

Meeting Minutes: Construction Codes Advisory Council

Date: Feb. 9, 2023

Time: 9:30 a.m.

Location: DLI, 443 Lafayette Rd. N., St. Paul, MN 55155 / WebEx

Members

1. Lori Bauer
2. Cody Bestul (Hinz alt) – WebEx
3. Mark Brunner
4. Dirk Cedergren (Sprung alt)
5. Chris Ferguson – WebEx
6. Barry Greive – WebEx
7. Gerhard Guth
8. Duane Hendricks – WebEx
9. Mike Herman
10. Tom Jenson
11. Russ Landry
12. Matt Marquis (Worms alt)
13. Dan McConnell
14. Scott McLellan – Chair
15. David Morlock
16. Mike Paradise
17. Mara Peterson
18. Steve Ubl

Members Absent

Ken Hinz
Shelonda Marie-Alves
William Pim
Reed Sprung
Mark Worms

Staff & Visitors

Kate Perushek – Deputy Commissioner
Jeff Lebowski – DLI
Brittany Wysokinski – DLI – WebEx
Lyndy Logan – DLI

Staff & Visitors continued

Rich Lockrem – DLI – WebEx
Greg Metz – DLI
Sean O’Neil – DLI
Chad Payment – DLI
Amanda Spuckler – DLI
Scott Anderson – City of Minneapolis – WebEx
Mary Barnett – Urban Works Architecture
Jessica Archer – Target – WebEx
Richard Becker – Plumbing Board – WebEx
Brooke Bordson – League of MN Cities – WebEx
Brent Casmey – CenterPoint Energy – WebEx
Michelle Drier – Electrical Ass. – WebEx
Patrick Farrens – City of Maple Grove – WebEx
Mark Foster – Housing First – WebEx
John Gunkelman – Dakota Construction - WebEx
Richard Graves – U of M
Joel Kadlec – CenterPoint Energy – WebEx
Todd King – VDA
Elizabeth Kosel – HBAFM – WebEx
Representative Kraft – WebEx
Eric Lacey – RECA-Codes – WebEx
John Lee – Cemstone
Jeff Mang – PIMA – WebEx
John Smith – former member
Gary Thaden – MMCA – WebEx
Beth Tomlinson – Stantec – WebEx
Jason Vandever – NAIMA – WebEx
James Williamette – City of St. Paul – WebEx
Michael Zandaroski – CenterPoint Energy – WebEx

1. Call to order

- A. Chair McLellan called the meeting to order at 9:38 a.m. Roll call was taken by Greg Metz (interim alternate chair) and a quorum was established with 18 members present in person or via WebEx; a quorum was maintained throughout the meeting.

- B. Announcements/Introductions – Chair McLellan
- **Reappointed members:** Steve Ubl, Gerhard Guth, Mark Brunner, Dan McConnell, William Pim
 - **Resignations:** John Smith
 - **New member:** Russ Landry
 - Everyone present in person and remotely can hear all discussions.
 - All votes will be taken by roll call if any member is attending remotely.
 - All handouts discussed and WebEx instructions are posted on the [Council's website](#).
- C. WebEx instructions/procedures were read aloud.

2. **Approval of meeting agenda**

A motion was made by McConnell, second by Brunner, to approve the agenda as presented. The roll call vote was unanimous with 18 votes in favor; the motion carried.

3. **Approval of previous minutes**

A motion was made by Morlock, seconded by Peterson, to approve the Sept. 29, 2022, meeting minutes as presented. The roll call vote was unanimous with 18 votes in favor; the motion carried.

4. **Regular business**

Expenses were approved.

5. **Department update**

Kate Perushek introduced herself and her areas of responsibility within the department. This time of year she spends quite a bit of time at the Capitol reacting to and responding to legislation that impacts building codes. She added that we're frequently able to suggest to Bill authors that we need to bring their ideas to the technical experts on the Construction Codes Advisory Council for their evaluation. She thanked the Council for their great work.

In January, Nicole Blissenbach was appointed by Governor Walz as DLI's new commissioner. Perushek described our collaboration with the Departments of Revenue and Employment and Economic Development (DEED) administering the \$500M Frontline Worker Pay Program to recognize frontline workers who had to work in person during COVID. She also described some of DLI's 22 budget proposals included in Governor Walz's budget initiatives. Although most aren't related to Construction Codes and Licensing, she mentioned them due to their high profile.

- **Paid Family and Medical Leave**
- **Earned Sick and Safe Time**
- **Prevailing-wage education and compliance**
- **Expanding equity in apprenticeship**
- **Penalties in line with federal OSHA**
- **Combative Sports health and safety improvements**
- **Commercial energy code**

The Climate Action Framework was an interagency work group formed by Governor Walz to consider ways to improve resiliency and address climate change. DLI has several proposals, one of which is aimed at reducing greenhouse gas emissions and addressing climate change.

In collaboration with the Department of Commerce and the Center for Energy and the Environment, DLI is going to be putting in an application for a federal funding opportunity from the

Bipartisan Infrastructure Law for Resilient and Efficient Codes Implementation. The goal of this grant is to assist us in adopting stronger energy codes.

