

**Minutes:**  
**Sustainable Silicon Valley General Meeting**  
**Friday, March 23, 2007**  
**9:00 am – 10:30 am**  
**CV Therapeutics**  
1651 Page Mill Road, Palo Alto, CA

Attending:

Larry Merrell	Northrop Grumman	Brandon Tinianov	Quite Solutions
Julie Coderre	Northrop Grumman	Heather Gualtney	Sustainable Berkeley
Shelley Lorentzen	SSV	Jennifer Cogley	Sustainable Berkeley
Bill Henry	Consulting Engineer	Grant Taylor	WSP Environmental
Won Lee	California Cement, Inc	Deborah Grove	SAP
Chris Brey	CV Therapeutics	Ted Huang	Webcor
Steve Attinger	Acterra	Todd Lukesh	Webcor
Maria Harris	Environmental Defense	Gary Kah	Aqua Metrics
Paul McGrath	RideSpring	Bert Castro	RWP
Bruce Karney	Mt. View Solar Buyers Coop	Christine Kohl-Zaugg	EcoPulse
Seth Fearey	Joint Venture Sil Valley Network	Selene Lenox	Gilbane
Barry Hooper	City of San Jose EWP	Adam Montgomery	Sil Vall Realtors Assn
Sally Tomlinson	SSV	John Tarlton	Commercial Property Building Owner
Rod	CV Therapeutics		

**Welcome new SSV Partners:** City of Santa Clara, Cargill Salt, Green Square Consulting, SF

Congratulations to SP Biopharma, which won an award from Schering Plough corporate central for Biopharma's CO<sub>2</sub> reduction program.

**Group Discussion:** these notes ramble a bit because it was a discussion and not a formal presentation

HANDOUT is included at the end of these minutes. It was not discussed directly, but was provided as foundation information.

We will cover two topics.

- 1) Information - How can tenants track their emissions?
- 2) Incentives - What are the motivations for owners and tenants to invest in energy efficiency/renewables?

1) Information Discussion:

Two different ways to ascertain tenant's energy use.

- Audit your consumption items (such as computers) and then estimate power consumption
  - In this climate you can do a pretty good job by grossing up all your consumption devices and factoring in air conditioning. We don't see a lot of energy use in heating (west coast).
- Use the devices available for measuring. There is a wide body of research that shows when a person knows what they are using they will be likely to drop it/use less.

- The E-mon Demon device monitors power split at the panel; costs about \$3000-5000; has to be read by someone; not practical for a many-tenant building.
- There are devices that measure now on the circuit level at each breaker. Can get information electronically.
- Can use an hour meter on a piece of equipment to monitor how many hours running. Used most often in large pumps, industrial applications.
- DIY Kyoto is wireless, useful for homes.
- Kilowatt tracks kilowatts for anything small – up to 150 amps.
- End goal is plugs that track power use.

***See separate listing of monitoring devices sent by several of the meeting attendees to SSV.***

Sally: In May, we have a guest talking about the Galvin Project to look at how we use and deliver electricity and he's focusing on two aspects. Micro grids sharing among homes in close proximity and the other is information about usage in offices and how to get information on specific equipment.

Energy Star has a 5 year plan to develop a read out for self-aware devices. The devices would Broadcast data about energy use.

Home is an easier nut to crack.

John Tarlton: If the technology is available, landlords will be eager to adopt it because they would love to get out of the energy business. Allocating energy expenses is a burden, and can be a cause of dissent from tenants who think they are using less than the average per square foot amount. Landlords would benefit from monitoring system that doesn't take human reader.

Need time of day tracking, because heavy use a peak load drives up the price for all tenants in the building.

- There is a product to track power by circuit and by time of day and cost of power at that time of day. Cost about \$120,000 for 60,000 square foot building (estimate given to Tarlton).
- Echelon energy management system might be in the \$5-10/square foot range.

