

Michael Shih

Jon Loveland

Dr. Edward Ellison

Susanna Bennett



Michael Shih's NuWa Textile plants in China, Taiwan and Irvine produce more than 22 million yards of polyester and nylon fabric a month, yet the company is widely recognized as a leader in environmental stewardship. Poseidon Resources has a proven track record of financing, designing and developing cost-efficient desalination plants throughout North America, and the one it wants to build in Huntington Beach could accommodate 8 percent of the county's water needs. Kaiser Permanente understands the connection between good health and a healthy environment, which is why its Irvine Medical Center is among the greenest hospitals in the nation. And TowerJazz Semiconductor's massive Newport Beach foundry could - potentially - eat up a whole lot of energy. But in less than two years, the company has reduced its annual consumption by a whopping 9 million kilowatt hours. (Find out just how much that's equivalent to on page 48.) A textile manufacturer, a desalination plant developer, a hospital and a semiconductor-maker: Together, they are an environmental powerhouse. And they stand among the next generation of businesses that believe preservation and conservation are just as important as revenue and profit. They, along with 21 other companies, make up OC METRO's 2010 Green Team. Turn the page and meet the players.



B. Braun Medical Inc.

Irvine (manufacturing facility) bbraunusa.com FOUNDED: 1839 in Germany VICE PRESIDENT AND GENERAL MANAGER: Pete Klaes (Orange County) CHIEF GREEN OFFICER: Rhonda Moore. **Environmental Engineer**

This medical products manufacturer is an environmental pioneer in its industry. It was the first to manufacture intravenous therapy bags that are free of polyvinyl chloride and the plasticizing agent DEHP, thus making them more environmentally friendly. In fact, it's the only company in the nation that offers a full line of PVC-free and DEHP-free products. And it launched this initiative long before the green movement came into vogue. The company also created a Waste Calculator for hospitals and health networks. It allows medical facilities to determine how much waste they'd be eliminating if they switched to more environmentally friendly products. Still not impressed? Consider this: 85 percent of the Irvine manufacturing plant's energy is produced on-site.

TowerJazz Semiconductor Newport Beach | towerjazz.com FOUNDED: 2002 | CEO: Russell Ellwanger CHIEF GREEN OFFICER: Dale Bogan, Director of Facilities

If you've ever passed by TowerJazz's Newport Beach foundry facility, it's clear that this is one big operation that could - potentially, at least - eat up a whole lot of energy. But it doesn't. In fact, since January of last year, the company has reduced its annual consumption by 9 million kilowatt hours. That's the carbon-reduction equivalent of 12,982 barrels of oil or 1,071 cars. And last year, Tower Jazz joined the Cool Planet Project, an energy-efficiency and climate-change mitigation program administered by The Climate Registry and Southern California Edison, which by the way – seems to have become guite smitten with the organization. The company has garnered an Outstanding Achievement in Energy Efficiency Award and a Flex Your Power award from the utility company. Now that's something to get jazzed about.





Sustainability Leadership Program, UC Irvine Extension Irvine | unex.uci.edu

PROGRAM CREATED: 2008 DEAN OF CONTINUING EDUCATION: Gary W. Matkin SUSTAINABILITY DIRECTOR: Kirwan Rockefeller

Thanks to UC Irvine Extension and its Sustainability Leadership certificate program, more than 60 professionals have joined the green movement and are championing the environmental imperative in business. The two-year-old program provides an interdisciplinary focus aimed at integrating sustainable development and environmentalism into management strategy, as well as achieving an understanding of regulatory trends and fostering a sense of cor-

porate responsibility. Its goal: to change the way Orange County companies and government agencies implement sustainability. Courses include Energy and Climate Change Strategies for Business; Legal Developments Concerning the Environment and Climate Change; and Principles of Finance: People, Planet and Project Determinations. All program content is reviewed by an advisory board of top industry experts. Each course is taught by professionals already working within the green-collar sector, and they share real-life experiences that enrich the education offerings. Students who complete this program end up with more than an education – they're armed with the tools that will help them effect change in the community.

