# City of Red Lodge Energy Projects Council Update, 8/9/16 Katelynn Essig, Montana Energy Corps Member, City Sustainability Coordinator

# **LED Streetlights**

- Completed LED retrofit of 14 streetlights on Broadway Avenue from 8<sup>th</sup> Street to 3<sup>nd</sup> Street.
- Replaced 70W metal halide with 30W LED.
- Monthly costs will decrease from \$205 (December 2015) to \$68; will save \$1,200 a year.
- Payback will be 3.2 years.

# 2016-2017

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

# **Electric Vehicle Charging Stations**

- Installation of four 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, and Public Works
- Public Works retrofit would also provide safety benefits due to better lighting.
  - Payback is higher than anticipated 7 years.

#### 2016-2017

- Complete retrofit analysis for City buildings; 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.



EV CHARGING STA

# **Solar Panel Analysis for City Buildings**

- Gathered necessary data including rooftop square footage, potential production, cost and design.
- Completed Wastewater Treatment Plant Solar Panel Analysis; figured production and cost savings for the last the six years.

## 2016-2017

- Complete full written analysis for City buildings
- Research financing mechanisms, including grant opportunities and tax incentives.

# 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

• Provide advice to the Red Lodge Recycling Board.

# **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.



· styrofoam · glass · plastic bags of any kind