Michigan Energy Code Compliance Collaborative

*** MEETING MINUTES - 3/7/2019 ***

Location: 7109 W. Saginaw Hwy, Lansing, MI 48917

Date: March 7, 2019

Time: 9:30am - 3:00pm EST

Call-In #: 1 (877) 336-1829 Access Code: 2022874#

Facilitator for both Subcommittee Meetings: Jake Wilkinson, Michigan Energy Office (MEO)

Commercial Subcommittee group meeting 9:30am – 11:30am

Attendees In Person

Ed Bartram, Diversified Heating & Cooling

lan Blanding, Midwest Energy Efficiency Alliance

David Gard, Michigan Energy Efficiency Contractors Association Kevin McNeely, McNeely Building Group

William (Bill) Hordyk, City of Grand Rapids

Arn McIntyre, Performance Home Corp

Terri Novak, Michigan Energy Office

Jon Paradine, Bureau of Construction Codes

Sonya Pouncy, Energy Sciences

Callie Richards, Small Business Association of Michigan

Rut Wattanasak, Catalyst Partners

Jake Wilkinson, Michigan Energy Office

Attendees On The Phone

Ed Carley, National Association of State Energy Officials

Eric Devries. E3M Solutions

Brandon Trierweiler, Homeworks Tri-County

Suzy Westmoreland, Michigan Electric and Gas Association

Welcome and Introductions (brief project intro for any new members)

Jake Wilkinson, Michigan Energy Office, welcomed everyone to the second meeting of the second meeting of the Michigan Energy Codes Compliance Collaborative. The goal of the collaborative is to identify and address what are the gaps, issues and opportunities in compliance with the current Michigan energy code and how we can improve compliance. The goals of the meeting (from the perspective of the MEO) is to develop actionable items by the end of the meeting to move forward with development of resources that are determined through this meeting.

Summary of Last Meeting and Updates on Action Items

- First meeting was January 10, 2019
- It was decided at that meeting to split into two (2) subgroups; one to focus on the commercial code and one for the residential code.
- Bureau of construction codes adopts the code after stakeholder input and review but does not enforce in most areas. Enforcement is the responsibility of the local officials in each jurisdiction
- At the time of the first meeting, MI was one of 3 states at 2015 IECC or higher for commercial code but there are 2 others in process of updating. -
- At the time of the first meeting there were 4 established codes collaboratives and 2 in development (one of those is MI)

- US DOE is funding field studies in several states across the country to measure the impact of energy codes on buildings and identify opportunities for savings through increased compliance. Michigan is not one of those states but there was a study completed in 2016 for residential compliance funded by DTE and Consumers Energy.
- One of the issues facing members is that energy code language tends to be confusing and there is no singular place to go for answers to their questions.
 - Other states have set up a hotline to address this issue
- The BCC adopts the code but doesn't enforce it in most areas, so they have limited influence on how it is interpreted and enforced. Each jurisdiction must interpret the code and enforce as they see it.
- There are some organizations that provide training on energy codes, but more may be needed.
- Creation of a study to prove savings estimates are accurate and that code improvements do in fact save energy and money for the owners may be useful
 - Some places have even tried to demonstrate the value of code improvements through reduction in air pollutants.
- Compliance checklists could be a useful tool
- Creation of a document to highlight the updates may be a beneficial when new codes are adopted
- Collaborative structure
 - We don't see the need to put limits on the collaborative, regarding the type and number of members, at this
 time but will do so if needed
 - Still interested in gaining new members if you have suggestions please send to Jake Wilkinson, MEO
 - Michigan Association of Code Enforcement Officials
 - Association of Building Contractors
 - Local Code Enforcement officials

Identifying Key Issues for Michigan Code Compliance with the Commercial Code

Jake Wilkinson reiterated the intent of today's meeting is to continue the discussion of the issues facing code compliance in the state but also that the goal is to have actionable items out of today's meeting so that we can start to move forward with development of resources. As I had mentioned in the first meeting, the MEO does have some funding set aside to support these actions.

