

APRIL 22, 2016

# ENERGY EFFICIENCY IN MICHIGAN K-12 SCHOOLS

SURVEY AY 2015-16



**MICHIGAN RENEWABLE  
SCHOOLS PROGRAM**

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## EXECUTIVE SUMMARY

In January 2016, the Ecology Center released a survey targeting feedback from K-12 school administrators and facilities directors. The intent was to assess current needs and opportunities related to increasing investments in energy efficiency in K-12 school facilities. The survey was promoted through partner channels and existing networks (including the Michigan School Business Officials), and was intended to illuminate specific resources and tools that K-12 school communities identify as necessary in moving energy projects forward in their school/districts.

The respondents represent **over 400 instructional facilities and 100 additional non-instructional facilities**. These facilities are estimated to total 30-50M SF of institutional space, or \$50M in estimated annual utility costs.

### KEY FINDINGS

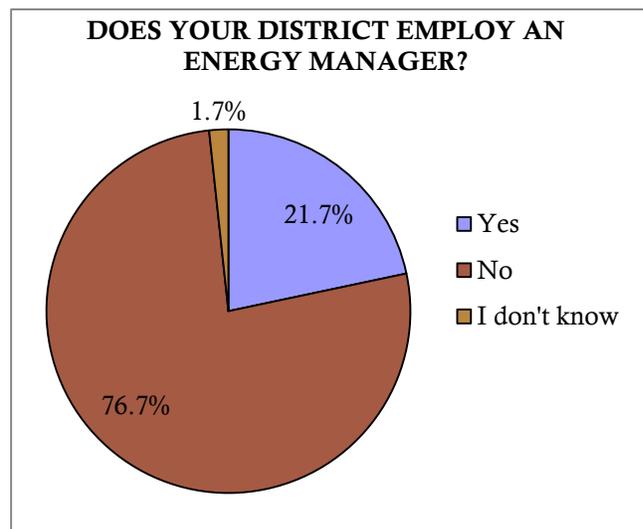
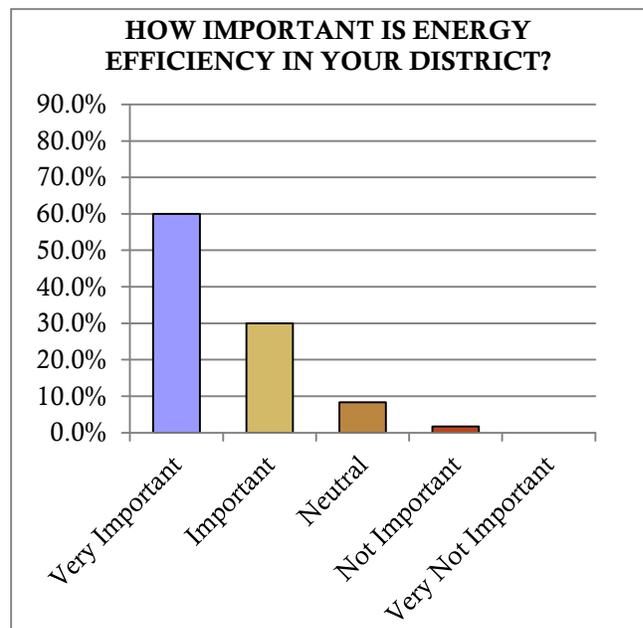
A large percentage of respondents indicated that energy efficiency is important (90%) in their school/district.

80% also indicated they are tracking energy usage at their schools. However, more than half of respondents are using Excel based spreadsheets or just monitoring utility bills on a monthly basis. A small percentage (15%) were taking advantage of ENERGY STAR Portfolio Manager while a number of other schools indicated they were using EnergyCAP or some other proprietary solution for tracking.

Only 22% of respondents indicated their school/district employed an Energy Manager, or personnel whose primary responsibility is energy management.

When asked specifically about the barriers that exist in moving projects forward, respondents most frequently responded that a “limited budget” and a “lack of funding” were very problematic, with lack of “expertise on staff” and “lack of staff to implement” also identified as problematic.

Most schools seem to prefer to handle projects internally or work collaboratively with outside professional organizations to execute projects. When asked how projects were implemented at their school/district, only one (1) respondent selected “outside professional organization” as a sole solution provider. This is consistent with feedback captured from 2009-11 and is important to consider when developing solutions for this market sector.



More than a third of respondents have done minimal to no lighting upgrades, while nearly 50% of respondents have not upgraded heating and cooling plants in the last ten (10) years – and likely longer. Other opportunities appear to exist related to ventilation systems, commissioning, behavioral management and water conservation. These represent significant dollar savings potential.

Overall, the school/district respondents sent a clear message: funding is a critical need for moving projects forward. Additionally, technical engineering and financing education and tools seem to be important components to implementing energy efficiency and renewable energy projects. Extra incentive funding and assistance can move a project in front of “other more pressing needs.”

A recurring theme was the need for increased access to incentives/grants and low-cost funding. When asked about preferred interest rates and length of financing terms, school/districts identified 0-2% financing packages with a 3-5 year simple payback window as a highly rated finance solution.

In general, schools expressed a strong interest in energy efficiency, and indicated that assistance – either in the form of funding or technical engineering/project assistance – would be beneficial to getting projects done. Additionally, they expressed interest in a collaborative engagement that allowed schools to maximize the savings to their district and reduce maintenance and operating costs. They understand that there is monetary value and savings to be had from implementing efficiency measures in their schools.

Finally, the interest level appears to remain strong in participating in a statewide energy program for K-12 schools. Over 80% of respondents expressed interest in participating in technical energy and financing program. The list of school/districts responding to the survey are identified in the Appendix.

