Local Government Energy Efficiency

Best Practices

BENCHMARKING

Valley Innovative Energy Watch

Two counties, six cities in the San Joaquin Valley *

Population: 375,000

Because you can't manage what you can't measure!

Valley Innovative Energy Watch

SUMMARY

2010 was just the right time for the Valley Innovative Energy Watch (VIEW) partnership to start. All 8 VIEW local governments had accepted Energy Efficiency & Conservation Block Grant funding for energy efficiency projects, and utilities began providing support for the California Long Term Energy Efficiency Strategic Plan through their partnerships.

The VIEW partners understood that local governments need a solid understanding of their energy usage, and ideally an Energy Management System (EMS). However, the Partnership could not afford an EMS for each partner. Instead, the local government partners would make use of the implementer's resources, and use benchmarking as a way to serve all jurisdictions equally.

Why benchmark?
• Data becomes a roadmap for:
  • Project investment
  • Energy Action Plans
  • Targeted awareness efforts
• It identifies less efficient buildings
• It tracks results of efficiency measures
• It helps comply with the State's commercial building energy disclosure law

PROGRAM HIGHLIGHTS

■ The VIEW Partnership leveraged funding from embedded Strategic Plan funds for a regional effort to benchmark all government facilities, and for each local government partner to adopt a Benchmarking Policy.

■ Drafted "Benchmarking Made Easy" to be a simple and easy-to-use guide that addresses the why, how, and what now of benchmarking government facilities.

■ Adapted the US EPA's Portfolio Manager to be an entry-level, energy management system that fits the Partnership's needs, and input data for all utility accounts by using the 'other' space type category.

■ Created a template for Portfolio Manager uploads that accurately matches and merges account data as reported by Southern California Edison and Southern California Gas Company.

■ Provided a Portfolio Manager account and in-person training for each partner jurisdiction.

■ Each Local Government Partner will receive a one-time comprehensive accounting of all electric and gas utility accounts, scrubbed for accuracy and duplication, and assigned facility characteristics.

■ Each local government will receive assistance in adopting Benchmarking Policy memoranda of understanding, so that data gathered is used to make smart decisions in future energy efficiency investments.

* See 'The Rest of the Story'

VIEW – Benchmarking Program

LESSONS LEARNED

- Local governments track utility bill payment, building management, information technology and staffing assignments in a variety of departments. It was important to know *exactly* what was needed for each account before asking the local government staff to commit time to the project.

- The work is relatively simple, but incredibly time consuming. The Partnership projected an eight month project life-cycle, but the time needed by each jurisdiction pushed the timeframe to an 18+ month project!

- Data set identifiers are not standardized in name or in presentation—dashes vs. no dashes, ten numbers vs. eleven numbers, etc. For example, Portfolio Manager uses 'Service Account number,' but one of our utilities uses 'Service Account Number' and the other uses 'Bill Account ID' for the same data. This is especially important for using the Automated Benchmarking Service. If the formatting is not correct or consistent, then the service will not work.

- The way Portfolio Manager accepts data is different from the way utilities report data! Portfolio Manager's upload required exact matching of data collected to upload parameters, again this required unanticipated time from those conditioning the data.
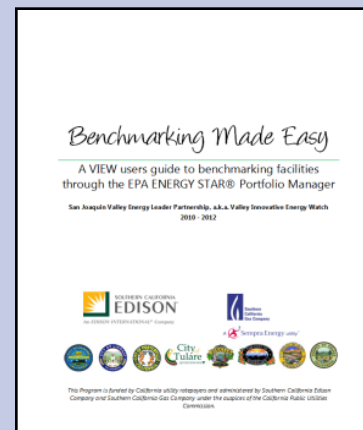
THE REST OF THE STORY

The VIEW partners – Southern California Edison, Southern California Gas Company, San Joaquin Valley Clean Energy Organization, the counties of Kings and Tulare, and the cities of Hanford, Lindsay, Porterville, Tulare, Visalia and Woodlake – find data to be so important because it provides the roadmap for local governments as they plan and implement efficiency projects.

The partners will use the data for so much more than project investment; the results obtained through Portfolio Manager will be included in an Energy Action Plan (EAP) that each partner is developing. The EAPs will have regional consistency, but will be customized for each jurisdiction's specific needs.

The first milestone was to draft an easy to use 'how-to' manual that did three things: explain why the need to benchmark; show step-by-step how to use the United States Environmental Protection Agency's ENERGY STAR® Portfolio Manager system; and explain what to do with the data once it is available. The effort resulted in "Benchmarking Made Easy: A VIEW users guide to benchmarking facilities through the EPA ENERGY STAR® Portfolio Manager." The goal was to create a document that was not too technical, but would cover the how and why without time intensive training. Brevity was also important; the entire manual – why, how, and what to do after – fits on only ten pages.

> more…

Benchmarking Made Easy

A VIEW users guide to benchmarking facilities through the EPA ENERGY STAR® Portfolio Manager

San Joaquin Valley Energy Leader Partnership, a.k.a. Valley Innovative Energy Watch
2010 - 2012

"Knowing what is being spent, where and why - well that is a necessity for any smart planning to take place."

