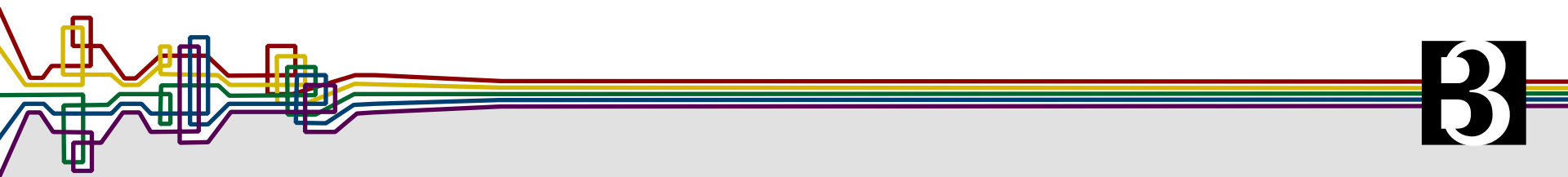


February 7, 2024
B3 Program Celebration

B3 PROGRAMS AND TOOLS: WHAT'S NEW AND WHAT'S NEXT?

Maureen Colburn, LHB



LEGISLATIVE RECOMMENDATIONS

3 GUIDELINES

WHAT'S NEW?

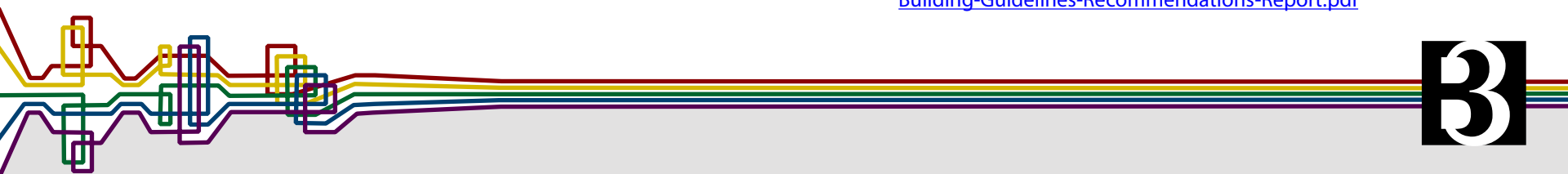
- Recommendations for program improvements

WHAT'S NEXT?

- Discussion with Legislature
- Training targeted to stakeholder feedback



www.b3mn.org/wp-content/uploads/Sustainable-Building-Guidelines-Recommendations-Report.pdf



B3 GUIDELINES



WHAT'S NEW?

- Performance mgmt. resources

WHAT'S NEXT?

- Daylighting, Site & Water (v3.2r02)
- Resilience
- SB 2030 interface (E1A & E1B)

