Steve Westly: Funds Climate Change And Green Tech Ventures

From helping build eBay, to serving as California state controller, Steve Westly can claim dramatic successes in public and private service. The investment portfolio of his newest venture, The Westly Group, includes an impressive list of companies with some of the most promising clean technologies on the market. In the following VerdeXchange News interview, Steve Westly discusses the promise of clean tech and the ongoing political struggle to implement climate change legislation.

You’ve made the transition from eBay, to state controller, and now back to the private sector with The Westly Group. What is the focus of The Westly Group, and why you chose clean tech as your re-entry into the private sector?

It’s exciting to me that we’re trying to “change the world.” Everybody understands that the fight against global warming is the one fight

China’s Environmental Awareness Grows with its Economy

Having surpassed the United States as the country emitting the most total carbon dioxide, China’s growing demand for resources presents a major stumbling block in the world’s fight against global warming. Dan Dudek, China-based chief economist for Environmental Defense, and Dan Mazmanian, USC Professor & former dean of the University of Michigan’s School of Natural Resources and Environment, recently spoke with VerdeXchange News about their experiences with the China Council for International Cooperation on Environment and Development—a unique advisory institution with the ear of the Chinese Premier.

The two of you serve on the China Council for International Cooperation on Environment and Development. What is the mission and purpose of the committee?

Dan Dudek: CCICED is an international advisory body. It has a council composed of roughly 20 foreigners and 20 Chinese. Many of them are former or current sitting environment ministers, for example: the minister of environment of Sweden, Parliament members from Norway, the current and former heads of the United Nations Environment Program, myself, and 20 high-level

Ed Feo Advises Energy Firms Making Investments in Renewables

As partner with Milbank, Tweed, Headley & McCloy and chair of the firm’s Energy and Projects group, Ed Feo helped negotiate one of the largest public-private partnerships in U.S. history: the $1.8 billion Chicago Skyway. VerdeXchange News was pleased to discuss Mr. Feo’s current practice, representing global developers of large-scale renewable energy projects, such as the $123 million Three Winds Holdings wind project in Wyoming and California, and the $108.5 million financing of the Sweetwater II wind project in Texas.

The renewable energy market is thriving, both globally and in the United States. As a professional in the field, what’s fueling entrepreneurial investment and business development in green tech research?

We have a confluence of several circumstances that have made renewable energy attractive: 1) Increases in cost of and greater concern about the security of traditional fuels, such as oil and natural gas; 2) The increased awareness of environmental impacts

VerdeXchange Launches Global Green Tech Xpo

GreenXchange Xpo, a global one-stop marketplace event for green technology, was recently announced by IDG World Expo and VerdeXchange. Date: October 1–3, 2008. Location: the Los Angeles Convention Center. GreenXchange Xpo will be preceded by an invitational shaping conference in Los Angeles, December 10–11, 2007. <www.greenXchangeXpo.org>
The European Climate Exchange recently announced that it has traded more than one billion tons of carbon dioxide credits since its inception in April 2005.

Russian President Vladimir Putin has approved the construction of 26 new nuclear stations.

In his final meeting with a foreign official before stepping down as prime minister, Tony Blair met with Governor Arnold Schwarzenegger to discuss global warming. Governor Schwarzenegger also recently met with French President Nicolas Sarkozy to discuss global warming, trade, and politics.

The United Kingdom and Germany have signed global warming pacts with Florida.

Britain will build a desalination plant on the River Thames. The plant will be finished in 2010.

The Japanese government is planning to place solar power generators on its buildings across the country over the next six years.

The German Federal Ministry for the Environment, Nature Conservation, and Nuclear Safety has recommended that the country target 27 percent renewable usage by 2020.

Southern California Edison will receive a Ford plug-in hybrid vehicle by the end of 2007 and as many as 20 by 2009 to test its durability, range, and impact on the power grid.

The Hague has announced its plans to use geothermal heating to warm 4,000 households and several industrial buildings.

Southern California Edison has signed six new renewable energy contracts.

Dallas-based Mesa Group has announced plans to build the country’s largest wind farm in Texas, including 2,000 turbines on 200,000 acres.

