

Energy Benchmarking

What You Need to Know to Comply with AB1103

Did you know that AB 1103 requires your building's energy use to be benchmarked by next year or you won't be able to sell, lease to a single tenant, or refinance?

What is benchmarking?

It's a way to rate the energy efficiency of a building, using the federal ENERGY STAR benchmarking system through [ENERGY STAR Portfolio Manager](#). This provides a "score" of 1-100 which ranks the building on a percentile basis against comparable buildings nationwide.

What is the AB1103 implementation schedule?

On and after January 1, 2011, a building owner shall disclose the Statement of Energy Performance and the California Energy Performance Disclosure Report for a nonresidential building that has a total floor space measuring 50,000 square feet or more.

On and after January 1, 2012, a building owner shall disclose the Statement of Energy Performance and the California Energy Performance Disclosure Report for a nonresidential building that has a total floor space measuring 10,000 to 50,000 square feet.

On and after July 1, 2012, a building owner shall disclose the Statement of Energy Performance and the California Energy Performance Disclosure Report for a nonresidential building that has a total floor space measuring 1,000 to 10,000 square feet.

What will trigger your building needing a benchmark report?

A building owner shall disclose the Statement of Energy Performance and the California Energy

Performance Disclosure Report: (a) at or before the time the owner presents a sales contract to a prospective buyer; (b) at or before the time the owner presents a lease for the entire building to a prospective lessee; and (c) at or before the time the owner presents a loan application to finance the entire building to a prospective lender.

Why should commercial buildings be benchmarked?

Benchmarking energy use is an important aspect of an effective energy management plan. Also, [Assembly Bill No. 1103 \(AB 1103\)](#) requires that on or after January 1, 2011, a nonresidential building owner or operator disclose ENERGY STAR Portfolio Manager benchmarking data and ratings for the most recent 12-month period to a prospective buyer, lessee of the entire building, or lender.

How will AB1103 be enforced?

Although the draft regulations do not contain penalties for noncompliance, the [CEC](#) has indicated that enforcement will consist of a complaint and investigation process. According to the CEC, most complaints would be resolved informally and there are no fines or separate enforcement mechanisms currently proposed with AB 1103 implementation. Thus, enforcement will largely be industry-driven. Compliance with the law is important to avoid the potential risk and costs associated with any administrative hearing, and may also serve to insulate against claims of fraud associated with the transaction.

What does it take to benchmark a building?

It takes a year's worth of utility bills and some basic information about the building (occupancy type, ZIP code, square footage, weekly operating hours, number of occupants, and number of computers). A building account is created in the EPA ENERGY STAR web site, the data is entered, and a score is generated.

If you would like help with benchmarking your buildings and discovering potential energy savings, COAC can take care of the entire process for you. Please contact COAC at 916.381.4611 or email: info@coacair.com with your questions about benchmarking.

Lunch & Learn Scores Local Building Efficiencies

Cooper Oates Air Conditioning (COAC) hosted a lunch & learn event for a group of over 30 Building and Facilities Managers to discuss AB1103 and the ramifications this new legislation will have on their businesses. Along with the discussion of AB 1103, COAC provided each attendee a complimentary benchmark report on one of their own buildings.

Attendees were able to compare scores and see for themselves how benchmarking is a valuable tool for building performance measuring. Attendees with high scoring buildings were used as examples of how to reduce energy use, and no-cost strategies for decreasing energy use, increasing efficiencies and improving their benchmark score.

Lunch & Learn



COAC President, Ruzwa Cooper welcomes the Building & Facilities Managers to the Lunch & Learn held at the COAC Sacramento Training Room.

The success of the event and the conversations that were generated will fuel future events on energy monitoring and management and HVAC basics. If you would like copies of the information distributed at the event please email: marketing@coacair.com.

CUSTOMER KUDOS

"Thank you for taking a few minutes to talk to me yesterday while you were out to perform maintenance on the system. What a nice change from what we have dealt with for years. Since the new system has been properly adjusted, we have had very few complaints. This has made a piece of my job tons easier. So on behalf of the DHHS tenants a very big THANK YOU for the new control system."

Teresa Heckley, ASO II
DHHS - Facility Management Services

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HVAC Retrocommissioning



Retrocommissioning is the systematic process for identifying less-than-optimal performance in a facility's existing equipment and control systems and

making necessary repairs or enhancements to save energy and cost. Whereas retrofitting involves replacing outdated equipment, retrocommissioning focuses on improving the efficiency of what is already in place.

