Creating a Sustainable Saint Paul

MPCA’s Air, Water, Waste, Environment Conference

28 February 2008
Saint Paul – The Most Livable City in America

- Ready for School, Ready for Life
- Safe Streets and Safe Homes
- Expanding Economic Opportunity
- Healthy Communities = Healthy Living
- Quality Infrastructure
- The Soul of Saint Paul
Vision – Sustainable Saint Paul

Take proactive steps to protect our City’s air, water and urban landscape by focusing on energy-efficiency and conservation, clean energy supply, alternative fuels & vehicles, transportation options, water quality, recycling & waste reduction, reforestation and green space.
Saint Paul’s Commitment to Reduce Carbon Dioxide (CO2)

- On February 1st, 2006 Mayor Coleman and City Council signed U.S. Mayor’s Climate Protection Agreement.
- Reduce CO2 emissions by 20% by 2020 by increasing energy-efficiency; promoting renewable energy and alternative fuels; and reducing vehicle miles traveled.
Sustainability Criteria

Environmental Impact

Cost-Effective

Broad Public Support
Energy Efficiency in Public Buildings

- Created $1 million “Energy Conservation Investment Fund” to finance building improvements with a payback or 10 years or less
- At no add’l cost to taxpayers
Energy Efficiency & Conservation

- Use State’s Buildings, Benchmarking & Beyond (B3) developed by Weidt Group & Xcel Energy to identify and prioritize public buildings
- Analyze 8-10 City Buildings per year
- Retrofit 6-8 buildings for energy-efficiency in 2007
Retrofitting City Buildings for Energy Efficiency

- Completed energy efficient lighting projects in four Parks & Recreation buildings
- Explore opportunities for solar, green roofs & other techniques
- Hired Energy Coordinator to coordinate energy conservation initiatives.
Light Emitting Diodes (LEDs)

- City has 370 signalized intersections with approximately 3,500 red & green LED’s and 2,230 walk/don’t walk
- Estimated energy savings $180,000 annually
- Labor savings $85,000 annually
- Exploring use in street lights
Alternative Fuels & Vehicles

- Analyzed current fleet & buy more efficient sedans (Ford Focus) and light utility vehicles
- Request alternative fuel engine options (when available) on new vehicle purchases
- Use of E85 in 1/3 of currently owned flex-fuel vehicles
Public Works will start dispensing E85 last summer, E85 usage will more than double for 2008 and should continue to increase in 2009.

City's diesel trucks run on B10 in summer/B5 in winter with a few using B20.
Electric Powered Utility Vehicles

- Parks Department owns one electric pickup truck and 13 other electric powered utility vehicles.
- Lower initial capital outlay, cheaper to operate, longer useful life & less emissions
Transportation Options

- Expanding biking facilities & event parking
- Support bicycle events like the Saint Paul Classic Bike Ride and Great River Energy Bicycle Festival
- Develop Light Rail from Minneapolis to Saint Paul
“Green Building” Policy for Public Buildings

- Adopted on Jan. 24 2007 “Green Building Ordinance” for public buildings
- Two well-established standards for planning, design, construction & major renovation of City buildings:
  1) Leadership in Energy and Environmental Design (LEED) Silver
  2) MN Sustainable Building Guidelines
Building Costs - A building over 30 years

- Ongoing Operations: 94%
- Building First Costs: 6%
“Green Building” Policy for Public Buildings

- Trained 50 City staff on LEED and MN Sustainable Building with 5 accredited in 2008
- Adopt Green Community’s protocol for Affordable Housing and utilize Xcel Energy’s Energy Design Assistance or Energy Star Programs
- Develop policies for projects receiving public investment
Saint Paul’s New Police Station

- 48% more efficient than current energy code
- 15% increase in upfront construction costs with a 7.2 year payback
- 100% stormwater treatment on site
- 75% daylighting with solar tubes & windows
- White Roof system & in-floor heat
Minnesota Energy Challenge
www.mnenergychallenge.org

