



The SerraLux Interview: Andy Bush, Principal at Morgan Creek Ventures

~Interview with Chris Hergenrother, Director of Marketing at SerraLux



Harnessing the Power of Daylight

The New Net Zero Energy Lease:

Encouraging Building Developers, Tenants, and their Employees to Reap the Benefits



ANDY BUSH

PRINCIPAL, MORGAN CREEK VENTURES

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The benefits of properly deployed green building and energy efficiency initiatives are overwhelming. The results are happier, healthier and higher performing occupants, reduced building operating expenses, more attractive buildings with higher rent premiums, tenant retention and sale value, and a healthier planet from a reduced carbon footprint. Forward thinking developers and building owners understand these benefits and are making the investments into green buildings—it just makes great economic, health and well-being and environmental sense.

However, until now investing in green buildings has not been adequately incentivized as current leasing structures do not align the interests of the stakeholders (developer, tenant and tenants’ employees). In order to maximize the benefits, tenants must understand the benefits through education and participate in creating the desired outcomes in their use of the space. One of the greatest challenges in green building has been the win-lose lease structures of the past.

I recently had the pleasure of interviewing Andy Bush, Principal at Morgan Creek Ventures and a visionary who, in concert with the Rocky Mountain Institute, designed a zero net energy lease structure (“ZNE”) to keep all stakeholders engaged and their interests aligned. Andy just implemented this new leasing structure in his firm’s new zero net energy commercial development, Boulder Commons. Boulder Commons will be the first large-scale multi-tenant ZNE building requiring every tenant to sign a net-zero lease. Located in Boulder Junction, this development consists of two buildings totaling 100,000 square feet of professional office space, retail space, and community gathering flex space.



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The creation of this leasing structure not only serves Boulder Commons, its tenants and Morgan Creek Ventures’ future developments, but will also help fuel the acceleration of green building through alignment of stakeholder interests and a broader understanding of the economic benefits of green buildings. For Morgan Creek Ventures, the investment in this ZNE complex and using this lease structure creates two outcomes: 1) greater energy performance; and 2) providing occupant comfort which meets or exceeds the alternatives.

The energy side is kept simple; the energy budget for each tenant is based on the average energy consumption of 7 kBtu per square foot, aligned with the ZNE metric that the New Buildings Institute* recommends. To provide occupant comfort while achieving lower annual energy use, the team searched for technologies which would achieve occupant comfort while reducing the carbon footprint of energy consumption.

Architects have considered the concepts of “form” and “function” for a hundred years. Clearly, numerous studies support the notion that the next dimension of architectural design should include providing a better workplace environment while reducing our carbon footprint. Boulder Commons architecture firm Coburn Development’s mantra is to build “healthy and productive places that connect people and sustain the earth” so they were a perfect fit for this project.

* The New Buildings Institute (a nonprofit organization driving better energy performance in commercial buildings) defines zero net energy (ZNE) buildings as “ultra-efficient new construction and deep energy retrofit projects that consume only as much energy as they produce from clean renewable resources.”

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There are a variety of mechanisms designed into the Boulder Commons including photovoltaic generation and energy efficiency initiatives including high-performance windows, daylight harvesting window film, intelligent lighting controls, dimmable LED lighting and large, open spaces. As a result, Boulder Commons was designed with bright, open, collaborative work spaces. Daylight and views, along with efficient floor plans, open workspaces near windows, flexible configurations, and architectural/ engineering façade design lead to reduced heat gain/loss and better daylighting.

As Andy Bush says, “SerraGlaze daylight redirecting window film (DRF) is one of the best examples of enhancing the use of daylight. We have found that typically with really good glass which performs well we lose some of the views. Applying SerraGlaze Daylight Redirecting Film to the upper portion of the windows allows us to take some daylight that folks may not normally experience and bounce it upward further and deeper into the space brightening the space longer with natural full-spectrum lighting, which is comfortable on the eyes.” With this added daylighting, triple glazed Alpen high-performance windows, and supplemental LED lighting, electric energy savings can be reaped.

With this new lease structure, the core break-through is getting the stakeholders aligned and having them engaged; capitalizing and benefiting from the various initiatives deployed by Morgan Creek Ventures. Per Andy, “The challenging part is educating the public about the net-zero lease concept.” To guide tenants in appreciating this new building system and lease structure, Morgan Creek Ventures has created a pre-occupancy survey on sustainability and employee comfort.



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“The idea of the survey is to understand where people are coming from both in terms of their sustainability and kind of transportation modes, as well as employee comfort in the space that they're in. We do a walk-through to show them design aspects of the building we think they'll really like. We also have a series of open houses to provide education on the energy savings features.”

The net-zero lease model is a profound way of sharing the benefits between landlord and tenant while incentivizing all to reduce operating costs. “Annually, we have a re-commissioning where we sit down with each tenant to review results. Ultimately, I think the net-zero lease program will be a way to connect people together as we share information and share results. Tenants have the opportunity to share what they're doing and how their building feels. We assume people will be happier in the new building than their old building in part because it is new. We'll have to try to sort out what pieces of employee comfort and energy management systems they get excited about or don't get excited about, notice or don't notice. It should be pretty exciting.”

As energy efficient developments are in demand, Morgan Creek Ventures' blue-print for lease developments which incentivizes the building owner and occupants to behave in concert is on track to expand. “In order to move the needle in both energy use and occupant comfort, we need to be willing to embrace the new technologies. There's always new products out there, so as we proceed, we'll continue to seek out and select innovative or next-gen technologies. I think we are also going to take our first crack at that zero-risk measurement. We think that in the higher-end apartment world that although somewhat more difficult--it's the kind of the “next place” to take our skills and our learning.”

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During one of the tours, Andy was pleased by an unexpected reaction from a prospective tenant who expressed their appreciation. Boulder Commons is not only a great place with good views but they quickly found the bonus was the energy savings.

Andy expects Boulder Commons to be fully occupied by year-end.

More on Boulder Commons www.bouldercommons.com

ABOUT SERRALUX

Headquartered in England and California, SerraLux develops and manufactures cleantech window products that harvest daylight and redirect it deeply into a building. SerraLux's patented technologies combine cutting-edge optical science, electronic design, and engineering into products that harvest daylight from outside, and redirect it so it can illuminate the room—all while mitigating glare and preserving the view.

The company's flagship product, SerraGlaze® Daylight Redirecting Film, is a transparent, easy-to-install, window film that redirects incoming daylight to the ceiling. SerraGlaze contributes to daylighting credits/points for LEED, BREEAM, and GREENSTAR.

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