Retrocommissioning projects can produce an average savings of 5-25% of total facility energy costs. These changes and upgrades typically pay for themselves in energy savings alone within an average of less than two years.

Retrocommissioning projects are often combined with retrofitting efforts in a systematic approach to maximize the return on the building investment.

There are immediate benefits to retrocommissioning:

- **A more productive and efficient facility for people and products**
- **Lower energy bills**
- **More efficient building operations**
- **Longer equipment service life**
- **Fewer service and maintenance calls**
- **Thorough building assessment and documentation by highly qualified HVAC Professionals.**

RETROCOMMISSIONING WITH COAC

COAC and your senior building operations staff work closely through a three-step process:

“Current findings demonstrate that commissioning is arguably the single-most cost-effective strategy for reducing energy, costs, and greenhouse gas emissions in buildings today”

— Lawrence Berkeley National Laboratory

1. Initiation

Clients provide COAC some basic information about their facility(ies). The facility owner grants COAC access to billing data to establish a benchmark rating according to the Energy Star Energy Performance Rating System. A COAC Representative schedules an on-site investigation of each facility. COAC gathers information about the building use, control

systems, scheduling, and the condition of equipment and generates a benchmark score that will indicate if there are opportunities for retrocommissioning savings.

2. Investigation

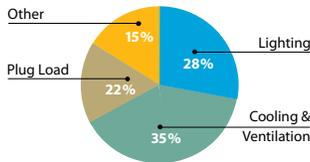
Using wireless data gathering monitors throughout the facility, a real-time accurate assessment of the facility is then performed to identify specific and measurable

energy savings opportunities. If it is determined that cost-effective energy-saving measures exist, a proposal will be presented that identifies problems and opportunities for energy savings and a prioritized report listing recommended measures, estimated project costs and utility incentives, along with energy savings and payback periods.

3. Implementation & Verification

The facility manager / owner then decides which measures to implement based on their own criteria. COAC provides documentation, support, and training as requested. Then COAC confirms that installed measures are complete and verifies savings calculations with post action benchmarks.

Major Electricity Use by Office Buildings:



YOUR NEXT STEPS

To discover potential energy and revenue wasting systems in your buildings and to improve the return on your building investments, contact COAC at 916.381.4611 or at info@coacair.com. See for yourself if retrocommissioning can deliver an ROI that makes sense to you. 



INDUSTRY EVENTS

Not-to-be-Missed Events

- 8/18 – BOMA Networking Luncheon bomasacramento.org
- 8/18 – IREM CPM Roundtable and Ethics Course iremsac.org
- 9/8 – BOMA Taste of the Town Showcase bomasacramento.org
- 9/14-17 – CREW Network Annual Convention & Marketplace crewsacto.org
- 9/22 – BOMA Property Mgr. Breakfast bomasacramento.org
- 9/23 – IFMA New Member Breakfast ifmasac.org
- 9/29 – BOMA Stockton Networking Luncheon bomasacramento.org

A Retrocommissioning Success Story

This is the story of a 30,100 sqr ft, office building in West Sacramento. COAC did a preliminary building evaluation and a complete energy utilization analysis. COAC installed variable frequency drives on the AC units, and replace the building pneumatic/electronic control system with a Direct Digital Control (DDC) system. The year-over-year comparisons tell the tale of savings:

	2009	2010	Change
Benchmark	37	80	43pts
Gas Therms	8.42	5.62	(-33.3%)
Gas Cost	\$6,863	\$4,778	(-30.3%)
Electricity kWh	425,280	295,680	(-30.1%)
Electricity Cost	\$70,805	\$52,571	(-25.8%)

The 43pt jump in the benchmark, and these savings do not include the utility rebates they received, the elimination of higher tier charges, nor the savings in service calls. Beyond all the savings, there was significant increase in tenant satisfaction and building manager peace-of-mind. The bottom line of this story is the owner accomplished his objectives of lowering costs, increasing tenant retention, and increasing the building investment value. 

OUR THANKS

We are grateful to all of our customers, especially those whose trust we have earned and refer us to others. This month we wish to thank **Headwaters Construction** for recommending us to KG Properties, Inc. Our hard hats off to you!