- Help residents identify and take actions to save energy
- Create individual action plans and calculate your “carbon emissions”
Clean Energy Supply

Spring of 2008, Xcel’s 250 MW coal-burning power plant converts to a new, gas-fired, combined cycle 550 MW power plant reducing CO2 by approx. 415,000 tons annually.
Clean Energy Supply

- District Energy’s system serves over 80 percent of downtown area
- 30 MW of electricity from urban wood waste
- CO2 reduced by 96,000 tons/year
Additional Clean Energy Supply

- Ford’s 14-18 MW Hydro Electric Dam saves 150 million pounds of CO2 annually
- Preserve 5 MW for future development on Ford site
Green Energy for RockTenn & new development along Central Corridor

- 1000-ton/day (100 yr old) paper recycling facility
- 500 full-time jobs including 385 union
- 75 megawatts (MW) thermal energy demand
Mayor’s Green Manufacturing Initiative

- Create development team of business leaders, labor unions, economists, elected officials, developers & environmentalists
- Identify economic growth areas for green industries
- Develop marketing strategy and business plan to attract new green manufacturers
Transportation Options

- Expand Metropass & Commuter Challenge at June 2007 Commuter Fair
Recycling & Waste Reduction

- Continue to expand reuse & recycling at neighborhood cleanups with new “Litter-free Saint Paul” feature
- Increase recycling at City parks like Como Park & public events like the Parks Spring Cleanups
- Reinvigorating recycling in City buildings January 2008
Recycling & Waste Reduction

- In January 2007, added juice boxes and milk, soy and broth cartons to recycling program
- With loan from Ramsey County & MPCA, Eureka added new optical glass sorting line
- Add organic collection to curbside recycling in 2008
Recycling & Waste Reduction

- Expand recycling & environmentally preferred purchasing in all City operations
- Steel, Oil, Oil Filters, Street Sweepings, Batteries, Office Products, rags and other items are being recycled
- 10/30 Oil for light duty vehicles is made from recycled oil
Green Space & Reforestation

- Planted over 14,100 trees & 10,000 native plants with community partners to restore ecology.
- Worked to remove 6.5 acres buckthorn and other invasive species.
- Utilized prescribe burning to maintain 21 acres of Park land.
Green Space & Reforestation

- Secured VISTA worker for three years to Parks & Rec’s Environmental & Horticulture services
- Added 50 hanging baskets along Rice St., 7th Place Mall & Wacouta
- Planted medians with roses on Kellogg Blvd and between Wabasha & Robert Streets donated by Bailey Nurseries
Water Quality

- Implement new Watershed District rules for Storm Water Runoff and volume control on projects i.e. Arlington/Pascal or Chatsworth/Goodrich
- New Water section in Comprehensive Plan
- Hire Water Resources Coordinator in 2007
Sustainable Saint Paul Awards

- Created Earth Day event for April 22, 2007 – “Wishes for the Sky Promises for the Earth”

- Sustainable Saint Paul Awards by Mayor Chris Coleman & Saint Paul City Council in April 2007
Community Partners

- Capitol Region Watershed District
- Center for Energy & Environment
- Center for Sustainable Building Research at U of M
- District Energy
- EcoDeep
- Eureka Recycling
- Fresh Energy
- Friends of the Mississippi River
- Friends of the Parks & Trails
- Great River Greening
- Green Institute
- LHB Architects
- Lower Phalen Creek Project
- MN Conservation Corps
- MN Pollution Control Agency
- Ramsey County
- Ramsey Washington Watershed District
- Xcel Energy
Saint Paul – The Most Livable City in America
For More Information

Anne Hunt, Deputy Policy Director
Mayor Chris Coleman
City of Saint Paul
390 City Hall
Saint Paul, MN 55102
651.266.8520
anne.hunt@ci.stpaul.mn.us