Division update – Scott McLellan, Chair – see [presentation](#)

- A. 50th Anniversary of the State Building Code
 - a. [Illustrated Field Guide to the Residential Building Code](#)
 - b. [50-years of the State Building Code – Past, Present, and Future](#)

6. Old business – Scott McLellan, Chair – see [presentation](#)

- A. Proposed DLI legislation
 - a. Existing building energy
 - b. EV charging stations
 - c. Window cleaning safety
 - d. Assisted living
 - e. Boiler inspections
 - f. Licensing

7. New business – Scott McLellan, Chair – see [presentation](#)

- A. Code updates
 - a. NEC 2023
 - b. Commercial energy code
 - c. Residential energy code
- B. Proposed legislation
 - a. Commercial energy code – [HF 772](#) (Rep. Kraft & Richard Graves, U of M) – see Attachment A
 - Representative Kraft introduced House File 772 that includes one of DLI’s earlier versions that we were intending on bringing to the legislature. Representative Kraft thanked the CCAC for allowing him to speak and provide explanation of the bill. This Bill was the result of many thoughtful stakeholder engagements, partnering with DLI and other stakeholders, and working through some of the issues raised at a prior CCAC meeting. The Bill accelerates an existing code adoption process, adds the goal of decarbonizing and reducing emissions, and puts the commercial energy code on a path to maximize energy efficiency by 2036.
 - Chair McLellan thanked Representative Kraft and then briefly described the background and current focus of the department to accelerate adoption of the commercial energy code, ASHRAE Standard 90.1.
 - Richard Graves, Director for the Center for Sustainable Building Research at the University of Minnesota, provided this portion of the presentation. He was the technical advisor to the Stakeholder group in 2019 and runs the Sustainable Building 2030 program through the U of M for state bonded construction. –Graves referred to [slides 24 through 28](#).
 - **Slide 24** – An index called the Zero Energy Performance Index (zEPI) makes sense of the various complicated versions of energy codes. It creates an index to get them all on one graph to compare one code versus another or new versions of ASHRAE with the baseline of 100 being an average building in 2003. A net zero Energy building is zero.

- **Slide 25** – It's important to keep in mind that codes have already advanced considerably since the average building in 2003. The current Minnesota Energy Code is approximately a 50 so we've already made a 47% advancement in code from those typical buildings. Our SB 2030 program started at a 40 on the scale, moved to 30, and then current projects are 20 on the scale. We're already very aggressive, very close to the performance level discussed in this code language.
- **Slide 26** – Current code improvements have taken us way down this chart. There's the potential for future prescriptive code improvements to take us into the upper 30s. Then at that point you run into some barriers with federal regulations where one must switch to performance-based codes. Those can take us to a point somewhere between 25 to 15. This is about the limit of cost effectiveness of energy efficiency, near the end of the scope of building code as we currently know it.
- **Slide 27** – This was the trajectory that originally came out of the stakeholder meetings that looked at having future versions of the energy code track SB 2030 performance levels with the goal of net zero by 2036.
- **Slide 28** – The current Bill language basically uses 90.1 2004 as the baseline because the Department of Energy uses it to measure codes. Because it shifts the baseline, it makes the math slightly confusing. If we go 80% better and translate that back to the zEPI scale, it's basically a 15 which is right at that edge of the limit where energy efficiency is maximized.
- Chair McLellan asked Graves if he could describe how much further we have to go from where we are today. Graves said it's probably half the distance from the baseline, approximately a 43 on the zEPI scale. We're about halfway there with the current energy code that's rolling out.
- Chair McLellan said the main goal of this legislation was to help articulate the fact that we want to maximize the commercial energy code by the year 2036. To be clear, net-zero is not a subject of this bill. This is about regulating energy code development, not energy sources.
- Chair McLellan said if anyone has any input or questions regarding the Bill, they can email him, and he will forward to Rep. Kraft.
- John Smith, former Energy Conservation Industry board member, agreed with the conversation but added that a discussion about a healthy indoor environment needs to be considered, particularly because of what we learned after COVID regarding healthy indoor air quality, even if that means increased energy use.
- Russ Landry said the energy code doesn't address the amount of ventilation because ventilation is regulated in a separate standard. Although ventilation would impact the building's energy use, it would not be considered in determining code compliance. The effect of the filtration is addressed by the energy code.

Dan McConnell departed the meeting resulting in 17 members present in person or via WebEx.

- b. Adult changing tables – [HF 981](#) (Greg Metz) – see Attachment B

8. Open Forum

Two open forum requests were received – Smith's comments are above, and Jason Vandever declined the invitation to comment.

9. Council member discussion

No discussion

10. Announcements

Next meeting date TBD – likely in April/May.

11. Adjournment

A motion was made by Landry, seconded by Jenson, to adjourn the meeting at 11:07 a.m. The roll call vote was unanimous with 17 votes in favor; the motion carried.

Respectfully Submitted,

Lyndy Logan

Executive Secretary to the CCAC

Green meeting practices

The State of Minnesota is committed to minimizing in-person environmental impacts by following green meeting practices. DLI is minimizing the environmental impact of its events by following green meeting practices. DLI encourages you to use electronic copies of handouts or to print them on 100% post-consumer processed chlorine-free paper, double-sided.

1.1 moves to amend H.F. No. 772 as follows:

1.2 Delete everything after the enacting clause and insert:

1.3 "Section 1. Minnesota Statutes 2022, section 326B.106, subdivision 1, is amended to read:

1.4 Subdivision 1. **Adoption of code.** (a) Subject to paragraphs (c) and (d) and sections
1.5 326B.101 to 326B.194, the commissioner shall by rule and in consultation with the
1.6 Construction Codes Advisory Council establish a code of standards for the construction,
1.7 reconstruction, alteration, and repair of buildings, governing matters of structural materials,
1.8 design and construction, fire protection, health, sanitation, and safety, including design and
1.9 construction standards regarding heat loss control, illumination, and climate control. The
1.10 code must also include duties and responsibilities for code administration, including
1.11 procedures for administrative action, penalties, and suspension and revocation of certification.
1.12 The code must conform insofar as practicable to model building codes generally accepted
1.13 and in use throughout the United States, including a code for building conservation. In the
1.14 preparation of the code, consideration must be given to the existing statewide specialty
1.15 codes presently in use in the state. Model codes with necessary modifications and statewide
1.16 specialty codes may be adopted by reference. The code must be based on the application
1.17 of scientific principles, approved tests, and professional judgment. To the extent possible,
1.18 the code must be adopted in terms of desired results instead of the means of achieving those
1.19 results, avoiding wherever possible the incorporation of specifications of particular methods
1.20 or materials. To that end the code must encourage the use of new methods and new materials.
1.21 Except as otherwise provided in sections 326B.101 to 326B.194, the commissioner shall
1.22 administer and enforce the provisions of those sections.

