

Energy Efficiency: A Step Closer to Financial Sustainability for Michigan Nonprofits

Deborah Philbrick, Louise Sharrow, and Tim Skrotzki

February 14th, 2017



Funding for the Energy Efficiency Report was provided to Elevate Energy by the C.S. Mott Foundation.



Executive Summary

Michigan has 49,567 active nonprofits¹ despite the fact the Michigan Nonprofit Association (MNA) has documented that the number of Michigan nonprofits declined by 13% from 2011 to 2014 due to the Great Recession.² This decrease in number should then leave no one surprised that one of the primary concerns for nonprofits is financial sustainability. Of the more than 5,000 nonprofits surveyed nationally, 41% cited that achieving long-term financial stability is one the greatest challenges they face.³

Building energy efficiency upgrades have the ability to curb utility and operating costs and increase the comfort of employees and clients. However, energy efficiency programs are not always designed to be as accessible to nonprofits. This creates an unfortunate reality where nonprofits—organizations that are inherently focused on mission-critical activities—often miss opportunities to decrease operating costs and use a larger share of their budget on providing much-needed, direct services.

This paper, written for the Michigan nonprofit community, describes the robust nonprofit sector in Michigan and makes the case that there is a need for increased energy efficiency programs and funding for a clean energy economy. It also serves as a primer to understand the Michigan energy policy landscape and how energy efficiency projects can be funded. The first section describes Michigan's nonprofit sector; the second describes the results from a survey, interviews, and energy use analysis completed by Elevate Energy and Michigan Energy Options; the third describes Michigan's energy policy and programs; and the fourth describes Michigan's use of energy efficiency financing. The last section makes recommendations that will promote energy efficiency of the buildings that nonprofits occupy.

To better understand the energy use and need for energy efficiency in Michigan, Elevate Energy conducted a survey of Michigan nonprofits that resulted in the following findings:

- Monthly utility costs, excluding water, ranged from \$200 to more than \$10,000
- 86% of respondents used natural gas to heat their facilities
- Half of the organizations reported that they had recently experienced issues with their heating, ventilation, and air conditioning (HVAC) systems, and about a third said that they had electrical or lighting problems
- 11% of organizations said that they had recently experienced utility bill volatility
- 25% of organizations noted that there had been no energy efficiency (e.g., new lighting, improved HVAC, etc.) or construction improvements (e.g., new roof) in the last five years

The policy landscape in Michigan is promising, but there are improvements to be made. Recent legislation set a goal for 35% of the state's energy to come from renewables and energy efficiency by 2025. While the utility efficiency goals remain at 1% annually for electric utilities and 0.75% for natural gas, the new law extends those requirements through 2021, removes a cap on how much can be spent on programs, and rewards them

for achieving even greater savings as well as allowing for some costs to be recovered. Currently, the utilities are achieving their energy savings,⁴ but consistent "over-subscriptions" to the programs indicate that not everyone who could benefit from energy improvements is currently being reached. Utilities should respond to the oversubscription of their programs by taking advantage of the spending cap removal and infusing

^{1.} Commonwealth Edison. The Power of Energy Efficiency in Nonprofits. Chicago: 2015.

^{2.} Public Sector Consultants, Michigan Nonprofit Association, and Council of Michigan Foundations. Economic Benefits of Michigan's Nonprofit Sector. 2014. https://www.mnaonline.org/docman/uncategorized/281-economic-impact-of-nonprofit-sector-2014/file

^{3.} Commonwealth Edison. The Power of Energy Efficiency in Nonprofits. Chicago: 2015.

^{4. &}quot;2016 Report on the Implementation of P.A. 295 Utility Energy Optimization Programs," November 30, 2016, accessed December 15, 2016.

more capital into programs, especially those that nonprofits can take advantage of.

Adequate funding is essential to propel the adoption of energy efficiency practices in nonprofits. There are two types of energy efficiency project financing: traditional and alternative. Traditional mechanisms include rebates and low-interest loans funded through money set aside in the abovementioned utility spending plans as well as grants provided by foundations. New, alternative financing options include Property Assessed Clean Energy funds as well as On-Bill Financing.

In order to address the concerns regarding energy costs and the best way to mitigate them, the coordination of many players from nonprofits and government to utilities and energy program administrators is necessary to ensure that the benefits of energy efficiency are realized by Michigan nonprofits. Those organization's funders also have a part to play in the clean energy economy. Foundations can directly benefit from energy efficiency upgrades, and can facilitate the adoption

of energy efficiency upgrades by signaling to grantees that the financial stability and built environment of a nonprofit is a priority.