"Sustainable products and manufacturing processes are important elements in B. Braun's commitment to protecting the planet. They are also increasingly important to hospital and health-care facility customers. We're proud to partner with our customers in finding solutions that address the issues they face in delivering quality care, especially environmental responsibility. - Rhonda Moore, Environmental Engineer for **B. Braun Medical Inc.**

"We only have one planet and currently consume seven planets' worth of resources. At some point, we must rethink how we're going to balance our current needs with the unrealized needs of our future generations." - Spencer Brown



Rent A Green Box Costa Mesa | rentagreenbox.com; earthfriendlymoving.com FOUNDED: 2005 in Huntington Beach | FOUNDER AND CHIEF GREEN OFFICER: Spencer Brown

Consider all of the boxes just one person uses during a move to a new home, and then think about how many more a company would use in an office relocation. That's a lot of cardboard that could end up in landfills. The thought of it bothered Spencer Brown so much that he came up with a solution: Rent A Green Box. Brown has invented more than 15 zero-waste moving products that are changing the way people around the world pack and move. He also reinvented the disposable moving box with Recopacks, which are made entirely from plastic mined from local landfills. Each box can be used more than 400 times and is crush-proof, tear-proof, and dust- and waterresistant. Perhaps best of all: Each box spares 12 trees in its lifespan. The company delivers the Recopacks one week before the moving date and picks them up a week after the move is complete. Then they're cleaned, sanitized and delivered to the next client. When a box is worn out, the company grinds it down to make another Recopack. And all the transporting is done via Rent A Green Box's fleet of alternative-fuel trucks - which also happens to be the largest in the state fueled by vegetable oil and bio fuel. Brown's innovation hasn't gone unnoticed: Rent A Green Box earned a 2009 California Small Business Award and a 2008 California Governor's Economic and Environmental Leadership Award for new market technologies in recycling, and received two honorable mentions from the Green Dot Award program. And now, the company's gone global, with operations in Canada, Japan and England.





Stantec Consulting

Irvine (Western U.S. headquarters) stantec.com FOUNDED: 1953 in Canada SENIOR VICE PRESIDENT AND CHIEF **GREEN OFFICER:** Eric Nielsen (O.C.)

Ask any one of the firm's engineering or architectural consultants to explain just what this company specializes in, and he'll likely quote its Web site: "In simple terms, the world of Stantec is the water we drink, the routes we travel, the buildings we visit, the industries in which we work and the neighborhoods we call home." Perhaps it's that 360-degree spectrum of interest that propels the company's concern for environmental preservation. The Stantec team has worked on more than 105 LEED-certified projects, and 17 of those earned Platinum ratings. One project currently in the works is the LEED Platinum Ocean Science Education Building at UC Santa Barbara. Among the sustainable leadingedge features that Stantec engineers have designed: a system that will use ocean water to provide an environment for aquarium fish - and cool the building. Even more impressive: Stantec engineers are working for the Department of Energy to design North America's largest net-zero-energy commercial building, meaning it will produce the same amount of energy it consumes. Situated on the National Renewable Energy Laboratory campus in Colorado, this building will serve as an international model in sustainable development. Back at home, the environmental awareness continues with various office programs, including an annual Bike-to-Work Challenge. Stantec's 130 offices throughout North America compete each spring to determine who can log the most miles. Irvine employees placed first last year, cycling 1,407 miles during the three-week challenge and offsetting the release of about 1,500 pounds of greenhouse emissions. Stantec Senior Project Manager Paul Carey rode 568 miles, landing him in the No. 2 spot among pedaling employees companywide.

GREENTEAM



The Costa Mesa Green Home Steven and Karen Blanchard, David Gangloff Architects and Gonterman Construction Costa Mesa | costamesagreen.com YEAR BUILT: 2009 | ARCHITECT: David Gangloff | CHIEF GREEN OFFICER: Jason Gonterman

Steven and Karen Blanchard wanted to build a custom home, and they wanted to do it with a clear conscience – environmentally speaking, that is. So they tapped the certified green building specialists at David Gangloff Architects and the contracting experts from Gonterman Construction to help them. The result: Orange County's first Platinum LEED-certified home. Care was taken every step of the way in the planning and execution of the project. The Blanchards donated the pre-existing structure for firefighter training exercises. Only engineered lumber from small trees and sustainably managed forests were used, along with low-volatile organic compounds, energy- and water-efficient appliances and fixtures, and a grey-water recycling system that filters shower water for use in toilets and sprinklers. And because of its rooftop solar panels and high-performance design (sunlight and shade positioning, and the path of prevailing winds were factored into the building's orientation on the property), the Costa Mesa Green Home exceeds the requirements of the state's energy code by 40 percent. It's so efficient that electricity bills should add up to a big, round zero.