Cosan, Brazil’s largest sugar and ethanol producer launched an IPO on the NewYork Stock Exchange in the hopes of raising up to $2 billion in capital funds.

Fresno-based Vintage Dairy has been given approval by the PUC to produce natural gas from animal waste.

As part of its $4 billion plan to provide drinking water to Melbourne residents, Australia will build one of the world’s largest desalination plants.

The French national electric utility, EDF, signed a partnership agreement to build and own nuclear plants in the U.S. and Canada with American company, Constellation Energy.
Australian Prime Minister John Howard set a deadline for his country to establish a carbon trading scheme by 2011 but stopped short of setting targets for the reduction of greenhouse gas emissions. The plan includes $300 million in green vouchers for schools to improve energy and water efficiency.

In Britain, the House of Commons Environment Audit Committee released a report making a strong appeal for a code of practice regarding a carbon offset market. Although the report acknowledged the importance of voluntary offsetting, it criticized a recent British proposal to tie a voluntary market to the existing mandatory standards required for carbon trading under Kyoto, calling the proposal too restrictive.

Spain has approved a tax hike for high emission cars. Cars emitting less than 120 grams of CO2 per km will be exempt from registration tax; cars emitting 120–160 grams per km will have a tax of 4.75 percent; cars emitting 160–200 grams per km will have a tax of 9.75 percent; and cars emitting over 200 grams per km will face a tax of 14.75 percent.

New Jersey has become the third state in the nation to adopt a comprehensive greenhouse gas reduction law, requiring that it significantly decrease the emissions of the gases that contribute to global warming. Governor Corzine signed the Global Warming Response Act on July 6; it mandates that the Garden State reduce global warming gases to 1990 levels by 2020, and reduce greenhouse gas emissions to 80 percent below 2006 levels by 2050. New Jersey is the first state to require that all energy imports comply with its standards.

Florida Governor Charlie Crist has signed three executive orders to mandate dramatic decreases in carbon emissions, auto emissions, and pollution by power companies. The state has also signed cooperation pacts on climate change with Germany and Britain. The governor’s plan calls for state utilities to reduce greenhouse gas emissions to 2000 levels by 2017, to 1990 levels by 2025, and 80 percent below 1990 levels by 2050. Florida will also adopt California's stringent auto emissions standards, which have not yet been implemented because they require a waiver from the EPA. For more on this plan, see page 8 of this issue.

The U.S. Senate recently approved, by a 62-32 vote, an energy bill that will raise gas mileage standards for cars and trucks for the first time in 20 years. Under the new mandates, automakers will have to meet a fleetwide average of 35 miles per gallon by 2020. The current standard is 27.5 mpg for cars and 22.2 mpg for SUVs and small trucks. The energy bill also includes provisions for an increase in automobile fuel economy, an increase in the production of ethanol, and new laws against energy price-gouging. The measure must now receive approval from the House. The White House has stated that the president will most likely veto any bill that includes a price-gouging measure, saying that it is tantamount to price controls. Bush has also said that he opposes Congressional mandates on specific mileage numbers for fuel economy, instead preferring that the Transportation Department be given flexibility to set the standard. A week later, the House Energy and Commerce Committee rejected a similar proposal, following the plan of Rep. Jim Dingell, D-Michigan, who is urging the committee to discuss gas mileage issues later this year. The Bush Administration supports a 4 percent annual increase in the standards.

The U.S. House of Representatives passed, by a 272-155 vote, a bill confirming the existence of global warming. The $276 billion bill would increase federal investments in research and scientific review. The Bush Administration has promised to veto the bill if it passes the Senate because its spending level exceeds Bush's request by $2 billion. The bill would provide the U.S. EPA with $8 billion for the next year, which is $887 more than Bush sought.

A task force convened by Gavin Newsom, mayor of San Francisco, has proposed the nation's most comprehensive green building requirements for the city of San Francisco. The San Francisco County Board of Supervisors would have to approve any such building requirements.