This can be accomplished by the nonprofit community through the following actions:

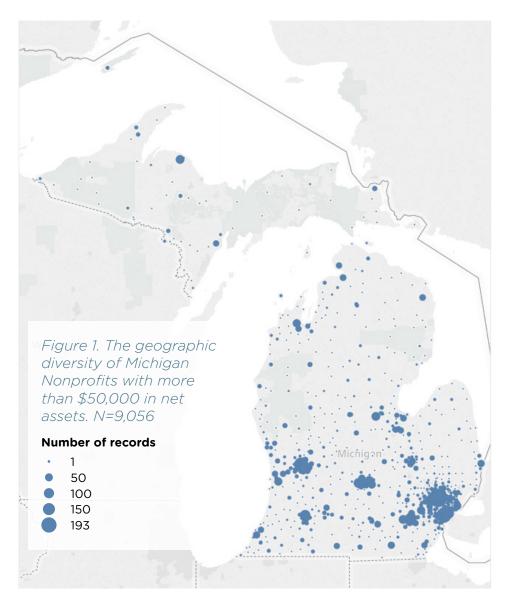
- 1. Nonprofits should inquire about and take advantage of existing utility funded energy efficiency programs and funders can make clean energy activities more accessible by providing efficiency-specific grant dollars or investments.
- 2. Funders can set an example and invest in the energy efficiency of their own buildings.
- 3. The nonprofit community should share the benefits of energy efficiency to nonprofit facilities, especially the financial benefits that allow organizations to focus on their mission.
- 4. Nonprofits in the community can be open to data and information sharing with energy efficiency professionals.

Nonprofit Sector in Michigan

The nonprofit⁵ sector in Michigan is a vibrant one that spans the state and provides a diverse set of services and knowledge. The most comprehensive source of data on nonprofits is GuideStar, which aggregates information from 990s, the nonprofit tax filing form. According to GuideStar, Michigan has 49,567 active nonprofits. The gross majority of these (35,058) are 501(c)3 public charity-designated organizations. These organizations are extremely varied in financial asset size, function, and number of employees. For instance, their assets range from less than \$100 to more than \$2 billion.

Nonprofit organizations are classified by their mission through a National Taxonomy of Exempt Entity (NTEE) code. The codes refer directly to the type of organization such as hospitals, prevention of abuse, etc. Understanding the number of various organizational types is a useful tool to draw inferences on building type and potential energy use patterns. For example, animal shelters are likely climate controlled 24 hours a day and senior housing is often a multifamily building.

Through Elevate Energy's experience as a 501(c)3 nonprofit that conducts technical energy assessments and increases access to clean energy for affordable housing and community-based organizations, we have discovered nonprofits are most likely to move forward with energy



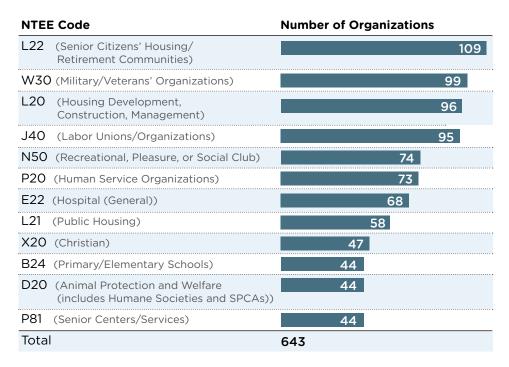
efficiency improvements if they own their building. As such, Elevate restricted the analysis to organizations that have Land, Building, and Equipment Assets of more than \$150,000.

This constraint could result in missing organizations that do own their buildings but that have depreciated, or organizations that rent their building. Figure 2 shows the prevalence of the 10 most

^{5.} For the purpose of this paper, we are defining a nonprofit as any tax-exempt organization. 6. As of October 25, 2016.

common organizations types that have more than \$150,000 of Land, Building, and Equipment Assets. Organizations that provide housing for senior citizens are the most common followed by military veterans' organizations. The buildings within these top ten are likely to include some of the following building types: multifamily housing, offices, and hospitals.

Figure 2. Ten most common NTEE codes of Michigan nonprofits that had Land, Building, and Equipment with assets greater than \$150,000.



