

MI ENERGY CODE UPDATE Ann Arbor Energy Commission 2.13.24



Accelerating to Zero faster together! Jan Culbertson, FAIA

- Michigan Legislature delegates authority for code setting to Licensing and Regulatory Affairs (LARA)
- Within LARA, the Bureau of Construction Codes (BCC) handles regulations for construction codes

- Michigan Uniform Energy Codes applies to all new construction
- Existing buildings, under the Michigan Rehab Code
 - Repairs need not comply with 90.1
 - Any alterations must comply with 90.1
 - Unmodified systems/assemblies may remain non-compliant



- Michigan Uniform Energy Code
- Part 10: Residential
 - Adopts IECC
- Part 10a: Commercial
 - Adopts both the IECC and ASHRAE 90.1

By state statute, LARA is supposed to update every 3 years



MI Energy Codes Overview

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RFR	 ▲ A department must submit a Request for Rulemaking (RFR) to MOAHR to begin the rulemaking process. ▲ MOAHR reviews and approves the RFR and notifies the Joint Committee on Administrative Rules (JCAR). 		 ▲ The JCAR Report and rules must be submitted to JCAR within 1 year after the public hearing, or there must be a subsequent public hearing. ▲ The JCAR Report summarizes the purpose of the draft rules and any comments made at the public hearing or submitted in writing.
		JCAR	▲ The rules must be before JCAR for 15 session days, unless JCAR grants a waiver of the remaining days.
Draft Rules	 ▲ Rules are drafted by the agency and submitted by the agency's Regulatory Affairs Officer (RAO) to MOAHR to review for legal authority. ▲ MOAHR approves the draft rules and notifies JCAR. MOAHR sends the draft to the 		 ▲ During those 15 days, JCAR may object to the rules, but then must introduce legislation within another 15 session days to stop or delay the rules. ▲ Rules can be filed by MOAHR with the Office of the Great Seal after 15 session days expire or after JCAR has waived the 15 session day requirement.
Agency: 90 days*	Legislative Service Bureau (LSB) for informal editing according to format and style requirements. ▲ The agency makes the suggested LSB edits to the draft rules and sends to MOAHR.	•	
		Certificate of Adoption Agency: 25 days*	 ▲ The agency director confirms the intent to adopt the rules by submitting a Certificate of Adoption to MOAHR. ▲ MOAHR files the final rules with the Office of the Great Seal.
RIS Agency: 35 days*	 ▲ A Regulatory Impact Statement & Cost-Benefit Analysis (RIS) is prepared by the agency and sent to MOAHR for approval 28 days prior to the public hearing. MOAHR notifies JCAR. ▲ A Notice of Public Hearing is prepared by the agency and sent to MOAHR. MOAHR 	Filing with Office of the Great Seal	 ▲ The rules may become effective immediately upon filing, or at a later date specified by the agency in the rules. ▲ On the effective date, MOAHR amends the Michigan Administrative Code to reflect the new language of the rules.
Public Hearing Agency: 40 days*	 notifies JCAR. ▲ The Notice is published in 3 newspapers, including 1 in the UP, not less than 10 days but no more than 60 days prior to the hearing. ▲ MOAHR publishes the Notice and draft rules in the <i>Michigan Register</i>. ▲ The agency holds a public hearing for public comment. 		
↓ ·····		https://www.michigan.gov/lara/-	
JCAR Report Agency: 40 days*	 ▲ The agency submits the final draft of the rules and the JCAR Report to MOAHR. ▲ MOAHR submits the final draft to LSB to formally certify the rules. ▲ MOAHR legally certifies the rules and sends the JCAR Report, including the final draft of the rules, certifications, RFR, and RIS to JCAR. 	Educat	n/Project/Websites/lara/moahr/ARD/ <u>tion/Rulemaking_Process_Summary.p</u> =7450cb60e46f45b69bc4d4b4edd8f79
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Rulemaking Process

ASHRAE 90.1 is a voluntary standard

- Similar: NFPA 13
- Not a code doesn't contain rules for enforcement
- New edition every 3 years, with continuous maintenance
- Covers commercial buildings only
- Int'l Energy Conservation Code (IECC) is a model code
 - Similar: International Building Code
 - New editions every 3 years
 - Covers commercial and residential
 - Each edition references 90.1 from two years prior

Commercial buildings shall comply with one of the following:

- ANSI / ASHRAE / IESNA 90.1
- IECC Sections C402 through C405
- An energy model compared to a standard model







MI Energy Codes

2021 Michigan Plumbing Code & Mechanical Code

Were filed with the Secretary of State November 13, 2023, and are effective on March 12, 2024.

