CalBEM 2026 WG2 Pre-reads

EnergyPlus-MCP

- **EnergyPlus-MCP: A model-context-protocol server for AI-driven building energy modeling**
  - Link: sciencedirect.com/science/article/pii/S2352711025003334
  - PDF file: Li_Xu_Hong_2025_EnergyPlus-MCP_SoftwareX.pdf
  - Description: This paper introduces LBNL's open-source MCP server, which gives AI assistants 35 tools to load, inspect, modify and simulate EnergyPlus models through natural-language conversation.
- **MCP-enabled agentic AI workflow for building energy modelling: framework and use cases**
  - Link: tandfonline.com/doi/full/10.1080/19401493.2026.2653969
  - PDF file: Li_Zhang_Zhou_Hong_2026_MCP-agentic-AI-workflow_JBPS.pdf
  - Description: This study compares conversational and multi-agent workflows built on EnergyPlus-MCP, showing typical model inspection and modification tasks dropping from 1–2 hours to under 15 minutes.
- **EnergyPlus-MCP GitHub repository**
  - Link: github.com/LBNL-ETA/EnergyPlus-MCP
  - PDF file: EnergyPlus-MCP_GitHub-repo.pdf
  - Description: The open-source code, with Docker-based setup instructions for running the server in Claude Desktop, VS Code or Cursor.

OpenStudio AI

- **OpenStudio AI: One agentic energy-modeling experience**
  - Link: pnnl.github.io/openstudio-ai-plugins
  - Description: A DOE multi-lab project (NLR, LBNL, PNNL, ORNL) providing plugins and 20+ reusable skills that let Codex and Claude Code edit OpenStudio models, build HVAC systems, run simulations and analyze results, with an optional OpenStudio-MCP server offering 150+ tools.
- **Development of a dynamic multi-agent network for building energy modeling: A case study towards scalable and autonomous energy modeling**
  - Link: sciencedirect.com/science/article/pii/S0378778825014422
  - Description: This Energy and Buildings paper presents a network of coordinating AI agents that builds and simulates building energy models autonomously, demonstrated through a case study.

BEM Education and Career Development Resources

- **BEM Education and Career Development (CalBEM)**
  - Link: calbem.ibpsa.us/bem-career-dev
  - Description: CalBEM's resource hub from the WG2 BEM Career Pathways Initiation Project. For students, educators and career changers, it collects guest-lecture slides, building case studies, job boards, certifications, trainings, podcasts and community resources.