- One member expressed that there is a lack of awareness of code updates and when they take effect
 - o There is uncertainty as to whether the codes are being updated or not
 - BCC clarified that all codes are updated every 3 years except for the residential code which must be updated after 6 years but can be updated at the 3-year mark if deemed appropriate.
 - o Municipalities often lack the resources to properly train enforcement officials
- There is a lack of understanding and comfort with the current code
 - Many builders have a desire to stick with the prescriptive path even when it may not be the best or easiest way to achieve compliance
 - Likely due to a lack of understanding of the other compliance paths
 - Prescriptive has gotten very detailed and has caused confusion leading to more non-compliance
- Michigan received money from DOE to encourage MI to stay current on energy codes
- There has been a shift to rely on energy raters to ensure compliance due to lack of man hours of the code officials
 - Enforcement is sometimes politicized based on what those in power think is best often without proper education of the benefits of code compliance
- In reference to a compliance checklist it was pointed out that the ASHRAE code book contains a checklist of items that must be provided to the code enforcement official

- Another issue with compliance to the MI energy code is that many manufacturers equipment does not meet MI standards because other states are behind in code adoption
 - Code enforcement officials get a lot of pushback for equipment that doesn't meet code due to desire for certain features or aesthetics
 - Can often still be done through a trade off approach in the performance rating system path
- Need to prove the value of following code to industry and to the end user
 - o There have been projects that didn't move forward when the payback was less than 2 years
 - Commercial code more often faces the owner/tenant relationship issue since the owner does not generally
 pay the utility bills there is little incentive to pay more for better building performance
 - A required building performance disclosure (for potential tenant decision making) may be helpful for owners to see value since better performing buildings will be more desirable
 - USGBC study showed that "Green" buildings can charge higher rent and tend to have less turnover
- Trainings that could be considered
 - Bureau of construction codes was only aware of 2 energy focused trainings registered
 - o Training on quality of installation to ensure building components perform to their potential
 - Trainings that include continuing education credits to incentivize participation
 - o Trainings on the value of codes to municipal leadership
 - Using a "Living facility" for hands on training of techniques and technologies partner with university or another partner site?
- Maybe code enforcement should change to a carrot rather than stick method
 - o The possibility of offering incentives for code compliance was brought up
 - Unlikely since compliance with code is required by law and should not provide incentives for following the law
 - Example of no incentives for not speeding was brought up
- Energy Star certified buildings meet code requirements since their restrictions are "Better" than a code-built house
 - This would be true for some other high-performance building certifications as well and those can still be used for code requirements in MI as long as their standards are at least as good as the MI code.
 - To be named specifically in the code that certification program would need to go through the International Codes Council (ICC) and be put in the base code this is not MI specific
- One member thought there is a PNNL study on the most important items in the code (in regard to high building performance) and maybe those are things that we should focus on possibly through more stringent commissioning process for those items.
- Inclusion of sustainability officers from local governments may be helpful to the group

Prioritization of Key Issues to Move Forward

Prioritization was done by listing the items on the board and allowing each member two votes for their highest and second highest priority. The list was also sent via email to those on the phone for their responses which were then reflected on the board with the rest of the votes from the group. The results of this process are below and has been sorted with the tasks receiving the highest number of votes on the top.

Task	# of First Priority Votes	# of Second Priority Votes	Interested in Development	
Training for local gov. leaders (mayors, commissioners,	4	1	MEEA, MEECA, SBAM,	
legislators, etc.)			Energy Sciences, Ed B.	
Training that includes continuing education credits	3	2	MEEA, MEECA, Energy	
			Sciences, Rut W.	
Study to prove value of compliance with current code	2	1	MEEA, Energy Sciences,	
			SBAM, Rut W.	
General Code training	2	0	Energy Sciences	
Development of a best practices document	1	1		
Development of a compliance checklist	0	2	MEEA, Energy Sciences	
Hands on training	0	2		
Development of a FAQ document	1	0	Energy Sciences	
Development of a compliance roadmap	0	1	Energy Sciences, Rut W.	
Study to determine baseline of code compliance	0	0		

Next Steps

Any organizations/individuals interested in being involved in the development/implementation of the action items below please send an email to Jake Wilkinson (wilkinsonj8@michigan.gov) indicating which action to which you wish to contribute. The MEO will evaluate the needs identified by the group and may consider taking action on certain items. Jake Wilkinson, MEO, will send out notification to schedule the next meeting.