1.23 (b) The commissioner shall develop rules addressing the plan review fee assessed to
1.24 similar buildings without significant modifications including provisions for use of building
1.25 systems as specified in the industrial/modular program specified in section 326B.194.

2.1 Additional plan review fees associated with similar plans must be based on costs
2.2 commensurate with the direct and indirect costs of the service.

2.3 (c) Beginning with the 2018 edition of the model building codes and every six years
2.4 thereafter, the commissioner shall review the new model building codes and adopt the model
2.5 codes as amended for use in Minnesota, within two years of the published edition date. The
2.6 commissioner may adopt amendments to the building codes prior to the adoption of the
2.7 new building codes to advance construction methods, technology, or materials, or, where
2.8 necessary to protect the health, safety, and welfare of the public, or to improve the efficiency
2.9 or the use of a building.

2.10 (d) Notwithstanding paragraph (c), the commissioner shall act on each new model
2.11 residential energy code and the new model commercial energy code in accordance with
2.12 federal law for which the United States Department of Energy has issued an affirmative
2.13 determination in compliance with United States Code, title 42, section 6833. The
2.14 commissioner may adopt amendments prior to adoption of the new energy codes, as amended
2.15 for use in Minnesota, to advance construction methods, technology, or materials, or, where
2.16 necessary to protect the health, safety, and welfare of the public, or to ~~improve the efficiency~~
2.17 ~~or use of a building~~ mitigate the impact of climate change by increasing energy efficiency,
2.18 improving resiliency, and reducing greenhouse gas emissions of new buildings and of
2.19 existing buildings undergoing additions, alterations, and changes of use.

2.20 (e) Beginning in 2024, the commissioner shall act on the new model commercial energy
2.21 code by adopting each new published edition of ASHRAE 90.1 or a more efficient standard.
2.22 Each new adopted commercial energy code shall establish efficiency and performance
2.23 standards that result in buildings and building systems that can be powered completely by
2.24 carbon-neutral energy sources by the year 2036 and thereafter."

2.25 Amend the title accordingly



January 31, 2023

RE: Support for advanced commercial building energy code

Honorable Chair Acomb and members of the Climate and Energy Finance and Policy Committee,

The Center for Energy and Environment (CEE) supports legislation advancing the State commercial building energy code. The proposed legislation would ensure:

- the most recent American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) 90.1 commercial building energy code is adopted upon the Department of Energy's determination that such code improves energy efficiency beginning in 2024.
- that the energy code advances energy efficiency and resilience requirements such that newly constructed commercial buildings may be fully fueled by carbon-neutral energy sources by 2036.

CEE is a 501c3 nonprofit organization based in Minneapolis, MN with expertise in energy efficiency that traces back over 40 years. CEE's mission is to discover and deploy the most effective energy solutions that strengthen the economy and improve the environment. A key component to accomplishing that is supporting energy efficiency in new buildings through in-the-field energy efficiency research on new construction, often with through the State of Minnesota's Conservation Applied Research and Development (CARD) grant program, and by working with utility programs and city code officials to maximize the energy code implementation.

Furthermore, this legislation is valuable for Minnesota compete for federal Bipartisan Infrastructure Law dollars to improve energy code and its implementation throughout the state. CEE is leading the proposal team along with Department of Commerce and Department of Labor and Industry and others for the federal Resilient and Efficient Codes Implementation program.

This legislation is the result of multiple years of stakeholder discussion, including a joint Department of Commerce and Department of Labor and Industry process held in 2019-2020. We are delighted to have been part of those discussions and to support this important legislation moving forward.

We support energy efficient new construction because it one of the most impactful and cost-effective ways the State can enhance the comfort and health of people, reduce costs for building owners, and make progress toward State energy goals.

Sincerely,

A handwritten signature in black ink that reads 'Katie Jones'.

Katie Jones
Community Program and Policy Manager
Center for Energy and Environment

February 1, 2023

Minnesota House of Representatives
Climate and Energy Finance and Policy Committee
State Office Building, Rm. 200
Saint Paul, MN 55155

RE: House File 772, Support for Advanced Commercial Energy Codes

Dear Chair Acomb, Representative Kraft, and Committee Members,

On behalf of Clean Energy Economy MN (CEEM), I write today in support of HF772 to advance the State's commercial building energy code by adopting the most recent version of ASHRAE 90.1, once the Department of Labor and Industry (DOLI) determines it will improve energy efficiency, beginning in 2024. We support this bill because it provides a clear pathway to significantly lower energy usage and greenhouse gas emissions in commercial buildings.

CEEM is an industry-led, nonpartisan, non-profit organization representing the business voice of energy efficiency and clean energy in Minnesota. We work to educate Minnesotans about the economic benefits of transitioning to a clean energy economy and are committed to delivering a 100% clean energy future where all Minnesota businesses and citizens will thrive. Our business membership is comprised of nearly 50 clean energy companies ranging from start-up businesses to Fortune 100 and 500 corporations that employ tens of thousands of Minnesotans across the state.

