

## I<sup>2</sup>SL Lab Benchmarking Working Group

### Conference Call 2/8/2017

**Attendees:** Alison Farmer, Dan Doyle, Ludmilla Pavlova-Gillham, David Landman, Phil Wirdzek, Graham Lierley, Vikram Sami, Luci Keazer, Marcus Hazelwood, Allison Paradise, Jacob Werner, Paul Mathew, Rick Martorano.

### Meeting minutes:

- 1) News and Updates
  - a. Building a new benchmarking tool!
    - i. Phil: I<sup>2</sup>SL will be awarded a grant from DOE in conjunction with the Better Buildings Smart Labs Program. The grant will be used in part to fund I<sup>2</sup>SL's tools, which will include the creation of a new lab benchmarking tool to replace the existing Labs21 tool! The new tool will include the functionality of the old tool but will have enhanced features and a modern graphing interface. The benchmarking working group will be asked to continue to provide their valuable input and review as the new tool is developed, so stay tuned. Phil will keep us updated on funding progress, and Alison/Paul will provide updates on specific plans for the new website.
    - ii. Paul: The plan devised by I<sup>2</sup>SL and LBNL is for LBNL to retain hosting of the benchmarking database, with I<sup>2</sup>SL creating and owning the front-end website to allow users to query the database. LBNL has applied for separate funding to enhance the back-end database to allow expanded data fields and interfacing with outside applications.
  - b. Abstract submitted to Greenbuild
    - i. Jacob submitted an abstract to this year's Greenbuild conference (to be held in Boston in November); the proposed panel discussion would feature representatives of Energy Star Portfolio Manager, AIA, the city of Boston, and Jacob (representing the I<sup>2</sup>SL benchmarking working group). Competition for presentation slots is fierce, but the panel line-up is great and Jacob will let us know if it's accepted.
  - c. I<sup>2</sup>SL Annual Conference call for presenters
    - i. Phil reminded us that the call for presenters is open. The conference will be held in Boston in October and abstracts are due by March 17.
  - d. Ongoing volunteer work
    - i. I<sup>2</sup>SL volunteers have been assisting LBNL with review of submitted datasets. We are now working with LBNL to understand the best way to upload large volumes of data submitted via the Excel spreadsheet option.
- 2) Labs21 Tool FAQ expansion
  - a. The group reviewed the new draft FAQs for the Labs21 benchmarking tool website. The new FAQs are the final piece of the website upgrades we carried out last year.
  - b. Ludmilla and Jacob confirmed that the LEED-EB guidance for benchmarking should still work for certification under LEED O&M, and both volunteered to reach out to USGBC to understand their needs as the new benchmarking tool is developed.
  - c. Jacob provided language answering the FAQ about using the Labs21 data to benchmark in conjunction with the AIA 2030 challenge.
  - d. Luci asked about what to do if a lab building is split 60/40 research and teaching. At present, it's best to enter the lab purpose as the predominant purpose (in this case research). It would be helpful to also make a note in the comments field of the data submission to allow conversion of the data if future versions of the tool support a more detailed area breakdown.

- e. Paul provided some very useful edits offline and these will be incorporated into the final version of the FAQs.
  - f. Alison will finish editing the FAQs over the next few days and will convert the Word file into html for upload to the website.
  - g. David Cohen (via email) offered to check formatting and links once the new FAQs are uploaded. Upload is expected in ~1 week.
- 3) UMass Amherst's Campus Energy Visualization Tools
- a. Ludmilla Pavlova-Gillham from UMass Amherst gave a presentation on the campus benchmarking tools she and her team have developed.
  - b. The tools include a clickable campus map with layers indicating building type or energy intensity. Clicking on a building brings up a list of building properties and multiple years of energy consumption data.
  - c. Check out the Building Energy Explorer here: <http://www.umass.edu/cp/building-energy-explorer>
  - d. The tool's use has been incorporated into some classes taken by mechanical engineering students at the university.
  - e. Ludmilla also discussed data collection methods on campus and the extent to which this can be automated. Some meter data comes from JCI automation systems, but some meter data must be gathered manually by students.
  - f. The UMass Amherst team is looking into using Tableau for future energy benchmarking tools.
  - g. Campus energy data have been used to set energy baselines against which to gauge behavior change interventions.
- 4) Next call
- a. The next group call will be in approximately 6 weeks.

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