In accordance with AB-32 implementation, the California Air Resources Board voted six to three to enact “early action” anti-greenhouse gas measures that will require automobiles to use alternative fuels, restrict the use of vehicle air-conditioning refrigerants, and force landfills to capture the methane released by rotting garbage. An analysis of the efficacy of these strategies will take place in six months. Concerns of those who opposed the adoption of the measures include consumer cost and the limited availability of biofuel.
California’s SB 375 Would Tie Local Planning Decisions to Transportation Funding

It is no secret that reductions in carbon emissions will require a holistic effort relying heavily on smart land use and transportation. A new bill in the California State Senate, SB 375, would compel local planning agencies to make planning choices that reduce Vehicle Miles Traveled (VMT). In order to discuss the details of SB 375—which may become the next trend-setting piece of legislation to emerge from the California State Legislature—VerdeXchange News was please to speak with the bill’s author, State Senator Darrell Steinberg.

There have been reports that partisan politics are impacting the implementation of California’s climate change legislation. How committed is the state to an aggressive and proactive bi-partisan strategy to mitigate global warming?

First of all, you can never dismiss partisanship as a factor and a challenge in getting important things done, but when it comes to the implementation of AB 32, I think it’s less about partisanship, and more about a fundamental difference of opinion. I think everyone recognizes that in order to meet the requirements of this very aggressive law, we’re going to have to employ market-based mechanisms, we’re going to have to regulate, and we’re going to have to focus on mobile sources, stationary sources, and land use, which is the subject of SB 375. Since this is such groundbreaking legislation, there’s a lot of anxiety about the balance of those aspects. Many of us on the Democratic side feel that, while market-based mechanisms are important and should be part of the strategy, if we aren’t aggressive in looking at the regulatory side, we’re not going to meet the goals. The Republican side feels that if we regulate, we’re going to harm the economy. So it’s about finding the right balance while remaining committed to the goal, because as much as AB 32 is landmark legislation, it will mean very little if we don’t implement it in the spirit in which it was intended.

How important is the nomination and appointment of Mary Nichols as the chair of CARB to the implementation strategy for AB 32?

I am heartened by the governor’s selection of Mary Nichols. There have been a lot of questions about what went on, and why the prior chair was let go, but I think Mary Nichols is an excellent choice. She certainly has the confidence of the broader environmental community, she has a reputation as someone who can listen to all sides, and she’s a problem solver.

As you give this interview, there’s a press statement emanating from Florida that Governor Crist, with Governor Schwarzenegger in attendance, has signed into law greenhouse gas targets related to auto emissions and electricity generation. What is your reaction to state and federal actions on climate change—what does it suggest regarding the best legislative approach/strategies to combat climate change?

Time magazine had it right a few weeks ago: there’s a whole lot more action at the state level than there is at the federal level, and if you allow me to be partisan for a moment, I think everyone is looking forward to a change of administration, because there is no vision or strategy at the federal level on par with the actions of certain states. I know that there’s a great willingness between Senator Boxer and the leaders of the House and the Senate, but to actually make change in this area, it will take an administration with vision and desire, and that just isn’t there. But we can’t hold our head in our hands; states must take the mantle to change the way we look at our climate. I’m confident that sometime in the next several years, when there’s a new administration in office, the federal government will follow.

Let’s turn to your bill, SB 375. What is the focus of SB 375, and what are your hopes and objectives for the bill?

You interviewed me before, when I was in the Assembly, about my strong belief that better land-use policy must be inextricably tied to environmental policy. I tried different ways to go about that during my years in the Assembly, which created a great debate over AB 680. It did not result in a change. I recovered from the bruises during a couple of years out of office, and now, I believe, I have found a better way that has a greater chance of success in the political arena. With the passage of AB 32, it’s very clear that addressing mobile sources and stationary sources is not enough and that land use is an essential element of achieving our climate change goals under AB 32.

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Senate Bill 375 is the lead bill in this area. It is a very important yet fairly modest measure, because it requires the 18 metropolitan planning organizations across the state of California to show that their future planning scenarios will result in a reduction in carbon. The requirement will engage regions in a process similar to a process pioneered in my region of Sacramento, known as “the

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Green Legislation

‘Sea Change’ in Washington?
Blumenerauer Greens Congress’ Energy & Farm Bills

As Oregon’s 3rd Congressional District representative, Rep. Earl Blumenerauer has long been a supporter of sustainable public policies. Yet while Portland frequently tops the lists of the greenest cities in the country and the world, he has lamented that the federal government has played the role of caboose to the world’s green movement. VerdeXchange News was pleased to speak with Congressman Blumenerauer, a Budget Committee member, about Congress’ recent proactive efforts regarding sustainability and climate change.