Michigan Nonprofits' Need

While increasing the financial stability of nonprofits could arguably be done in a variety of ways, energy efficiency delivers financial savings as well as a plethora of additional benefits including acting as a job creator, increasing comfort, productivity, and health of occupants, and improving the environment. Additionally, energy efficiency upgrades have been specifically shown to have positive effects on children occupants leading to fewer growth problems, healthier weights, and lower their likelihood to be hospitalized. However, these known benefits will only manifest themselves if Michigan nonprofits have the resources

and information to make their buildings more energy efficient. To better understand how to do that, Elevate surveyed and interviewed various Michigan nonprofits. The results were definitively in support of bringing energy efficiency information, services, and resources to these organizations.

Michigan Nonprofit Survey

Due to the wide variety of types of buildings occupied by nonprofits, and the relatively little public information about them, Elevate Energy conducted a survey to gather information about their

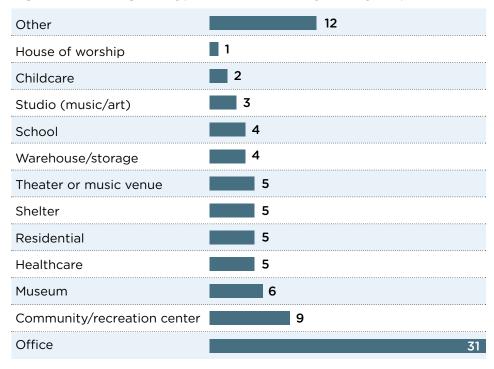
building characteristics and energy costs. We created a list from GuideStar of Michigan nonprofits that had Land, Building, and Equipment Assets of more than \$150,000 in an effort to survey those nonprofits that own their buildings. Of the 3,664 nonprofits that met the criteria, Elevate Energy was able to obtain 411 active emails from the GuideStar system. We received 50 responses, a response rate of 12%. The maps in Appendix A show that the geography of the contacted nonprofits and those that responded mirrors the larger population show in Figure 1.

^{7.} Philbrick, Deborah. Elevate Energy. Preserving Affordable Multifamily Housing through Energy Efficiency. Chicago: 2014. http://www.elevateenergy.org/wp/wp-content/uploads/Preserving_Affordable_Multifamily_Housing_through_Energy_Efficiency_Final_2.18.14.pdf

Eighty-eight percent of the respondents owned their building. This is relevant because, as mentioned above, it is often easier to do energy efficiency improvements when there is no landlord that needs to approve them. It also reinforces that the search parameters of a minimum of \$150,000 in Land, Building, and Equipment assets returned a large percentage of owneroccupied buildings. Furthermore, 77% of the respondents are the sole occupants of their space, which can make upgrades logistically simpler.

Monthly utility costs ranged from \$200 to more than \$10,000 and 86% of respondents used natural gas to heat their facilities. The range of the size of the buildings also varied widely, but the median size was 12,000 square feet. Half of the respondents said that they had recently experienced issues with their HVAC systems and about one third noted that they had electrical or lighting problems. Sudden changes in utility bills can also indicate a malfunctioning system and 11% of organizations cited recent utility bill volatility. Forty-two percent stated that they did not have any issues with their building. Despite the high percentage of responses indicating energy related issues, 25% noted that there had been no energy efficiency (e.g., new lighting, improved HVAC, etc.) or construction improvements (e.g., new roof) in the last five years. This feedback came from a wide variety of different nonprofits. Their NTEE codes can be found in Appendix B, Table 1.

Figure 3. Building use types as identified by survey respondents.



Nonprofit Interviews

We conducted interviews with three organizations – SafeCenter, Shiawassee Humane Society, and Raven Hill Discovery Center - to better understand the opportunities and challenges facing Michigan nonprofits in regards to their energy use. All three organizations understood the benefits that an energy efficient facility could bring to their mission, although their motivations were slightly varied.

SafeCenter provides comprehensive services to the victims of domestic and sexual violence in Clinton and Shiawassee Counties. They own four buildings in addition to a garage and a storage unit. Some of the buildings are living spaces (shelters) that must be climate controlled 24/7. On

average, SafeCenter spends \$1,000 per month for water and electricity. Benefits from energy efficiency upgrades would extend beyond reduced operating costs. Tonya Avery, SafeCenter Executive Director, noted that the lighting is very poor and that the temperature in each room is unbalanced. Tonya spoke about how saving money on utility bills will directly result in more resources for their clients, but will also have a positive impact on staff comfort. Though Tonya understands the benefits of energy efficiency, choosing to spend on money on upgrades versus immediate program needs can be difficult. Several interviewees echoed this trade-off also mentioning that it can be a challenge to invest in infrastructure improvements when funders prioritize seeing a high percentage of every dollar go toward programs.

