

Minnesota GreenStep Cities
Draft Best Practices & Actions
November 23, 2009
Buildings & Lighting

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

- (1) Develop and adopt an historic preservation ordinance.
- (2) Implement the national Main Street comprehensive commercial revitalization strategy.
- (3) Work with a local school to either add-on space, or repurpose space into non-school district uses.
- (4) Create a residential housing program to assist homeowners in adding space to their existing homes.
- (5) Adopt zoning language and design standards that facilitate infill and redevelopment of strip/big box commercial areas.

See alley house renovations in the related best practice *Higher Density*.

❖ ***Efficient Existing Buildings: Work with utilities and others to assess and finance energy and sustainability improvements of existing structures.***

City buildings:

- * Enter yearly public building data into the Minnesota B3 database and make energy improvements with a 5-year or less payback in 1/3 of those buildings.
- * Audit (or recommission) for large buildings) the bottom third buildings (in terms of energy performance) and implement all energy efficiency opportunities with a payback under 5 years.
- * Use PBEEEP: energy efficiency building improvements via retrofit or retro-commissioning opportunities and financing at attractive interest rates for cities, school and park districts.
- * Use the OES 25% Facility Cost-share program for Minnesota school districts and local governments to make energy efficiency improvements.
- * Use an energy service company (ESCO) and a performance contract to retrofit at least one building at a discounted up-front cost.
- * Create an internal loan fund (ala St. Paul) for building improvements.
- * Renovate city-owned buildings above a cost threshold to meet or qualify for a green building standard.

Private buildings:

- * Require that all homes sold must have a blower-door test prior to resale; report on energy use for home.
- * Tailor a utility conservation improvement program for your city.
- * Use the Home Performance with Energy Star program of NEC, estimated to reduce home energy bills by 20 percent on average.
- * Use the Quick-Fix program for homeowners.
- * Work with an assistance provider such as a utility, a community action agency, EnergySmart and ReTAP to do building audits and finance improvements in residences.
- * Implement a robust watering ordinance, conservation rate structure or feebates program on WaterSense- and Energy Star-rated appliances.
- * Provide a significant incentive to builders, homeowners, businesses and institutions who renovate to a green building standard: Building permit fee discount; Expedited permit review; Grant or tax breaks; Density bonus
- * Arrange for on-bill financing, using either utility or property tax bills, to make home/building improvements more affordable by lengthening repayment periods.
- * Require that building renovations receiving city financing and/or applying for a conditional use permit, variance or rezoning over a specified cost or other threshold meet or qualify for a green building standard.
- * Implement a distributed energy technology in one public building, including microturbines and fuel cells.

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

- (1) Construct new city-owned buildings to meet or qualify for a green building standard.
- (2) Require that buildings receiving city financing over a specified dollar amount meet or qualify for a green building standard.
- (3) Require development projects applying for a conditional use permit, variance or rezoning to meet or qualify for a green building standard.
- (4) Build renewable energy or distributed generation capacity into at least one city building.
- (5) Customize and adopt the St. Paul/Center for Sustainable Building Research model green building ordinance.
- (6) Provide a significant incentive to builders (homeowners, businesses, institutions) who build to a green building standard:
 - a. Building permit fee discount
 - b. Expedited permit review
 - c. Grant or tax breaks
 - d. Density bonus
- (7) Adopt covenant guidelines for common interest communities addressing stormwater and renewable energy.
- (8) Work with the local school district to assure that all schools are built to a green building standard.

❖ ***Efficient Building and Street Lighting & Signals: Improve the efficiency of all public and private lighting and signals.***

1. Require energy efficient, Dark Sky-compliant outdoor lighting for all lighting replacements on city-owned buildings and facilities.
2. Work with a utility program to relamp interior/exterior building lighting in at least one building with energy efficient, Dark Sky-compliant lighting.
3. Replace half of the city's parking lot lighting with Dark Sky-compliant, energy efficient lighting technologies.
4. Replace at least one-third of the city's traffic signals with energy efficient lighting technologies.
5. Require all new street lighting and signals to be Dark Sky-compliant, energy efficient lighting technologies.
6. Modify any city franchise agreement with a utility to facilitate rapid replacement of inefficient street lighting.
7. Synchronize traffic signals so as minimize car idling at intersections yet maintain safe and publicly acceptable vehicle speeds.

Note: energy efficient is defined as including light emitting diodes or any other technology of equal or greater energy efficiency.