I'M SPEAKING AT

CalBEM
2024
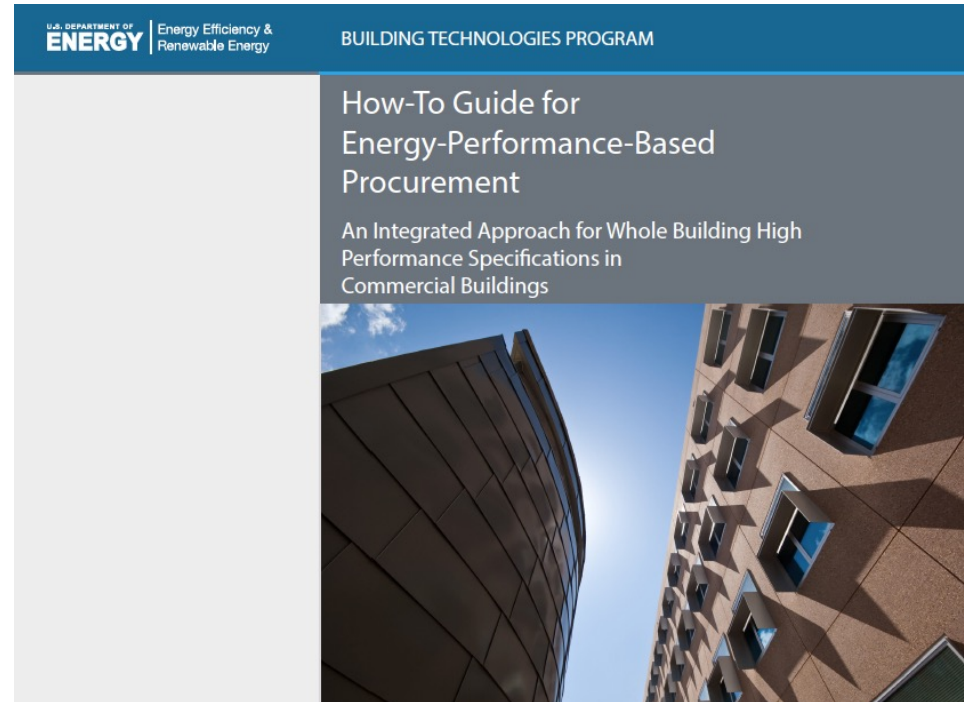
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📍 Sacramento, CA

Learn more at
calbem.org

The standard of care is evolving

- Predicted energy performance used to select bidders

- Modeling (feedback) core to the design process

- Building (real) performance verified

Source:
https://www1.eere.energy.gov/buildings/publications/pdfs/rsf/performance_based_how_to_guide.pdf

Lessons learned

- Shifting landscape: Alphabet soup of tools, workflows, and now AI
- Training and tools largely focused on compliance
- Many model assumptions are unexamined
- Human factors is driving design decisions, yet poorly accounted for by crude assumptions
- Lack of systematic QAQC processes
- Lack of validation in the physical world, crude performance data (if at all)
- Peer-to-peer opportunities are underutilized
- Data is not science: the production of outcome measures is not analysis
- Expertise must be developed over time and integrated into the entire academic program
- Students need to find and ask the "right" questions

Big picture

- Incorporate BEM into K-12

- Design-infused, project based

- Find joy in the process

From the age of sail to the age of steam:
The Fighting Temeraire (National Gallery, London) JMW Turner
https://www.nationalgallery.org.uk/paintings/joseph-mallord-william-turner-the-fighting-temeraire