The Shiawassee Humane Society, which cares for 100 animals per day, also recognized the value of energy efficiency. Electricity and gas utilities cost the shelter more than \$1,300 every month. Dave Faulkner, the Society's Executive Director, noted that they have had trouble with HVAC systems as well as lighting. Dave reflected that "most nonprofits do not have readily available cash other than to support their mission."

Both the Shiawassee Humane Society and SafeCenter have received a free energy assessment from Michigan Energy Options made possible by a joint grant from the Cook Family Foundation and C.S. Mott Foundation. The energy audit conducted for the SafeCenter identified an opportunity to invest approximately \$3,000 for an LED lighting retrofit that would save the organization approximately \$1,500 per year with a two-year payback. Nonprofits across Michigan have similar opportunities, but without assistance the energy savings won't be realized.

The third interview was with Cheri Leach from the Raven Hill Discovery Center, which provides a hands-on experience linking science, history, and art. The Center has already taken advantage of some energy efficiency opportunities. They recently installed LED lights in the main museum room and energy consumption dropped 62%. Raven Hill is in a unique position to use energy efficiency improvements to directly impact their mission. Cheri said it best: "I keep coming back to the science

We can put more money in the long-run towards clients. A sustainable facility would help control and limit the repairs and maintenance needed over time. Finally, staff efficiency and comfort will improve, helping our organization to thrive.

-Tonya, SafeCenter

of everything, being able to see the difference, to us it's like having a learning exhibit as well as potentially helping to decrease energy cost because people can see what might work for them." These opportunities, where financial sustainability and the organization's mission can both directly benefit, should not be overlooked.

Energy Use

To lower costs, a building's energy use can either be decreased by efficiency measures, such as installing better insulation or updating lighting systems, or offset by photovoltaic solar panels and geothermal systems. Energy efficiency is recommended as the first step towards a clean energy economy. The impact of solar panels is greater in a building using less

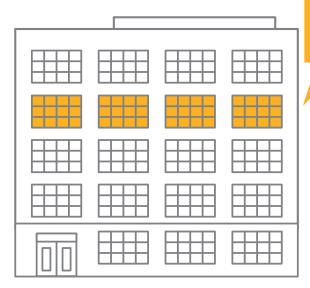
energy, which results in the need for fewer solar panels to provide a cost-effective energy offset. Energy efficiency is typically the most cost-effective place to start when considering the range of clean energy actions. The efficiency upgrades, which modernize a building, can be especially important in a cold weather climate such as Michigan where a significant percentage of

energy use is attributed to space heating. Typical energy efficiency upgrades might be less necessary in new construction built to current energy codes, but many buildings that nonprofits operate in were built before the nation's first energy codes went into effect in 1978. The aforementioned survey found that the median building construction date was 1965.

Typical energy efficiency upgrades might be less necessary in new construction built to current energy codes, but many buildings that nonprofits operate in were built before the nation's first energy codes went into effect in 1978. The aforementioned survey found that the median building construction date was 1965.

Figure 4. Key Metrics in Michigan Energy Options Nonprofit Pilot

25,100 square feet
Electricity EUI:
20,460 BTU/sf/year
Gas EUI:
39,712 BTU/sf/year
Potential Energy Savings:
220,930 kBTU/year
Potential Dollar Savings:
\$4,901/year



Energy use in buildings is often discussed in terms of Energy Use Intensity (EUI), which is a measurement that normalizes energy use based on building size and seasonal weather variations, calculated as British Thermal Units (BTUs, a measure of energy) used per square foot annually.8 Using EUI, as opposed to just gross energy consumption, allows many different types of buildings to be compared with each other regardless of their size, function, or geography. Using EUI information allows for helpful

research and understanding nonprofits in the larger context of building energy use.