We thank Representative Kraft for bringing this bill forward. Adopting new commercial building energy codes in a timely manner is an example of clear policy leadership in alignment with the state's Climate Action Framework of driving reductions in greenhouse gas emissions. New building codes also represent an important expansion of the market for our energy efficiency businesses. Additionally, Minnesota adopting new building energy codes is vital for fully maximizing and competing for federal dollars through the Infrastructure Investment and Jobs Act.

Today, over 42,200 Minnesotans work in energy efficiency comprising nearly 75 percent of our state's almost 58,00 clean energy jobs.¹ In addition, CEEM and its member businesses know that climate risk is business risk. State policies, including HF 772, that support swift progress towards a thriving and prosperous clean energy future send a powerful signal that Minnesota is open for business – attracting private sector investment and supporting local job creation.

Thank you for this opportunity to share our support for this bill. We look forward to its passage. If you have any questions, please let us know.

Sincerely,



George Damian
Director of Government Affairs
gdamian@cleanenergyeconomymn.org

¹ 2022 Clean Jobs Midwest Report: <https://www.cleanenergyeconomymn.org/clean-jobs-midwest>

IBEW LOCAL 292



HF 772 Energy Code adoption, House Energy Committee

February 1, 2023

Thank you Chair Acomb and members of the House Climate and Energy Committee. for allowing us to submit this written testimony in regard to HF 772 the Accelerated Energy Code Adoption bill

My name is Andy Snope, I am the Legislative Director for IBEW Local 292. We represent 5000 electrical workers who work throughout the state of Minnesota.

HF 772 provides for an accelerated adoption of the latest recommended standards for a statewide energy code for commercial buildings. Building energy efficiency is what our members and the contractors we work for do. We perform work that helps buildings perform better; electrification, lighting and load control, building automation, building energy management, process control and HVAC controls are all tasks that our members perform. We are trained to do these tasks and we continually receive training to update our skills to meet the latest codes and standards adopted by the Minnesota Department of Labor and Industry.

The IBEW is ready to meet the challenge of additional efforts to help make building more energy efficient. We support the efforts outlined in this legislation and have been and will continue to work with Representative Kraft and all stakeholders to make this a more perfect bill that will help match energy efficiency goals while working within the real-world boundaries of industry and technology advancements towards those end goals.

This legislation is a result of a several years, long process with stakeholders to put in place flexibility while preserving the framework of a statewide implementation and regulatory conformity of the energy code. This year's legislation is a continuation of that work to act towards adoption of most recent nationally adopted efficiency standard, while keeping within the framework of statewide adoption through the rules process allowing for the advisory of industry experts through the Construction Codes Advisory Group and public input.

We are looking forward to working with Representative Kraft, the Departments of Labor, Commerce, Cities and Municipalities, and all other stakeholders to be a part of the process helping to implement these current and future energy efficiency standards.

Thank you for your time today and I apologize I cannot be there in person but am always available to answer any questions.

Andy Snope

IBEW Local 292

Andy Snope, IBEW Local 292, asnope@ibew292.org, 612-617-4238, 612-810-2781

Joel Johnson, IBEW State Council, joelonemn@gmail.com, 763-639-1746



JANETTE DEAN

National & Regional Environmental Policy & Human Rights Advocate
 Caledonia, MN
 JanetteNoelle@gmail.com
 (507) 725-3012 Landline / (507) 500-0142 Cell

January 31, 2023

House Committee on Climate and Energy Finance and Policy
 Minnesota House of Representatives
 100 Rev. Dr. Martin Luther King Jr. Blvd.
 Saint Paul, MN 55155

Re: Letter of Support for [HF772](#) (Kraft) - State Building Code; energy code for new commercial building adoption process modified.

Dear Chair Patty Acomb, Vice Chair Larry Kraft & Committee Members:

Our state as well as many others need to reduce energy usage in commercial buildings by increasing energy efficiency standards as high and as soon as possible.

Although I could not be happier that a 100% Clean Energy Bill ([House File 7](#)) for the State of Minnesota passed the Minnesota House of Representatives last week and should pass the Senate as well soon as [Senate File 4](#), ***in addition to the type of energy used in Minnesota, the amount of energy used in Minnesota matters as well.***

Some of those reasons are emphasized by our own U.S. Office of Energy Efficiency & Renewable Energy on their “Energy Efficiency” page (see: <https://www.energy.gov/eere/energy-efficiency>) including:

“Energy efficiency is one of the easiest and most cost-effective ways to combat climate change, reduce energy costs for consumers, and improve the competitiveness of U.S. businesses. Energy efficiency is also a vital component in achieving net-zero emissions of carbon dioxide through decarbonization.”

“Energy-efficient buildings cost less to heat, cool, and operate, while industry and manufacturing plants can make products at lower cost.”

“Energy-efficiency programs improve community resilience and address energy equity by bringing efficient, cost-effective technologies and infrastructure to underserved communities, including communities of color.”

“Energy-efficient homes and buildings are also better equipped to switch to renewable energy, which does not produce harmful emissions.”

“Energy-efficiency improvements reduce the amount of electricity on the grid at one time, known as load, minimizing congestion and stress on the U.S. electric grid. Less load prevents power disruptions.”

Please pass HF772 so that more energy efficiency is required in commercial buildings in Minnesota and will therefore be much more highly prioritized.

Thank you,

Janette Dean

La Crescent High School Graduate; B.A. Political Science & Sociology – UNR / USC Alumna
 Sierra Club Wilderness Guardian member; MN350 Action member; Houston County DFL member



January 30, 2023

Re: HF 772 – Energy Code Components of State Building Code

Chair Acomb and members of the House Climate and Energy Finance and Policy Committee:

The League of Minnesota Cities appreciates the opportunity to comment on HF 772. We thank the author, Rep. Kraft, for his work on this issue and support the proposed changes to the schedule and progression of energy code requirements.