Residential Subcommittee group to meet 1:00pm - 3:00pm

Attendees In Person

Brad Bartholomew, Bartholomew Heating & Cooling

lan Blanding, Midwest Energy Efficiency Alliance

John Dulmes, Michigan Chemistry Council

David Gard, Michigan Energy Efficiency Contractors Association Sonya Pouncy, Energy Sciences

William (Bill) Hordyk, City of Grand Rapids

Brett Little, GreenHome Institute

Terri Novak, Michigan Energy Office

Jon Paradine, Bureau of Construction Codes

Matt Rosendaul. Great Lakes Home Performance

Art Thayer, Michigan Electric Co-operative Association

Jake Wilkinson, Michigan Energy Office

Attendees on the Phone

Ed Carley, national Association of State Energy Officials

Jose Goncalves, DTE Energy

Kevin McNeely, McNeely Building Group

McKenzie Tompkins, Crane Energy Solutions Brandon Trierweiler, Homeworks Tri-County

Welcome and Introductions (Brief Project intro for any new members)

Jake Wilkinson, Michigan Energy Office, welcomed everyone to the second meeting of the second meeting of the Michigan Energy Codes Compliance Collaborative. The goal of the collaborative is to identify and address what are the gaps, issues and opportunities in compliance with the current Michigan energy code and how we can improve compliance. The goals of the meeting (from the perspective of the MEO) is to develop actionable items by the end of the meeting to move forward with development of resources that are determined through this meeting.

Summary of Last Meeting and Updates on Action Items

- First meeting was January 10, 2019
- Bureau of construction codes adopts the code after stakeholder input and review but does not enforce in most areas. Enforcement is the responsibility of the local officials in each jurisdiction
- MI currently one of 2 states at 2015 IECC or higher but there are 5 others in process of updating.
 - o Although due to amendments the Michigan code has a rated efficiency between the 2009 IECC and 2012 IECC efficiency levels.
- At the time of the first meeting there were 4 established codes collaboratives and 2 in development (one of those is MI)
 - o Ian Blanding may have updates on that
- US DOE is funding field studies in several states across the country to measure the impact of energy codes on buildings and identify opportunities for savings through increased compliance. Michigan is not one of those states but there was a study completed in 2016 that focused on the residential code and was funded by DTE and Consumers Energy.
- One of the largest issues facing members is that energy code language tends to be confusing and there is no one place to go for answers to their questions.
 - Other states have set up a hotline to address this issue
- The BCC adopts the code but doesn't enforce it in most areas, so they have limited influence on how it is interpreted and enforced. Each jurisdiction must interpret the code and enforce as they see it.
- There are some organizations that provide training on energy codes, but more may be needed.
- Creation of a study to prove savings estimates are accurate and that code improvements do in fact save energy and money for the owners may be useful

- Some places have even tried to demonstrate the value of code improvements through reduction in air pollutants.
- Compliance checklists could be a useful tool
- Creation of a document to highlight the updates may be a beneficial when new codes are adopted
- Collaborative structure
 - We don't see the need to put limits on the collaborative, regarding the type and number of members, at this
 time but will do so if needed
 - Still interested in gaining new members (especially in the enforcement sector)
 - Michigan Association of Code Enforcement Officials
 - Association of Building Contractors
 - Home Builders Association
 - Local Code Enforcement officials

Identifying Key Issues for Michigan Code Compliance with the Residential Code

Jake Wilkinson reiterated the intent of today's meeting is to continue the discussion of the issues facing code compliance in the state but also that the goal is to have actionable items out of today's meeting so that we can start to move forward with development of resources. As I had mentioned in the first meeting, the MEO does have some funding set aside to support these actions.