"It is important to be environmentally responsible in as many little ways as possible. The Japanese use a word called 'kaizen.' meaning continuous improvement with small steps.' Although a homeowner may not have as lofty of a goal as the Blanchards'. I believe it is in the small steps we make individually and within our homes that will have the most positive impact on our future." - Jason Gonterman, CEO of Gonterman Construction



Yard House Restaurants

Brea, Costa Mesa, Irvine and Newport Beach | yardhouse.com FOUNDED: 1996 in Irvine

PRESIDENT AND CEO, AND CHIEF GREEN OFFICER: Harald Herrmann

The Yard House was the first restaurant in the nation to install eCorect, a wet-waste system that reduces the weight and volume of food scraps by 93 percent. The one-touch machine decomposes the compostable waste through intensive heat, with no negative environmental impact. The result is a high-density organic substance that can be used for soil amendments, biomass energy and organic fillers. And the company saves about 180,000 gallons of water a year at each restaurant with the waterless urinals it installed in its men's rooms.



"We all have a responsibility to ensure a healthy planet for one another, as well as for future generations. At McCarthy, we follow this excerpt from our green mission: 'We believe the choices we make are not just for today ... not just for us or our clients. The choices we make will leave a legacy for those who will follow us and create new footprints on this earth."

- Ron Hall, Executive Vice President of McCarthy Building Cos.

e-Recycling of California Irvine | erecyclingofca.com

Irvine | erecyclingofca.com FOUNDED: 2002 in Paramount | PRESIDENT: Art Kazarian CHIEF GREEN OFFICER: Dennis Kazarian

It's probably not something you've ever given much thought to – where all those old computers and monitors go after they've died and left your home or office building. But the 150 environmentally conscious employees from e-Recycling of California can tell you exactly what happens to them. Chances are, a number of them have even landed in their hands. That's because any electronics that are delivered to Household Hazardous Waste drop-off sites and Waste Management facilities throughout Orange County wind up in the care of e-Recycling's green team of workers. It's their job to take apart the items – or, as the company likes to call it, "demanufacture" them. They strip them down to their basic commodity categories – circuit boards, metals, plastics and glass – so that those components can be shipped off for further recycling. The company has three electronics demanufacturing facilities in California, with its newest plant in Irvine at the Great Park.





McCarthy Building Cos. Newport Beach | mccarthy.com

FOUNDED: 1864, headquartered in St. Louis, Mo. PRESIDENT: Carter Chappell (California region) CHIEF GREEN OFFICER: Ron Hall

McCarthy Building Cos. formed its own green team more than 10 years ago to ensure that the construction firm was doing everything it could to leave behind the greenest footprint possible. And now the largest commercial construction firm in the state employs more than 400 LEED-accredited professionals, touts a resume that includes sustainable projects valued in excess of \$4 billion and was named the third-largest green contractor in the state by California Construction magazine. The company incorporates sustainable design, building practices and materials into its projects whenever possible and recycles its construction waste. And environmental awareness isn't left behind on the job site; green practices abound in the administrative offices as well. Staffers use recycled paper and environmentally friendly cleaning products. They recycle toner cartridges and electronics, reuse packing materials and recycle about 75 percent of their waste - they even recycle their blueprints. And the company recently calculated its carbon footprint and is committed to reducing it by 5 percent over the next three years.

