

City of Royalton GreenStep Cities Progress Report

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We owe a special thank you to the folks at Region 5 Development Commission, Initiative Foundation, and the University of MN for providing educational opportunities to learn about renewable energy. Thank you to the members of the Clean Energy Resource Team for the chance to share our story with other cities. Thank you to the Minnesota Pollution Control Agency for providing the tools to help cities like Royalton achieves greater energy efficiency. Most of all thank you to Betsy Gerads and Brenda Rian for volunteering to help with our GreenStep Cities initiative.

FOREWORD:

On September 7, 2010, the Royalton City Council moved to participate in the Minnesota GreenStep Cities program because the city had already completed many energy saving projects: changing the traffic lights from incandescent to LED, completing energy audits of all city buildings and the relamping of city buildings, and participating in the Small Cities Development Program providing energy upgrades for businesses and home owners.

This report is a summary of the initial steps taken to achieve GreenStep Cities status and identify other steps to help the City of Royalton become more energy efficient. The report is meant for a wide audience – policy makers, businesses, community members and students. Specifically this report will:

- Summarize the GreenStep program
- Describe Royalton’s involvement in the GreenStep to-date
- Detail Best Practices already completed or in progress
- Specify next steps toward GreenStep City designation

ABOUT MINNESOTA GREENSTEP CITIES

Minnesota GreenStep Cities is a challenge, assistance, and recognition program to help cities achieve their sustainability goals. Cities are classified as ‘A, B or C’ class cities based on population and city utilities. Based on those criteria, Royalton is a “B” city. Cities that choose to participate in this voluntary program are challenged to become more sustainable by working toward a number of specific “Best Practices” such as improving energy efficiency of city-owned buildings. The Minnesota Pollution Control Agency (MPCA) which oversees the program provides technical assistance to help cities implement Best Practices. A city that attains all required Best Practices is officially recognized as a GreenStep City.

GREENSTEP CITY BEST PRACTICES

Building & Lighting	<ul style="list-style-type: none"> 1. Efficient Existing Public Buildings 2. Efficient Existing Private Buildings 3. New Green Buildings 4. Efficient Building & Street Lighting & Signals 5. Building Reuse 	<ul style="list-style-type: none"> 2 Required Optional Optional Optional Optional
Land Use	<ul style="list-style-type: none"> 6. Comprehensive Planning & Implementation 7. Higher Density 8. Efficient & Healthy Development Patterns 9. Efficient Highway-Oriented Development 10. Conservation Design 	<ul style="list-style-type: none"> 2 Required Optional Optional Optional Optional
Transportation	<ul style="list-style-type: none"> 11. Complete Green Streets 12. Mobility Options 13. Efficient City Fleets 14. Demand-Side Travel Planning 	<ul style="list-style-type: none"> Optional Optional Optional Optional
Environmental Management	<ul style="list-style-type: none"> 15. Environmental Purchasing 16. Urban Forests 17. Efficient Stormwater Management 18. Green Infrastructure 19. Surface Water Quality 20. Efficient Water/Wastewater Facilities 21. Septic Systems 22. Solid Waste Reduction 23. Local Air Quality 	<ul style="list-style-type: none"> Required Required Optional Optional Optional Optional Optional Optional Optional
Economic, Community Development	<ul style="list-style-type: none"> 24. Benchmarks & Community Engagement 25. Green Business Development 26. Renewable Energy 27. Local Foods 28. Business Synergies 	<ul style="list-style-type: none"> Required Required Optional Optional Optional

The following are the required Best Practices for all “B” cities:

Building and Lighting:

Required for all cities: Enter baseline information into the MN B3 Benchmarking database and routinely enter monthly energy use data from all city-owned buildings

Land Use:

Required for all cities: Adopt a Comprehensive Plan that is less than 10 years old and it must reference regulatory ordinances that support the plan (zoning ordinance)

Transportation:

Required for all cities: Adopt a policy or guideline directing that the city purchase paper containing at least 30% post-consumer recycled content or purchase at least 15% of city government’s energy requirements from renewable energy sources

Required for “B” cities: Qualify as a Tree City USA

Economic and Community Development

Required for all cities: Report at least annually to community members on implementation of GreenStep Cities Best Practices, including energy/carbon benchmarking data if gathered

Required for “A and B” cities: Connect businesses with assistance providers, including utilities, who conduct personalized energy, environmental sustainability, or waste reduction audits and assistance

WHAT ARE THE BENEFITS OF GREENSTEP DESIGNATION?

