#2: GREEN BUILDINGS

OPTIONAL METRIC FOR CATEGORY **A** & **B** & **C** CITIES

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

METRICS

- **Public Buildings**
  - **2.1 Number of city-owned (municipal) green certified buildings**
  - 2.2 Identify specific green building frameworks that have been used for city-owned buildings
  - 2.3 Municipal green square footage completed last year
  - 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
  - 2.7 Private green square footage completed last year
  - 2.8 Percent of new private square footage that was green building certified in the last year

METRIC DEFINITION

- **Include all buildings built, renovated, or maintained within the city** 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 (http://www.pca.state.mn.us/6p38rhu)
  - Include **public buildings** (owned by the city). (Metric 2.1-2.4)
  - Include all **private buildings** (not owned by the city) 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®	Minnesota GreenStar	Minnesota Green Communities
AHRAE 189.1	ICC 700	Indoor airPLUS
Passive House	Minnesota Green Path	B3-MSBG
		Living Building Challenge (or Petal Recognition)

  - **If a building "meets" minimal qualifications but is not third-party rated,** the city 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-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 city's web site. (Metrics 2.2 and 2.6)

  A city-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 city.

DATA SOURCES

- City building permits (Metrics 2.1-2.8)
- County tax records (for square footage) (Metric 2.7)
- Relevant city/state/national program data (Metrics 2.1-2.8)
- City staff knowledge of private development projects (Metrics 2.5-2.8)

METRIC CALCULATION AND PUBLIC REPORTING

- **Total city-owned and private green buildings in the city** – calculated for 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. 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-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 city 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. City 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 city's previous highest annual amounts.

NEED HELP?

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