One nonprofit type that has been researched extensively by the United Stated Environmental Protection Agency (US EPA) is houses of worship. Nationally, there are 370,000 houses of worship, and in Michigan alone there are more than 4,000 religious nonprofits9, which spend more than \$3 billion on energy each year. If worship facilities cut their energy use by 10 percent,

they would save \$315 million and prevent one million tons of greenhouse gas emissions.¹⁰

The Michigan Nonprofit Survey highlighted that a large number of the respondents (62%) occupied some office space. While the US EPA has not analyzed the energy use of nonprofit-specific offices, they have published trends on offices more broadly. Specifically, office buildings that are the most energy intensive use almost nine times as much energy as those that are the least intensive.11 Buildings that are the most energy intensive are also the most likely to be able to make energy saving improvements, and to realize significant savings through efficiency. This highlights the need for nonprofits to better understand their own energy use intensity, either on their own or by partnering with a energy efficiency service provider to receive an energy assessment.

In 2012 and 2013, Michigan Energy Options, a 501(c)3 nonprofit based in East Lansing, Michigan, conducted a nonprofit energy efficiency pilot project. They completed assessments on 21 nonprofits which ranged in type from warehouses (food banks) and churches to offices and multifamily housing. The figure above shows a few of the key findings from that pilot. Most striking is the potential for monetary savings. The median savings potential was almost \$5,000 per year, which equates to a little over \$400 per month.

^{8. &}quot;What is energy use intensity (EUI)?" ENERGY STAR. Accessed January 2, 2017. https://www.energystar.gov/buildings/facility-owners-and-managers/existing-buildings/use-portfolio-manager/understand-metrics/what-energy.

^{9.} GuideStar, as of October 25, 2016.

^{10. &}quot;Energy Star Congregations: New England." ENERGY STAR. 2011. Accessed January 2, 2017. https://www3.epa.gov/region1/eco/energy/pdfs/NERegionalHOWENERGYSTARRatingAwards.pdf

^{11. &}quot;Energy Use in Offices." ENERGY STAR. 2015. Accessed January 2, 2017. https://www.energystar.gov/sites/default/files/tools/DataTrends_Office_20150129.pdf

How to Fill the Gap

Bringing relief to the financial and physical stress caused by energy inefficient nonprofits can be better accomplished by understanding the current policy environment and funding mechanisms.

Michigan Energy Policy

Through 2016, Michigan Public Act 295 required all utilities to achieve annual energy savings targets and a 10% renewable energy portfolio. Utilities were required to put together plans outlining how they would achieve savings through a portfolio of efficiency programs for the residential and commercial/industrial (C/I) sectors (nonprofits are typically eligible for the latter). Michigan in 2016 had the second highest percentage of clean energy jobs in the Midwest overall, of which over half were in energy efficiency. It also had the second highest number of jobs in solar energy, showing the impact of these standards on workforce and investment in the state.12

In December 2016, two large new energy bills were passed that significantly increase the opportunity in the state for renewables and energy efficiency and provide greater certainty to the sector. There is an opportunity for the nonprofit sector to benefit from this growth. Michigan's renewable energy standard created \$2.2 billion in economic growth in Michigan in just the first 5 years of implementation.¹³ Based on an analysis by the Michigan Public Service Commission, for every \$1 invested to meet statewide energy efficiency goals, Michigan customers saw over \$4 in benefits.¹⁴

Overall, the utilities are achieving their energy savings,15 but consistent "over-subscriptions" to the programs indicate that not everyone who could benefit from energy improvements is currently being reached. Additionally, the programs may not always provide sufficient levels of monetary incentives for nonprofits operating under strict budget constraints or who are not able to cover up-front costs that would be reimbursed later in the year. Nonprofits do appear to be taking advantage of some programs. Data from

Consumers Energy indicates that since 2013 about 1,300 nonprofits have participated in their programs: receiving audits, direct install measures, and monetary incentives resulting in an average of around \$1,200 in annual savings per organization. However, this represents just under 3% of nonprofit organizations in Michigan (many of whom own more than one building), so there is still a great deal of potential savings in the sector.

The new energy bills passed in December 2016 are likely to lead to greater investments statewide in energy efficiency, and it will be important to make sure that investment is reaching all sectors of the economy, especially those underserved and with much to gain such as nonprofits. The new law increases the renewable portfolio from 10% to 15% and sets an overall goal for 2025 of

Michigan's renewable energy standard has created:



in economic growth in Michigan since 2009.

^{12. &}quot;Clean Jobs Midwest," March 01, 2016, accessed December 2, 2016, http://www.cleanjobsmidwest.com/wp-content/uploads/2016/03/CJM-Full-Story-Final-1.pdf.