Meeting the state's goals on carbon and greenhouse gas emission reductions will take significant effort and the energy standards we use for larger commercial and multistory residential structures will need to be consistently reviewed and strengthened to achieve those results. The State Building Code sets the standards that must be met in new or substantially retrofitted structures and prohibits local requirements that differ from that code. The current state schedule for the amendment and adoption of more stringent building and energy codes is not adequate to result in the state meeting those goals in larger commercial and multistory residential structures.

The League of Minnesota Cities, through the adoption of policy *SD-30. Advanced Energy Building Standards* by our Board of Directors in its 2023 City Policies, recognizes the importance of establishing advanced building energy performance standards for commercial and multi-story residential construction. The pacing of the updates to the standards and scope of affected properties is consistent with LMC policy recommendations, although we believe that the intended date for reaching net zero carbon emissions found in line 2.24 should be 2036, not 2038.

Thank you for your time and attention to this important issue.

Sincerely,

A handwritten signature in black ink that reads 'Craig A. Johnson'.

Craig A. Johnson
Intergovernmental Relations Representative
League of Minnesota Cities



January 31, 2023

House File 772

Dear Chair Acomb and Members of the House Climate and Energy Committee,

Our organizations represent tens of thousands of employers and workplaces across the state of Minnesota. Safe, affordable, and reliable energy is critical for our businesses, workers, customers, residents, and occupants.

We write to express our opposition to House File 772 in its current form. This legislation directs the Minnesota Department of Labor to achieve a net zero energy standard for new commercial buildings within 15 years. The department must adopt each new published edition of ASHRAE 90.1 and amend as needed to achieve a minimum efficiency gain of 8% with each new edition on the way to net zero.

While our businesses strive to be more efficient every day, HF 772 as written presents numerous challenges for the owners, operators, residents, and occupants of commercial buildings. Please let us take this opportunity to outline the challenges with the bill.

Weather. Minnesota experiences extreme swings in temperature. This week's forecast is a prime example of these swings. We started Monday at -10 degrees and by Wednesday we expect to reach 19 degrees. These swings in temperature tax the best of systems.

As the efficiency mandate ratchets up, we will likely see a corresponding decline in the construction of new commercial buildings absent significant improvement in building systems technology that can withstand Minnesota's climate.

Technology Limitations. The bill sets Minnesota down a relatively short path toward net zero energy for new commercial buildings. The term "net zero energy standard" is undefined in the bill, but could be understood to mean that the building produces as much

energy as it uses. On-site energy production is impractical for many types of commercial structures, especially in a future with a much heavier dependence on electricity as a primary energy source.

And alternatives to conventional energy consuming infrastructure, such as heating systems, often come with a much longer payback period that makes construction or ownership infeasible. Perhaps the cost of such technology will improve in the future, but HF 772 makes no contingency if it does not.

Cost. The bill imposes new costs on commercial building owners and operators, given the need for on-site generation, stricter energy codes, and the incremental costs related to adhering to an ever-changing energy code. Energy generating infrastructure is expensive, early adoption of new technology is expensive, and Minnesota already has one of the most stringent energy efficiency codes in the country. The standard building code adoption cycle is six years, and this bill puts commercial buildings on an expensive track toward an uncertain future.

Reliability. Forcing commercial buildings to adhere to a net zero standard without knowing whether it's practical or achievable with existing technology puts reliability at risk. The bill contains no off ramp to ensure reliability and affordability is preserved for future structures. We urge the committee to find alternatives to this inflexible mandate, such as incentives to adopt higher efficiency technology that shortens the payback period.



Office of Mayor Jacob Frey
350 S. Fifth St. - Room 331
Minneapolis, MN 55415
TEL 612.673.2100

www.minneapolismn.gov

Jan 30, 2023

Members of the House Climate and Energy Finance and Policy Committee:

Thank you for the opportunity to share our support for HF 772, which modifies the energy code adoption process for new commercial buildings, because of the importance of the bill in helping the City of Minneapolis achieve our climate goals. Deploying energy efficiency measures at the time of construction is the most cost-effective time to make these investments and will save money and reduce greenhouse gas emissions for property owners and renters. Buildings account for approximately 40% of all the energy used in Minnesota, and this goes up to 60% for the City of Minneapolis. Advancing the energy code is essential for helping Minnesota meet its renewable energy targets and greenhouse gas emission reduction goals.

Sustainable Building 2030 has long been required for state buildings and buildings receiving state bonding money. Minnesota's experience with SB 2030 positions us to successfully implement HF772 and capture the benefits of cost-effective, high-performance buildings for businesses and residents of multifamily buildings. Building contractors and design professionals statewide are already familiar with the Sustainable Building 2030 energy standards developed by the State of Minnesota.

SB 2030 has resulted in energy efficient, resilient buildings for low- or no-cost with immediate energy savings. The existing Minnesota buildings meeting SB 2030 standards save tens of millions of dollars every year. In addition, clean energy measures are known to improve public health and support economic development, creating value that exceeds the minimal associated costs.

Effective, least-cost implementation is key to the implementation of clean energy technologies and is best integrated during construction or during a major renovation. Please accept this letter of support and contact me if you would like to discuss the matter further.

Yours Truly,

A handwritten signature in black ink, appearing to be "JF", with a long horizontal line extending to the right.

Mayor Jacob Frey,
City of Minneapolis



February 1st, 2023

TO: House Climate and Energy Finance and Policy Committee

FROM: Andrea Lovoll, Legislative Director, Minnesota Center for Environmental Advocacy

RE: Building Codes Legislation

Chair Acomb and Members of the Committee:

Thank you for your service to the people of Minnesota and thank you for the opportunity to testify on HF 772 (Kraft). Minnesota Center for Environmental Advocacy (MCEA) is a nonprofit organization with almost 50 years of experience using law and science to protect Minnesota's environment and the health of its people.