guidelines@b3mn.org

SECTION 01 8113

B3 SUSTAINABLE DESIGN REQUIREMENTS

PART 1 GENERAL

1.1 PROJECT GOALS

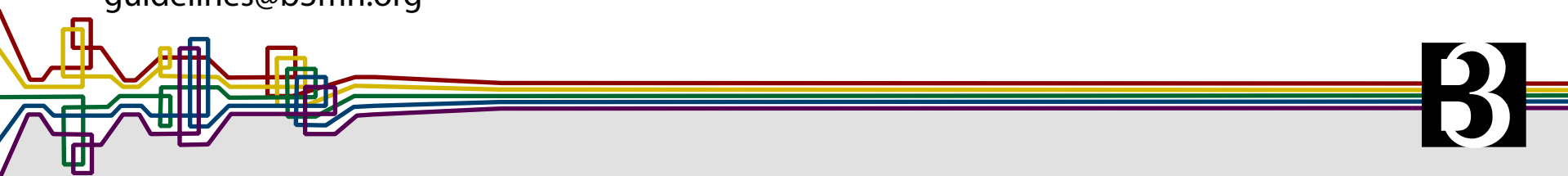
- A. This project has been designed to comply with the B3 Sustainability Guidelines including the SB2030 Energy Standard.
- B. Many of the B3 requirements can be achieved only through intelligent design of the project and are beyond the control of the Contractor. However, certain credits relate to the products and procedures used for construction. Therefore, the full cooperation of the Contractor and subcontractors is essential to achieving compliance.
- C. Contractor shall familiarize himself/herself with the relevant requirements and provide the necessary information and instruction to all subcontractors and installers.
- D. Since Contractor and subcontractors may not be familiar with B3 requirements, this section includes a summary of the products and procedures intended to achieve B3 compliance.
- E. Some requirements are dependent on proper performance by Contractor and subcontractors.
- F. Some requirements involve quantifying percentages by weight and cost; these require careful recordkeeping and reporting by the Contractor.
- G. See <https://www.b3mn.org/guidelines/> for more information.

1.2 SECTION INCLUDES

- A. Minimum Sustainable Performance Requirements.
- B. State of Minnesota Sustainable Building Guidelines for New Buildings.
 1. Version 3.2 r 01 of the State of Minnesota Sustainable Building Guidelines (B3 Guidelines) are included by reference and can be found at: www.b3mn.org/guidelines/

1.3 RELATED SECTIONS

- A. Section 01 3323 - Shop Drawings, Product Data and Samples.
- B. Section 01 4500 - Quality Control
- C. Section 01 5721 - Indoor Air Quality Controls
- D. Section 01 7419 - Construction Waste Management and Disposal.
- E. Section 01 9113 - General Commissioning Requirements.
- F. Section 03 3000 - Cast-in-Place Concrete.
- G. Section 03 3511 - Concrete Floor Finishes.



BUY CLEAN BUY FAIR ACT

WHAT'S NEW?

- Embodied carbon standards applicable to state-owned buildings over 50,000 SF

WHAT'S NEXT?

- Environmental Standards & Procurement Task Force



SUSTAINABLE BUILDING 2030

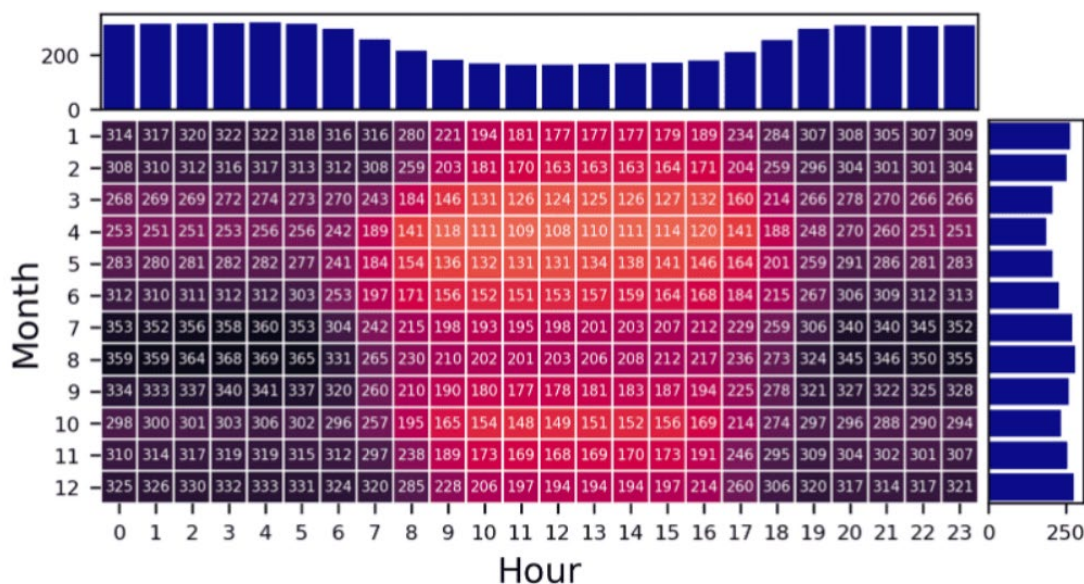


WHAT'S NEW?