You recently authored and inserted three environmental initiatives into the House Ways and Means Committee’s Energy Bill. How will these congressional initiatives drive change in alternative energy?

With the legislation that has passed out of the Ways and Means Committee, there is an opportunity to send a very clear signal about the country’s approach to issues of energy, conservation, and climate change. The overall structure of the bill is critical for providing incentives for alternative energy and resources for local and state governments to jump-start some of their innovations.

I was concerned with some particular items that I think send important signals. One dealt with closing the “Hummer loophole.” Congress, some years ago, made clear that it wasn’t the intention of the tax code that a tax benefit for purchase of vehicles for small business, such as farms, be used for luxury cars. This was defined according to weight, and unfortunately, the auto industry in the last 20 years has been working aggressively in building some of the biggest, heaviest gas guzzlers imaginable, providing the perverse effect that there was actually a tax break for people who would buy a Hummer. We closed that loophole, saving three quarters of a billion dollars that can be spent on energy-related initiatives, while maintaining opportunities for the farm vehicle, the plumber’s truck, the delivery van, etc.

The second initiative was to extend commuter benefits to people who burn calories instead of gasoline. For years, there have been opportunities for employers to give over $200 dollars a month in tax-free parking benefits for their commuting employees. After a struggle, we were able to get a transit benefit, which is about half that amount, and now a provision that I had as separate legislation has been incorporated into a commuter “bike benefit,” which will send a signal that we value people using the most efficient form of urban transportation ever designed.

The third element that was very important to me was to understand how our tax code contributes to global warming. We included a provision for a carbon audit of the tax code—for us to sort through the various provisions in the United States tax policy and explore how those provisions impact our carbon footprint.

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The 1970s saw a bipartisan coalition pass the nation’s Clean Air and Water bills—a Republican White House and a Democratic Congress adopted landmark legislation. Now it appears that there is less bipartisanship. Is there solidarity to be found in this new Congress around climate change and environment?

It’s slow coming. Some of my Republican colleagues share our concern about global warming and dependence on energy from unstable parts of the world. I can think of a half dozen that have been quite helpful and outspoken. Unfortunately, they have been minority voices, and they have been deliberately marginalized. For instance, Speaker Pelosi, in one of her first official acts, created a special committee on global warming and energy independence. The invitation was given to the Republicans to name their members, and they excluded the people who had been most concerned and involved with the climate change issues. As their ranking member, the Republicans chose Congressman Jim Sensenbrenner from Wisconsin, who has been one of the most outspoken skeptics in Congress on these issues of global warming. There are still problems with the administration and most Republicans in Congress, but that’s starting to change.

The public has raced ahead of the federal government in this regard, which is fueling the most noticeable changes. As of July 13th, there are 612 cities in 50 states [See http://usmayors.org/climateprotection/ClimateChange.asp] that have decided that they are not going to wait for the federal government, and they’ve moved ahead on Kyoto compliance. I’m proud that I’m from one of those cities, Portland, Oregon, which also may be the first city in the United States to actually reduce its greenhouse gases on a per capita basis and an absolute basis. At a time when our population grew 17 percent, we slightly reduced our overall greenhouse gases and significantly reduced our per capita output. When you have major environmental groups locking arms with business organizations and major corporations, coupled with grassroots pressure at the municipal level, you start

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Grist.org Ranks World’s Greenest Politicians


Grist Ranks World’s Greenest Cities


Voluntary Carbon Market Price Triples

Trade in voluntary carbon markets not overseen by the Kyoto Protocol tripled in size last year, but remains dwarfed by the regulated carbon market. According to a study by Ecosystem Marketplace and New Carbon Finance, voluntary carbon trading has reached 23.7 million tons of carbon dioxide equivalent, worth about $91 million. American companies account for 68 percent of the unregulated carbon market’s customers. The study also indicated that the most popular motive for companies to trade in the carbon market was to bolster their images as being socially and environmentally responsible.

