



# Community Energy Management Case Study City of Dearborn

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## Community Energy Management

Dearborn has taken part in Community Energy Management since 2015 with financial support from the Michigan Energy Office, EcoWorks, and project partners working in collaboration with the city to provide third party community energy management services. During the first half of 2016, with leadership from City of Dearborn Sustainability Coordinator Dave Norwood working from the Mayor’s office the collaboration worked diligently to ensure existing energy efficiency project work continued, see that recommendations from the first grant year of CEM were implemented, benchmark municipal buildings, as well as assess and plan for Dearborn’s future as a leader in sustainability.

## City of Dearborn Background

Founded in 1876 and incorporated as a city in 1929, Dearborn is the second largest city in Wayne County, MI and eighth largest city in the state of Michigan with a population of 98,153. Demographically, Dearborn is 89.1% white, 4% African American, and 4% two or more races with 19.4% of its residents living below poverty level<sup>1</sup>.

Dearborn is home to the Ford Motor Company’s corporate headquarters as well as the AK Steel Works and also features The Henry Ford Museum and Greenfield Village. The city boasts amenities including: the Ford Community & Performing Arts Center, Camp Dearborn, Dearborn Ice Skating Center, and the Henry Ford Memorial Library as well as two branch locations.



*Ford Community & Performing Arts Center*

## Clean Energy and Energy Efficiency Progress

Dearborn published their initial climate action plan – *Ensuring Dearborn’s Future* – in August of 2012, in which there are also elements speaking to energy efficiency and renewable energy. The city’s current master plan, published in September 2014, features a section on “Efficient and Renewable Energy.” The city employs Dave Norwood as its Sustainability Coordinator, this position is housed in the Mayor’s office and holistically addresses Dearborn’s sustainable pursuits. From bike lanes to purchasing, Mr. Norwood oversees a wide portfolio of activities and projects. Both Dearborn’s Mayor John O’Reilly and his Chief of Staff Mark Guido have been generally supportive of the CEM work both pushing for renewable energy solutions and, in particular from Guido, encouraging the CEM team to think big when considering Dearborn’s energy management future.

## 2016 Community Energy Management Program

As of July 2016, EcoWorks has set up Portfolio Manager accounting for 24 Dearborn owned and operated buildings with benchmark years beginning in 2014. While some gaps exist in the Dearborn portfolio on the whole this billing data will allow Dearborn to set realistic energy reduction goals for the coming years addressing energy usage and performance.

In addition to benchmarking, Dearborn saw implementation of recommendations from work done as part of DTE’s RCx Program which will save the city 130,603 kWh/year and \$14,366/year while costing \$14,385. Also during the 2016 grant period the Dearborn Administrative Center had all of its fluorescent lighting replaced with LED tube lightings.

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Dearborn Ice Skating Center Potential Solar Array Rendering

Beyond implementation work, much time was spent during the 2016 grant cycle working within Dearborn’s city government to increase the city’s appetite both for dedicated energy management as well as defining opportunities for energy efficiency or renewable energy upgrades to the city’s holdings across a spectrum of short, medium, and long-term timelines. While Mr. Norwood captains Dearborn’s approach to sustainability on the whole, his duties do not allow for the time needed to provide the attention and work needed to not only keep an eye on the monthly billing and how it compares to the benchmarking data but also seek out increased opportunities for funding of energy efficiency and renewable energy projects. The CEM work has helped immensely in this regard but with an annual energy spend of \$5.6 million per year, Dearborn’s energy deserves a dedicated, in-house manager. The culmination of the 2016 grant period involved a meeting with Chief of Staff Mark Guido in a presentation focused on the city’s need for

dedicated energy management as well as achieve buy-in for the array of projects Dearborn can pursue in the future including: solar awnings, solar carports, new pumps for outdoor pools, continued relighting efforts, a smaller boiler installed at the Dearborn powerhouse, recalibration of the police station heating, solar and insulation work on the Ford Community & Performing Arts Center roof, solar and geothermal installation at the Dearborn Ice Skating Center, geothermal installation at the Dearborn Administrative campus, a geothermal district paired with economic development projects, and community solar projects focusing on enhanced resiliency. This presentation was well received and we are eager to present again to the Mayor directly who unfortunately was unable to attend the initial presentation due to injury. Having laid a policy-focused foundation in Dearborn’s second round of funding, we expect future CEM work with the city to be more focused on implementation.

City of Dearborn Accomplishments and Commitments:

- ✓ Finished relighting Dearborn Administrative Center with LEDs
- ✓ Implementation of DTE RCx Program recommendations
- ✓ Built interest in full time energy manager position
- ✓ Built list of potential energy efficiency and renewable energy generation projects broken down according short, medium, and long term and well suited to cascade savings from one to the next.
- ✓ Continued benchmarking efforts from Pilot funding round.



Endnotes

<sup>1</sup> United States Census Bureau. *Quick Facts: City of Dearborn, Michigan*. Washington: U.S. Census Bureau. 2015. Web. 26 Aug. 2016.

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