- On-demand training

WHAT'S NEXT?

- 90% reduction on 1/1/25
- Reviewing:
 - Cost-effectiveness
 - Future weather & emissions factors
 - Hourly emissions
 - RECs
 - Loads from EVs



Long-run marginal CO2 emission rate pattern (kg/MWh) for the contiguous U.S.



SUSTAINABLE BUILDING 2030

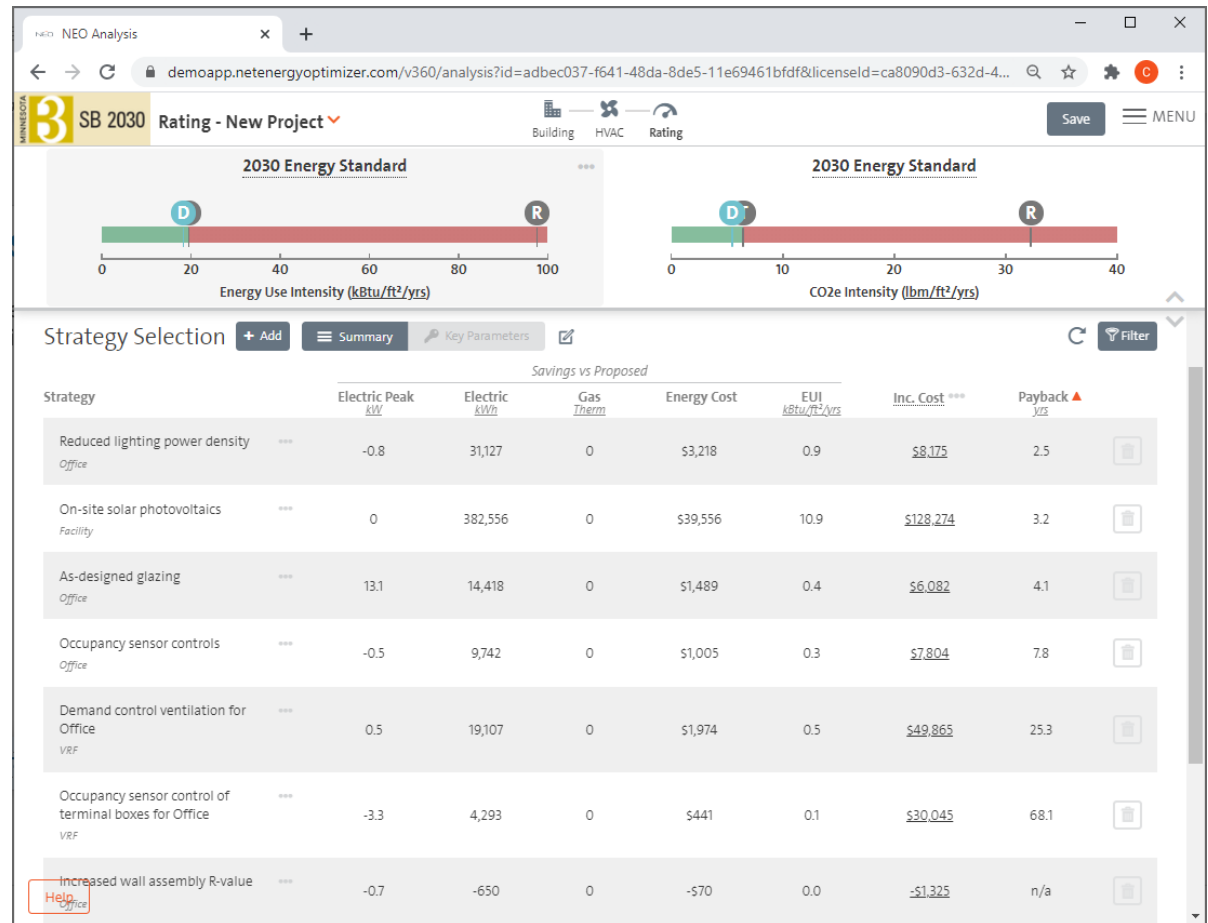


WHAT'S NEW?

