

# Building Energy Codes and Michigan Communities

Building energy codes define the minimum requirements for the envelope (insulation, windows and air sealing), mechanical equipment and lighting of a building in terms of energy efficiency/conservation for new construction or major renovations of commercial and residential buildings.

Michigan has adopted the 2015 International Energy Conservation Code with state-specific amendments as the statewide energy code for residential and commercial buildings.



## How do building energy codes impact Michigan communities?

Buildings are responsible for nearly 50 % of Michigan's energy use. By reducing the energy use of buildings through the implementation and enforcement of energy codes, Michigan communities have an opportunity to save money while also realizing the associated health, climate and resiliency benefits. Building energy codes are also a critical step for communities seeking to achieve climate and sustainability goals. Additionally, energy codes serve as a strong consumer protection mechanism by locking in key efficiency improvements for years to come.

## What value do energy codes bring to Michigan communities?

### Jobs

The energy efficiency sector supports more than 85,000 jobs in Michigan. Of these jobs, 22% are in the construction industry, making it a significant source of employment for Michiganders.

### Stronger Local Economy

Building energy codes reduce operating costs, saving owners and renters money on their utility bills. This puts dollars back into residents' pockets that they are able to spend in the local economy.

### Resilience

Building energy codes ensure homes and commercial buildings are constructed with a range of efficiency measures, including insulation, efficient windows, and air sealing, that reduce the energy consumption of buildings and lower the demand on the grid. These measures also allow buildings to maintain safe temperatures for longer periods, enabling building occupants to shelter in place longer in times of extreme weather events.





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### Healthier Environments

Air sealing and mechanical ventilation requirements in the energy code control the source of fresh air intake and ensures appropriate makeup air in buildings, which reduces the build-up of mold and air pollutants in residences and offices. Reduced energy demand also leads to lower emissions from generation plants, improving outdoor air quality.

### Consumer Protection

Building energy codes ensure that all new buildings are constructed with a quality building envelope, locking in key efficiency and health improvements for years to come. This is particularly important for low-income families that often have disproportionately high energy bills and limited financial capacity.

### Value of Homes

Studies have shown that homes constructed and labeled to be energy efficient typically have a higher market value and sell faster than their less-efficient counterparts. This not only benefits the homeowners, but adds value to communities and increases the tax base for municipalities. Additionally, buyers of energy efficient homes are less likely to default on their mortgages, giving these homeowners the freedom and flexibility to invest in their communities.

## Codes & Sustainability Goals

Building energy codes are a critical component for Michigan municipalities to meet their climate and sustainability goals. By reducing the energy consumption of buildings, Michigan communities can cut carbon emissions by reducing the amount of power generation necessary. Additionally, energy efficiency measures improve the reliability and effectiveness of renewable energy sources by reducing demand on the grid.

## Energy Code Enforcement

Although the Michigan Energy Code is adopted at the state level, local jurisdictions are responsible for the implementation and enforcement of the energy code. This means that local code officials are responsible for ensuring the requirements of the Michigan Energy Code are met by commercial and residential buildings in their community.

## Developed in collaboration with



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