^{13. &}quot;Report on the implementation of the p.a. 295 renewable energy standard and the cost-effectiveness of the energy standard," February 14, 2014, accessed January 2, 2017, http://www.michigan.gov/documents/mpsc/pa295report_447680_7.pdf.

^{14. &}quot;2016 Report on the Implementation of P.A. 295 Utility Energy Optimization Programs," November 30, 2016, accessed December 15, 2016,

^{15.} Ibid. http://www.michigan.gov/documents/mpsc/2016_Energy_Optimization_Report_to_the_Legislature_with_Appendix_Nov_30_543919_7.pdf.

^{16. &}quot;Consumers Energy News Release," December 13, 2016, accessed January 7, 2017, http://www.michigan.gov/mpsc/0,4639,7-159-52495---,00.html



Michigan Saves issued its first loan in September 2010, and less than five years later its total loan portfolio has crossed the \$50 million mark.

meeting 35% of Michigan's energy needs through renewable power and energy efficiency. While the utility efficiency goals remain at 1% annually for electric utilities and 0.75% for natural gas under current Energy Optimization plans, the law extends those requirements through 2021, removes a cap on how much can be spent on programs, and rewards them for achieving even greater savings as well as allowing for some costs to be recovered.

While the passage of these bills creates important certainty at the state level, federal changes do leave some unknowns for energy policy, namely the Clean Power Plan (CPP) and how it will be implemented in Michigan. Due to legal challenges the CPP is currently under a stay by the Supreme Court and Michigan planning work for CPP compliance is officially "frozen." In many ways, this uncertainty makes the case for energy efficiency even stronger. Studies consistently show that energy efficiency is a cost-effective and least-cost source of electricity, and is a key component of any energy plan, whether compliance-focused or

not.¹⁷ Additionally, with aging infrastructure in Michigan, energy efficiency is expected to play a key role in Michigan's energy future regardless of the type of energy policy that is developed.

Michigan Energy Efficiency Financing Programs

While policy around utility programs and state planning is important for allowing and encouraging energy efficiency, it is not the only component. Financing programs are also a key component in incentivizing and facilitating efficiency. Energy efficiency upgrades are typically funded through two general mechanisms, traditional and alternative. Traditional mechanisms include rebates and low-interest loans funded through money set aside in the abovementioned Energy Optimization plans as well as grants provided by foundations. New, alternative financing options include Property Assessed Clean Energy funds as well as On-Bill Financing.

Traditional Financing Options

Michigan Saves is an independent nonprofit "dedicated to making energy improvements easier for all Michigan energy consumers."18 In practice, they offer a variety of energy efficiency financing options for residential, multifamily, commercial, and public sector buildings. Michigan Saves not only offers its own financing packages, but also implements financing offers on behalf of Investor Owned Utilities (IOUs), such as Consumers Energy & DTE Energy. Michigan Saves issued its first loan in September 2010 and less than five years later its total loan portfolio has crossed the \$50 million mark.

Another traditional funding mechanism is through grants, which often covers upfront work needed to determine action: benchmarking, energy audits, financial analysis, and other technical assistance. Grants could also directly pay for the building upgrades by providing money for capital and operating reserves or to cover training or additional staff around facility and asset management. Another option is to use grant money to facilitate other financing programs through interest-rate buy downs, down payment assistance, or loan loss reserves. Some of this work is already happening in Michigan, but there is a great deal of potential for expansion. The Cook Family Foundation, serving

^{17. &}quot;New Research Shows Michigan Could Actually Profit from Clean Power Plan Compliance," American Council for an Energy-Efficient Economy, October 16, 2016, accessed November 5, 2016, http://aceee.org/blog/2016/10/new-research-shows-michigan-could.

^{18. &}quot;About," Michigan Saves, 2016, accessed December 7, 2016, http://michigansaves.org/about/.

Shiawassee County, runs a Nonprofit Capacity Building Program¹⁹ where members are provided trainings and technical assistance. Through that program, more than six nonprofits are getting energy assessments to identify energy efficiency retrofit opportunities. Similarly an Energy Foundation grant is being used in Detroit, Michigan to fund energy efficiency assessments for six nonprofit developers for affordable housing redevelopments to create energy efficient and healthier buildings for those that need it the most.