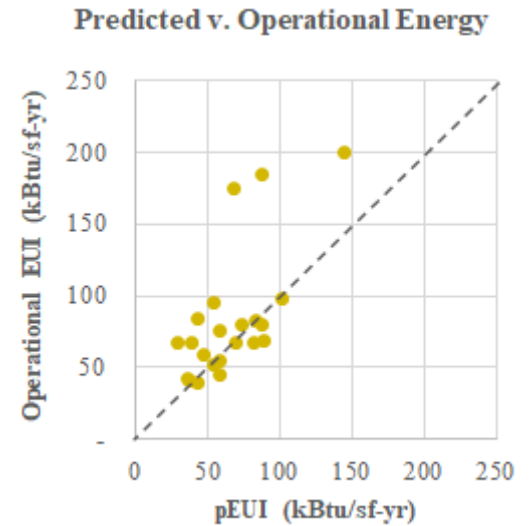
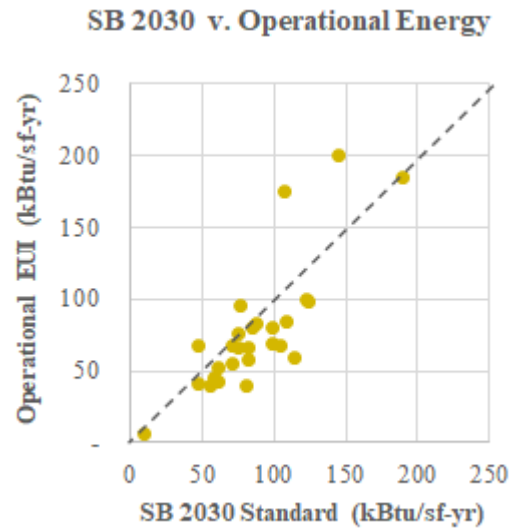
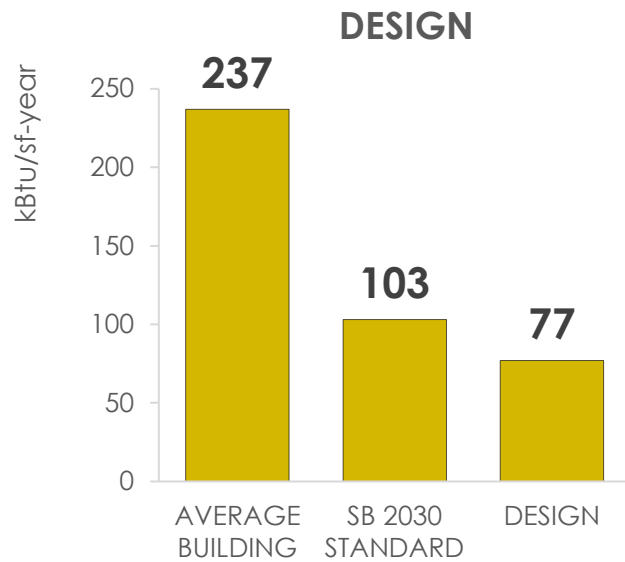
- Energy code update
- More HVAC options
- Reviewer mode
- Auto version upgrades

WHAT'S NEXT?