- The 2018 residential code would have required blower door testing if it had been adopted which means that it is likely that the next update will require this test when code is updated (likely 2021)
 - RESNET maintains a list of certified blower door testing companies but there is a fee to be listed on the site
 and many (especially smaller companies) are not willing to pay the fee
 - Michiganblowerdoor.com maintains a list of all the certified blower door testers that the operator is aware of to serve as a source of information
 - This site also has many documents that have been developed
 - There is a FAQ document that was the combined effort of several organizations that are active in energy codes (several collaborative members)
 - Also have developed a blower door checklist and other compliance check sticker templates for use by energy raters and code officials.
 - There are no company names on these documents and are not meant to "sell" any companies or service but instead serve as a source of information and answer frequent questions received by the developers of the document.
 - There are relatively few certified blower door testing companies and if the test is added to code the demand may far exceed what current operators are able to handle.
 - Should find out the number of blower door tests that are done in a year currently
- To really drive compliance, we need to get buy-in of the value of code compliance to both builders and customers
- There are some utility programs designed to incentivize "green" buildings (incentives for Energy Star and HERS ratings)
 - DTE currently has a program to give incentives to builders for building homes that receive a HERS rating of 65 or better
 - Consumers Energy has a similar program but no one in the group knew the specifics
 - These buildings should exceed code compliance requirements
- One member said that many builders are moving to the performance path for compliance
 - Another indicated that he has seen that in most rural areas there is a preference to the prescriptive path because of familiarity

- Another member has seen that smaller builders are often using the prescriptive path, but the large builders are often doing the performance path
- The performance path currently allows what many consider to be a loophole due to the ductwork being out of conditioned space in the model home
 - o This is specific to Michigan
- Many energy audits are driven by comfort issues and many are in relatively new homes (<2 years old)
- High performing building be problematic in the real estate industry because some don't pass the appraisal step due to the comparisons with other homes
 - Other homes will have higher value aesthetics than the high-performance building but also lesser performance
 - Some organizations have been working with realtor associations to help them understand the value of higher performance for proper home value comparisons
- It may be helpful to raise awareness of energy code and the benefits of higher performing building to customers
 - Over time that may lead to customers driving efficiency and lead to better code compliance
- There are a few places that require disclosure of energy performance to potential buyers (Minneapolis, MN; Portland, OR; Berkeley, CA)
 - o This is not done in MI although many high-performance builders choose to present this information
 - o Local jurisdictions could implement ordinances to require HERS rating disclosure

Prioritization of Key Issues to Move Forward

Prioritization was done by listing the items on the board and allowing each member two votes for their highest and second highest priority. The list was also sent via email to those on the phone for their responses which were then reflected on the board with the rest of the votes from the group. The results of this process are below rearranged with the highest vote getters on top.

Task	# of First	# of Second	Interested in
	Priority Votes	Priority Votes	Development
Training for municipal leadership and local code administrators	4	3	MEEA, GHI
Education and outreach to municipal leadership and local code	3	4	MEEA, Matt R.,
administrators			Brad B.
EWR pilot for utility data in new homes	1	3	GHI, Brad B.
Training for customers	2	0	MEEA, GHI
Study to prove value of compliance with current codes	1	1	
Study to determine gaps/ issues/ and opportunities for improvement	1	0	MEEA, Brad B.
in code compliance			
Education and outreach to relators and appraisers	1	0	GHI
Education and outreach to customers	0	1	GHI
Training for Bankers (utility bills part of mortgage review, green choice	0	1	MEEA, GHI
for upgrades, etc.)			
Education and outreach to banks (utility bills part of mortgage review,	0	0	
green choice, etc.)			
Increased marketing for existing beyond code programs (Energy Star,	0	0	
HERS, etc.)			
Study to determine areas of high development for focus of efforts	0	0	
Training for Builders	0	0	GHI
Training for Appraisers / Relators	0	0	MEEA, GHI

Any organizations/individuals interested in being involved in the development/implementation of the action items below please send an email to Jake Wilkinson (wilkinsonj8@michigan.gov) indicating which action to which you wish to contribute. The MEO will evaluate the needs identified by the group and may consider taking action on certain items. Jake Wilkinson, MEO, will send out notification to schedule the next meeting.