

DATE: February 23, 2016

TO: Partners in Energy Planning Team

CC: Energy and Environment Commission

FROM: Ross Bintner P.E. - Environmental Engineer

RE: **City of Edina Energy, Conservation and Sustainability Goal Summary**

This report provides a summary of energy, environment and sustainability goals to support the Partners in Energy planning initiative city operations focus area. This report is an update to a report initially produced in 2013 to support an Energy and Environment Commission (EEC) initiative to better integrate City environmental sustainability goals into City operations.

Mission and Vision

The mission of the City of Edina defines the foundation for the organization. The mission reflects the authorities and core services that are delegated to Cities in Minnesota including public safety, local transportation networks, clean water and public sanitation, and orderly land use. The mission specifically recognizes key roles of infrastructure systems, land redevelopment and public facilities in sustaining a high quality of life in the community.

- *Our mission is to provide effective and valued public services, maintain a sound public infrastructure, offer premier public facilities and guide the development and redevelopment of lands, all in a manner that sustains and improves the uncommonly high quality of life enjoyed by our residents and businesses*

The vision of the City of Edina was recently updated after extensive public involvement. Vision Edina defines how the organization and community at large sees itself and its approach and understanding of future challenges.

- *Edina holds a well-earned reputation as a city of choice. It is the model of a successful, mature, and progressive urban community, that strives to lead in a modern and evolving world. We maintain our heritage and attractiveness, and afford our residents the highest quality of life, while actively embracing our future.*

This vision also spells out five strategic focus areas; 1) Inclusive and connected, 2) Built-to-scale development, 3) Sustainable environment, 4) A community of learning, 5) Future oriented. Strategic area four includes specific vision statements that speak from the future about sustainability including;

- Edina has focused and invested in world-class citywide resource management systems, built around the leading principles of environmental sustainability.
- We have substantially reduced our overall environmental impact and significantly increased our resource use efficiency.
- Our planning has integrated the best-proven standards of sustainable building and environmental stewardship into all aspects of our city planning and building codes.
- Our community continues to treasure and protect our public spaces and parks. We have enhanced our biodiversity and natural ecosystems, which in turn support and purify our natural environment.

While the mission of the City of Edina can be accomplished without an emphasis on environmental sustainability, the vision of the Community includes the specific focus to implement the mission in a way that is future oriented, and environmentally sustainable.

Comprehensive Plan, Goals and Policy

A variety of city wide policy and plan speak to topics of conservation and sustainability. Specific City Council resolutions, City ordinance and the Comprehensive Plan were reviewed. The following list is intended to summarize types of energy, and environment topics, and specific goals articulated in each document relating to energy, conservation and sustainability.

1. Resolution 2007-05 City Code Section 2-137 and formation of the EEC
 - a. No specific goals set.
2. Code of Ordinances, Chapter 2, Article 3, Division 3 [\(2-137\)](#) Energy and Environment Commission
 - a. Chapter two, division 1 describes role of boards as providing advice to Council and investigate subjects of interest to the City.
 - b. The Council, recognizing the need to support and advance environmental protection, conservation efforts including energy conservation, and waste reduction, and to improve thereby the overall welfare of the citizens of the City, does hereby establish the Energy and Environment Commission.
 - c. Duties; The Commission shall:
 - i. *Examine and recommend best practices for energy conservation for Edina's citizens and businesses, including a "green" building code, use of Energy Star appliances, and other energy reduction targets.*
 - ii. *Examine and recommend changes in City Government purchasing and operations to conserve energy.*
 - iii. *Evaluate and monitor the provision of a residential recycling program.*
 - iv. *Evaluate and monitor the provision of a privately provided solid waste program, as well as a reduction in municipal solid waste produced by Edina residents and businesses.*
 - v. *Evaluate and encourage improvements in air and water quality.*
 - vi. *Promote the establishment of targets for the reduction of greenhouse gas emissions produced by the City's buildings, equipment and operations.*
 - vii. *Educate the public about energy issues, reduction, conservation, reuse, recycling and environmental protection.*
 - viii. *Examine and promote renewable energy options for transportation, heating, and cooling, and other energy uses.*
3. Resolution 2007-20 Endorsing US Mayors Climate Protection Agreement
 - a. Preamble contains mentions of IPCC study, greenhouse gas (GHG) reduction, climate change, adaptation, planning for natural disasters, and the Kyoto Protocol.
 - b. RESOLVED, that the U.S. Conference of Mayors endorses the U.S Mayors Climate Protection Agreement.
 - c. RESOLVED, that the U.S. Conference of Mayors will work in conjunction with ICLEI Local Governments for sustainability or other appropriate organization for track progress and implementation of the U.S. Mayors Climate Agreement. (The wording of the ordinance seems to simply proclaim the work of the US Mayor group)
4. Resolution 2007-119 Joining ICLEI Cities for Climate Protection Campaign
 - a. Preamble assumes 2007-20 authorized city signing the U.S. Mayors Climate Protection Agreement and that the City has committed to take a variety of actions including:
 - i. *Urging Federal policy and programs to meet Kyoto protocol goals*
 - ii. *Promote land use and transportation policies that reduce GHG*
 - iii. *Increase use of renewable energy and energy efficiency*
 - iv. *Adopt purchasing and building construction and operations practices that reduce GHG*
 - v. *Increase recycling rates and urban forest cover*
 - vi. *Support education efforts to reduce GHG in the community*

- b. RESOLVED, City will join ICLEI Cities Climate Protection Campaign and take a leadership role in reducing GHG in the community and promote public awareness about impacts of climate change.