- Switch to EnergyPlus



SUSTAINABLE BUILDING 2030



B3 BENCHMARKING

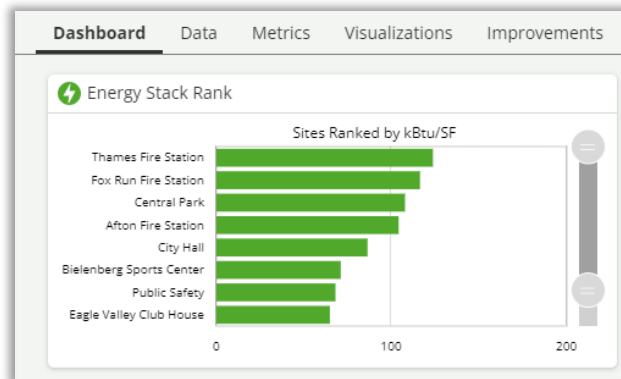
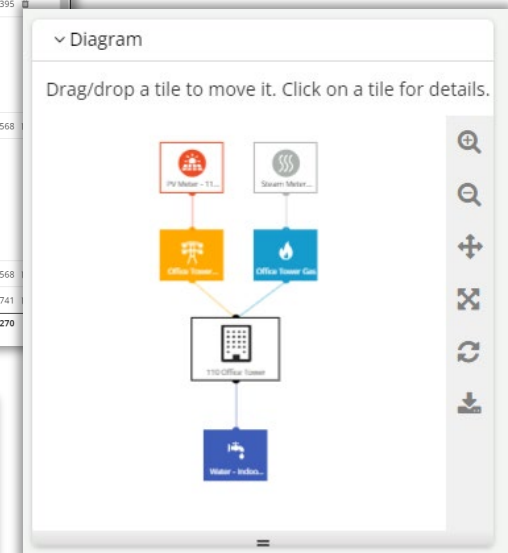
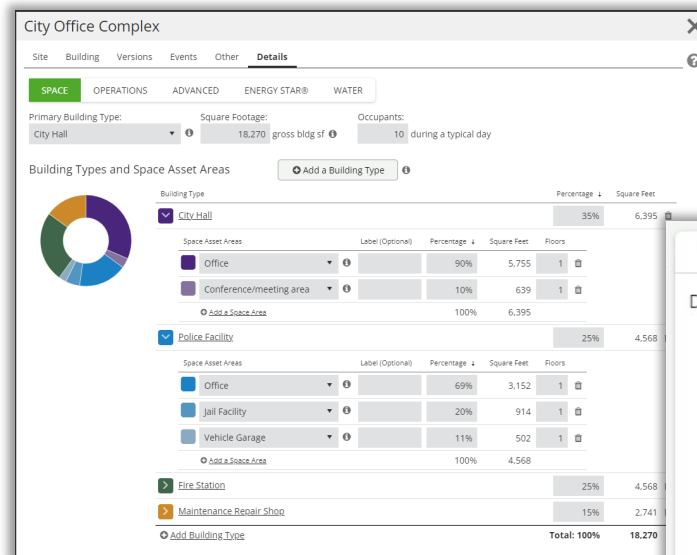


WHAT'S NEW?

- Additional dashboard widgets
- Multiple building types
- Enhanced diagram view

WHAT'S NEXT?

- Re-designed Improvements Tab
- Re-designed Targets



ENERGY EFFICIENT OPERATIONS



WHAT'S NEW?

- On-demand training:
["Beyond Cutsheets and Keys: Best Practices for Building Handoff"](#)

WHAT'S NEXT?

- Call for building candidates – contact:
Garrett Mosiman
mosi0019@umn.edu

MINNESOTA 3 ENERGY EFFICIENT OPERATIONS

Welcome mosi0019@umn.edu
My Account | Sign Out

Home Contact Admin

U of M ST&SS
222 Pleasant St SE
Minneapolis, MN 55455

DOAS-1
Areas Served: no data
Active

VERIFY WHEEL SPEED TASKS

Verify Wheel Speed

Intent:
The intent of this task is to periodically verify that the enthalpy wheel speeds are operations as expected.

