

Dale Sartor meets with design team of the future IT building at UH

Energy guru works to help green the UH Mānoa campus

As the in-house energy manager of the Lawrence Berkeley National Laboratory (Berkeley Lab), Dale Sartor has slashed the energy consumption of their lab by 40%, bringing their annual energy cost down from \$10 million to \$6 million. When UHM engineer, Blake Araki, asked Dale how he achieved these savings, Dale responded, "It took 10 years!"

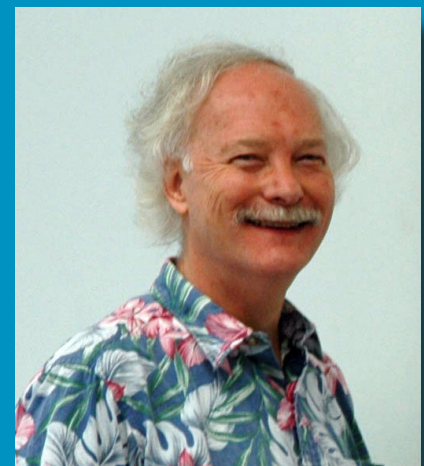
Dale holds a Bachelor of Arts in Architecture, a Masters of Business Administration, and is a licensed mechanical engineer and general contractor. With his multidisciplinary skills he has headed up the Berkeley Lab Building Technology Applications Team (the "A-team"). This team specializes in making energy intensive buildings containing laboratories, clean rooms, and data centers as efficient as possible while maintaining comfort and safety standards.

Dale is currently Affiliate Faculty with the University of Hawai'i Sea Grant College Program (UH Sea Grant) and has been working with the program for the past 10 years. The UH Sea Grant Center for Smart Building and Community Design hosted his most recent visit from August 17-20th. The UHM Facilities Department has been chipping away at the campus energy use for the past 2 years, with the goal to realize the energy savings set out by the 2006 Chancellor's Energy Summit. In order to achieve an ambitious 50% energy reduction by 2015, UHM will have to use innovative strategies and the latest technologies.

The UHM Facilities Department's team of engineers and architects met with Dale to hear what methods he used to reduce the Berkeley Lab energy consumption. Aside from the usual energy efficient upgrades of lighting and air conditioning systems, Dale described improvements in some energy hogs, like data centers. He also retrofitted a particle accelerator with a more efficient power supply and smaller magnets. This in turn meant the Berkeley Lab scientists could afford to run the accelerator for more time, so it did not reduce the power bill but it certainly increased the scientific output of the laboratory. With his vast experience, Dale is able to understand the needs of scientists as well as the concerns and frustrations of facilities staff and he manages to bridge the gap with a bit of humor.

Dale will continue working with UHM Administration, Facilities, and UH Sea Grant to help UH Mānoa hone its policies and procedures as well as suggest energy efficiency technologies that can be employed in both the retrofitting of existing buildings and the planning of new construction projects. In light of the budget cuts the university has to endure, making this shift is not easy. An infusion of humor won't bridge the budget gap, but following Dale's example – it certainly can't hurt.

- Eileen Ellis, Sept 2, 2009



Dale Sartor, energy manager of the Lawrence Berkeley National Laboratory operated by the University of California, works with UH Mānoa to reduce carbon footprint.

To learn more about Dale Sartor's work, visit:

www.ateam.lbl.gov
www.labs21century.gov

To learn about Hawaii Sea Grant's Center for Smart Building and Community Design, visit:

www.BuildingGreenCommunities.