Citigroup Analyst Downgrades Coal Company Stocks

Citigroup Inc. Analyst John Hill downgraded coal company stocks across the board and announced the downward trend could last for more than a year. The U.S. Department of Energy reports that U.S. utilities still have plans to build about 150 coal-fired power plants, but recently, steps taken by California, Texas, and Florida to cut back on coal-generated power have hurt the long-term value of the industry.

Oil Industry Slows Expansion of U.S. Refineries

Due to a push from both Congress and the White House for major increases in biofuels, the oil industry has scaled back its plans for refinery expansions. In 2006, refineries were raking in large profits and anticipating a growing demand for gasoline. In response, the refineries intended to boost their capacity by 1.6 million barrels a day, a 10 percent increase. However, due to biofuel legislation, oil companies have scaled these plans back by 40 percent.

French, British Leaders Seek Tax Breaks for Green Products

French President Nicolas Sarkozy and British Prime Minister Gordon Brown have announced that they will lobby fellow European leaders to set a lower rate of value-added tax for environmentally friendly products. They did not release details on the amount of the tax reduction, but they pledged to send their respective finance ministers to Brussels to present a formal proposal to the European Union.

Ford, Chrysler Join USCAP

The U.S. Climate Action Partnership (USCAP) has added Ford and Chrysler to its roster of participating organizations, bringing the total up to 29. USCAP focuses on convincing the federal government to enact environment-related legislation. Total revenues of USCAP companies top $1.9 trillion, a combined workforce of more than 2.3 million, and operations in all 50 states and across the globe.

U.S. Green Building Council Updating LEED Standards

The U.S. Green Building Council has launched a campaign to improve its LEED Green Building Rating System. The campaign is intended to adjust and balance LEED credits throughout the rating system and offer greater adaptability overall. The adjustments are composed of four initiatives: first, to harmonize and align LEED credits across the rating system; second, to focus on technical development work; third, to establish a regular development schedule that encourages community participation; and fourth, to structure the LEED committee around the three key areas of technical development, market segment focus, and certification process.

Bush Administration Approves Offshore Leasing Plan

U.S. Secretary of the Interior Dirk Kempthorne has approved the Minerals Management Services 2007-2012 Outer Continental Shelf Oil and Gas Leasing Program, a plan governing the sale of offshore oil and gas leases in federal waters over the next five years. The program, effective July 1, schedules 21 lease sales in eight planning areas across the nation. The Center for Biological Diversity has filed a legal challenge to the plan, claiming that in addition to drilling in pristine marine habitat, the plan will generate more than four billion tons of greenhouse gases over the terms of the leases.

Texas Wind Power Continues Expansion Efforts

The Texas Public Utility Commission approved eight “Competitive Renewable Energy Zones” (CREZ) for the construction of transmission lines for more than 20,000 megawatts of proposed wind generation. Although Texas surpassed California as the state generating the most wind power last year at 2,300 megawatts, ongoing efforts to build more wind farms have been hampered by lack of transmission capacity. The Electric Reliability Council of Texas (ERCOT), which oversees the transmission network, has requests for more than

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28,000 megawatts of new wind generation, and claims that about 1,500 megawatts of new wind generation is scheduled to come online this year.

New York City Still Without Congestion Pricing
After the New York State Senate had adjourned its special July 16 session without taking up Mayor Bloomberg’s congestion pricing plan, due to an almost complete lack of support from both political parties, the state agreed to create a state commission to explore the congestion pricing plan as well as any alternatives that could hit the same traffic-reduction targets proposed by Bloomberg’s original plan. The New York State Legislature will ultimately have until March 31, 2008 to approve the commission’s recommendations.

University of Iowa Launches Mileage Fee Study
The University of Iowa Public Policy Center has commenced a study that will explore the use of a mileage fee for drivers as a possible replacement for dwindling gas taxes revenues. The $16.5 million study, entitled the Road User Charge Study, will take place in six states around the country.