Click to open detailed instructions

Step 1
Find current data.
(See screenshot sequence.)

Step 2
Enter outside air temperature (OAT).
OAT: 82

Step 3
Enter wheel speed (WS).
WS: 100 %

Step 4:
Report
Due date: 3/18/2022
Assigned to: Garrett Mosiman

(This task is not editable.
Due date too far out.)

Click to open enthalpy wheel configuration parameters

DOAS-1

Wheel Speed Table

Outdoor Air Temperature	Wheel Speed
-40°F	ON
-35°F	ON
-30°F	ON
-25°F	ON
-20°F	ON
-15°F	ON
-10°F	ON
-5°F	ON
0°F	ON
5°F	ON
10°F	0%

Verify Enthalpy Wheel Speed Task Frequency

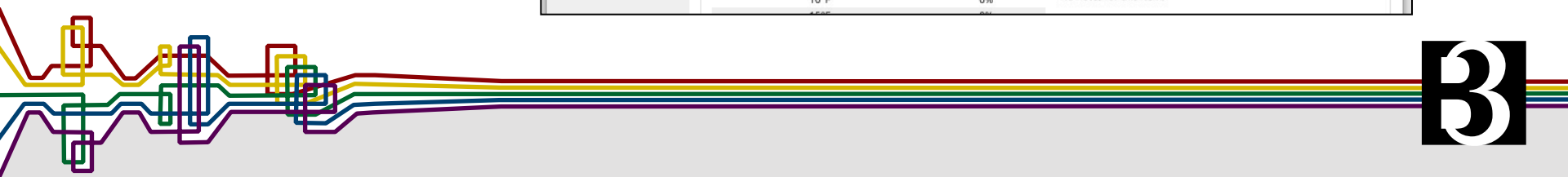
Assigned to: Garrett Mosiman
This task occurs every 1 year starting on 3/18/2021
[Edit verify enthalpy wheel speed task frequency](#)

Task Completion History

Assigned To	Completed By	Completed	Days Late	Details
This task has no history				

Notes

No notes for this item.



POST-OCCUPANCY EVALUATION



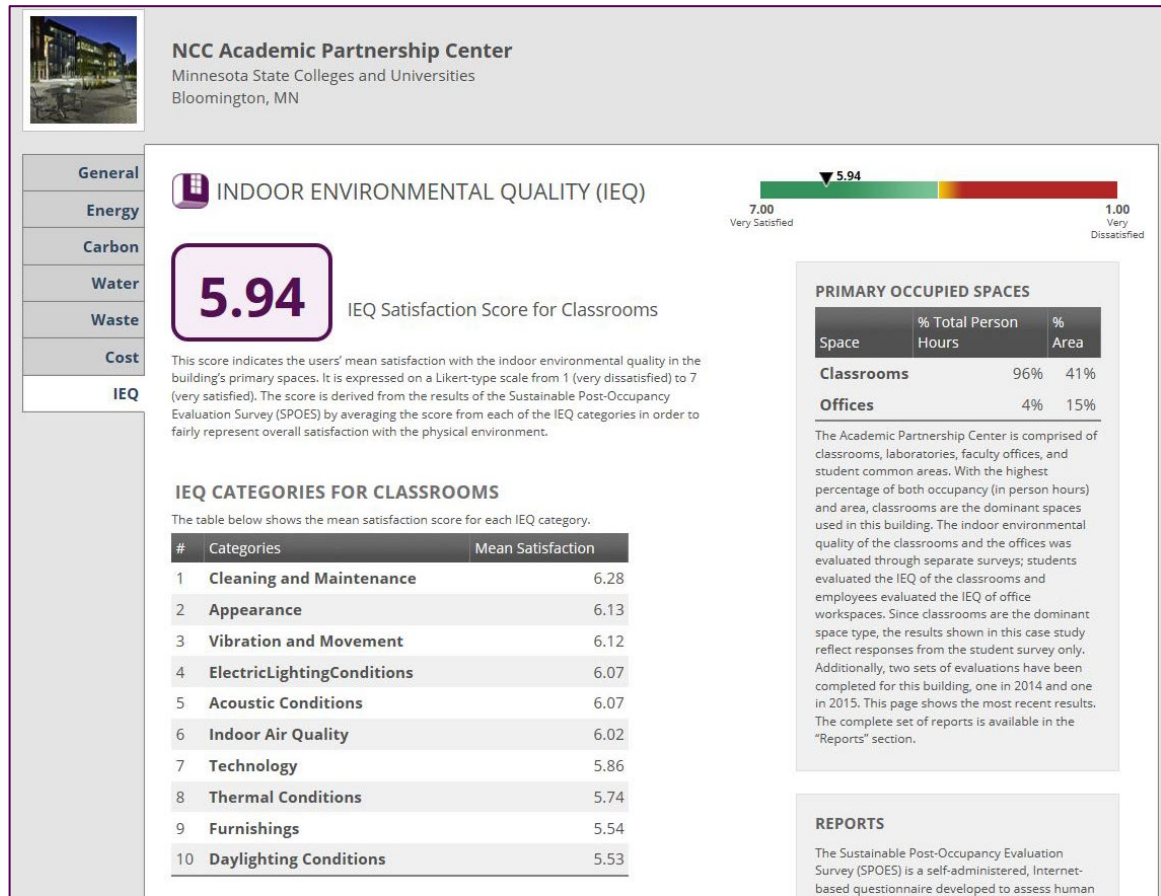
WHAT'S NEW?

