

#2: GREEN BUILDINGS

OPTIONAL METRIC FOR CATEGORY A & B & C COMMUNITIES

Bold, green font indicates metrics that must improve to be recognized at Step 5

METRICS

- **Public Buildings**

- 2.1 **Number of city/tribal-owned (municipal) green certified buildings** (# of buildings)
- 2.2 Identify specific green building frameworks that have been used for city/tribal-owned buildings (Program)
 - 2.2a How many buildings were rated under this program? (# of buildings)
 - 2.2b If second rating program was used, enter its name here (Program)
 - 2.2c How many buildings were rated under this program? (# of buildings)
 - 2.2d List any other green energy building programs that were used and how many buildings were rated under each (Program, # of buildings)
- 2.3 Municipal green square footage completed last year (Square Feet)
- 2.4 Percent of new municipal square footage that was green building certified in the last year (%)

- **Private Buildings**

- 2.5 **Number of private (non-municipal) green certified public buildings**
- 2.6 Identify specific green building frameworks that have been used for private buildings (# of buildings)
 - 2.2a How many buildings were rated under this program? (Program)
 - 2.2b If second rating program was used, enter its name here (# of buildings)
 - 2.2c How many buildings were rated under this program? (Program)
 - 2.2d List any other green energy building programs that were used and how many buildings were rated under each (Program, # of buildings)
- 2.7 Private green square footage completed last year (Square Feet)
- 2.8 Percent of new private square footage that was green building certified in the last year (%)

METRIC DEFINITION

- **Include all (today's total) buildings built, renovated, or maintained within the community** that are rated, certified, or verified by a third party as meeting minimal qualifications under a green building framework listed under GreenStep best practice action 3.1 (<https://greenstep.pca.state.mn.us/page/green-building-and-energy-frameworks>)
 - Include **public buildings** (owned by the city or tribe). (Metric 2.1-2.4)
 - Include all **private buildings** (not owned by the city or tribe) within city limits that were built new or were expanded/renovated and/or are operated and maintained under a green building framework. (Metric 2.5-2.8)
 - **Green building frameworks** include:

LEED	Green Globes	IgCC
ENERGY STAR®	GreenStar	Minnesota Green Communities
AHRAE 189.1	ICC/ASHRAE 700	Indoor airPLUS
Passive House	Minnesota Green Path	B3-MSBG
Living Building Challenge (or Petal Recognition)	SB 2030 Energy Standard	

Minnesota GreenStep Cities & Tribal Nations Performance Metrics for Recognition at Steps 4 and 5

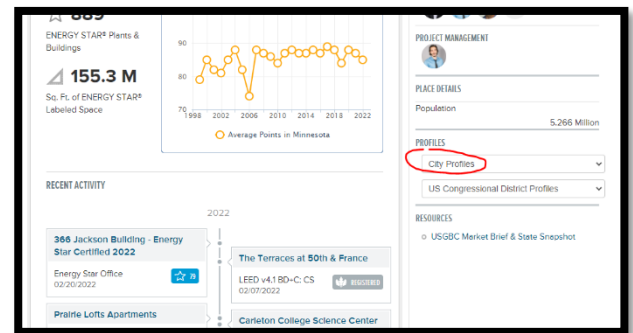
- If a building “meets” minimal qualifications but is not third-party rated, the city or tribe must submit a building expert’s credit calculation for that building. For example, if a builder reports to the city that all their housing units “meet LEED standards,” the city would ask for the architect’s LEED checklist and submit that to the GreenStep program.
- **Green building frameworks may include city/tribe-defined** green building standards. Buildings may be included that qualify as a green building under a city program that has clear criteria which are publicly announced on the community’s web site. (Metrics 2.2 and 2.6)

A city/tribe-defined green building framework should conform roughly to this MPCA definition:

- Green building, also called sustainable or high-performance building, means a significantly reduced impact on the Earth’s resources compared to conventional building practices.
- We define a green building as one that is both economical to operate and healthy and comfortable for its occupants. It conserves resources (including energy, water, raw materials and land) and minimizes the generation of toxic materials and waste in its design, construction, landscaping, operations and maintenance. A green building includes the sustainability of its site. It also considers historic preservation and access to public infrastructure systems, as well as the entire life cycle of the building and its components.
- **Alternative Metrics:** If you have been gathering or want to gather different metrics, report those and explain why they are a better fit for your community.