Building emissions are increasing and we need to reverse that trend

- Buildings emissions account for 12% of total greenhouse gas emissions in Minnesota, and unlike emissions from most other sectors, are increasing over time.
- We need to reverse this trend if we are going to achieve the emission reductions the science indicates are necessary to preserve a livable planet.
- One of the fastest and most cost-effective ways to achieve those emission reductions is to improve the energy efficiency of building envelopes, heating and cooling systems and appliances.
- We know from prior studies conducted in Minnesota that energy efficiency measures are a great investment because they decrease water use and reduce greenhouse gas emissions while creating high quality jobs, lowering utility bills for customers, and reducing infrastructure investment costs for utilities.

Updated building codes are essential for maximizing the energy efficiency of buildings

- Building codes help us achieve the benefits of energy efficiency by establishing minimum energy efficiency requirements for the design and construction of new buildings and their components and by specifying how to assess compliance with these standards.
- National building code standards are updated every few years to reflect state of the art approaches for maximizing building energy efficiency and safety, but Minnesota's building codes have not been updated to the most recent standard.
- This means we are missing a critical opportunity to reduce building energy waste and save money.
- Because the Inflation Reduction Act includes \$1 billion in grants from the Department of Labor and Industry for updating state building codes, and these funds will only remain for the next five years, now is the time to align our state building codes with the most recent national standards.

Summary

- HF 772 will help ensure our state reaps the benefits of more efficient buildings by ensuring that our state commercial building codes are updated regularly and put us on track to achieve a net zero standard within 15 years.
- We support this important legislation because it will reduce energy waste from buildings, while creating jobs and saving money for building owners and occupants.

Thank you,

Andrea Lovoll
Legislative Director
Minnesota Center for Environmental Advocacy
alovoll@mncenter.org



January 31, 2023

House File 772

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While our businesses strive to be more efficient every day, HF 772 as written presents numerous challenges for the owners, operators, residents, and occupants of commercial buildings. Please let us take this opportunity to outline the challenges with the bill.

Weather. Minnesota experiences extreme swings in temperature. This week's forecast is a prime example of these swings. We started Monday at -10 degrees and by Wednesday we expect to reach 19 degrees. These swings in temperature tax the best of systems.

As the efficiency mandate ratchets up, we will likely see a corresponding decline in the construction of new commercial buildings absent significant improvement in building systems technology that can withstand Minnesota's climate.

Technology Limitations. The bill sets Minnesota down a relatively short path toward net zero energy for new commercial buildings. The term "net zero energy standard" is undefined in the bill, but could be understood to mean that the building produces as much

energy as it uses. On-site energy production is impractical for many types of commercial structures, especially in a future with a much heavier dependence on electricity as a primary energy source.

And alternatives to conventional energy consuming infrastructure, such as heating systems, often come with a much longer payback period that makes construction or ownership infeasible. Perhaps the cost of such technology will improve in the future, but HF 772 makes no contingency if it does not.

Cost. The bill imposes new costs on commercial building owners and operators, given the need for on-site generation, stricter energy codes, and the incremental costs related to adhering to an ever-changing energy code. Energy generating infrastructure is expensive, early adoption of new technology is expensive, and Minnesota already has one of the most stringent energy efficiency codes in the country. The standard building code adoption cycle is six years, and this bill puts commercial buildings on an expensive track toward an uncertain future.

Reliability. Forcing commercial buildings to adhere to a net zero standard without knowing whether it's practical or achievable with existing technology puts reliability at risk. The bill contains no off ramp to ensure reliability and affordability is preserved for future structures. We urge the committee to find alternatives to this inflexible mandate, such as incentives to adopt higher efficiency technology that shortens the payback period.

January 30, 2023

Reference: Concerns on HF 772

Representative Larry Kraft
515 State Office Building
St. Paul, MN 55155

Dear Representative Kraft and honorable members of the Climate and Energy Finance and Policy Committee:

Our organizations deeply value energy efficiency and the commercial building sector. For decades our utilities have helped our customers reach their energy efficiency goals. Unfortunately, we must express concerns with HF 772 in its current form. Our concerns include timeline and cost-effective implementation of net zero energy use in buildings in Minnesota's harsh climate. We are aware of the potential for modified language, or a separate bill, from the Department of Labor and Industry (DLI) on this topic and are interested to learn more. As stakeholders affected by codes legislation, we would greatly appreciate an opportunity to participate in ongoing discussions and language considerations with all parties.

Sincerely,

Justin Dever
Senior Public Affairs
Great Plains Natural Gas

Rick Evans
Director of Government Affairs
Xcel Energy

Jamie Fitzke
Director of Government Affairs
CenterPoint Energy

Jason Grenier
Market Planning Manager
Otter Tail Power

Nick Krzeminski
Vice President
Minnesota Energy Resources Corp

Zach Martin
Manager of Government Affairs
Minnesota Power

Kent Sulem
Director of Government Relations and Senior
Counsel
Minnesota Municipal Utilities Association



Grant Programs for Climate & Energy
HF747 & HF597

January 30, 2023

Representative Patty Acomb
593 State Office Building
St. Paul, MN 55155

RE: Support for HF747 & HF597

Dear Chair Acomb,

This letter is to express the City of New Brighton's support for HF747 & HF597, which establishes grants for solar energy systems and a grants program to provide financial assistance to cities to address climate change.