- 5 new POEs
- Enhanced report format










WHAT'S NEXT?

- Ongoing POEs

b3mn.org/poe/library/



B3 CASE STUDIES DATABASE

Name	Organization	City	Building Type(s)	Construction Type	Building Area (sf)	Design Submission Status	Design Compliance	Operations Submission Status	Operations Compliance	Occupancy Date
 Village of Hope: Ours to Serve House of Hospitality	Minnesota Housing Finance Agency						✓	✗	?	1/1/2010
 Riverview Apartments South Wall Renovation	Minnesota Housing Finance Agency						✓			7/15/2018
 180 Degrees Youth Development Campus	City of Saint Paul						?	✗	?	8/1/2014
 Prairie Horizons Townhomes	Minnesota Housing Finance Agency						✓	✗	✓	6/1/2012
 Wells Street Houses	City of Saint Paul						✓	✗	?	1/6/2015
 Crow River Villa	Minnesota Housing Finance Agency						✓	✗	?	1/9/2015
 Silver Creek Corner	Minnesota Housing Finance Agency						✓	✗	?	11/1/2011
 Gateway Gardens Apartments	Minnesota Housing Finance Agency	Moorhead	Housing	New Construction	22,976	✓	✓	✗	✓	10/9/2010
 UMM Green Prairie Living and Learning Community	University of Minnesota	Morris	Housing	New Construction	27,434	✓	✓	✗	?	8/15/2013

UMM Green Prairie Living and Learning Community - Google Chrome
https://casestudies.b3mn.org/GuidelinesCompliance?id=5294

