

**GreenStep Cities Best Practices  
Buildings and Lighting Actions**  
- final draft for comment through May 2010 –  
[www.MnGreenSteps.org](http://www.MnGreenSteps.org)

**1. Efficient Existing Public Buildings: Work with utilities and others to assess and finance energy and sustainability improvements for existing structures.**

Best Practice Actions

- Category A cities must complete at least one Action if they choose to implement this best practice.
  - Category B and C cities must implement this best practice by completing at least Actions (1) and (2).
  - Category C cities must complete at least one additional Action among (3) through (7). Completing this additional Action allows this best practice to be counted as implementation of two best practices.
- (1) REQUIRED FOR CATEGORY B AND C CITIES: Enter monthly public building data into the Minnesota B3 database.
  - (2) REQUIRED FOR CATEGORY B AND C CITIES: Audit (or, for large buildings, recommission) all buildings in the bottom third of the B3 energy performance ranking and implement all energy efficiency opportunities with a payback under 5 years, using an appropriate technical assistance and financing programs.
  - (3) Complete energy efficiency improvements in at least one city, school or park district building (in addition to buildings addressed in Action 2) via retrofit and retro-/re-commissioning, with financing at attractive interest rates under MN's PBEEEP program or related lease-purchase financing, energy performance contracting, or other cost-justified program.
  - (4) Participate in other state or utility programs that provide rebates or co-funding for energy efficiency improvements to public buildings.
  - (5) Renovate and operate at least one city-owned building to meet or qualify for a green building standard.
  - (6) Create an internal loan fund for making public building improvements based on an energy or green building standard.
  - (7) Install in at least one public building at least one of the following energy efficiency measures:
    - a. A distributed energy technology: micro-turbine, fuel cell, reciprocating engine.
    - b. A ground-source geothermal system where net greenhouse gases are less than those generated by the system being replaced.

**2. Efficient Existing Private Buildings: Work with utilities and others to assess and finance energy and sustainability improvements for existing structures.**

Best Practice Actions

- Category A and B cities must complete at least one Action if they choose to implement this best practice.
  - Category C cities must complete at least two Actions if they choose to implement this best practice.
- (1) Create a marketing and outreach program with the local utility or the local Community Action Program to promote residential energy use reduction and energy efficiency.
  - (2) Integrate green building information into the building permit process.

- (3) Develop a (or modify an existing) truth-in-housing inspection program for homes being sold, to include a blower-door test and energy use rating.
- (4) Partner with an assistance provider such as a utility, EnergySmart, MNTAP or ReTAP and document building energy improvements in businesses.
- (5) Take action to conserve drinking water resources through at least one the following:
  - a. Implement a robust watering ordinance.
  - b. Implement a conservation rate structure.
  - c. Adopt, with modifications as necessary, a model landscaping ordinance to allow for low water-use landscaping.
  - d. Create a rebate or feebate program to promote purchases of WaterSense- and Energy Star-rated appliances.
- (6) Provide a meaningful and significant incentive to builders, homeowners, businesses or institutions who renovate to a green building standard:
  - a. Building permit fee discount
  - b. Grant, rebate or tax breaks (e.g., property tax abatement)
  - c. Expedited permit review
  - d. Green building design assistance
  - e. Density bonus
- (7) Customize a model sustainable building policy and adopt language governing commercial renovation projects:
  - a. Receiving city financial support, and/or
  - b. Requiring city regulatory approval (conditional use permit, rezoning, PUD).
- (8) Arrange for on-bill financing, using either utility or property tax bills, to make home/building sustainability improvements easier and more affordable.

### **3. New Green Buildings: Construct new buildings to meet or qualify for a green building standard.**

#### **Best Practice Actions**

- Category A and B cities must complete at least one Action if they choose to implement this best practice.
  - Category C cities must complete at least one public realm Action (1) or (2) and at least one private realm Action (3) through (6) if they choose to implement this best practice.
- (1) Require, by ordinance, new city-owned buildings and substantial remodels to meet or qualify for a green building standard.
  - (2) Work with the local school district to ensure that all schools are built to a green building standard.
  - (3) Customize a model sustainable building policy and adopt language governing new development projects:
    - a. Receiving city financial support, and/or
    - b. Requiring city regulatory approval (conditional use permit, rezoning, PUD).
  - (4) Provide a meaningful and significant incentive to residents, builders or developers who build to a green building standard:
    - a. Building permit fee discount
    - b. Expedited permit review
    - c. Green building design assistance
    - d. Grant, rebate or tax breaks (e.g., property tax abatement)
    - e. Density bonus

- (5) Adopt covenant guidelines for common interest communities addressing issues such as stormwater, native vegetation, clothes lines and renewable energy.
- (6) Work with local financial institutions to use energy-efficient mortgages for buildings seeking a green building certification.

#### **4. Efficient Building & Street Lighting and Signals: Improve the efficiency of public lighting and signals.**

##### **Best Practice Actions**

- Category A cities must complete at least one Action if they choose to implement this best practice.
  - Category B and C cities must complete at least two Actions, including one of Actions (5) through (8), if they choose to implement this best practice.
- (1) Require energy efficient, Dark-Sky compliant new or replacement outdoor lighting fixtures on city-owned buildings and facilities.
  - (2) Require all new street lighting and traffic signals to be Dark-Sky compliant, energy efficient lighting technologies.
  - (3) Modify any city franchise or other agreement with a utility to facilitate rapid replacement of inefficient street lighting.
  - (4) Synchronize traffic signals so as minimize car idling at intersections yet maintain safe and publicly acceptable vehicle speeds.
  - (5) Install solar powered lighting in a street, parking lot or park project.
  - (6) Work with a utility program to relamp exterior building lighting for at least 30% of city-owned buildings with energy efficient, Dark-Sky compliant lighting.
  - (7) Replace at least 50% of the city's parking lot lighting with Dark-Sky compliant, energy efficient, automatic dimming lighting technologies.
  - (8) Replace at least one-third of the city's traffic signals with energy efficient LED or equivalent lighting technologies.

#### **5. Building Reuse: Create economic and regulatory incentives for redeveloping and repurposing existing buildings before building new.**

##### **Best Practice Actions**

- For all cities: complete at least one of the following actions if you choose to implement this best practice.
- (1) Develop and adopt an historic preservation ordinance to encourage adaptive reuse, with attention to energy and resource conservation, indoor air quality and other green building practices.
  - (2) For cities with traditional downtown areas, implement the Main Street™ model for commercial revitalization with attention to green building practices.
  - (3) Work with a local school to either add-on space, or to repurpose space into non-school uses, with attention to green building practices.
  - (4) Create/modify a green residential remodeling assistance/financing program to assist homeowners in adding space to their existing homes while retaining historic architectural elements.
  - (5) Adopt development and design standards that facilitate infill and redevelopment, such as developing strip/big box commercial areas into more livable/walkable neighborhoods and gathering places.

See the best practice *Higher Density* for alley house renovations.