

## E. ENERGY, WATER AND WASTE STANDARDS

This section is established in support of Capitol Area Principle 3—*The Capitol Area is a model for Minnesota, where best practices are expected in the planning, design and development of public and private projects.*

The best time to consider energy-efficient options is in the earliest stages of design. Retrofitting a building later for solar, electric vehicle charging or other features can be expensive. Going beyond standard energy efficiency up front can have long-term savings on energy bills and operating costs. In addition, financial incentives from utility companies may be available to developers that implement energy conservation investments in their projects.

### District-Wide Policy

In the Capitol Rice District, the following policies are ‘best practices’ that will guide decisions by the Board, Staff and the Zoning Administrator when reviewing and approving projects, and will guide revisions to the Zoning and Design Rules:

### Planning and Early Design Stages

These standards are identified within guidelines for *MX (Mixed Use District) Master Plans* within the Capitol Area. See *Section H for information on MX Master Plans. Also see 2040 Comprehensive Plan Chapter 3 for general policy on sustainability standards in the Capitol Area.*

- a) Compliance with municipal standards. City of Saint Paul Site Plan Review (planning commission staff) and building reviews by Department of Safety and Inspection.  
Insert certification mechanism, links, timing of submittal  
Compliance: City of Saint Paul review
- b) Compliance with City of Saint Paul Sustainable Building Ordinance. All new development shall comply with standards, guidelines and regulations set forth by the City of Saint Paul’s Sustainable Building Ordinance. Large proposed phased re-developments, such as the Sears Site, may be able to comply with the certification requirements of that ordinance by certifying their development, the Central Corridor Overlay District, or the entire Capitol Rice District in **LEED for Neighborhood Development (LEED-ND)**. See the *Saint Paul Sustainable Building Policies* at <https://www.stpaul.gov/DocumentCenter/View/7/Sustainable%20Building%20Policy%20for%20Public%20Buildings.PDF> and <https://www.stpaul.gov/DocumentCenter/View/7/Building%20Policy%20for%20Private%20Development.PDF>  
Compliance: City of Saint Paul Sustainable Building Ordinance – *to be verified*
- c) Participation in the Basic Energy Design Assistance Program. Xcel Energy provides a suite of tools to help developers include energy savings in the design of the project. All new developments in the Capitol Area above 20,000 square feet must perform, minimally, the “Basic” Energy Design Assistance track provided by Xcel Energy. See *Xcel Energy’s Energy Design Assistance website for more information:* [https://www.xcelenergy.com/programs\\_and\\_rebates/business\\_programs\\_and\\_rebates/new\\_construction\\_and\\_whole\\_building/energy\\_design\\_assistance](https://www.xcelenergy.com/programs_and_rebates/business_programs_and_rebates/new_construction_and_whole_building/energy_design_assistance)  
Compliance: CAAPB Zoning Administrator review
- d) Participation in SB 2030. The SB 2030 Energy Standard is required on all projects that receive general obligation bond funding from the State of Minnesota. SB 2030 can also be used on a voluntary basis on any project. Adherence to SB2030 standards is *strongly encouraged* in all commercial development in the Capitol Area. Compliance with SB 2030 may satisfy the energy requirements of the municipal Sustainable Building Ordinance (see item f. below). See the *State of Minnesota SB 2030 Energy Standard website for more information:* <http://www.b3mn.org/2030energystandard/>  
Compliance: *clarify administration and certification and involvement of CAAPB*

- e) Capitol Region Watershed District Review. The entire Capitol Area falls within the Capitol Region Watershed District. Multi-phased project plans or larger master plans of any type in the Capitol Area, and particularly in the Capitol Rice District, should make available their concepts for a preliminary review with Capitol Region Watershed District to ensure compliance with standards and practices for water management. A ‘water plan’ will be required (by the City).  
Compliance: Capitol Region Watershed District review
- f) Solar-Ready Flat Roofs. While solar is not required on new buildings, all flat roofs are encouraged to be built solar-ready. A solar-ready roof is one that is structurally built to make later installation of a solar power system an easier task. See “Solar Ready Building Design Guidelines for the Twin Cities, Minnesota” for more information: <http://mn.gov/commerce-stat/pdfs/solar-ready-building.pdf>  
Compliance: CAAPB Zoning Administrator review
- g) Electric Vehicle Ready. Parking for commercial, hotel, multi-residential are encouraged to provide electric vehicle charging capability. This includes wiring for every stall and a site transformer(?). Panels can be easily added as demand requires after development. Adding wiring at time of development greatly reduces long-term cost of converting to EV.  
Compliance: CAAPB Zoning Administrator review
- h) Organics Collection. New buildings should accommodate organics collection in the design of the building. Even if organics collection is not immediately planned for building operations, the design must incorporate future ability for organics collection.
- i) District Energy. District energy is already in use in many parts of the Capitol Area and should be encouraged in large developments.
- j) District Stormwater Management. District stormwater management functions should be considered in large development sites. Artful and unique use of stormwater management can help with placemaking.
- k) Travel Demand Management Planning. Refer to Section G: Mobility and Parking Planning.

### **Building Maintenance and Monitoring**

After construction, ongoing review helps to ensure a building is performing as planned.

- l) Energize Saint Paul - Energy Benchmarking.<sup>1</sup> The City of Saint Paul is working to require new buildings above 50,000 square feet to report energy and natural gas usage through a benchmarking tool—the Energy Star Portfolio Manager. All new developments in the Capitol Area are strongly encouraged to participate in the benchmarking program. See the Benchmarking Guide at: <https://www.stpaul.gov/departments/mayors-office/energize-saint-paul>  
Compliance:

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<sup>1</sup> “Benchmarking is the ongoing review of building energy and water performance to ensure a building is using energy and water as anticipated—over time and relative to peers. It allows owners and occupants to understand their building’s relative energy performance, and helps identify opportunities to cut energy waste...”

Building benchmarking and energy data transparency align with the City’s vision to keep Saint Paul’s property market competitive, enhance economic vitality, create green jobs, and initiate progress toward the City’s climate and energy goals. Across the country, cities are embracing building benchmarking as a best practice to reduce waste, save money, and mitigate climate change.

In Saint Paul, commercial and residential buildings are responsible for 52% of citywide greenhouse gas emissions. This represents a significant opportunity for energy and cost savings, as it is estimated that the average commercial building wastes 30% of its energy consumption due to inefficiencies (Source: Environmental Protection Agency). The first step to reducing energy waste is to develop awareness and understanding of a building’s efficiency, and in cities that currently require benchmarking, buildings have realized annual energy savings of 2-3% from just the process of benchmarking. (Source: Environmental Protection Agency).” *Quoted from City of Saint Paul*