

Energy Projects in Red Lodge

City Council Update March 13, 2018

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Monitoring Initiatives:

Streetlight Retrofit Savings		
Cost Savings since Install	kWh Savings since Install	CO2 Savings since Install
\$1,892.88	15,094 kWh	10,049 lbs

Building Retrofit Savings			
kWh Savings in February	kWh Savings since Install	Cost Savings in February	Cost Savings since Install
950 kWh	3,696 kWh	\$182.67	\$863.23

Electric Vehicle Charging Station		
Total Charging Cost	Total Miles Charged	Total CO2 Savings
\$744.05	12,097 miles	233,887 lbs

- Partnered with The Yodeler Motel on an advertisement in Destination Red Lodge that showcases our charging stations

City of Red Lodge Energy Conservation Plan

- The plan will be built off of the Baseline Inventory
- Baseline Inventory Core Findings:
 - City government energy use resulted in net annual emissions of 1,910 mtCO₂e and cost \$201,227 in total (Table 1).
 - 60% of total emissions and energy use are attributed to Buildings & Facilities (Table 2).
 - Over half of energy costs come from consumption of energy in Water Treatment, which encompasses wastewater treatment, water treatment, and pumps and pumping stations (Table 2).
 - City Hall, the Public Works Shop, Pool, and the Library, represent the greatest opportunity for cost and carbon savings (Table 3).
 - Streetlight costs are disproportionately high when compared with actual energy usage (Table 5).
- Taskforce has been established, first meeting was held February 19th
- Focus Areas were identified as 1- Internal Policies and Practices 2- Fleet, Buildings and Streetlights 3- Wastewater and Water 4- Solid Waste, Recycling and Compost 5-Codes and Land Use 6- Education and Outreach

Streetlight Retrofit:

- NorthWestern Energy made us an offer on the 24 decorative streetlights on Broadway
- We can purchase them today for \$38,788 or wait and hope that the price goes down later on
- Waiting on a local electrician to give us an estimate on what it would cost to retrofit to LED
- If we purchased and retrofitted the lights, we would save \$4,037 annually

Library Solar Array:

- Structural Analysis was performed, found the newer section of the Library was not strong enough to support a solar system

- Proposed System is a 10.8 kW array that would produce 11,470 kWhs of electricity annually and reduce Library energy costs by \$1,287 each year
- Grant application is almost complete, Library Director is making final edits
- Grant would pay for 90% or \$25,200 of the project costs
- Library must raise the remaining 10% or \$2,800

Green Team:

- Working with the Green Team to launch a pilot bike-share program called Pedal Power
- Will result in 3 bikes that are available for high school students to check out, once school is out the bikes will transition and be located at the Community Foundation

Recycling:

- Glass recycling is now possible
- Partnered with SCRaP in Billings, they are accepting glass from us and turning it into sand and beads for cement and artworks
- Started “Recycler of the Month” which celebrates one person at the Recycling Center
- Once each employee has been highlighted we may pick a person from the community each month

City Hall Energy Upgrades:

- R49 Insulation will be installed on March 15th in the City Hall attic as recommended by NorthWestern Energy in the 2016 Energy Audit
- Currently getting bids for a full window replacement in City Hall

SolSmart:

- Working with the City Planner, MREA and NREL to get Red Lodge certified as a SolSmart Community
- National program that works to decrease the soft-costs of going solar and helps local governments understand how their codes and regulations relate to solar power

Earth Day Festivities

- Organizing the 2nd Earth Day Block Party, April 21st from 12 to 3pm at the Library Parking Lot
- Will follow the Parks Clean Up and highlight earth-friendly activities in Red Lodge such as the new bike rental program, passive home technology, local foods and environmental stewardship training
- 14 organizations are signed and Parks Clean Up volunteers will receive a Coupon Book from local businesses

City of Red Lodge Sustainability Page:

- Rebranded the Energy Corps page on City website to focus on Sustainability
- Status of current projects, energy analysis, and resources can be found here
- Progress of Energy Conservation Plan can also be tracked

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