Sustainable San Diego

Economy · Environment

Tapping the Energy of Innovation

SAN DIEGO BUSINESS JOURNAL

Building Eco-friendly Communities

■ By Lindsay Santa

Circa De Loma, Fallbrook

KirE Builders, Inc. specializes in eco-friendly communities spread across San Diego County. KirE applies a wealth of knowledge to every home it constructs, ensuring that its customers receive energy efficient homes with environmentally savvy designs at the highest possible standards.

➥ *KirE page A45*

Don't Tear It Down!

■ By David McCullough

Sustainability is a big word with many different connotations, depending upon its context. But when it comes to the built environment, the meaning is simple: it's made to last. In a connected world where our attention span has shortened significantly, those in the building industry are

➥ *Sustainability page A38*

So You've Decided to Go Solar. Now What?

■ By Mike Teresso

Mike Teresso, President, Baker Electric Solar, in front of Baker's corporate headquarters in Escondido

Solar is a significant investment designed specifically to benefit your wallet and create a better lifestyle for your family. Let's face it — high

➥ *Baker page A44*

Britt Scripps Inn interior

San Diego County Hotels Welcome Sustainability

Consumer Expectations and Rising Costs Drive Environmentally Friendly Practices

■ By Stephanie R. Glidden

Earth Day, an idea sparked in part by the 1962 publication of "Silent Spring" by Rachel Carson, was born April 22, 1970. The book fueled the idea that air pollution, oil spills, toxic factory fumes, pesticide-laden food and polluted lakes and rivers did not contribute to prosperity. By 1990, Earth Day had gone global and today it is celebrated by billions of people worldwide.

➥ *Hotels page A36*

Corporate Social Responsibility Reporting: A Business Imperative

■ By Gerardo Godinez, Senior Manager, and Eric Rohner, Tax Partner, Moss Adams LLP

The past 100 years have drawn our attention to the effect we have on our environment—and how it, in turn, affects us. Both individuals and businesses are tasked with doing our part to mitigate our impact. Simply put, it's the right thing to do—so it's no wonder corporate social responsibility (CSR) reporting has become common practice in the past decade.

Most large, global businesses have been issuing CSR reports for years, and midsize businesses aren't far behind. For all but the smallest companies, investing in CSR reporting pays back—not only in the cost savings associated with better resource management but also with respect to your long-term business strategy.

The Business Case for CSR

Most of us in San Diego are already on the same page concerning sustainability; this issue of the San Diego Business Journal

Photo ©Stephen Whalen
Abundant natural light creates a welcoming team meeting space in the Moss Adams board room.

➥ *Corporate page A37*

Let the Sun Heat Your Commercial Pool and Save

Rebates and Lower Utility Bills Attract a Wide Range of Pool Owners

■ By Chuck Colgan

Commercial pool

Warm spring days mean the return of swim season in San Diego as people flock to pools at apartment buildings, homeowner associations, schools, swim clubs, hotels and elsewhere. However, commercial pool owners and operators know that even when daytime temperatures go up, nighttime temperatures remain low, forcing them to continue costly

➥ *Sun page A46*

Data Center Sustainability

By Chris Orlando

The U. S. Office of Management and Budget recently issued a requirement for data center operators nationwide to improve overall energy efficiency by 2018. The new mandate requires that data centers reach a PUE (Power Usage Effectiveness) of 1.5 or

➥ *ScaleMatrix page A43*

LEED Silver Certification and The Old Globe

A Personal Commitment to Sustainability

■ By Bruce Bergman

An impressive total of six buildings in Balboa Park earned LEED Silver certification in 2015. In 2013 and 2015, as a volunteer with the San Diego Green Building Council

➥ *Old Globe page A48*

ScaleMatrix:

better within the specific timeframe. For many corporate or enterprise data center operators, this will mean adopting new energy-efficient cooling and power management systems or migrating to a facility which meets these new standards.
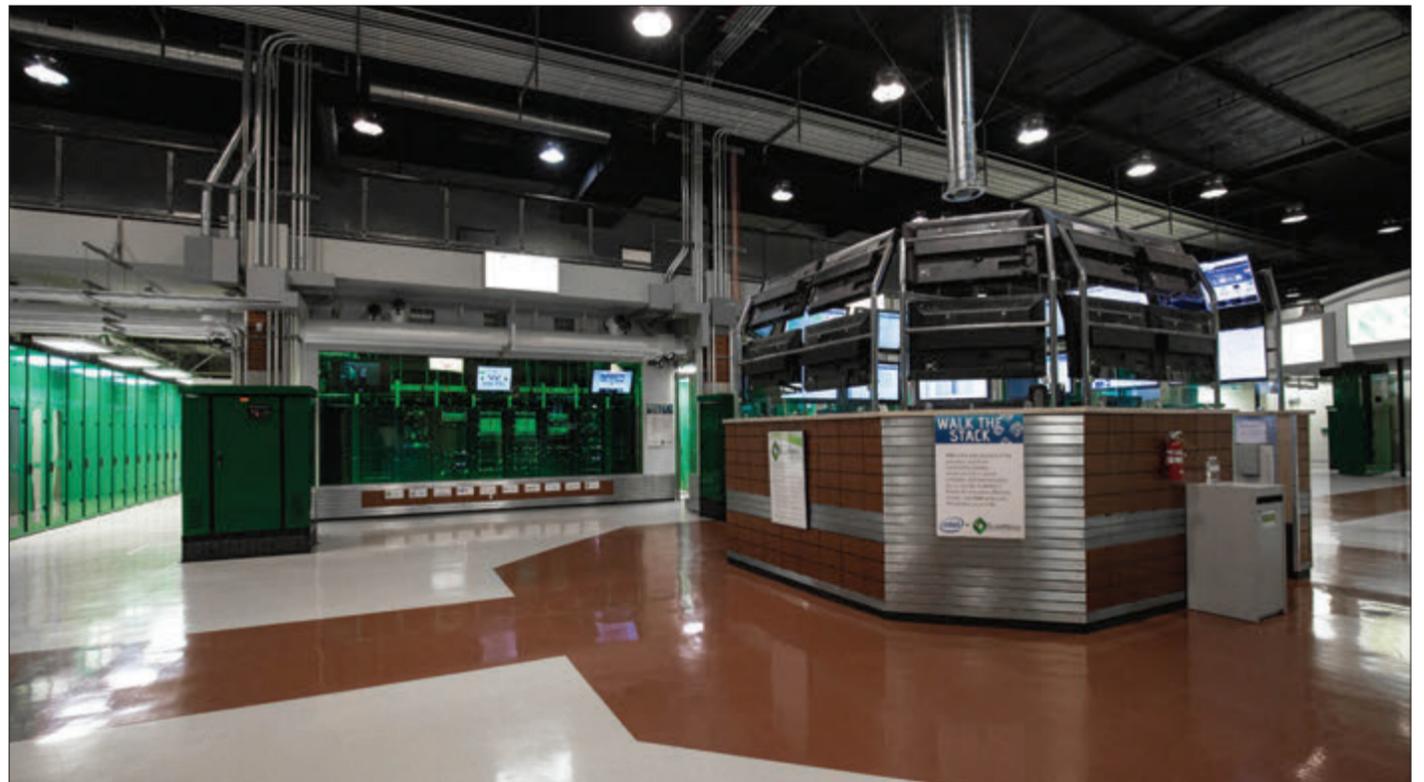
> *This move towards sustainability and energy efficiency is not a new trend, but with stricter regulations becoming the norm, large scale users of power, water, and other key data center resources will need to begin evaluating ways to comply and improve operational efficiency.*