Study Touts Benefits of Plug-Ins
A study conducted by the Electric Power Research Institute and the Natural Resources Defense Council found that, with a market share of about 60 percent or more plug-in cars, the vehicles could reduce 450 million metric tons per year of greenhouse gas emissions by 2050, the equivalent to taking 82 million cars off the road. Other benefits include improvements in ambient air quality and the reduction of pollutants. Plug-in hybrids are currently being developed by General Motors, Ford, DaimlerChrysler AG, and Toyota.

Leadership Change: Mary Nichols to Chair California Air Resources Board
Catherine Witherspoon resigned as the executive director of the California Air Resources Board, and was replaced by Mary Nichols, who held the same job 30 years ago. A 27-year veteran of the air board, Witherspoon decided to leave because, in her words, the “Administration has lost its way on air quality and I no longer want to be a part of it,” a claim disputed by the governor.

Study Outlines Law Preventing Expansion of Nuclear Power in California
MRW & Associates, an Oakland-based consulting firm, has released a study reporting that any expansion of nuclear power in California would probably have to come in more than a decade’s time. A 1976 law prohibits the construction of nuclear facilities until the federal government build adequate storage facilities for spent nuclear fuel. The U.S. Department of Energy claims that the Yucca Mountain storage facility, which was originally scheduled for completion by 1998, will be complete by 2017, but the study sets the date of completion at 2020.

U.S. Rules Against Companies for Role in California Energy Crisis
The Federal Energy Regulatory Commission has ruled that two power companies must pay $84 million to settle claims against them regarding the 2000–01 California energy crisis. El Paso Corp. will pay $46 million and PacifiCorp will pay $27.9 million. The commission uncovered evidence of widespread manipulation by the power companies during the energy crisis. The California attorney general’s office and the Public Utilities Commission have agreed to the settlements, as well. In total, more than $6 billion in settlements stemming from the power crisis have been approved.

U.S. Senators Author Low Carbon Economy Act
Senators Jeff Bingaman, chair of the Senate Energy Committee, and Arlen Specter have unveiled their measure, the “Low Carbon Economy Act,” which calls for a cap and trade system; the proposal sets a target emissions cap for 2020 at 2006 levels, and for 2030 at 1990 levels. The measure also includes a limit on the price industry would have to pay for carbon permits. The bill has earned the support of the AFL-CIO, the United Auto Workers, and the United Mine Workers. Some critics have noted that the bill includes substantial benefit for the coal industry. Five climate change plans have been released in the Senate this year.
Florida Governor Charlie Crist recently hosted the Florida Climate Summit, bringing together leaders and experts in order to generate solutions for the crisis of global warming. The following is an excerpt from the speech given by the governor at the summit.

Our purpose during these two days is to hear from the experts. Together, we will identify specific actions we can take here in Florida to address the causes and the effects of global climate change....

...But these experts are not merely talkers. They are achievers—people of action—working hard to explore and experiment, envision and imagine. They are developing new ways to power our homes, our businesses, our vehicles—while also preserving our natural resources for generations to come.

I, too, am committed to being a person of action. Here in Florida, we plan to reduce greenhouse gases and increase our energy efficiency. Florida will pursue renewable solar energy sources—after all we are the Sunshine State—as well as wind and alternative energy such as ethanol and hydrogen.

I know there are some who still debate global climate change. While debate is healthy, we must acknowledge that there is a strong body of scientific evidence indicating that global climate change is real. We know that carbon emissions have grown exponentially, that they take time to dissipate—and that they are contributing to this change. We cannot afford to ignore this issue any longer. We have a responsibility to face this reality head on and take action to address it.

Even if it turns out some day that global climate change is not as serious as scientists believe, the actions needed to reduce greenhouse gases can have nothing but good outcomes for Florida and for our nation. We cannot be so foolish as to think that our natural resources are inexhaustible—or that the exhaust from our energy plants and vehicles has no impact on our environment. We must wisely use our resources and protect our environment—or future generations will not enjoy them as we do today.

That is why we must take action. We must be people of action who make every effort to boldly do our best to do what is right—for our environment, for our quality of life and for future generations. We have a responsibility to be good stewards of our natural resources, of our beautiful surroundings. And no place is more beautiful than our Florida.

