

Meeting Notes: Building Efficiency Workgroup

Date: November 21, 2019

Attendees:

| Commissioner Steve Kelley | Department of Commerce |
|----------------------------|---|
| Commissioner Nancy Leppink | Department of Labor and Industry |
| Katherine Teiken | Minnesota Housing Finance Agency |
| Kelly Hyvonen | Big-D Construction |
| Justin Knopps | JE Dunn |
| Jessica Looman | MN State Building and Construction Trades Council |
| Andy Snope | IBEW Local 292 |
| Gary Thaden | MN Mechanical Contractors Assn |
| Gerhard Guth | HGA Architects and Engineers |
| Rick Carter | LHB Corp |
| Craig Johnson | League of MN Cities |
| Kurt Schultz | City of St. Paul |
| Megan Hoye | Center for Energy and Environment |
| Ben Rabe | Fresh Energy |
| Skip Duchesneau | D.W. Jones |
| Barry Greive | Target Properties |
| Becky Landon | Newport Midwest, LLC |
| Richard Graves | U of M Center for Sustainable Building Research |
| Representative Jamie Long | MN House |

Commissioner Nancy Leppink started the meeting at 2:06 pm. Meeting attendees introduced themselves. Commissioner Leppink provided an overview of the agenda.

Commissioner Kelley thanked workgroup members for completing the survey. He summarized respondents' answers to the survey questions regarding advantages and concerns with enabling cities to voluntarily promote or otherwise ensure greater energy efficiency & energy performance measures for commercial and multifamily residential buildings.

Commissioner Leppink then introduced Scott McLellan, Director of the Construction Codes and Licensing Division at the Minnesota Department of Labor and Industry, to provide an overview of the State Building Code and specifically the energy code as well as how a stretch code would interact with the current statewide building code. Mr. McLellan shared the existing statutory language and authority around the State Building Code. He noted Minnesota is obligated to review and adopt a new commercial energy code when recommended by the U.S. Department of Energy. Members wanted to know if the U.S. Department of Energy had ever issued a non-affirmative determination and the answer is no. Mr. McLellan said adoption of the commercial portion of the next Minnesota Energy Code (IECC 2018/ASHRAE 2016) will occur November 25 with an effective date of March 31, 2020. The increased efficiency of this edition of the commercial energy code is approximately 16% more efficient than our current code that was adopted 5 years ago. The ASHRAE 2019 standard could be considered by the state - the commissioner has authority to adopt amendments to the code prior to the adoption of the new energy codes to, among other reasons, improve the efficiency of a building.

Commissioner Kelley introduced the next presenter, Richard Graves, Director of the Center for Sustainable Building Research and an associate professor in the College of Design at the University of Minnesota. Professor Graves gave a brief presentation on building energy efficiency policies in other states/counties. He noted there are five other versions of stretch codes besides Massachusetts. There are also incentives, benchmarking, improvements to the base code, reach or stretch codes. Stretch codes are often paired with incentives. ASHRAE 2016 is often the base building code for a stretch code. Professor Graves briefly discussed the British Columbia Energy Step Code and noted the province is in climate zones 4-8, which intersects with Minnesota's climate zones 6 and 7.

Commissioner Leppink introduced, via live Webinar, Ian Finlayson, Deputy Director of the Energy Efficiency Division at the Massachusetts Department of Energy Resources. Mr. Finlayson works on policy development of a number of Massachusetts' energy efficiency priorities and was the lead author of the buildings chapter of the Massachusetts clean energy plan for 2020. Mr. Finalyson said Massachusetts is a leading state for energy efficiency and the energy code. The state recently adopted strengthening amendments beyond IECC 2018 related to lighting power density, envelope minimum requirements, solar readiness, and EV-ready parking spaces. The Massachusetts stretch energy code has been an option since 2009 and 278 municipalities have adopted the stretch code. Mr. Finlayson said lessons learned include the importance of incentives (the Green Communities program increased available grant funding to \$20 million annually), code training for officials and industry, and supporting code officials. Modeling a percentage better than the ASHRAE standard is complex to administer, and they dropped prescriptive requirements in 2017. Mr. Finlayson said some cities are asking for additional options and development is underway on a net zero stretch code for 2021. While net zero has some support from the design & construction industry, trade associations are concerned. Cities that have 100% by 2050 zero carbon commitments are highly dependent on buildings for achieving greenhouse gas reductions.

Mr. Finlayson said net zero adds around 1% to the cost but there has been no clear evidence of increased cost for stretch codes. He noted some design firms see net zero capability as a competitive advantage. Mr. Finlayson said there has been no noticeable impact on development, particularly interesting during an economic downturn. Once developers know what they are building to, it hasn't been an issue. At first, technical knowledge is an issue; cost is not an issue. Mr. Finlayson concluded stretch codes were less disruptive than expected. While it took Massachusetts nine years to get to where they are, Minnesota could "catch up" quickly.

Commissioner Leppink introduced the final part of the agenda regarding workgroup goals and factors to evaluate policies.

The workgroup discussed what baseline of information is needed to evaluate policy options, including costs and benefits, job creation/reduction potential, the impact on small businesses and communities, and complexity of implementation. Workgroup members added the need for education and training, discussed the role of utilities, the need for incentives to make options successful, and consistency. It was noted a roadmap and common endpoint, to match goals and results, would be important. Other discussion points included the distinction of building operations from building codes, and the need for flexibility. When considering cost as a factor, it was noted that buildings are a long-term asset (or liability) and the group should think beyond just the first cost of construction.

Commissioner Leppink reminded members of the December 4 meeting and said the next meeting will include a presentation and discussion by Mr. Schultz and Mr. Hoffman regarding recommendations from the Cities Advanced Building Performance Working Group. The agenda will include breakout discussions for members to discuss specific policy options with a focus on factors workgroup members have identified as important. Commissioner Leppink concluded the meeting at 4:30 pm.