GREENTEAM



Miocean Foundation Irvine | miocean.org FOUNDED: 2002 CHAIRMAN OF THE BOARD AND CHIEF GREEN OFFICER: Patrick R. Fuscoe

Orange County is home to 42 miles of coastline and waterways - a lot of room for swimming, surfing, bodyboarding and a list of other water sports. But urban runoff and other pollution can also make it a playground for bacteria. And there isn't a whole lot of money in government coffers to fund diversion projects or other cleanup and prevention efforts. So that's where the water-loving executives who make up the membership of Miocean come in. They don't fund research studies or support long-term development projects. Instead, they support municipal and educational projects that need a boost to come to fruition. The foundation has completed dozens of local projects with measurable, visible improvements to local coastal waters, and it's educated thousands of students about the consequences of urban runoff. Since its establishment. Miocean has committed millions of dollars for water quality-related and educational projects. And the results of their efforts are impressive. More than 1.2 million gallons (the equivalent of two Olympic-size pools) of polluted water are removed from Southern California oceans daily because of Miocean-supported projects, including the North Creek-Doheny Beach Diversion and Salt Creek-Monarch Bay Treatment Plant

Nova Vita Salon & Spa Tustin | novavitasalon-spa.com FOUNDED: 2005

CEO AND CHIEF GREEN OFFICER: Katerina Bisbikis

A day of pampering could produce a lot of waste: Think about all those cotton balls, tissues, swabs and disposable applicators that are used in a day. There's also the waste that goes along with running a business - old memos, used forms and to-do lists. And then there's all that use of energy – except if you're talking about operations at Nova Vita Salon & Spa. Owner Katerina Bisbikis has her own Rmantra: Relax, renew, rejuvenate and recycle. Her staff recycles all used bottles, cans and paper, and uses recycled treatment supplies made of sustainable materials such as cotton. All post-its, printer paper and notepads are made of recycled material and, once used, are recycled again. But the team tries to keep even that in check. In fact, the staff has cut paper communications by 50 percent since the completion of the spa's Green & Gorgeous makeover in January. As for energy use: You'll find only energysaving light bulbs at Nova Vita.



OCB Reprographics Costa Mesa, Orange and two

locations in Irvine ocbinc.com FOUNDED: 1926 in Santa Ana **CEO AND CHIEF GREEN OFFICER:** Roger Lackey

OCB Reprographics has set a green course for business. and it's modified a number of standard operating procedures to ensure the company stays on track. Want a sampling of some of the many initiatives? OCB replaced its aging delivery fleet with newer, more fuel-efficient vehicles. And by restructuring

its dispatching strategy, the company was able to cut the fleet in half and save about 1,800 gallons of fuel per month. The company prints all documents on recycled paper and then offers its clients free recycled paper pickup. And OCB offers incentives for ride-sharing. Here's a company doing its part to keep the world colorful and clean.

'Our ocean is one of our most precious natural resources, providing countless quality-of-life benefits and plaving a key role in California's \$30 billion tourism industry. Through groups like Miocean, we can participate in the worldwide effort to save the planet for future generations and ensure that our ocean remains a source of well-being, enjoyment and vitality for all.' - Patrick R. Fuscoe, Chairman of the Board of Miocean Foundation

NuWa Textiles

Irvine | nuwatex.com FOUNDED: 2007 | PRESIDENT AND CHIEF GREEN OFFICER: Michael Shih

Irvine-based NuWa Textiles manufactures more than 22 million yards of polyester and nylon fabric each month in its plants in Taiwan, China and the U.S., yet it's been recognized as an industry leader for its green innovation. In fact, its plant in JiaXing, China, was the first vertical textile mill to be certified by bluesign, a global agency that promotes environmental, health and safety standards. NuWa President Michael Shih says keeping a tap on the ecological impact of manufacturing is the company's highest priority, while still leading the industry in innovations in weaving, coating, laminating and finishing. The plant recycles 90 percent of the water it uses in weaving and complies with bluesign's stringent restrictions on air emissions. The company's efforts have been noticed by others as well. Ski Press magazine featured the textile-maker as an environmental innovator and industry leader, and President Michael Shih was named a top Power Player by the outdoor- and fitness-industry magazine SNEWS.