- Courtney Kalashian, VIEW Project Manager

Valley Innovative Energy Watch

Much work went into the project long before a single facility could be loaded into Portfolio Manager. That responsibility fell to the well-organized Project Coordinator who collected the gas and electric data for all eight partners, merged the various accounts to represent their actual facility, scrubbed it for accuracy, and then provided each local government with a comprehensive overview of its energy portfolio. The Coordinator also worked (and in some cases is still working) to gather the space use characteristics for each facility with a utility account.

The VIEW team provides in person, one-on-one training with the local government staff, ideally to more than one person in each city or county, to ensure that the process will continue regardless of staff turnover.

> *The Partners recognized early on that the data would be worthless without local governing support.*

GAINING POLITICAL SUPPORT

The Partners recognized early on that the data would be worthless without local governing support. By completing the work in Portfolio Manager first, local government staff "energy champions" were able to create interest in the program through word of mouth during the data collection and conditioning process.

The San Joaquin Valley Clean Energy Organization (SJVCEO) also supported the work of the VIEW partners by telling the story of the hard work of local governments in regional meetings, through social media, and in other non-VIEW projects with personnel and council members from other jurisdictions.

The intention was to make the project a well-known effort, so that when the time came to pass memoranda of understanding at the Council or Board level, there would be a basic level of education as well as institutionalized support.

The "Benchmarking Made Easy" tool included a section on policy adoption, taken from the United States Environmental Protection Agency's State and Local Climate and Energy Program. The EPA language was chosen, because like the tool itself, it was simple!

Sample US EPA State & Local Climate Change & Energy Program Language

As a participant in the Valley Innovative Energy Watch, [your jurisdiction name here], California, has pledged to reduce the energy consumption of its portfolio of buildings by [your goal percent] or more. As a result of our RESOLUTION [#] to participate in the San Joaquin Valley Energy Leader Partnership with Southern California Edison, Southern California Gas Company, and the San Joaquin Valley Clean Energy Organization, our city buildings have been entered in Portfolio Manager. Officials are using data from this tool to make decisions about energy upgrades and operations within their buildings. They are also incorporating energy efficiency best practices into new building designs. [City/County] officials are leading by example and demonstrating to local government agencies and businesses that they too can reduce their energy consumption while continuing to deliver quality services.

(United States Environmental Protection Agency, 2009)

Local Government BEST PRACTICES

Benchmarking

The **Valley Innovative Energy Watch** is a collaboration between Southern California Edison (SCE), Southern California Gas Company (SCG), the San Joaquin Valley Clean Energy Organization (SJVCEO), the counties of Kings and Tulare, and the cities of Hanford, Lindsay, Porterville, Tulare, Visalia, and Woodlake. The Partnership is making changes to local government buildings in order to set an example, show how easy it is to implement change, and demonstrate how great the savings can be! To help the communities become more efficient, the Partnership is pooling resources to offer South Valley residents and businesses incentives and rebates.

> www.viewthesavings.com

To download the draft *"Benchmarking Made Easy: A VIEW users guide to benchmarking facilities through the EPA ENERGY STAR® Portfolio Manager"* visit:

> www.viewthesavings.com/resources

For more information about this case study:
Patrick Stoner, Statewide Local Government Energy Efficiency Best Practices Coordinator, pstoner@lgc.org

ADDITIONAL RESOURCES

- **ENERGY STAR® Portfolio Manager** online overview: *energystar.gov/benchmark*

- **ENERGY STAR® Portfolio Manager** online video tutorial: *energystar.gov/ia/business/benchmarking_training/benchmarking.html*

- **Pacfic Gas & Electric Energy Benchmarking**: *pge.com/benchmarking*

- **San Diego Gas & Electric Energy Benchmarking**: *sdge.com/benchmarking*

- **Southern California Edison Energy Benchmarking**: *sce.com/business/energy-solutions/benchmarking.htm*

- **Southern California Gas Company Energy Efficiency Benchmarking**: *socalgas.com/for-your-business/energy-savings/benchmarking.shtml*

- **Statewide Energy Efficiency Best Practices Forum 2011, Benchmarking Best Practices**: *lgc.org/events/seec/forum2011_videoB3.html#vid*

- **SEEC Webinar, October 27, 2011, Benchmarking**: *lgc.org/events/seec/webinar8_2011.html*

- **San Joaquin Valley Clean Energy Organization Benchmarking Blog Posts**: *sjvceonews.blogspot.com/search/label/benchmarking*

- **IFMA Foundation Sustainability "How-To Guide" Series, EPA's ENERGY STAR® Portfolio Manager**: *ifmafoundation.org/documents/public/EnergyStar.pdf*

- **Advanced Benchmarking: Benchmark Building Energy Use Quickly and Accurately Using EPA's ENERGY STAR Portfolio Manager**: *www1.eere.energy.gov/wip/solutioncenter/pdfs/eecbg_advanced_benchmarking_v2_1-20-11.pdf*