The City of New Brighton will be developing its first Climate Action Plan over the next year. This plan will guide the City in climate action efforts addressing adaptation needs and greenhouse gas reductions in both municipal operations as well as community-wide. As we develop our Climate Action Plan and identify priorities and goals the city will need additional funding to help achieve them. These Bills will provide a source for us to pursue and perhaps use.

The programs identified in these Bills will support communities like New Brighton and allow for the implementation of projects that address climate change and renewable energy systems. The programs provide solutions and tools to cities ever changing needs.

Many communities can benefit from these Bills, and we will continue to benefit from the expansion of these programs as we strive to meet the future needs of our citizens and environment.

Sincerely,

Craig Schlichting
Director of Community Assets and Development

CCAC Review and Comment

Legislative and/or Code Information

Bill number(s) description (if applicable) – Attach Bill language

[SF 2536/HF 2135](#) Adult-Size Changing Facilities

(n) Adult-size changing facilities. (1) The code must require the installation of adult-size changing facilities on each floor where there is a restroom accessible to the public. This requirement is met by providing adult-size changing facilities in either a unisex restroom or in both a men's restroom and a women's restroom. Adult-size changing facilities consist of:

- (i) an adult-size changing table in a private location;
- (ii) a supply of paper table liners and disinfectant wipes;
- (iii) an appropriately sized waste container for used supplies;
- (iv) nonslip flooring;
- (v) wall-mounted hooks and a shelf for a user's personal supplies;
- (vi) a chair for the user's attendant or caregiver; and
- (vii) signage indicating the presence of the adult-size changing facilities.

(2) Adult-size changing tables must have a changing surface that:

- (i) is a minimum of 24 inches wide and 71 inches long;
- (ii) either sits at or is capable of being adjusted to a height of between 18 and 28 inches above the floor;
- (iii) is weight-bearing to a minimum of 350 pounds; and
- (iv) has both a safety rail and restraint straps available.

Subject/Building Code Section(s)

Minnesota Rules, chapter 1341, Minnesota Accessibility Code
 Proposed Minnesota Statutes 326B.106 Subd. 4 (n)

Technical Advisory Group (TAG)

TAG Formed Yes No

Title of TAG: Building Code Series 1 TAG

TAG Members

Scott McKown
 Irene Kao
 Charlie Vander Aarde
 Nick Erickson
 Brian Hoffman
 Kurt Welker
 Karen Gridley
 Barry Greive
 Simona Fischer
 John Smith
 Ken Hinz

Affiliations/Representing

MN DLI/CCLD; Assistant Director
 League of Minnesota Cities
 Metro Cities
 Housing First Minnesota
 City of St. Louis Park; Association of MN Building Officials
 Welker Custom Homes; Builders Association of MN
 MN DLI/CCLD; Accessibility Specialist
 Target Corporation; Building Owners
 MSR Design; MN American Institute of Architects
 Michaud Cooley Erickson; Building Systems Design and Engineering Practices
 CBS Construction Services, Inc; Contractors

TAG Meeting Date(s) 11/9/2021; 11/23/2021; 12/7/2021; 12/21/21	
TAG Comments/Recommendations – Attachment <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
<ol style="list-style-type: none"> 1. TAG members support adoption of national model code requirements for adult changing tables through the rulemaking process that will adopt the 2024 “I” codes in lieu of the proposed statutory requirements. 2. Placing technical requirements in statute limits the ability of designers, builders and building officials from proposing and approving alternative designs. 3. The bill language conflicts with the intent of the State Building Code that buildings be designed to accommodate all persons with disabilities. The addition of a requirement for adult changing tables without any increase in the size of the restroom, will create barriers for other members of the disability community who use wheelchairs or other mobility devices. 4. Adopting the national model code language reduces costs by only requiring adult changing tables in key locations and using existing requirements for family- and assisted-use restrooms. 5. Accessibility advocates and subject-matter experts recommend regulating adult changing tables in the building code rather than through legislation to prevent inconsistency with the national standard. It is anticipated that the 2024 IBC will contain appropriate provisions for adult changing tables. 6. TAG members do not recommend these proposed legislative changes. However, if the proposed bills move forward, they should be modified to include an effective date that allows 18-months for implementation and a sunset date, so the statute expires when the new building code with criteria for adult changing stations becomes effective. 	
Criteria Addressed (check all that apply) <input checked="" type="checkbox"/> Eliminating inconsistencies <input checked="" type="checkbox"/> Promoting coordination & consistency <input checked="" type="checkbox"/> Making rules easier to understand & apply <input checked="" type="checkbox"/> Streamlining construction regulation & construction procedures <input checked="" type="checkbox"/> Improving procedures within and among jurisdictions <input type="checkbox"/> Other:	
CCAC Comments & Recommendations	
A motion was made by Sprung, seconded by Guth, to approve the Technical Advisory Group Report on Adult-sized Changing Facilities. The roll call vote was unanimous with 17 votes in favor.	
Date of CCAC Meeting: January 20, 2022	
Prepared by/Name & Title Scott McLellan, Construction Codes Advisory Council Chair	Date January 21, 2022

This Document can be made available in alternative formats upon request

State of Minnesota HOUSE OF REPRESENTATIVES

NINETY-THIRD SESSION

H. F. No. 981

01/30/2023 Authored by Hicks, Reyer, Pryor, Acomb and Curran The bill was read for the first time and referred to the Committee on Labor and Industry Finance and Policy

1.1 A bill for an act
1.2 relating to the State Building Code; requiring the installation of adult-size changing
1.3 facilities in restrooms accessible to the public; amending Minnesota Statutes 2022,
1.4 section 326B.106, subdivision 4.

