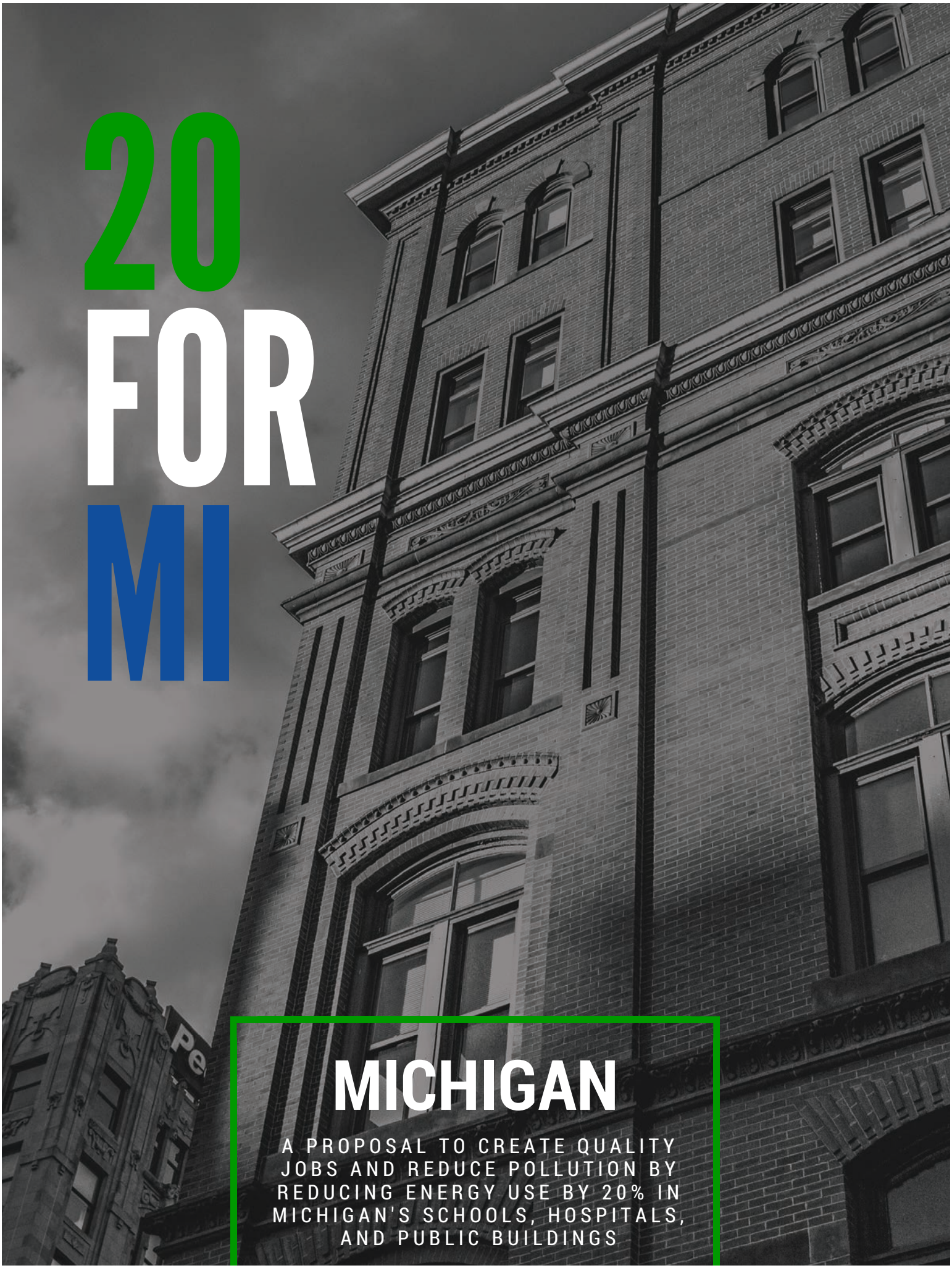
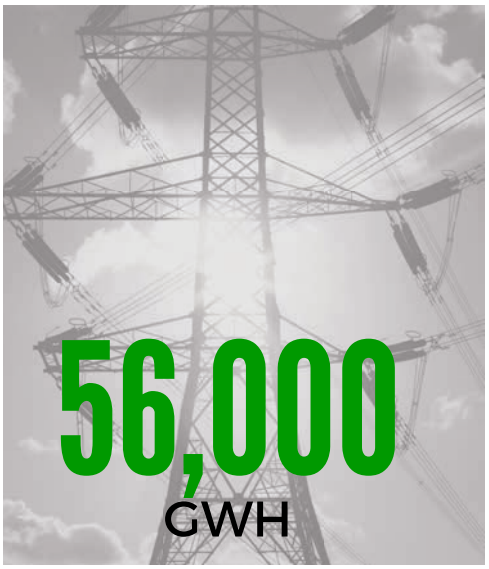


20 FOR MI

MICHIGAN

A PROPOSAL TO CREATE QUALITY JOBS AND REDUCE POLLUTION BY REDUCING ENERGY USE BY 20% IN MICHIGAN'S SCHOOLS, HOSPITALS, AND PUBLIC BUILDINGS



Estimated lifecycle energy savings when assuming average effective useful life (EUL) of equipment is 12 years.