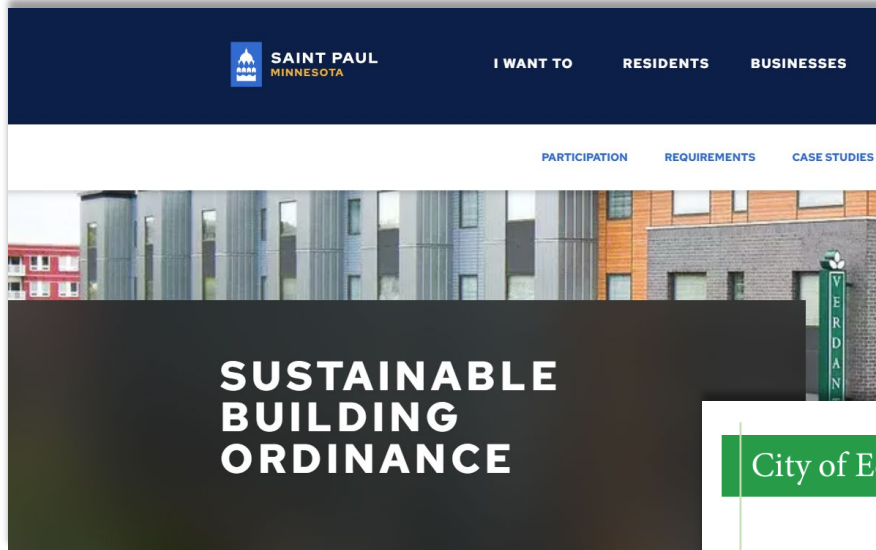
UMM Green Prairie Living and Learning Community Morris, MN

Design Submission Status	✓	Complete – the B3 Guidelines design and construction documentation for this project is complete
Design Compliance	✓	Compliant – this project has reported compliance with the B3 design and construction guidelines, including SB 2030
Operations Submission Status	✗	Overdue – the B3 Guidelines operations documentation for this project is more than 90 days overdue
Operations Compliance	?	Undetermined – this project has not yet completed a full year of B3 Guidelines operations documentation

casestudies.b3mn.org



VOLUNTARY PARTICIPATION



City of Edina Policy



☒ City Council
☐ City-Wide
☐ Department

Approved: 11/16/2021
Revised: 9/7/2022

Sustainable Building Policy

The Edina community is dedicated to building a sustainable environment where current and future generations benefit from clean air and water, climate and community resiliency, and access to nature, as reflected in City Council value statements. In particular, the City recognizes the risks of climate change and has set a goal of reducing greenhouse gas emissions 45% by 2030. Since the built environment is a significant contributor to Edina's greenhouse gas footprint, it is important that new developments are built to minimize emissions and environmental impact during construction as well as the operation of buildings. Developments that seek City funding or land use incentives can join the City in these goals and meet set sustainable building requirements. As such, the City of Edina adopts the following Sustainable Building Policy:

B3/SB 2030 TRAINING

WHAT'S NEW?

- Updates to training library

WHAT'S NEXT?

- On-demand content
 - E1A & E1B updates
 - Performance mgmt. tools
 - B3 Guidelines roles

Training Materials



Small Buildings and Sites

- **Demystifying B3 for Small Projects** – (AIA MN Conference on Architecture, November 2022) [Recording & Slides](#)
- **An Introduction to the SB 2030 Small Buildings Method** (B3/SB2030 Training, June 2021) – [Recording & Slides](#)
- **An Introduction to the B3 Guidelines Small Building Method** (B3/SB2030 Training, March 2021) – [Recording & Slides](#)



Energy and Atmosphere

- **Pre-Design and Planning for Electrification** (Science Museum of Minnesota Symposium on Sustainable Buildings 2030, October 2022) – [Integrating High Performance in Pre-Design, Decarbonization through Electrification](#)
- **Sustainable Buildings 2030: Lessons Learned and Planning for the Future** (Science Museum of Minnesota Symposium on Sustainable Buildings 2030, February 2022) – [Recording Part 1](#), [Recording Part 2](#), & [Slides](#)
- **Offsite Renewable Energy Options for SB 2030: Renewables, Energy Credits, Green Power, and More** (B3/SB2030 Training, December 2021) – [Recording & Slides](#)
- **Pathways to SB 2030: Three Minnesota Case Studies** (AIA MN Conference on Architecture, November 2021) – [Recording & Slides](#)

b3mn.org/guidelines/training-and-education

www.youtube.com/@b3mnb3programassistance61