This move towards sustainability and energy efficiency is not a new trend, but with stricter regulations becoming the norm, large scale users of power, water, and other key data center resources will need to begin evaluating ways to comply and improve operational efficiency. The benefits of these efforts are real, both from a reduction in resource usage, to tangible cost savings which can result from the efficiency improvements. Still, many organizations may simply look to service providers who specialize in operating highly-efficient data center space in order to solve this new challenge.

At ScaleMatrix, their revolutionary green data centers were designed from the ground up with power efficiency in mind. The company was fortunate to have identified this need early on, and has been designing extremely efficient data centers throughout the U. S. since their opening in 2011. According to ScaleMatrix Co-Founder Chris Orlando, "Our proprietary Dynamic Density Control™ (DDC) is a revolutionary change to the traditional raised floor, hot/cold aisle type of data center design. Our DDC platform aligns cooling and power resources with actual client demand, alleviating waste, improving efficiency, increasing density, and delivering unmatched cost savings in the data centers."

> *The Dynamic Density Control™ (DDC) platform was developed in 2011 by the team at ScaleMatrix,*

Why is this important? Well, it's simple Orlando explains, "By dramatically increasing the efficiency of a data center, we are able to significantly reduce the cost of delivering our services. This means better prices for our colocation, cloud, and managed service clients. For companies operating their own data

ScaleMatrix is the first data center to launch an open-air NOC (Network Operations Center).

ScaleMatrix owns and operates more than 100,000 square feet of data center space in San Diego, which is capable of supporting 10MW of critical load.

Our Green cabinets are self-contained and they hook into ceiling-mounted power, cooling and networking infrastructure that is enclosed in metal tubing. There are no exposed cables or wires, which reduces the risk of unauthorized tampering.

centers, they will either need to meet these new regulatory requirements, or look to partner with a firm like ours, who not only meets these guidelines, but who leads the industry in setting the standard."

The Dynamic Density Control™ (DDC) platform was developed in 2011 by the team at ScaleMatrix, and over the past four years, ScaleMatrix has helped hundreds of local businesses reduce their IT hosting costs by leveraging their highly efficient data centers. This advancement in efficiency is especially important in markets like San Diego, where electrical utility costs are some of the highest in the nation. For those

looking to reduce their demand and improve efficiency, companies like ScaleMatrix can help by providing hosting or colocation services for existing IT infrastructure, or by helping install highly efficient data center cabinet technology within enterprise or corporate facilities.

"We're seeing between 25 and 30 percent improvement in overall energy efficiency over a traditionally built data center. For clients who choose to host their IT equipment in one of our facilities around the country, this equates to the most cost effective power pricing available. For those retrofitting their facilities with this groundbreaking tech, it can mean tens of thousands of dollars

in electrical savings per year or more.

In our local community, the concentration of life science, genomics, and high tech start-up organizations means a larger than normal focus on high-performance computing (HPC). These users in particular are faced with considerable electrical utility requirements, and can truly benefit from leveraging any available efficiency tools to reduce overall cost. In addition to cost and resource savings, ScaleMatrix' proprietary DDC platform provides unparalleled density capabilities, meaning that you can put more IT equipment in a smaller footprint. By saving space and improving efficiency, ScaleMatrix can help ensure the best possible use of space, power, and financial investment for these high-performance users.

> *In our local community, the concentration of life science, genomics, and high tech start-up organizations means a larger than normal focus on high-performance computing (HPC).*

In addition to the cost savings, there are measurable improvements to the overall sustainability of this industry through the use of the DDC platform. It is estimated that that a traditional data center can have a carbon footprint of between 5M and 150M kilograms of CO_2. With ScaleMatrix' Dynamic Density Control™ Platform, this amount can be reduced by an estimated 30 percent, making the green color of these innovative cabinets more than part of their aesthetics.