Much of the Florida lifestyle we enjoy is connected to our state’s beautiful natural environment. Our weather, beaches and fishing attract 85 million visitors each year. Tourism is our number one industry. Many visitors come to enjoy our almost 1,350 miles of coastline, our freshwater springs, and the national treasures entrusted to our care, such as America’s Everglades and our 130 miles of coral reefs, the third largest in the world. FloridaBay—between Florida’s peninsula and the Keys—is the world’s largest sea grass bed and breeding ground for 22 fish species important to commercial and recreational fishing.

With such a wealth of natural resources, it is easy to see why Florida is also one of the fastest growing states. Almost 1,000 new residents arrive daily. Regrettably, the natural beauty that draws people to our state is also vulnerable to the impact of those who are attracted to it. As the fourth most populous state, we rank third in energy consumption. And 70 percent of Florida’s electricity is generated by fossil fuels. For these reasons, the long-term economic well-being of our state is dependent upon the strategies we develop to address global climate change. It is one of the most important issues we face this century.

Our state is uniquely vulnerable to the impact of global climate change. Bordered by bodies of water, Florida has the longest coastline in the continental United States. We boast the second largest lake in the nation—Lake Okeechobee—and thousands of miles of rivers, streams and waterways. Our waters define our state’s identity. And, climate change can threaten that identity.

Rising sea levels are one threat from climate change, especially to sensitive coastal areas, America’s Everglades and our coral reefs. Scientists estimate that sea levels will rise five inches during the next 25 years, and by 20 inches by the year 2100. These changes can affect water temperatures and salt levels, disrupting nature’s perfect balance and endangering Florida’s water supply.

Our state is already experiencing many changes that may be attributed to climate change. Due to declining rainfall, parts of Florida, including South and Southwest Florida, are currently experiencing long-term drought conditions. Earlier this year, as we battled wildfires across our state, there were times when 57 of Florida’s 67 counties were fighting fires.

The economic impact of climate change on Florida’s agriculture could be devastat-
Alberici Builds LEED Platinum Headquarters; Spawns Green Subsidiary Vertegy

After achieving unprecedented levels of sustainability with its headquarters in St. Louis, Missouri and recognizing a need in the market for a consultants on similar projects, Alberici Corp. launched Vertegy, a new green consulting subsidiary. To discuss the challenges of designing and maintaining one of the greenest buildings in the world and the role played by Vertegy in the expanding green building market, VerdeXchange News was pleased to speak with Vertegy General Manager Tom Taylor.

Stream of visitors from around the country go through the Alberici headquarters in St. Louis because it’s one of the only LEED-platinum corporate facilities in Missouri, and one of less than a dozen worldwide. What’s so special about your headquarters in terms of its green building components?

To date, under the U.S. Green Building Council’s LEED-NC program, we still have the highest number of points recorded by a project: 60 points. It embodies all of the strategies that LEED protocols encourage, whether it’s water conservation, rainwater harvesting for sewage conveyance, to the native landscape, which provides us with zero storm water run-off because of our retention pumps, to the adaptive reuse of the existing structure, because we used an existing structure in the building, re-orienting the back side of it for proper solar orientation. The way we mechanically ventilate the building achieves a 60 percent reduction in operating costs. Then it goes into indoor air quality and the indoor environmental quality—providing all our employees a place to work where there are views of the outside and a naturally day-lit environment.

Alberici didn’t create a successful, 90-year-old construction business by being impractical. What motivated the company to want to certify its headquarters as LEED platinum?

When we were planning the project, the chairman of the board, John Alberici, encouraged us to investigate everything that we could in order to make this the best building possible. That doesn’t mean the most expensive—that means the best building. Fortunately, we were designing and building this building for ourselves, and because of that, we knew the client very well. John Alberici wanted us to explore opportunities to provide something more than just shade and shelter to the employees. What could we do to create a building that really shows that our employees are our most valuable asset? We had never done a green building before, and in exploring what a green building was all about—

To date, under the U.S. Green Building Council’s LEED-NC program, we still have the highest number of points recorded by a project: 60 points.

Alberici transformed a boxy, 50-year-old, metal-covered, industrial building into a 110,000-square-foot green-building showcase. Was there some trepidation along the way on how to do so on time and on budget?

