



Building a Strong Foundation for Michigan Tribal Nations to Adopt Efficient and Resilient Building Energy Codes

The **Building a Strong Foundation for Lasting Energy Code Adoption by Native Nations in Michigan** project aims to support Native Nations in Michigan in establishing an effective code adoption process and developing a comprehensive codes program centered on education, training, adoption, and compliance.

Funded by a grant from the Department of Energy (DOE) **Resilient and Efficient Codes Implementation (RECI)**, our team is a partnership between the Inter-Tribal Council of Michigan, Bay Mills Indian Community, and Slipstream, a Wisconsin-based nonprofit dedicated to accelerating climate solutions for everyone.

Our goal is to support Michigan's Native Nations in building resilient, healthy, and cost-effective structures, with a strong focus on enhancing energy codes.

Building Energy Codes for Tribal Nations: A Path to Efficient and Resilient Buildings

Building energy codes are one of the most significant opportunities for Native Nations to reduce building energy costs and emissions. Building energy codes, a subset of building codes, establish minimum standards for energy-efficient design and construction, ensuring that new and renovated buildings are healthy, cost-effective, and resilient. Codes address various technical aspects of a building, including insulation, windows, HVAC systems, lighting, and readiness for renewable energy. Code compliant buildings are more comfortable and cost-effective to operate, providing energy, economic, and environmental benefits.

Why Energy Codes Are Important Health and Community Benefits

Improved indoor air quality and reduced emissions associated with energy codes help mitigate health stressors, such as asthma and mold. Reduced energy expenditures enable households, particularly low-income families, to allocate their resources toward other essential needs.

Native Nations can adopt building and energy codes that reflect tribal goals, align with tribal sovereignty, and cultural values.

Economic Benefits

Lower energy bills for homeowners, schools, and businesses, and create employment opportunities in construction and advanced manufacturing.

Resilience and Reliability

Modern codes improve building durability and passive survivability during power outages or extreme weather events. Increased efficiency also reduces strain on the electrical grid, helping prevent outages.

Environmental and Energy Security

Reduced emissions, lower fuel consumption, and alignment with Tribal clean energy goals.

Michigan's Energy Code Impact

Residential Code

Michigan is currently using the 2015 International Energy Conservation Code for residential building design and construction and is in the process of adopting the 2021 IECC for residential buildings.

Residential Savings

The 2021 IECC, as Michigan's energy code for residential buildings, is estimated to save households approximately 10.7% in annual energy costs, resulting in about \$396 in utility bill savings for new homes. Over a 30-year mortgage, this can result in a net savings of \$7,300 to \$9,250 for new homeowners, with a positive cash flow achieved within the first few years.¹

The 2021 IECC code is expected to save MI residents over \$7.2 million in energy costs and cut carbon dioxide emissions by 44,850 metric tons in the first year across the entire state.

Commercial Code

In April 2025, Michigan adopted the 2021 International Energy Conservation Code (IECC) and ASHRAE 90.1-2019 with amendments for commercial buildings.

Commercial Savings - ASHRAE 90.1-2013 to ASHRAE 90.1-2019

Transitioning from ASHRAE 90.1-2013 to ASHRAE 90.1-2019 across two code cycles will save an average of \$0.186² per square foot annually in statewide total energy costs. The shift from ASHRAE 90.1-2016 to 2019 alone will cut statewide CO₂ emissions by 10.0 million metric tons (cumulative over 30 years), equivalent to the emissions from driving 2,182,000 cars for one year.³

¹R Salcido, Cost-Effectiveness Analysis of the 2021 IECC for the State of Michigan, August 2023 https://www.energycodes.gov/sites/default/files/2023-11/20230814_PNNL_MI_State_TA_Request_2021_IECC_RES%20MEMO_FINAL.pdf

²ASHRAE 90.1-2013 to ASHRAE 90.1-2016 results in a \$.123 sq ft savings. ASHRAE 90.1-2016 to ASHRAE 90.1-2019 results in a \$.063 sq ft savings.

³M Tyler, Cost-Effectiveness of ANSI/ASHRAE/IES Standard 90.1-2019 for Michigan, July 2021

https://www.energycodes.gov/sites/default/files/2021-07/Cost-effectiveness_of_ASHRAE_Standard_90-1-2019-Michigan.pdf

M Tyler, Cost Effectiveness of ASHRAE Standard 90.1-2016 for the State of Michigan, August 2020

https://www.energycodes.gov/sites/default/files/2021-03/Cost-effectiveness_of_ASHRAE_Standard_90-1-2016-Michigan.pdf

Michigan Tribal Code Initiative

Who We Are and How We Work

The Inter-Tribal Council of Michigan (ITCM) is a non-profit organization that serves as a forum and advocacy group for 12 federally recognized Native American tribes in Michigan.

The Bay Mills Indian Community (BMIC) is a federally recognized Ojibwe tribe located in Brimley, Michigan.

The Midwest Energy Efficiency Alliance (MEEA) is a collaborative network, promoting energy efficiency to optimize energy generation, reduce consumption, create jobs, and decrease carbon emissions in all Midwest communities.

Slipstream is a nonprofit that develops and scales energy efficiency programs with a focus on climate solutions for buildings.

Our approach to working with your Tribal Nation includes:

- Listening, understanding your goals, and providing requested assistance,
- Direct, in-person, and remote engagement,
- Quarterly Tribal Codes Advisory Committee (TBAC) discussions.
- Shared resources that Nations can use to build and strengthen their energy codes.
- Expert assistance on buildings and energy codes.



For additional information or questions, contact:

Laura Manthe, Slipstream | Senior Manager—Indigenous Community Outreach | 920.309.7453 | lmanthe@slipstreaminc.org
Bill Bernier, R.S., Inter-Tribal Council of Michigan | Environmental Services Director | 906.632.6896 x 115 | bbernier@itcmi.org