1.5 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF MINNESOTA:

1.6 Section 1. Minnesota Statutes 2022, section 326B.106, subdivision 4, is amended to read:

1.7 Subd. 4. Special requirements. (a) Space for commuter vans. The code must require
1.8 that any parking ramp or other parking facility constructed in accordance with the code
1.9 include an appropriate number of spaces suitable for the parking of motor vehicles having
1.10 a capacity of seven to 16 persons and which are principally used to provide prearranged
1.11 commuter transportation of employees to or from their place of employment or to or from
1.12 a transit stop authorized by a local transit authority.

1.13 (b) Smoke detection devices. The code must require that all dwellings, lodging houses,
1.14 apartment houses, and hotels as defined in section 299F.362 comply with the provisions of
1.15 section 299F.362.

1.16 (c) Doors in nursing homes and hospitals. The State Building Code may not require
1.17 that each door entering a sleeping or patient's room from a corridor in a nursing home or
1.18 hospital with an approved complete standard automatic fire extinguishing system be
1.19 constructed or maintained as self-closing or automatically closing.

1.20 (d) Child care facilities in churches; ground level exit. A licensed day care center
1.21 serving fewer than 30 preschool age persons and which is located in a belowground space
1.22 in a church building is exempt from the State Building Code requirement for a ground level
1.23 exit when the center has more than two stairways to the ground level and its exit.

2.1 (e) **Family and group family day care.** Until the legislature enacts legislation specifying
2.2 appropriate standards, the definition of dwellings constructed in accordance with the
2.3 International Residential Code as adopted as part of the State Building Code applies to
2.4 family and group family day care homes licensed by the Department of Human Services
2.5 under Minnesota Rules, chapter 9502.

2.6 (f) **Enclosed stairways.** No provision of the code or any appendix chapter of the code
2.7 may require stairways of existing multiple dwelling buildings of two stories or less to be
2.8 enclosed.

2.9 (g) **Double cylinder dead bolt locks.** No provision of the code or appendix chapter of
2.10 the code may prohibit double cylinder dead bolt locks in existing single-family homes,
2.11 townhouses, and first floor duplexes used exclusively as a residential dwelling. Any
2.12 recommendation or promotion of double cylinder dead bolt locks must include a warning
2.13 about their potential fire danger and procedures to minimize the danger.

2.14 (h) **Relocated residential buildings.** A residential building relocated within or into a
2.15 political subdivision of the state need not comply with the State Energy Code or section
2.16 326B.439 provided that, where available, an energy audit is conducted on the relocated
2.17 building.

2.18 (i) **Automatic garage door opening systems.** The code must require all residential
2.19 buildings as defined in section 325F.82 to comply with the provisions of sections 325F.82
2.20 and 325F.83.

2.21 (j) **Exterior wood decks, patios, and balconies.** The code must permit the decking
2.22 surface and upper portions of exterior wood decks, patios, and balconies to be constructed
2.23 of (1) heartwood from species of wood having natural resistance to decay or termites,
2.24 including redwood and cedars, (2) grades of lumber which contain sapwood from species
2.25 of wood having natural resistance to decay or termites, including redwood and cedars, or
2.26 (3) treated wood. The species and grades of wood products used to construct the decking
2.27 surface and upper portions of exterior decks, patios, and balconies must be made available
2.28 to the building official on request before final construction approval.

2.29 (k) **Bioprocess piping and equipment.** No permit fee for bioprocess piping may be
2.30 imposed by municipalities under the State Building Code, except as required under section
2.31 326B.92 subdivision 1. Permits for bioprocess piping shall be according to section 326B.92
2.32 administered by the Department of Labor and Industry. All data regarding the material
2.33 production processes, including the bioprocess system's structural design and layout, are
2.34 nonpublic data as provided by section 13.7911.

3.1 (l) **Use of ungraded lumber.** The code must allow the use of ungraded lumber in
3.2 geographic areas of the state where the code did not generally apply as of April 1, 2008, to
3.3 the same extent that ungraded lumber could be used in that area before April 1, 2008.

3.4 (m) **Window cleaning safety.** The code must require the installation of dedicated
3.5 anchorages for the purpose of suspended window cleaning on (1) new buildings four stories
3.6 or greater; and (2) buildings four stories or greater, only on those areas undergoing
3.7 reconstruction, alteration, or repair that includes the exposure of primary structural
3.8 components of the roof.

3.9 The commissioner may waive all or a portion of the requirements of this paragraph
3.10 related to reconstruction, alteration, or repair, if the installation of dedicated anchorages
3.11 would not result in significant safety improvements due to limits on the size of the project,
3.12 or other factors as determined by the commissioner.

3.13 (n)(1) **Adult-size changing facilities.** The code must require the installation of adult-size
3.14 changing facilities on each floor where there is a restroom accessible to the public. This
3.15 requirement is met by providing adult-size changing facilities in either a unisex restroom
3.16 or in both a men's restroom and a women's restroom. Adult-size changing facilities consist
3.17 of:

3.18 (i) an adult-size changing table in a private location;

3.19 (ii) a supply of paper table liners and disinfectant wipes;

3.20 (iii) an appropriately sized waste container for used supplies;

3.21 (iv) nonslip flooring;

3.22 (v) wall-mounted hooks and a shelf for a user's personal supplies;

3.23 (vi) a chair for the user's attendant or caregiver; and

3.24 (vii) signage indicating the presence of the adult-size changing facilities.

3.25 (2) Adult-size changing tables must have a changing surface that:

3.26 (i) is a minimum of 24 inches wide and 71 inches long;

3.27 (ii) either sits at or is capable of being adjusted to a height of between 18 and 28 inches
3.28 above the floor;

3.29 (iii) is weight-bearing to a minimum of 350 pounds; and

3.30 (iv) has both a safety rail and restraint straps available.