Irvine Ranch Water District Irvine | irwd.com FOUNDED: 1961 | GENERAL MANAGER AND CHIEF GREEN OFFICER: Paul Jones

Since 1961, the Irvine Ranch Water District has been a leader in environmental stewardship, and its recycled water distribution system is the largest in the nation. Recycled water is used for landscape irrigation in parks, golf courses and school grounds, and in cooling towers and toilets in more than 25 office buildings throughout its

service area, which includes Irvine and portions of Costa Mesa, Lake Forest, Newport Beach, Tustin, Santa Ana, Orange and some unincorporated areas of the county. IRWD's water conservation efforts and unique conservation rate structure have facilitated a marked decrease in water consumption among its 330,000 customers. While the average





"A product or

Orange County resident uses 190 gallons of water a day, an IRWD customer uses only 90. What's more, IRWD uses solar energy to power some of its operations, and urban runoff is cleaned through a natural ecosystem treatment that removes contaminants before the water reaches the ecologically sensitive Upper Newport Bay.



Kaiser Permanente Irvine Medical Center Irvine | kaiserpermanente.org FOUNDED: 1945 in Oakland (The Irvine Medical Center opened in May 2009) CEO AND CHIEF GREEN OFFICER: Julie Miller-Phipps (Orange County)

The people at Kaiser Permanente just seem to get it – there's a connection between good health and a healthy environment. Breathe California apparently recognizes that. In April, the nonprofit dedicated to fighting lung disease gave Kaiser Permanente its Clean Air Award for leadership. The program honors organizations that are implementing initiatives to reduce global warming and air pollution. Kaiser Permanente's sustainable energy strategy, for example, seeks to reduce demand, increase the use of renewable sources, and limit air pollutants and greenhouse gas emissions that affect the health of its members and the community. And in the past seven years, Kaiser Permanente has used ecologically sustainable materials for 7.5 million square feet of new construction, eliminated the purchase and disposal of 40 tons of hazardous chemicals, saved more than \$10 million per year through energy conservation strategies and worked with suppliers to introduce several new PVC-free products to

the market – and that's just a short list of achievements. That said, it should come as no surprise that Kaiser Permanente's Irvine Medical Center is among the nation's greenest. The 434,000square-foot facility is based on a new template that represents the next generation of Kaiser Permanente hospitals. The carpet backing throughout the facility is made with a recycled safety film, cafeteria trays are made from recycled materials and all X-ray scans are electronic, making the "We aspire to provide healthcare services in a manner that protects and enhances the environment and the health of communities now and for future generations." - Julie Miller-Phipps, CEO of Kaiser Permanente in Orange County

hospital mercury-free. Large windows allow for plenty of natural lighting, and careful placement of landscaping provides a natural sound barrier. But the Irvine center isn't the only facility with bragging rights. Kaiser Permanente centers across the country have garnered numerous awards for environmental initiatives, including a System for Change Award from Practice Greenhealth, which recognizes health-care systems that support and implement eco-friendly practices.

Alere

Irvine (with other offices in Atlanta; Reno, Nev.; and Upper Saddle River, N.J.) | alere.com FOUNDED: 2008 by parent company Inverness Medical Innovations EXECUTIVE VICE PRESIDENT: Kathy Cartelli (Irvine operations) CHIEF GREEN OFFICER: Stefanie Strobel

Alere Health is one of the nation's leading providers of integrated health and wellness programs to employers and health plans. For the company's Irvine-based team, caring about the environment is every bit as important as caring for one's health. The proof? Despite doubling its staff last year, the team was still able to reduce waste. In 2008 alone, the company eliminated 1,229 pounds of trash and saved the company \$8,413 in energy and other operating costs. Employees have cut 100 reams of paper from their supply by printing on both sides and have recycled more than 800 pounds of electronics. Their efforts were even recognized by the



California Department of Resources Recycling and Recovery. Go inside the office break room, and you'll find only ceramic dishes and silverware. For cleanups: Earth-friendly Method and Clorox Green Works are used. And employees who take a bus, train or vanpool to work are reimbursed for the expense.





Toshiba America Business Solutions Irvine | toshiba.com FOUNDED: 1999 as an independent company of Toshiba Corp. PRESIDENT AND COO: Mark Mathews CHIEF GREEN OFFICER: Tom Walter, Director of After-Market Operations

Toshiba America Business Solutions has a dream for the future. It's called Environmental Vision 2050, and it goes like this: In 40 years, people will be enjoying rich lifestyles in harmony with the environment, creating an ideal situation for the planet. And the company is doing its part to make it happen - by reducing its environmental footprint while manufacturing products that help businesses and consumers do the same. Sounds like a contradiction? It's not. Toshiba manufactures only EPA Energy Star-compliant products that are made of environmentally friendly materials. The company also launched a zero-wasteto-landfill toner cartridge collection program that repurposes the waste into a product called e-Lumber. which is made into items such as park benches and sustainable garden boxes.

