

City of Red Lodge Energy Projects

Council Update, 8/4/16

Katelynn Essig, Montana Energy Corps Member, City Sustainability Coordinator

LED Streetlights

- Completed LED retrofit of 14 streetlights on Broadway Avenue from 8th Street to 3rd Street
- Replaced 70W metal halide with 30W LED
- Monthly costs will decrease from \$202 (December 2015) to \$68; will save around \$1,200 a year
- Payback will be around 2.15 years

2016-2017

- Document installation of LED's and establish ongoing monitoring process
- Document potential cost savings of the remaining decorative streetlights on Broadway
- Work with council to determine next steps for potentially purchasing streetlights

Electric Vehicle Charging Stations

- Installation of 4 Charging Stations, painted curb stops, signage, and donation box completed
- Received \$11,000 in installation costs from Tesla Motors and Yellowstone Teton Clean Cities
- Waiting on a tracker from Yellowstone Teton Clean Cities as promised with our rebate

2016-2017

- Document all information and procedures used for installation
- Develop and conduct ongoing monitoring process that documents vehicle usage, energy costs, and maintenance issues

LED Lighting Retrofit for City Buildings

- Energy Audit completed January 2016 for Fire Station, City Hall, Police Station and Public Works buildings
- Boilers and water heating units were in good condition; biggest potential energy savings is lighting
- LED Retrofit Analysis nearly completed for City Buildings – City Hall, Police, Public Works
 - Payback is higher than expected – 7 years

2016-2017

- Complete retrofit analysis for; final decision to be made by council
- Manage installation and document all supplier and installer information
- Establish ongoing monitoring process to document monthly cost savings



Recycling

- Opportunities and pitfalls have been identified
- Recycling Facebook page has launched – almost 200 likes
- Increased recycling within the school district with the Green Team

2016-2017

- Advise Recycling Board
- Create a social media plan for Facebook page

Solar Panel Analysis for City Buildings

- Gathered necessary data including rooftop square footage, potential production, cost, and design
- Completed WWTP solar panel analysis; figured production and cost savings of the last 6 years

2016-2017

- Complete full written analysis
- Research financing mechanisms, including grant opportunities and tax incentives

Wastewater Treatment Plant Solar Panel Analysis

- Completed 6 year analysis of production and cost savings compared to original estimates
- The 47.85kW system produced 336,112kWh with an average of 5,885kWh and yearly savings of \$7,330

High School Green Team

- Successfully raised \$7,500 for solar project. Installation date still unknown

2016-2017

- Work on windmill project
- Provide additional support as needed

Greenhouse Gas Inventory

2016-2017

- Complete City operations inventory and full written document analysis

Energy Conservation Plan

2016-2017

- Research to determine if an energy conservation plan for the City to adopt is necessary and viable
- Complete Energy Audits of Wastewater and Water Treatment Plants

