



# Community Energy Management Case Study City of Pleasant Ridge

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EcoWorks | 2017

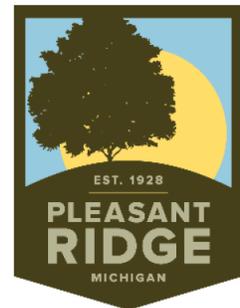


## Community Energy Management

Beginning in 2016, the City of Pleasant Ridge has been involved in Community Energy Management in cooperation with EcoWorks and project partners with financial support from the Michigan Energy Office. With leadership from City Manager and Energy Manager James Breuckman, the community energy management program built on the successes of previous projects and pursued the implementation of both technical and policy mechanisms aimed at improving energy performance and institutionalizing energy management.

## City of Pleasant Ridge Background

Founded in 1919, Pleasant Ridge was incorporated as a city in 1928. With a population of approximately 2,500 residents, the City of Pleasant Ridge is an inner ring suburb of Detroit known for its engaged citizenry and federally recognized historic homes.



## Clean Energy and Energy Efficiency Progress

In 2015, the City of Pleasant Ridge converted municipal streetlights to LED models generating significant financial savings and reducing energy waste from streetlights by over 50%. Additionally, under the direction of City Manager and Energy Manager James Breuckman, in 2016 the City Hall building underwent a partial LED retrofit project and two programmable thermostats were installed to more efficiently control the HVAC system and reduce energy consumption.

During the initial grant period, EcoWorks facilitated benchmarking for all city facilities and developed energy project recommendations for the Pleasant Ridge Community Center. Additionally, the Pleasant Ridge City Commission adopted a resolution supporting the development of a Community Energy Strategic Plan and energy management planning efforts.

## 2017 Community Energy Management Program

In March 2017, EcoWorks went before the Pleasant Ridge City Commission to present progress achieved through the Community Energy Management program as well as next steps and future opportunities. A primary goal for the City of Pleasant Ridge for this grant period was the development of the Community Energy Strategic Plan (CESP). The resulting Pleasant Ridge CESP includes an Energy Vision and the establishment of a municipal Energy Protocol which commits the City to reducing energy consumption 25% by 2020 relative to the 2015 baseline year established in the first year of the grant.

In June 2017 the initial draft of the Community Energy Strategic Plan was presented to the City Commission and published online on the City website for public review. Additionally, the Community Energy Survey developed cooperatively by EcoWorks and City Manager James Breuckman was simultaneously opened for response to gather feedback on the plan draft as well as identify energy priorities within the community. Response rates were high for the Community Energy Survey and reflected support for energy management as well as a desire for more education surrounding opportunities for residential energy projects. Public feedback was incorporated into the CESP and the final plan is expected to be adopted by the Pleasant Ridge City Commission in September 2017.

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To support the Community Energy Strategic Plan and future energy projects, a Revolving Energy Fund was developed and adopted as part of the 2017-2018 City Budget. The Revolving Energy Fund commits to reinvesting 50% of the savings generated by completed energy projects back to the revolving energy fund to be used for financing further energy projects. Seed funding was sourced from the savings generated through a partial LED retrofit of the City Hall and 100% LED retrofit of the Community Center. In addition, the revolving energy fund formally establishes the role of Energy Manager as a responsibility of the position of City Manager.



At the Pleasant Ridge Community Center, a project to convert 100% of the interior lighting to LEDs was completed in February 2017. This project is estimated to yield savings of \$5,331 and 44,061 kWh per year. In May 2017 an RFP for a rooftop solar PV array on the Community Center was developed in cooperation with independent consultant Dave Konkle and EcoWorks. In July the winning bid was announced and the 20 kW solar PV array is expected to be completed by late August 2017. Once implemented, this project is estimated to save \$82,500 and generate 754 MWh over the next 25 years.

#### City of Pleasant Ridge Accomplishments and Commitments:

- ✓ Established Revolving Energy Fund
- ✓ Developed and adopted Community Energy Strategic Plan including Energy Vision
- ✓ Carried out Community Energy Survey to gather feedback on energy priorities and inform related planning efforts
- ✓ Adopted Energy Protocol to reduce municipal energy consumption 25% by 2020
- ✓ Converted Community Center to 100% LED lighting system
- ✓ Installed 20 kW solar PV array on Community Center rooftop
- ✓ Signatory to the Mayors National Climate Action Agenda
- ✓ Committed to expanding energy awareness and project opportunities to community members

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