Alternative Financing Options

Property Assessed Clean Energy (PACE) is a tool that allows energy efficiency, water efficiency, and renewable energy projects to be financed through a loan that is then repaid as a Special Assessment on a property's tax bill. PACE loans can be more attractive than traditional loans because 100% of the costs can be financed and because the nature of a Special Assessment makes it low risk for the lender.²⁰ Furthermore, PACE Special Assessments stay with the property even if it is sold, which means that the length of the loan can be longer than typical, 10-20 years. This allows a building owner to undergo more extensive and costly improvements. In Michigan, the current PACE program, Lean and Green Michigan, is administered

66 Anything we're not spending on energy we can certainly put toward caring for these animals and looking to put them in forever homes.

-Dave Faulkner, Shiawassee Humane Society

by Levin Energy Partners.²¹ PACE financing provides a solution for many nonprofit owned buildings by providing the needed access to capital. Both Washington DC and New York State have designed programs specifically for the nonprofit sector.²² Both programs combine credit enhancements with PACE financing to bring down interest rates to a level even more attractive to nonprofits.

On-Bill Financing (OBF) is another trending alternative financing mechanism that is making waves across the country and allowing more building owners to invest in energy efficiency and related health and safety improvements. While each jurisdiction has a slightly nuanced model, at its heart, OBF is a program where building owners pay back an energy efficiency loan on their utility bill. This model is a good fit for customers who might not have the credit score needed for a traditional loan, as one of the primary determinants of loan worthiness is the customer's utility bill payment history. In Holland, Michigan, the Holland Energy Fund, Michigan Saves, and the Mott Foundation are teaming up to pilot OBF.23 Single family homeowners are able to borrow \$5,000-\$30,000 of capital for

energy efficiency and renewable energy projects at interest rates not to exceed 6.99%. Currently, this is only a residential program, but, if successful, could serve as a model for a commercial program that nonprofits could take advantage of.

Looking Ahead

It is well-documented that energy efficiency upgrades have the ability to curb utility and operating costs and increase the comfort of employees and clients. However, it is a challenge for nonprofits to prioritize making improvements and to access the capital needed to release energy efficiency's full potential in the Michigan market.

There is a great need for nonprofits to take advantage of the current clean energy programs and funds mentioned earlier, but also for the funding community to create more nonprofit energy efficiency-specific funding opportunities. As Michigan works toward their 2025 clean energy goals, traditional program implementers will likely seek to diversify their portfolio of projects, which is an opportunity for outreach to nonprofits. Funders might choose to earmark

^{19. &}quot;Nonprofit Capacity Building," Cook Family Foundation, 2017, accessed December 15, 2016, http://www.cookfamilyfoundation.org/capacity-building/.

^{20. &}quot;What Is PACE?," PACENation, December 3, 2016, accessed December 15, 2016, http://pacenation.us/what-is-pace/

^{21. &}quot;Lean & Green Michigan™ - Michigan's Energy Finance Marketplace™," 2016, accessed December 7, 2016, http://leanandgreenmi.com/index.

^{22. &}quot;PACE for Nonprofit-Owned Buildings: Cutting Energy Costs to Serve Communities," PACE News, May 16, 2016, accessed December 7, 2016, http://pacenation.us/pace-nonprofit-owned-buildings-cutting-energy-costs-serve-communities/.

^{23. &}quot;On-Bill Loan Program," Holland Energy Fund, 2016, accessed December 1, 2016, http://hollandenergyfund.com/on-bill-loan-program. & "Sparking Change | Mott Foundation," Charles Stewart Mott Foundation, January 27, 2016, accessed December 7, 2016, https://www.mott.org/news/articles sparking-change/.

a carve-out in a larger grant to be used for building upgrades, but they can also move beyond the traditional grant-making mechanism. Another powerful tool is engaging in alternative forms of financing, such as the Mott Foundation's support of the on-bill financing program in Holland and Solarize Michigan in Bay County.

Funders have a distinctive motivation to improve the financial sustainability of the nonprofits that they support and they have the opportunity to influence nonprofits to prioritize the energy efficiency of their buildings. The first step is that they can serve as early adopters and be stewards of energy efficiency. Funders can proactively get an energy assessment and engage with the myriad of energy efficiency resources in Michigan.