DATA SOURCES

- Local/tribal government building permits (Metrics 2.1-2.8)
- Relevant city/tribal/state/national program data (Metrics 2.1-2.8)
- [Green building framework websites](#) (Metrics 2.2 and 2.6)
 - [LEED](#)
 - [ENERGY STAR](#)
- [Green Building Information Gateway](#) (click on the ‘city profiles’ on the right bottom of the main page) (Metric 2.5-2.7)
- County tax records (for square footage) (Metric 2.7)
- Staff knowledge of private development projects (Metrics 2.5-2.8)



[Green Building Information Gateway](#)

METRIC CALCULATION AND PUBLIC REPORTING

- **Total city/tribe-owned and private green buildings in the community** – as of December 31 of a specified year. These are cumulative numbers, counting all existing buildings built to or operated under green standards over the previous years. Include any currently permitted, but not constructed projects in the following year. The GreenStep program will normalize these data and report green buildings per 1,000 residents. (Metrics 2.1 and 2.5)
- **Municipal green square footage completed last year** is the total square footage of all new city/tribal-owned/controlled green buildings completed by December 31st of that year (Metric 2.3). Divide that number by the total square footage of all new permitted buildings completed during the past calendar year, reporting the ratio as a percentage (Metric 2.4). Follow the same procedure for private green square footage (Metrics 2.7 and 2.8).

METRIC RATIONALE

Green buildings - including both the building and the building site - present an opportunity to shape the face of a community and to "cement in" reduced operating costs and other benefits beyond what results from conformance with the State Building Code. Studies in Minnesota and nationwide have shown that green buildings deliver numerous benefits to the building owner, the building tenant, to the community, and to society. Benefits include capital cost savings (in some cases), reduced operating costs, higher resale value, increased occupant health and productivity, heat island mitigation (through building and site design), and decreased energy, water, and materials use. Local/tribal government and private investments in buildings can be maximized by incentivizing the use of green building frameworks, which include codes, standards, rating systems with certification, and guidelines with verification.

STEP 5 METRIC TARGETS

Increase in number of green buildings and total green square footage above the community's previous highest annual amounts.

LEED FOR CITIES & COMMUNITIES CRITERIA

<https://www.usgbc.org/leed/rating-systems/leed-for-cities-communities>

IP Credit: Green Building Policy and Incentives

- Option 1. Buildings Owned and/or Operated by the Local Government or Development Authority (1-2 points)
 - Register and certify buildings, above 5000 square feet (465 square meter), owned by the local government or development authority to LEED, EDGE or an equivalent green building rating system. Points are awarded as per the table given below.

Table 1. Points for certified green buildings

Percentage of buildings registered to certify to LEED or equivalent green building rating system	Points
51% to 75 %	1
Greater than 75%	2

AND/OR

- Option 2. Green Building Policy and Incentives (1-4 points) Provide incentives for LEED or an equivalent green building rating system in the city. (1 point per incentive provided; up to 4 points can be achieved through this option.)
 - Structural Incentives: Provide expedited review or permitting processes to buildings achieving certification.
 - Structural Incentives: Provide density or height bonus allowing for percentage increases in Floor Area Ratio or other measures of density contingent upon certification.
 - Financial Incentives: Provide tax credits for buildings achieving certification.
 - Financial Incentives: Provide permitting fee reduction or waivers for buildings achieving certification.

RELATED BEST PRACTICE ACTIONS

- [3.1](#) Require by city policy that **new city-owned buildings** be built using the SB 2030 energy standard and/or a green building framework.
- [3.2](#) Work with the local school district to ensure that **future new schools** are built using the SB 2030 energy standard and/or a green building framework.
- [3.3](#) Adopt a sustainable building **policy for private buildings**; include the SB 2030 energy standard; adopt language governing new development projects that:
 - a. Receive city financial support, and/or
 - b. Require city regulatory approval (planned unit development, conditional use permit, rezoning, variance).

Minnesota GreenStep Cities & Tribal Nations
Performance Metrics for Recognition at Steps 4 and 5

- [3.4](#) Provide a financial or other **incentive to private parties** who build new buildings that utilize the SB 2030 energy standard and/or a green building framework.

[NEED HELP?](#)

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