Gary Kah - Water is a factor:

- Most commercial landscaping uses more water than necessary.
- Water costs allocated among tenants from a single meter.
- Tenants should encourage water efficiency.
- At one site in Redwood City, spent \$10,000 and saved \$16,000 in just one year.

## 2) Incentives Discussion:

Lease structures to encourage efficiency:

- Tenants should talk to landlords about what can be done to get information they need. Tenant may have to invest in the monitoring device, gather information, then compare with per square foot allocation.
- When initiating or extending the lease is a good time to negotiate.

- Landlord could charge an automatic “overage” amount, and if tenant can demonstrate they are using less, then get a reduction.
- Landlord can identify heavy users, especially heavy peak users, and charge an extra amount, or work with them to conserve. Peak rates can be 20% higher than non-peak.
- One meter per floor possible through utility, but very expensive because comes with utility meter reading, billing, etc. Rule 16 says landlord cannot officially sub-meter each tenant – cannot become a retailer of electricity. But can monitor – fuzzy.

The US Green Council Tenant Program provides silver, gold tenant space and you get credits for monitoring it. If you can measure it you will change your activity so if the tools don’t cover it why not look to the lease for help.

We could things like we do on food. If every building was labeled on kilowatts per square foot, there would be a lot of questions asked of why? Like an energy rating on a refrigerator. In terms of changing public consciousness, simple is important. (like an automobile, miles per gallon is the important one but there are others) energy consumed per sq. foot per year is simple metric. Slap it on the building so all can see.

What does it mean to the landlord to have more energy efficient property? If all the costs are passed on to tenants why care?

- One thing a tenant has is the ability to work with a landlord to share a common motivation.
- Smart tenants are looking at overall operating costs and smart tenants are willing to pay less rent and possibly move if the landlord won’t address efficiency.
- SSV could publish best in class utility operating information. “This is what you could achieve.”
- Right now we get information on conglomerate basis, building report like from Chicago, so to the point that someone publishes this is what you can achieve and combine with the rating that could be powerful.
- But landlords are busy, have many properties – real change may have to be initiated by tenants.

Benchmarking tools are surveys of typical use per square foot so you can get a range

- Distinguish among uses of building such as office different than hospital different than manufacturing.
- One benchmarking website specifically for California, others are nationwide.

Other ratings:

We don’t want to focus just on energy ratings but also a productive environment for the workers.

LEED for Existing Buildings is a new product and we have the ability to craft that with early input.

We are 80% built out from a commercial building point of view, so working with existing buildings is important.

Financing is a challenge:

- Need lenders that will lend on a replacement of a chiller. Because the incentives need to be tweaked.
- SSV is helping with Energy Watch Program.
- Upfront costs are a hurdle.

Cheap electricity takes away some of the incentive: Palo Alto ridiculously low utility rates. What works in tiered utility rates? Irvine water district power child for water use. They use 50% of others around because they have a sharply tiered rate. Marine County does the same thing. Set a budget. When you are over your budgeted amount, your bill ratchets up significantly.

#### SSV ACTION ITEMS:

- Pull together the information that all of you have on resources you use for estimating energy use in a leased without structural changes.
- Collect info on types of monitoring devices. *This is in a separate document.*
- Keep in mind pulling together resources on financing of energy projects.

It would be great if there were banks that had interest and specific size to partner with utility companies (pge or southern Edison).

#### **Chris Brey – CV Therapeutics**

Chris Brey, Director of Facilities at CV Therapeutics.

CVT has been pre-revenue until now (over 6 years) and is now setting sites on lower hanging fruit.

- Have low utility rates already so hard to find pay back projects.
- Have 3 leased buildings
- Changed pneumatic to controlled building exhaust and air economizer
- Save \$90-100,000/year with 2 year payback.
- Other building 25% reductions.
- Trying to get our green building certification this year.
- Want to focus on employee level as well as company. Talking with human resources on incenting the employee (bike riding, rideshare) what does it mean to recruit, retain. And employee attraction.