Estimated direct jobs (in job years) created from 2016 to 2030. This does not include indirect and induced jobs. 2/3 of these jobs are blue collar.

Estimated consumer energy bill savings of $4.5 billion from 2016 to 2030 assuming 1 percent annual increase in commercial rates.

1 REDUCE ENERGY USE BY 20% IN SCHOOLS, HOSPITALS, AND PUBLIC BUILDINGS

2 SUPPORT GOOD JOBS WITH FAMILY-SUPPORTING WAGES AND BENEFITS

3 REALIZE SIGNIFICANT COST SAVINGS

Source: U.S. EPA

Source: ASCE

Source: U.S. EPA

4 SUPPORT JOBS IN THE LOCAL ECONOMY

5 IMPROVE CONDITIONS OF MICHIGAN'S SCHOOL AND HOSPITAL FACILITIES

6 REDUCE WASTE IN MUNICIPAL BUDGETS

Menu of Financing Options

Michigan can leverage and expand its existing programs to meet a 20 percent reduction in school, hospital, and public building energy use. For example, the Michigan Energy Office and Michigan Agency for Energy currently manage a revolving loan fund, and the Ecology Center, in partnership with the Michigan School Business Officials and Michigan Saves, is recommencing its K-12 school energy efficiency program. Between 2009-2011 this pilot program provided comprehensive energy efficiency assistance to 67 Michigan K-12 schools, which save over $400,000 annually as a result.

- Green Banks encourage private sector investment in energy efficiency and renewable energy, reducing the need for public subsidies. The Union of Concerned Scientists (UCS) has analyzed a potential green bank in Michigan finding that it could leverage an initial capitalization of $105 million into a $3.3 billion investment over the next 15 years. Kentucky, Pennsylvania, and Iowa are some states that have successfully operated green banks for energy efficiency.
- Bonds raise private revenue that can be used to finance energy improvement projects. Conventionally used for infrastructure construction, various bonding options exist for energy efficiency. For example: (1) General obligation (GO) and revenue bonds include tax-exempt interest rates, (2) Qualified Energy Conservation Bonds are subsidized by the federal government and potentially offer even lower interest rates.
- Close tax loopholes - The California Clean Energy Jobs Act (Proposition 39) amended the corporate income tax code to close a tax loophole. Projected revenue is allocated both to the General Fund and the Clean Energy Job Creation Fund for five years. This measure makes up to $550 million annually available for eligible projects to implement renewable energy generation and energy efficiency in schools.
- On-bill financing leverages the relationship between consumers and their utility providers to access funding for energy improvements. It allows customers to invest in energy efficiency retrofits or upgrades and pay back the cost through charges on their utility bills.
- Carbon allowance revenue - In a mass-based plan, states can sell or auction off allowances and use the revenue to fund the proposed program.
- Emission Rate Credit (ERCs) - In a rate-based plan, states can qualify school and hospital efficiency projects to generate ERCs, which can be sold to power plants with compliance targets.
- Federal funding for energy efficiency is sometimes available through block grants, such as occurred under the American Recovery and Reinvestment Act. Numerous programs have tailored grants and loan assistance to schools, including ENERGY STAR for K-12 schools, EnergySmart School, the Healthy School Environments program, the Local Climate and Energy Program, State Climate and Energy Program, and Qualified Zone Academy Bonds from the U.S. Department of Education.

Summary

This proposal recommends the implementation of a comprehensive program to achieve deep levels of energy efficiency in Michigan's schools, hospitals, and other public buildings (also known as the M.U.S.H. sector for Municipal Buildings, Universities, Schools, and Hospitals) as a venue to create quality jobs and reduce carbon pollution.

Energy efficiency is the cheapest form of energy, according to the American Council for an Energy Efficient Environment. Achieving a 20 percent reduction in electricity use in schools, hospitals, and other public buildings (from a 2012 baseline) would create a positive economic impact on jobs and reduce energy waste in these facilities.

Based on assumed electricity rate increases of 1 percent annually and total costs of energy efficiency projects in this sector, a 20 percent reduction in electricity would cost $4.9 billion over 15 years, and save $6.8 billion over the lifetime of the energy savings. The savings could be even greater if electricity rates increase more. The cost savings could be reinvested in education and health care services for Michigan residents.

An aggressive program to reduce energy use in Michigan's schools and hospitals would also create good jobs with family supporting wages and benefits. A school and hospital energy efficiency program could provide jobs for workers vulnerable to layoffs in power plants as well as new workers seeking a stable career in the green economy. In addition, the program can support training and education for existing building staff, engaging custodial staff and other building workers in the energy savings opportunities right at their fingertips.

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