

**Minutes:
Sustainable Silicon Valley General Meeting
Friday, October 13, 2006
9:00 am – 10:30 am
Symantec, Mountain View**

Attending:

Ted Mendoza	Salas O'Brien	John Pitcher	Sterling Planet
Terry Smith	Cushman & Wakefield, Symantec	Lin Ortega	County of Santa Clara
Eugene Gutkin	IBS, Inc	Syed Ali	Sun
Bill Henry	Energy Technology	Rahul Young	ICF International
Christopher Moylan	City of Sunnyvale	Tony Eulo	City of Morgan Hill
Paul McGrath	RideSpring	Mary Ann Ruiz	Enviru
Doug Koenig	San Mateo County	Sally Tomlinson	SSV
David Kaneda	Integrated Design Associates		
Lori Sinsley	Public Relations		
Karl Okulove	Cushman & Wakefield, Adobe		
Greg Chambers	Sterling Planet		

Welcome to newest partners: Minerva Consulting!

Benchmarking for Energy Efficiency – Ted Mendoza, Salas O'Brien .

ted@salasobrien.com. Ted's power point presentation is at www.salasobrien.com/SSV_prez.pps

Energy use in California decreased with deregulation but is rising again.

Benchmarking is a presentation of facts, not a judgment or action plan.

- Benchmarking is a comparison of performance to buildings of similar use
- Benchmarking helps identify anomalies that may be acceptable because of special use needs, or may be correctable

Sources of information for benchmarking:

- Utility bills for energy used
- Gather information about buildings of similar use
- Do real-time monitoring of energy use
- In absence of real data, can estimate energy use or time patterns of use based on assumptions
- Can estimate usage based on title 24 information
- Can use external references that are available on line

You can do an internet search for “Building Energy Benchmarking” and get a list of sites that have benchmarking tools.

Ted recommends: **Cal Arch** <http://poet.lbl.gov/cal-arch/> , a tool specifically designed for California commercial buildings. It is the result of a Lawrence Berkeley National Lab and CEC PIER collaboration. Its limitations include a relatively small number of buildings that form the basis of their benchmarking comparisons (e.g., about 29 buildings for office usage, fewer for hospital usage)

Another at the meeting (sorry I didn't note who) recommended the US EPA **Energy Star Portfolio Manager** <https://www.energystar.gov/istar/pmpam/> , which is a national tool not specific for California. It has a larger number of buildings in its data base.

BOMA also has regional information on benchmarking.

Terminology:

- Energy Utilization Index (EUI) = energy use/year/square foot
 - kWh/yr/sq.ft
 - therms/yr/sq.ft
 - or combine to btu/yr/sq.ft
- Energy Cost Utilizations Index (ECUI) = dollar cost for energy/year/square foot
 - \$ for electricity/yr/sq.ft
 - etc.

The key is to find comparison with buildings of similar use.

Other Discussion:

PG&E Energy Efficiency Funds available to SSV Partners and SVLG members: Ben Mehta explained details. See

<http://www.sustainablesiliconvalley.org/docs/LGP%20RFS%2021July06.pdf>

Future meeting topics: Suggestions included commissioning (how the best laid designs go wrong over time); controls; data center management (LBL has done some work on hot and cold air separation)

Next meeting Friday, November 17, location to be determined. Check SSV website for details an directions: www.SustainableSiliconValley.org