A city that achieves GreenStep designation will be formally recognized at the annual meeting of the Minnesota League of Cities and on the GreenStep website (www.mngreenstep.org) Other benefits may include:

- Reduced greenhouse gas emissions
- Lower energy costs for residents, businesses, and city government
- Strong economic development tool
- A more resilient and livable community
- Press coverage
- More transportation options
- Community pride
- Healthier, more engaged citizens
- Cleaner water and air

HOW IS ROYALTON INVOLVED?

The City of Royalton began working on energy upgrades before the GreenStep City program was announced in 2010. City projects have included replacing incandescent traffic lights with LEDs; doing an energy audit of all city buildings and retrofitting lamps in all buildings; updating the Comprehensive Plan to include provisions for parks/trails; installing a 7.5KW solar photovoltaic system on the roof of city hall; and adopting a Wellhead Protection Plan and Comprehensive Water Management Plan to help protect our water resources. As part of a requirement for GreenStep Cities participation, the city has entered its electrical and natural gas usage for all city buildings into the MN B3 Benchmarking database. This allows us to track our energy usage from January 1, 2007 to the present. The mission of this database is to provide tools to help cities monitor energy usage and budget for energy expenses.



BUILDING AND LIGHTING BEST PRACTICES

Why do it? Our original goal was less about energy savings and more about having a positive impact on our city budget. It's nice to know that the two are compatible!

What we've found? Re-lamping the city buildings has resulted in fewer Kilowatt Hours Used (KWH). The switch from incandescent traffic lights to LED cut the cost of energy for the lights in half.

EFFICIENT EXISTING PUBLIC BUILDINGS – BEST PRACTICES #1

COMPLETED:

- Enter energy usage in B3 Database
- Energy audit of city buildings

Energy usage (heating and electric) for all city buildings was entered into the B3 database starting with 2007 data. This is an ongoing effort to measure total KWH and overall energy efficiency for all city buildings. The following is some of the data we gathered using the B3 database.

City of Royalton Electricity Usage Jan, 2007 – Dec. 2010 (B3 Database)

	KWH used				
	2007	2008	2009	2010	% change
City Hall	50100	52732	45870	45288	-9.60%
Fire Hall	20519	21586	17203	17472	-14.80%
City Shop	11318	9868	9817	9406	-16.90%

EFFICIENT BUILDING & STREET LIGHTS AND SIGNALS BEST PRACTICES

#4

COMPLETED:

- Replace at least one-third of the city's traffic signals with energy efficient LED lighting technologies.
- Possible second Action: Modify any city franchise or other agreement with utility to facilitate rapid replacement of inefficient street lighting. (Best Practice #4)



LAND USE BEST PRACTICES

Why do it? Our city has a Comprehensive Plan, Wellhead Protection Plan and a Comprehensive Water Management Plan 2010-2020 with common goals to protect our natural resources. Land uses outlined in comprehensive plans shape private and public actions that substantially affect whether our cities move toward energy efficiency or increase energy costs. The Wellhead Protection Plan and Comprehensive Water Management Plan focus on maintaining water quality in our city.

What we've found? The Comprehensive Plan 2005 – 2015 was written at a time of major growth in the city and focused on housing development and the infrastructure to maintain that growth. The City Council at its planning meeting in 2010 focused on the developing a more sustainable Royalton including walking/biking trails, parks, and renewable energy. The Comprehensive Plan 2010 will shape our city for years to come and help us meet the needs of our community.