5. 2008 Comprehensive Plan [Chapter 10](#) Energy and Environment

- a. Section 10.1 Introduction and History: This section describes a history of environmental action in Edina and the formation of the EEC.
- b. Section 10.2 Climate Change and Global Warming: includes trends and challenges, background describing ICLEI and Mayor Climate Protection resolutions, and 2007 State GHG goal are included. This section includes the following goals and policies:
 - i. *Conduct 2007 Baseline GHG emissions assessment (this effort was undertaken by the EEC, but the result is of little organizational value as a baseline due to the lack of data transparency and final report)*
 - ii. *GHG reduction goal: 15% reduction by 2015, 25% reduction by 2025, 80% reduction by 2050 (the 2025 goal has been interpreted to be in error, as the reference standard is set at 30% by 2025.)*
 - iii. *Develop a local action plan*
 - iv. *Implement policies and measures in the local action plan*
 - v. *Monitor and verify results of implementation*
- c. Section 10.3 Energy: Describes environmental costs of current mix of energy generation, and states importance of developing local and renewable sources of electric power. Topics of biofuels and fuel use reduction are covered. This section includes the following goals and policies:
 - i. *Lead by example in conserving energy and developing renewable energy for city buildings, fleets and operations.*
 - ii. *Promote community and business energy conservation including policies or incentives for energy efficiency, renewable energy, and reduction in GHG*
 - iii. *Adopt purchasing guidelines for Edina that include renewable energy sources such as wind sourced electric or biofuels.*
 - iv. *Promote educational programs to inform residents and businesses about energy*
 - v. *Obtains grants for adoption of renewable energy sources and work to make these projects self-sustaining.*
- d. Section 10.4 Solar Protection: Discusses potential for ordinances for solar protection and details 4 considerations and specific actions to develop further policy in this area. This section includes the following goals and policies:
 - i. *Continue to enforce setback, building height, and lot coverage ordinance that can serve as protection to solar access*
 - ii. *Consider access to solar when reviewing variance applications*
 - iii. *Promote use of passive solar in building design*
 - iv. *Establish policies to restrict development for the purpose of protection solar access*
- e. Section 10.5 Residential Energy Consumption: The section details the three major components of residential energy use; electric, heat and transportation and discusses energy trends and the Energy Star label. This section includes the following goals and policies:
 - i. *Inform residents on energy efficiency*
 - ii. *Create incentives to reduce residential energy use*
 - iii. *Promote LEED certification for new construction*
 - iv. *Encourage green materials and tree planting to reduce heating and cooling needs*
 - v. *Inform homebuilders and remodelers of energy efficiency*
- f. 10.6 Commercial and Industrial Energy Consumption: This section discusses potential opportunity for efficiency in the commercial and industrial sector, as well as challenges. This section includes the following goals and policies:
 - i. *Promote renewable energy*

- g. 10.7 City Energy Consumption: Describes the ability of the city to play a leadership role by reducing its own energy in buildings (56%), water and sanitary operations (33%), Fleet (5%), Street lights (2%) and employee commute (4%). This section includes the following goals and policies:
 - i. *Create benchmarks for current energy use in all public facilities and reduce to GHG reduction goal.*
 - ii. *Establish policy for annual build energy use report and goals for reduction.*
- h. Section 10.8 Waste: This section discusses the history of recycling in Edina, and describes the state of the industry and an increasing amount of waste generated. Trends in waste types and options for handling are discussed such as sources separated organic composting and electronic waste. This section includes the following goals and policies:
 - i. *Continue to operate a household recycling program encouraging reduction, reuse and recycling*
 - ii. *Encourage backyard home composting of organic material*
 - iii. *Support citywide collection of source separate organics*
 - iv. *Encourage businesses to participate in MN chamber waste wise program*
 - v. *Encourage proper disposal of household hazardous waste*
 - vi. *Educate consumers to buy green*
 - vii. *Recommend changes to City purchasing policy*
 - viii. *Expand range of plastics that can be recycled*
 - ix. *Encourage greater recycling among businesses*
 - x. *Identify an Edina site that would produce renewable energy from City waste, such as an anaerobic digester.*
- i. Section 10.10.1 Air: This section describes coal burning and automobile traffic as major causes of impairment to generally good air quality and also details potential indoor air quality issues. This section includes the following goals and policies:
 - i. *Cooperate with statewide and regional air quality efforts*
 - ii. *Encourage mechanical ventilation systems in new homes*
 - iii. *Provide incentives for building practices that improve indoor air quality*
 - iv. *Encourage tree planting to reduce noise and absorb carbon*
 - v. *Consider vehicle idling ordinance, and promote 'no idling' near school and public parking lots*
 - vi. *Promote the use of renewable energy sources to reduce coal particulate in regional air*