Waste Management of Orange County Offices in Irvine and Santa Ana

Wmorangecounty.com FOUNDED: 1986 DIRECTOR: David Ross (municipal and community relations, Orange County) CHIEF GREEN OFFICER: Chrystal Denning

When Waste Management employees say "think green," they really mean it. The folks who work here are responsible for keeping Orange County clean. The company services the cities of Costa Mesa, Irvine, La Habra, Laguna Beach, Lake Forest, Mission Viejo, Santa Ana and unincorporated areas of the county. And while Waste Management team members are picking up after others, they're practicing their own earth-friendly initiatives. Example? You know those big, green trucks you see being driven around service areas? Well, by powering most of these vehicles with natural gas, it's like taking 10,000 cars off of the county's roadways every day - yes, daily. The company's sustainable operations at both the Irvine and Santa Ana maintenance facilities are so environmentally friendly, the California Department of Toxic Substances Control has even recognized them as Pollution Prevention Model Shops.

The entire operation is taking action, too. Its new state-ofthe-art processing line in Irvine will help keep an additional 30,000 tons of waste from landfills, and everyone on the Waste Management team embraces earth-friendly practices.





Through its Cox Conserves program, the cable TV and broadband services provider (the third-largest in the country, by the way) aims to reduce its carbon footprint by 20 percent over

the next 10 years. It's a bold effort, but the company is poised for the challenge. The vast amount of roof space on its 300,000-square-foot headquarters in Rancho Santa Margarita is being outfitted with 600 solar panels to reduce the company's dependence on conventional power sources and eliminate approximately 100 tons of greenhouse gasses per year. The office already recycles more than 130 tons of employee waste and 3 tons of e-waste each year. Its vanpool program eliminates more than 1 million commuter miles annually. And through its Arbor Day Foundation donations, Cox has planted 3,195 trees. Then there are the weekly educational e-mails, Go Green public service announcements and Lunch & Learn to be Green programs that the company sponsors, to ensure that clients and employees alike remain aware, informed and environmentally conscious.

"One company, one individual can't solve the whole problem, but by focusing on what we can accomplish in our own world, we can make a significant contribution to the solution and to the community."

- James Leach, Vice President of Public Affairs for Cox Communications

"The city of Irvine has a long-standing history of environmental stewardship. ranging from preservation of open space to recycling and green building. Environmentalism is a cornerstone of the city's success. - Brian Fisk, Director of Community Services for the city of Irvine



City of Irvine ci.irvine.ca.us | Incorporated: 1971 MAYOR: Sukhee Kang | CHIEF GREEN OFFICER: Brian Fisk

Irvine aims to be the greenest city in the state – if not the nation. And if you consider all of the initiatives it has in place, there's every reason to believe it's a goal that's well within reach. Irvine already is ranked No. 13 among 178 Smarter Cities by the Natural Resources Defense Council. The list recognizes communities that demonstrate environmental stewardship, sustainable growth and livability – a set of values that the city has been practicing since its early days. Take, for example, the 1988 voter initiative that resulted in the city's current 5,200 acres of open space. It's the foundation of the community's interest in Irvine's environmental stewardship. Today, the city offers a variety of free classes for residents that promote environmental awareness, including a June 5



Green F San Clement FOUNDED: 2009

Surfers have long been lauded for their environmental activism. Heck, one of the most wellknown ocean-preservation groups around these parts – the Surfrider Foundation – was created by surfers. Ironically, the boards they use to ride the waves in the water they so passionately want to keep clean are chock-full of very environmentally unfriendly materials. And recycling isn't typically part of the board-making process – unless we're talking about boards crafted from Green Foam Blanks. The San Clemente-based company says it makes the "world's only recycled polyurethane surfboard blanks." Blanks are the blocks of polyurethane foam that shapers cut and sand into surfboards. And just like a woodshop floor is littered with sawdust, a board-shaping studio floor is covered in polyurethane dust, which typically ends up in landfills. But Green Foam Blanks Founder Joey Santley and his team sweep the floors of board-shaping studios throughout Orange County to collect bags of dust, which is then recycled and processed into new blanks. Santley says he's proud of the fact that his team has disproved a decades-old myth that polyurethane foam can't be recycled. He's even prouder that he's diverting some of that toxic waste from landfills. That's keeping things clean by land and sea.