These minutes are submitted by Shelley Lorentzen and Sally Tomlinson.

#### **Next meetings:**

**Friday, April 13, 9-10:30 am:** Helping your Employees reduce Personal CO<sub>2</sub> Emissions. City Hall, Redwood City, 1017 Middlefield Road, Redwood City, 94062. Agenda and directions at: [www.SustainableSiliconValley.org](http://www.SustainableSiliconValley.org)

**Friday, May 18, 9-10:30 am:** Innovative Approaches to Electricity Management: Micro-grids and Informed Consumer Control. Guest Roger Gale of the Galvin Electricity Initiative. Location to be announced.

Handout is on the next page. Monitoring devices are in a separate document.

HANDOUT:

	<p align="center"><b>Information: How can tenants track their emissions data?</b></p>	<p align="center"><b>Incentive: What are cost motivations for landlords and tenants?</b></p>
<p><b>Full Service Lease</b></p> <p>Information: NO \$ Incentive: NO</p> <p>Tenant does not see utility bill. Rent generally includes a per sq ft allocation of utility expenses.</p>	<p>If single tenant, tenant could get information about utility usage from owner/manager.</p> <p>If multi-tenant, tenant could request submeter for lighting and outlets. AC usually can't be submetered.</p> <p>Proxy information? How many lights still on when last person leaves; how many computers left on overnight; how many bulbs changed; etc.</p>	<p>Tenant might be able to negotiate with landlord for adjustments to rent based on reduced energy usage.</p> <p>Tenant may be able to negotiate with landlord about investment in efficiency measures.</p> <p>Landlord may be motivated to have energy efficient property to be competitive on the market.</p>
<p><b>Triple Net Lease</b></p> <p>Information: YES \$ Incentive: YES</p> <p>Tenant is metered directly to utility company and pays all utility bills.</p>	<p>Tenant has information about energy usage.</p> <p>Triple net is less common in multi-tenant situations.</p>	<p>If single tenant, tenant has cost incentive to reduce energy use.</p> <p>Single tenant possibly has cost incentive to invest in capital improvements for efficiency.</p> <p>Single tenant with long term lease may have most of the motivations, incentives for efficiency that an owner/occupant would have, except tax breaks may be different.</p> <p>If multiple tenants, tenant might have to negotiate with other tenants regarding improvements if other tenants' space would be affected.</p>

## Advice from others:

- For major capital expenses, may be able to work with landlord for co-investment.
- Who pays for improvements? Usually if a capital cost leads to cost savings for the tenant, the capital cost can be charged through to the tenant.
- Negotiating points for tenants who want to engage landlords in efficiency improvements:
  - “Rule of ten”: for every 25 cents reduction in utility bill, property rent increases by \$2.50 (in Bay Area).
  - Property value: for every \$1 invested in energy efficiency, a building’s value increases by \$3 (US EPA).
  - Investment community is putting pressure on landlords to be more energy efficient because lenders see it as a way of attracting tenants.
- The best time to negotiate is
  - Before moving in, when remodeling is easiest.
  - At the renewal of a lease when the investment period is longest.
- If lease will be expiring soon, only incentive for landlord will be if it is an investment that will attract new tenants.
- Easiest time to upgrade equipment (e.g., chiller) is when existing one nears the end of its life expectancy.
- A tenant in multi-tenant or single tenant full service lease needs to engage management/owner. Should approach the management and ask
  - What are your plans for reducing energy use?
  - What are your recommendations?
  - How efficient is the building now? Is it Energy Star rated, e.g.?
- A single tenant with triple net and with permission of owner can hire ESCO with Energy Savings Performance contract. This is usually for long term leases of 10-20 years.
- There are programs available for small tenants: Right Lights, Green Business Certification Program, PG&E-funded orgs like Synergy Companies for low income or school districts or small commercial.