6. 2008 Comprehensive Plan – Related Chapters

- a. [Chapter 4](#) – Land Use
 - i. Chapter 4.2 details natural features, landforms, water resources around which the built-environment is situated. The land use example of Southdale explains a context of using a massive heat pump, the largest in the world at the time, to “make our own weather at Southdale.”
 - ii. Chapter 4.3 details issues around zoning, mixed uses, and connectivity of transportation networks.
 - iii. Chapter 4.4 includes goals to increase pedestrian and bicycling opportunities and connects, and reduce dependence on the car, as well incorporating principles of sustainability and energy conservation into all aspects of design, construction, renovation, and long-term operation of new and existing development. This chapter also talks about the fundamental link between land use and transportation.
- b. [Chapter 7](#) – Transportation
 - i. Goals include; Minimizing the impacts of the transportation system on Edina’s , reducing the overall dependence on and use of single-occupant vehicles, Provide multiple travel options for transit users, pedestrians, bicyclists, and rideshare users, managing parking and encourage join and shared use of facilities, ride share, bicycle parking, and increased transit use, and providing efficient movement of goods.
 - ii. Policies include; Use economic and environmentally sound management techniques for snow and ice removal, a variety of pedestrian and bicycle recommendations.

- c. [Chapter 8](#) – Water Resource Management
 - i. This section covers the three major utilities that provide clean water service to Edina; Sanitary Sewer, Domestic Water, and Storm Sewer. Descriptions of the capacity of trunk sewers indicate that total water and sanitary use are a critical factor in the ultimate development density of the City. The storm sewer services of clean surface water and flood protection are described in detail and reference the Comprehensive Water Resource Management Plan, Nondegradation of Waters Report, local watershed plans, individual lake studies, and Stormwater Pollution Prevention Plan.
 - ii. Goals include; Eliminating inflow and infiltration of clean water into the sanitary system and protecting the health safety and welfare of citizens, modifying permitting and enforcement processes for construction activities, clean water education, providing clean, safe and high quality potable water, provide for sustainability of water supply through promotion of water conservation.
 - iii. Policies include; Eliminating points of inflow and infiltration to the sanitary system, restricting discharge of clean water into the sanitary system, implementation of the various surface water and pollution prevention plans for clean water and flood protection and implementation of the Water Supply Plan to encourage a reduction in water demand.
- d. [Chapter 9](#) – Parks Open Space, and Natural Resources
 - i. This section details links to surface water quality and parks operations, the restoration of natural resources, links to community health, active living goals and recreation places and space opportunities and regional amenities and trail networks. A variety of natural areas are catalogued, and environmental trends listed.
 - ii. This section includes a “Natural Resource Conservation and Management” part that details water resources and natural areas, and a “Wildlife Management Plan” that details habitat for birds and wildlife, and conservation and restoration of natural areas.
 - iii. Natural resource and wildlife goals include; Establishing a natural resource conservation and management plan for restoration and protection of natural resources. Ensure development includes provisions for protection of shorelines, creeks and lakes. Identify a master landscape planting plan for all Edina parks. Conserve and replace Edina urban forest. Maintain existing wildlife sanctuaries. Continue to improve shoreline fishing opportunities.
 - iv. Natural resource and wildlife policies include; conducting a natural resource inventory of prairies, woods, wetlands, establishing a natural resource conservation and management plan, managing deer, goose and beaver population, and provide fishing opportunities.

7. 2011-37 Joining Greenstep Cities

- a. No specific goals or policy set; implementation actions intended to help City meet its sustainability goals. Challenge, competition, recognitions and ideas-network functions served as well.
- b. Preamble describes GHG reduction goals in 2007 Next Generation Act goals.
- c. Appoints the EEC to serve as the GreenStep coordinator.

While detailed plan and policy information exists in the Comprehensive Water Resources Management Plan, and the Parks Strategic plan about water and natural resource environmental service, these topics were only covered to the level of the comprehensive plan in the “related chapters” section.

Attachments:

Link to prior [Vision and Strategic Plan](#)

Link prior [Vision Edina](#)

Link to [Comprehensive Plan](#)

Copy of prior summary memo includes [Resolution 2007-20, Resolution 2007-119, and Resolution 2011-37](#)

Link to Section [\(2-137\)](#) Energy and Environment Commission