workshop on composting. In addition, its Eco Living e-newsletter is packed full with green-living tips, and its CFL Bulb Mail-back Program provides residents with free recycling containers, so they can properly dispose of their burnedout fluorescent light bulbs. And a variety of energy-conservation and water-preservation efforts mark the city's 39-year history, including water-reclamation and retrofitting projects. Among the most ambitious programs are the city's Build It Green and energy plans. As part of these programs, the city strives to reduce energy use to 30 percent by the year 2015 and greenhouse gas emissions to 1990 levels (as required by AB 32) by the year 2020. The city also set guidelines for the green certification of new construction and home remodels.

Green Foam Blanks

San Clemente | greenfoamblanks.com FOUNDED: 2009 | CEO AND CHIEF GREEN OFFICER: Joey Santley

"It is

important for everyone to be environmentally conscious. as concerns over issues such as air quality. water conservation. urban runoff. greenhouse gas emissions and open space preservation have intensified through the decades. That is certainly the reason we have served as a leader in pioneering sustainable initiatives for more than a **century."** – Robyn Uptegraff, Senior

Vice President of Environmental Affairs for **the Irvine Co.**

The Irvine Co.

FOUNDED: 1864 | CHAIRMAN: Donald Bren | CHIEF GREEN OFFICER: Robyn Uptegraff

The Irvine Co. began crafting and implementing its environmental initiatives long before anyone had even coined the terms "smart growth" and "compact development." Its conservation programs date back to the 1960s, when the company drafted its master plan for developing the Irvine Ranch's land holdings, giving careful consideration to striking a balance between building the new communities required to sustain a growing region and preserving precious natural resources, including the swaths of open space, ecosystems, watersheds and ridgelines that remain thriving habitats for wildlife today. And the use of reclaimed water has been a core part of the ranch's environmental legacy since 1967. Those recycling efforts, when combined with conservation, save more than 35,000 acre-feet of potable water a year. Other programs are equally impressive. Over the last three years, for example, the Irvine Co. has retrofitted more than 1,500 plumbing fixtures, 1,200 faucet aerators and 5,000 irrigation fixtures with high-efficiency models, resulting in an annual savings of 34 million gallons of water. The company plans to continue the Irvine retrofit program, which has an additional savings potential of 50 million gallons annually. All tallied, you're looking at a water savings of about 85 million gallons a year. In addition, all of the new homes built in Irvine are Build It Green-certified, incorporating energy- and resourceefficient building practices into the design of new home developments. And 100 percent of the Irvine Co.'s high-rise buildings in Orange County are Energy Star certified.



Poseidon Resources

Huntington Beach (seawater desalination facility) poseidon1.com FOUNDED: 1995 in Stamford, Conn. PRESIDENT AND CEO: James Donnell CHIEF GREEN OFFICER: Jon Loveland, Chief Technology Officer

Huntington Beach stretches along about 8 miles of the Pacific. It makes for a perfect place to build a desalination plant, which is exactly what Poseidon Resources plans to do, using infrastructure that already exists next to the AES Generating Station at Pacific Coast Highway and Newland Street. If built to specs (construction is anticipated to begin next year), the company says it will be the most technologically advanced, energy-efficient and environmentally sound seawater desalination plan in the Western Hemisphere - and it will provide 50 million gallons of drinking water on a daily basis. That's enough to accommodate 8 percent of O.C.'s needs, without tapping into groundwater or other limited resources, or harming marine life. (Studies indicate that desalination has the same impact as natural evaporation.) The project includes an Energy Minimization and Greenhouse Gas Reduction Plan, a commitment that would result in a carbon-neutral footprint for the facility. The company plans to build the \$350 million plant at no cost to taxpayers, using a formula of private enterprise and investment tools. Poseidon has financed and developed more than \$2.8 billion worth of water projects throughout North America.