The third is for the nonprofit community to share the benefits of energy efficiency. The positive impacts of energy efficiency measures go beyond a "therm" or "kilowatt hour" saved. Energy efficiency has the potential to decrease operating costs, increase comfort, improve health, and enhance the work environment of a building. The benefits allow organizations to stay focused on their mission and provide more to their constituents. Nonprofits and their supporters should engage in a dynamic conversation to discuss if investing in the energy efficiency of a building is acceptable or even encouraged to prioritize the financial sustainability of their organization.

Finally, encourage the reciprocal sharing of resources between foundations, nonprofits, and program administrators to increase energy efficiency upgrades. The larger nonprofit community could connect with energy efficiency program administrators and adopt a policy of transparency regarding their personal energy data. In general,

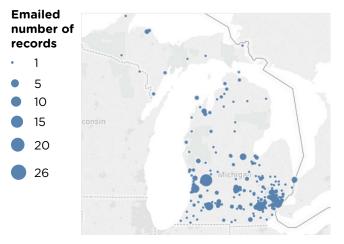
collecting energy use and cost data about the nonprofit sector is difficult because energy use is more frequently reported by primary building activity and not tax status. Data transparency allows energy efficiency companies to design programs to better serve the unique needs of nonprofits. Connecting nonprofits with resources for discounted or free energy assessments and upgrades coupled with the nonprofit's openness to share those learnings will result in the entire sector benefitting.

The potential that energy efficiency has to bolster a nonprofit's mission is already being touted by some foundation leaders. Debbie McKeon, from the Council of Michigan Foundations, noted that "there are alignments between energy efficiency, work force development, and poverty reduction." This type of forward thinking is exactly what the nonprofit sector needs to embrace energy efficiency and participate in the clean energy economy.



Appendix A—Supporting Survey Data

Figure 5. These two maps show where the nonprofits were located that we surveyed and those who responded.



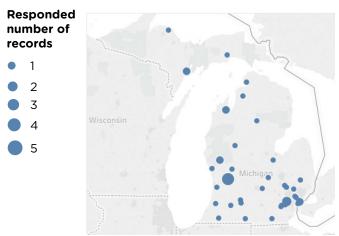


Table 1. NTEE Codes of Survey Respondents

NTEE Code	Number of Respondents
A20 (A) 0 H 10 1	
A20 (Arts, Cultural Organizat	, , ,
A50 (Museum and Museum A	
A51 (Art Museums)	2
A52 (Children's Museums)	1
A54 (History Museums)	1
A61 (Performing Arts Center	s) 1
A65 (Theaters)	2
A80 (Historical Societies and	Related Activities) 1
A99 (Other Art, Culture, Hum Organizations/Services	
B21 (Kindergarten, Nursery S Early Admissions)	schools, Preschool,
B24 (Primary/Elementary Sch	nools)
B70 (Libraries, Library Science	ce) 1
C32 (Water Resource, Wetlan and Management)	nds Conservation 1
D20 (Animal Protection and (includes Humane Soci	
E20 (Hospitals and Primary	Medical Care Facilities) 1
G30 (Cancer)	1
G41 (Eye Diseases, Blindness	s, and Vision Impairments)
173 (Sexual Abuse, Prevention	on of) 1
J30 (Vocational Rehabilitation and Employment for Di	
K30 (Food Service, Free Foo	od Distribution Programs) 1

NIEE Code Number of Respondents		
K99	(Other Food, Agriculture, and Nutr	ition N.E.C.) 1
L41	(Temporary Shelter For the Homel	
N20	(Recreational and Sporting Camps (Day, Overnight, etc.))	1
023	(Boys and Girls Clubs (Combined)	1
P12	(Fund Raising and/or Fund Distrib	ution) 1
P20	(Human Service Organizations)	3
P27	(YMCA, YWCA, YWHA, YMHA)	1
P30	(Children's and Youth Services)	2
P43	(Family Violence Shelters and Serv	ices) 3
P60	(Emergency Assistance (Food, Clo	thing, Cash)) 1
P81	(Senior Centers/Services)	1
P82	(Developmentally Disabled Service	s/Centers) 1
P99	(Human Services—Multipurpose ar	d Other N.E.C.)
S12	(Fund Raising and/or Fund Distribu	ution) 1
S20	(Community, Neighborhood Development, Improvement)	2
S50	(Nonprofit Management)	1
T30	(Public Foundations)	1
T31	(Community Foundations)	2
T70	(Fund Raising Organizations That includes Community Funds/Trusts Giving Programs e.g. United Way)	<u> </u>
U20	(Science, General (includes Interdi Scientific Activities)	sciplinary 1