction materials and waste removal during demolition or razing. For the purposes of this section, construction and waste materials do not include land-clearing debris (including trees, rocks, and vegetation), excavated soils, and fill and base materials such as topsoil, sand, and gravel. Ground concrete reused on site is considered retained construction materials.
- iii. Compliance with this requirement may be met through either on-site separation of materials OR sending materials to an approved construction & demolition material recovery facility. See handout for a list of construction & demolition material recovery facilities.
- C. Organics collection
 - i. For all buildings containing five or more dwelling units, designate space for the collection and hauler servicing of organics (food scraps). A central location in a trash room, garage, or enclosure is recommended. Solid waste staff is available to provide guidance on the inclusion of chutes dedicated to organic waste in the building design. Organics service level minimum should start at 25% of trash capacity, and service level should be routinely monitored and adjusted based on the needs of the building and level of tenant participation. At time of close-out, provide a copy of a contract with a hauler for organic waste collection with a minimum term of one year. Training and educational materials for residents and property management on how to properly dispose of waste can be provided by the city's Solid Waste division upon request.

BENEFITS: Recaptures embodied carbon; reduces need for raw building materials; supports material reuse; reduces greenhouse gas emissions; promotes organics recycling in multifamily buildings.



5. Healthy soils

Not required for projects certifying under the State of Minnesota B3 Guidelines

- A. For projects with an area of site disturbance that is 5,000 square feet or larger, soil management and erosion control plans should be created and implemented to protect the soil profile of the current site before, during, and after construction.
- B. In-site landscaped areas soil should be amended to mimic the physical and biological capabilities of natural and agricultural soils. Organic matter content should achieve a minimum of 5.0% by weight through the incorporation of US Compost Council (USCC) Seal of Testing Assurance (STA)-Certified Compost.

See handout for more details on the steps required to incorporate organic matter into soils and a list of USCC STA Certified Compost suppliers.

BENEFITS: Increases carbon sequestration in soil; promotes growth of healthy landscaping, avoiding need to replant; reduces need for pesticides and fertilizers; increases biodiversity; increases water retention, reduces erosion, and prevents polluted storm runoff from contaminating wetlands, lakes and streams; supports market for compost.

6. Stormwater management

Not required for projects certifying under the State of Minnesota B3 Guidelines

Implement current best management practices for stormwater management by following the Minnesota Pollution Control Agency Minimal Impact Design Standards (MIDS). MIDS is based on low impact development, an approach to storm water management that mimics a site's natural hydrology as the landscape is developed. MIDS requires that for new, nonlinear developments that create more than one acre of new impervious surface on sites without restrictions, to control stormwater runoff volumes and control the volume of post-construction runoff for 1.1 inches of runoff from impervious surfaces. Design can be integrated into existing features of the built environment, which may be rain gardens or bio-filtration basins, reduction in impervious surfaces or permeable pavement, cisterns for holding runoff and water reuse irrigation systems, tree trenches, green roofs, or any other practices that effectively manage stormwater runoff. Stormwater best management practices must be designed to allow for easy ongoing maintenance and operation as well as efficiency and aesthetic appearance.

BENEFITS: Flood mitigation; reduces need for potable water for irrigation; protects environmentally sensitive site features; increases water retention, reduces erosion, and prevents polluted storm runoff from contaminating wetlands, lakes and streams.

7. Efficient Building Benchmarking

Comply with Article VIII. Efficient Building Benchmarking ordinance of the city code regardless of total building square footage. Multifamily residential buildings with individually metered units must include in the tenant lease authorization for the release of utility bills to the landlord to facilitate building energy use reporting requirements.

BENEFITS: Monitoring whole building energy use intensity and comparing to similar buildings annually helps control owners' costs; tracking building performance will inform property owners about effects of green building; compliance triggers eligibility for extra city cost sharing incentives for property owners seeking additional energy efficiencies.



8. Commissioning

Conduct building commissioning per the chosen building certification or standard to ensure that newly installed operating systems are functioning at their maximum capacity and according to their design efficiencies. Commissioning agent must be independent from the project designer and in addition to any design assistance program.

BENEFITS: Fewer change orders; maximizes energy efficiency, environmental health and occupant safety; facilitates efficient on-going operations and maintenance of the facility through training and documentation.

9. Submit a summary report of policy compliance to Community Development staff at the time of Certificate of Occupancy approval.

BENEFITS: Provides assurance to both project developer and city staff that project meets all requirements.

Proof of continued compliance with the overlay must be provided at meetings with city staff. City financial assistance may be withheld in the event of noncompliance.

Requirements for residential buildings with 4 units or fewer

Applicability

The following building construction projects receiving or using city financial assistance are required to comply with this policy:

All new and renovated residential building projects with 4 units or fewer receiving \$10,000 or more in city financial assistance.

All applicable projects must fulfill the following requirements.

1. Renovations: Owners of residential buildings of 4 units or fewer shall have an audit conducted by a utility company or independent approved Home Energy Rating System (HERS) auditor. An audit conducted within the past three years will be accepted. Utility sponsored audits are available for a nominal fee and provide residents information to conserve energy.

Income-qualified homeowners undergoing home improvements using city funds will be directed to the local Department of Energy Weatherization Assistance Program service provider who will provide a no-cost audit. The audit must be scheduled before the work proceeds and conducted as soon as possible by the local weatherization provider. In emergencies, the work at these homes may proceed before the audit is conducted.

2. New construction: Project developer must utilize CenterPoint Energy and Xcel Energy's High Efficiency New Homes program (or equivalent program) to receive free design assistance that predicts energy usage, suggests potential energy savings strategies and estimates energy cost savings. This process ensures that the building owner is informed about what energy-cost savings options exist to fully evaluate the life cycle costs of various building components. These programs may also provide equipment rebates to help bring down the capital cost of the project.



Assistance to developers and property owners

To guide developers and property owners through the development process, the city will offer the services of staff and experts with in-depth sustainable design experience without charge. These resources will be made available to answer questions, provide clarifications, make suggestions, coordinate with area utility company energy efficiency programs, and assist with specific issues related to meeting policy requirements.

Community outreach

To further the goal of this policy, the city conducts community outreach to educate the public about the benefits of green building practices, techniques, and resources. Such efforts will utilize the city's existing staff and promotional resources. Specific audiences to be targeted will be single-family homeowners, neighborhood organizations, and multifamily housing owners as well as businesses and private developers.

All projects subject to this Policy, and which incorporate green improvements as a result, will be highly encouraged to showcase those projects upon completion so that others may benefit from lessons learned and be encouraged to make similar sustainable improvements.

Other provisions

The requirements of this policy may be waived, in whole or in part, by the economic development authority and/or city council after consideration of the advantages and disadvantages of a waiver, and upon demonstration by the developer of a compelling public purpose. Applicable portions of this policy are contingent upon availability of programs at participating utility companies. This policy may be amended or discontinued without prior notice.

Adopted by the St. Louis Park Economic Development Authority and the St. Louis Park City Council February 16, 2010. Updated September 16, 2014. Updated July 14, 2020. Revised and adopted June 6, 2022.