GREENTEAM



UPS Locations throughout Orange County | ups.com FOUNDED: 1907 in Seattle | VICE PRESIDENT AND COO: George Willis (Southern California)

When it comes to environmental initiatives, UPS has been a company of firsts in the packaging and shipping industry. It was the first shipping company to join the EPA's Climate Leaders Program, creating and implementing strategies for environmental preservation. It was the first to launch annual CO_2 inventory studies. UPS uses that information to set benchmarks and policies – including routing-efficiency programs – that will result in a target reduction of 1.24 CO_2 pounds/ATM by 2020. And in 2008, it became the operator of the largest alternative fuel/ technology vehicle fleet in the packaging sector. Among its many demonstrated results: A shift from ground to rail, and air to ground, prevented the emission of 3 million metric tons of CO_2 in 2008 alone. And for all of its efforts, the company earned a SmartWay Environmental Excellence Award from the EPA.

Sharp Solar Energy Solutions Group and the city of Huntington Beach sharpusa.com

ci.huntington-beach.ca.us



FOUNDED: 1998 (Sharp Solar) INCORPORATED: 1909 (city of Huntington Beach) | VICE PRESIDENT: Ron Kenedi (Sharp) CHIEF GREEN OFFICER: Aaron Klemm, Energy Project Manager for Huntington Beach

A partnership between Sharp Solar Energy Solutions Group and Huntington Beach aims to turn Surf City into a solar-powered community. And to make it so, the Sharp Solutions Group (which, by the way, is based in H.B.) and the city created the Huntington Beach Hometown Solar Rebate Program. Residents who install Sharp Solar systems in their homes get a \$150-per-kilowatt rebate – that's up to \$1,500 off the cost of a 10-kilowatt system. These new solar projects will be generating clean electricity for decades to come and will provide the city with emissions-free renewable power, while helping to relieve pressure on the electrical grid. Now there's a sunny outlook.

EVERYBODY'S BUSINESS HERE'S HOW YOU CAN CREATE A GREENER WORKPLACE

GO EASY ON THE EQUIPMENT

Set computers to energy-saving settings and make sure to shut them down when you leave for the day – even standby settings draw power. By plugging hardware into a power strip with an on/off switch, your whole desktop setup can be turned off at once. (But make sure you power down the inkjet printers first, so that the cartridges are sealed.) Printers, scanners and other equipment can be unplugged until they're needed. And, of course, turn off the lights in unoccupied rooms.

SAVE SOME TREES

Keep files on computers instead of in file cabinets. Review documents on-screen rather than printing them out. Send e-mails instead of paper letters. And for those tasks that do require it, use recycled paper with a high percentage of post-consumer content and a minimum of chlorine bleaching, and print on both sides of the page. If your office ships packages, reuse boxes and use shredded waste paper as packing material. You can even go a few steps farther and use only pens and pencils that are made of recycled materials, as well as refillable pens and markers.

TAKE THE HIGH ROAD

American workers spend an average of 47 hours per year commuting through rush hour traffic. That's 3.7 billion hours and 23 billion gallons of gas wasted in traffic each year. Carpooling, biking, walking or a creative combination of the three can help ease the impact. And if you must commute by car, consider buying a hybrid, electric vehicle, motorcycle or scooter, or using a car-sharing service.

REDESIGN YOUR WORKSPACE

Start with good furniture, good lighting and good air. Furniture can be manufactured from recycled materials. Incandescent bulbs can be replaced with compact fluorescents, and there is an evergrowing selection of high-end LED desk lamps that use miniscule amounts of energy. And then there's the always-free natural daylight – it has been proven to improve worker productivity and satisfaction. Good ventilation and low-VOC paints and materials will keep employees healthy.

ENJOY A SENSIBLE LUNCH

Bringing lunch to work in reusable containers is likely the greenest – and healthiest – way to eat at work. But if you choose delivery, join coworkers in placing a large order – it's more efficient than many separate ones. Also, bring in a reusable plate, utensils and napkins. If you go out for lunch, try biking or walking to the restaurant instead of driving.

SOURCE: planetgreen.discovery.com