COMPREHENSIVE PLANNING AND IMPLEMENTATION – BEST PRACTICE #6

COMPLETED:

- Adopt/have an adopted comprehensive plan that is less than ten years old (required for Category A cities) OR, Category B and C cities must simply adopt a land use plan that was adopted by a regional entity or the county less than ten years ago.
- Demonstrate that regulatory ordinances comply with the comprehensive plan including but not limited to having the zoning ordinance explicitly reference the comprehensive plan as the foundational document for decision making.



TRANSPORTATION BEST PRACTICES

Why do it? Our Comprehensive Plan includes the need for more walking/biking options in our city and this includes more sidewalks and biking lanes on our streets.

What have we found? The Royalton School has applied for a Safe Routes to Schools grant to provide for School Patrol and determine the cost of a sidewalk near the Royalton Elementary School.

MOBILITY OPTIONS – BEST PRACTICES #12

COMPLETED:

- Launch a Safe Routes to School program with educational, public health and other partners. (Dr. Jon Ellerbusch has submitted the grant application for this project.)
- Possible other actions:
- Identify and remedy street-trail gaps between city streets and trails/bike trails to better facilitate walking and biking (Best Practice # 18 Green Infrastructure)
- Promote Morr-Tran as a transportation option for residents in Morrison County (Best Practice #12)

ENVIRONMENTAL MANAGEMENT BEST PRACTICES



Why do it? Making a conscious effort to choose renewable energy sources has a positive impact on our city budget. Participating in Tree City USA is an investment that protects and enhances the city's green infrastructure, which includes trees, and other plant cover, deliver many financial, energy, quality of life benefits. Trees are as important to our city as our traditional infrastructure of roads and utilities.

What have we found? It's too early to tell what impact the solar panels will have on our city's electric bill/budget, but we can track the results and report on our website. We are very lucky to have an active Tree Board in our city and the work they have accomplished in counting the number of trees in Royalton and installing the gravel bed nursery is phenomenal.

URBAN FORESTS – BEST PRACTICE # 16

COMPLETED

- Qualify as a Tree City USA
- Tree census and gravel bed nursery are complete

SURFACE WATER QUALITY - BEST PRACTICE # 19

COMPLETED:

- Improve local water bodies – protection of Platte River includes: Flood Plain Management Ordinance 15.02, Comprehensive Water Management Plan 2010 – 2020, and Wellhead Protection Plan

SOLID WASTE REDUCTION – BEST PRACTICE # 22

COMPLETED:

- Document signing of at least one resource management contract with a waste hauler for one or more of:
 - a. city government operations

LOCAL AIR QUALITY - BEST PRACTICE # 23

COMPLETED:

- Regulate outdoor wood burning, using model ordinance language, performance standards and bans as appropriate, for at least one of the following:
 - a. recreational burning
 - b. outdoor wood boilers
- Possible other actions:
- Newsletter articles featuring ways residents can conserve water
- Establish a local purchasing preference policy
- Adopt a policy directing that city only purchase paper containing at least 30% post consumer recycled content

ECONOMIC AND COMMUNITY DEVELOPMENT BEST PRACTICES



Why do it? The energy initiatives taken by the City Council have a positive affect on the overall fiscal health of the community. Our solar PV panels will reduce our energy usage/cost. These same initiatives help set Royalton apart from other cities and can be used as an economic development tool to attract new business to our city.

What have we found? The Platte River Industrial Park policy now offers special consideration for companies that meet LEED certification for its building.

BENCHMARKS AND COMMUNITY ENGAGEMENT – BEST PRACTICE #24

COMPLETED:

- Report progress annually to community members on implementation of GreenStep City best practices, including energy/carbon benchmarking data if gathered.

RENEWABLE ENERGY – BEST PRACTICE # 26

COMPLETED:

- Install a public sector renewable energy technology, such as solar electric (PV), solar hot water or hot air, micro-hydro or wind.
- Possible other action:
- Create a renewable energy financing program for residents to install generation capacity (Best Practice # 26)