2023 Michigan Electrical Code

Was filed with the Secretary of State November 13, 2023, and are effective March 12, 2024.

2021 Rehabilitation Code

The 2021 Rehabilitation Code rules are now closed and the comments that have been received are in review.

2021 Building Code

The 2021 Building Code rules are now closed and the comments are in review.

2021 Michigan Uniform Energy Code (Part 10 Residential)
BCC public hearing 9:00 AM on
February 22, 2024 (Lansing)

2021 Michigan Uniform Energy Code (Part 10a Commercial) BCC public hearing 1:00 PM on

February 22, 2024 (Lansing)

2021 Part 5 Residential Code

BCC public hearing 9:00 a.m. on March 21, 2024

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MI Codes -- Currant Updates

Highlights of 90.1-2019

- Most requirements get more stringent
- Many "best practices" are now required
- A crackdown on inefficient RTUs
- Commissioning requirements expanded, including envelope, lighting, and power

This is LAW. Not optional

Enforcement can be lax

Local AHJs

 Responsibility of design professionals to respect, follow, and promote the Code

MI Energy Codes



- IECC Appendix RB is adopted by LARA
 - Covers solar-ready residential
- Roof space for solar
- Electrical panel space for solar

- IECC Appendix CB is adopted by LARA
 - Covers solar-ready commercial
- Roof space for solar
- Electrical panel space for solar
- Energy storage space

ON-SITE RENEWABLES



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IECC Appendix CC not adopted by LARA

- Covers mandates for on-site or off-site renewable power
- Gas is still allowed

IECC Appendix RC not adopted by LARA

Covers residential on-site or off-site renewable power

ON-SITE RENEWABLES



LARA's position on Appendix CC

The most significant alternative, which was presented to the agency and not adopted, was the proposition to require all new structures or renovations be exclusively electric in nature. This would mean no use of propane or natural gas. This would result in extraordinarily expensive construction beyond the current normal practice. It also eliminates possible cheaper modes to energy. At best it creates a monopoly and at worst this alternative would grind new construction to a halt. As of May 16, 2022, the Midcontinent Independent System Operator is preparing for a projected short fall in energy capacity for June, July and August of 2022."

Section 37 of Regulatory Impact Statement to 2021-49 LR, published 2023-09-26

ON-SITE RENEWABLES



90.1-2019: No requirements for on-site renewables

- 90.1-2022 will require on-site renewables
 - 0.25 W/sf, based on the three largest floors of the building
 - Only >10,000 ft² and new construction
 - Shaded, occupied, or equipment-heavy roofs exempt
- First time mandatory renewables added to a model code
- Unlike IECC Appendix CC, renewables must be ON SITE no option for purchased off site
- ASHRAE believes this is cost effective in all solar zones
- Prescriptive can trade off this requirement

ON-SITE RENEWABLES – look ahead



Commercial Energy Code (10a) Update Information: https://ars.apps.lara.state.mi.u s/Transaction/RFRTransaction? TransactionID=1307

Residential Energy Code (10) Update Information: https://ars.apps.lara.state.mi. us/Transaction/RFRTransactio n?TransactionID=1306 RFR Form DPDF BHTML

Draft Rule Language Word Draft Rule Language updated on: 1/17/2024 2:20:39 PM

RIS Form 📙 PDF 🐻 HTML

RIS Form updated on: 1/11/2024 9:18:01 AM

Notice of Public Hearing 📙 PDF 🛛 🐻 HTML

Notice of Public Hearing updated on: 1/17/2024 3:38:16 PM

MI Energy Codes





Legislative Action:

SB 274

Could it be adapted to pilot Appendix RC/CC? Intent to require Carbon Neutral/Zero Energy new buildings by 2027

Require automatic adoption of new Energy Codes—we jumped a code cycle (IECC 2018) and IECC 2024 is in final stages prior to publication



