



20 N. Wacker Drive, Suite 1301
Chicago, Illinois 60606
312.587.8390 Main Line
312.587.8391 Fax
www.mwalliance.org

January 26, 2023

Joseph Ricker, Attorney
Division of Policy Development
Department of Safety and Professional Services
P.O. Box 8366
Madison, WI 53708-8935

Re: MEEA comments in support of the adoption of the 2021 International Energy Conservation Code for commercial buildings in Wisconsin

Dear Mr. Ricker,

Thank you for the opportunity to provide comments on the adoption of the 2021 International Energy Conservation Code (IECC) for commercial buildings. The Midwest Energy Efficiency Alliance (MEEA) is a member-based non-profit organization serving as a collaborative network, promoting energy efficiency to optimize energy generation, reduce consumption, create jobs and decrease carbon emissions in all Midwest communities. MEEA has previously worked in Wisconsin on energy codes and provided technical assistance to the Wisconsin Department of Safety and Professional Services in previous energy code adoption cycles.

MEEA supports the current Wisconsin Commercial Building Code draft rules published for public comment. Updating the statewide commercial energy code to the 2021 IECC would not only improve building efficiency, create more comfortable and healthier indoor environments and result in greater building resilience, but it would also provide numerous economic benefits to Wisconsin's residents and business owners.

Provide Wisconsin with energy cost savings and health cost savings

Updating the commercial energy code to the 2021 IECC will reduce energy use and provide energy cost savings for Wisconsinites. The commercial version of the 2021 IECC references ASHRAE 90.1-2019 as a compliance path. The U.S. Department of Energy (DOE) has determined that implementing ASHRAE 90.1-2019 would improve energy efficiency in buildings and make them more affordable to own and operate, compared to ASHRAE 90.1-2016 (or the 2018 IECC). DOE analysis indicates that buildings meeting the 2021 IECC result in Wisconsin-specific energy savings of \$800,900 within the first year and more than \$343 million over the next 30 years.¹ Since Wisconsin is currently at the 2015 IECC/ASHRAE 90.1-2013 with amendments, these energy savings will actually be far greater.

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



20 N. Wacker Drive, Suite 1301
Chicago, Illinois 60606
312.587.8390 [Main Line](tel:312.587.8390)
312.587.8391 [Fax](tel:312.587.8391)
www.mwalliance.org

Due to the cost-effective efficiency improvements made in each model code, states that adopt the latest energy code will reap the greatest benefits.² To understand the impact of delayed code adoption and amendments to the adopted code, MEEA calculated the lost energy savings and corresponding monetized health impacts for Wisconsin. According to this analysis, between 2007 and 2017, Wisconsin **lost \$28,816,468 in health care savings³ and \$107,976,276 in energy savings⁴** by not regularly adopting the latest commercial model energy code or standard. Updating to the full 2021 IECC and consistently adopting the unamended model energy code as it becomes available will ensure that Wisconsin does not continue to miss out on these savings.

Capture cost-effectiveness and create high-quality jobs in Wisconsin

The most cost-effective time to include energy-efficiency measures is at the time of initial construction. DOE analyzes cost-effectiveness and the economic impact of energy codes in terms of Life Cycle Cost (LCC) savings. A building is deemed cost-effective if the weighted statewide LCC is positive. In analyzing two scenarios, the first looking at publicly-owned buildings and the second privately-owned buildings, DOE found both to be positive and therefore both to be cost-effective.⁵ While there certainly can be small incremental costs associated with updating any building code, the energy code is the only building code that reduces operating costs and improves owner cash flow from day one. These benefits continue far beyond the payback period – they last for the lifetime of the building, which can be from 50 to 100+ years.

Adopting the 2021 IECC will also result in job creation for Wisconsin. This occurs in two ways: 1. by reducing utility bills, which results in an increase in disposable income, and 2. by increasing construction-related activities in the state. DOE analysis indicates that updating the Wisconsin commercial energy code to the 2021 IECC will result in 177 total jobs created in the first year and 5,614 jobs created over the next 30 years.⁶

Access federal funding for statewide energy codes and energy efficiency measures

DOE will be providing billions of dollars in funding for updated energy code adoption and implementation, which should aid the enforcement community and building industry. The Inflation Reduction Act (IRA), specifically, includes \$1 billion to assist states with building energy codes. One third of this funding can go to states that meet or exceed the 2021 IECC and two thirds can go to states that require net-zero homes. There will be additional funding available to

² mwalliance.org/blog/energy-code-development-adoption-and-compliance-benefits-regularly-updated-codes

³ From MEEA's *Energy Efficiency Every Day Keeps the Doctor Away: How Energy Codes Impact Community Health*

⁴ From MEEA's *Energy Efficiency Every Day Keeps the Doctor Away: How Energy Codes Impact Community Health*

⁵ https://www.energycodes.gov/sites/default/files/2021-07/Cost-effectiveness_of_ASHRAE_Standard_90-1-2019-Wisconsin.pdf

⁶ https://www.energycodes.gov/sites/default/files/2021-07/Cost-effectiveness_of_ASHRAE_Standard_90-1-2019-Wisconsin.pdf



20 N. Wacker Drive, Suite 1301
Chicago, Illinois 60606
312.587.8390 [Main Line](tel:312.587.8390)
312.587.8391 [Fax](tel:312.587.8391)
www.mwalliance.org

train the workforce in energy efficiency technologies and methods. Only by updating to the 2021 IECC can Wisconsin be in position to apply for IRA funding in the future.

Realize health, resilience and other non-energy benefits

Adopting the full 2021 IECC would result in more than just economic benefits to Wisconsinites. More efficient buildings provide increased comfort, better indoor air quality and meaningful resilience benefits. Buildings built to newer codes are more comfortable, even in extreme temperatures, and allow for occupants to safely shelter in place during extreme weather events and power outages.⁷ A strong energy code also makes the grid more reliable by reducing energy use in buildings and lowering overall energy demand.⁸ Again, the most cost-effective time to prevent future damage from extreme weather is during initial construction, and Wisconsin has an opportunity to instill long-term resilience with the adoption of the 2021 IECC.

Adopting the 2021 IECC will reduce energy use and costs for Wisconsin residents and business owners, provide the state with health cost savings, create jobs and allow Wisconsin to access future federal funding for energy code and energy efficiency advancements. In order to realize greater economic, resilience and health benefits, MEEA strongly encourages Wisconsin to adopt the 2021 IECC for commercial buildings.

If you have any questions or need more information, please contact Corie Anderson, Senior Building Policy Associate at MEEA, at canderson@mwalliance.org or 312-784-7243. Thank you for your time and consideration.

Sincerely,

Stacey Paradis
Executive Director

⁷ <https://www.aceee.org/files/proceedings/2014/data/papers/1-439.pdf>

⁸ <https://www.aceee.org/sites/default/files/publications/researchreports/u1809.pdf>