Yes and no. The beauty of this was that nobody on the team had ever worked on one of these projects before. Nobody knew what could or couldn’t be done, so everything was possible. The biggest challenge was figuring out how to incorporate all the great ideas from the delivery team into the building in a fiscally responsible way. The financing structure for the project had been established once we had closed on the property, which was before we made the decision to build green. Neither our chief financial officer, nor John Alberici, nor anybody on the executive committee had the stomach to go back and try to renegotiate a financing package for what we had originally intended to build, which was to raze the buildings that were there, build what was suitable for us, and then parcel out the rest of the 14 acres.

The headquarters contains a variety of features that help achieve sustainability and LEED certification. Which of the features has turned out to be the most successful in achieving sustainability goals, and which is the most difficult on operation management?

One of the most difficult things to manage was the educational component of the facility’s management team—understanding that this is a high-performance building that requires specific operations. You can’t just flip a switch and then expect it to run at its designed performance levels. It takes a lot of care to operate the building.

We have some large assembly areas; we have a data center; and we also open the facility up for special events, civic events, community events, and private events. Because of that, there hasn’t been

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China’s CCICED: A Channel to Leadership on Environment

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China, many of them from prestigious scientific academies in China. The institution is unique in that it is the only high-level channel for direct delivery of environmental advice to the senior leadership in China. Each year in November the council meets personally with the Chinese premier, usually for several hours.

Dan Mazmanian: As a deliberative public policy institution, I don’t think it has any analogue. For instance, there aren’t any international environmental leaders solicited for advice by George Bush.

DD: It’s a tremendous opportunity. Each year, they set up a group of task forces. They have a functional focus. For example, in the two years in which Dan Mazmanian and myself served, there were task forces on environmental governance, ecological compensation, and one that looked at the overall performance of CCICED itself.

Why was CCICED created by the Chinese government? What is its mission and purpose?

DD: The basic mission was to bring international experience to bear on Chinese environmental problems. China has always been a nation interested in finding the best experience, strategy, and opportunities. The challenge has been transplanting the best practices of foreign origin. CCICED is a unique amalgam—foreign experts bring their experience, work directly with their counterparts with expertise in China, and shape the contexts of these experiences into implementable recommendations for the premier.

DM: What I found to be extraordinary is that this was a tri-part committee: Chinese experts and officials, international environmental experts (the category I was in), and international environmental leaders (which includes Dan Dudek). Having all three groups sit down together and work through these issues made this a unique process. It’s not just the Chinese seeking advice from the international community; they’ve invited critical advocates of environmental policy to the table.

How has the agenda of CCICED changed over the years?

DD: It’s 15 years old; it’s in its fourth phase now. It has evolved the same way as China in that time frame. 15 years ago China was asking, “How are we going to find the money to fund environmental protection when our domestic needs for economic growth and development are so dramatic?”

It remains a question today, with 700 million people living in the countryside throughout China, with large numbers of people living below the poverty line. A thousand dollars a year per capita is still a good living in China—by global standards that is inadequate.

The fundamentals of getting any kind of environmental infrastructure in China—the basic laws, the legal strategy, the focus of initial priorities—were the issues that dominated the agenda 15 years ago. Now, China’s discourse on the subject is saying, “We have built some machinery; we have some institutions; we have laws; we have a plethora of regulations; we have statements by senior leaders about where they would like to see things go; but our environmental problems continue to get worse.” So they are asking, “What are the root issues, what are the problems here? What is it that we have not paid attention to?” The agenda is now much more focused on the mechanics of having its institutions be coordinated, consistent, comprehensive, and to see that they are providing polluters with a coherent signal that says, “Emissions must go down.”

Prof. Mazmanian, you’ve been studying environmental issues at the University of Michigan and USC for decades, researching environmental policy and public management. There are 1.2 to 1.3 billion people in China, and an estimated 300 million are moving from rural habitats into cities in the next 10–20 years. The impacts and trends are obvious in terms of carbon emissions and pollution. What does a scholar offer the Chinese in the way of solutions to such challenges?

DM: The international environmental advocates and scholars on the task force brought the discussion a great deal of policy and implementation knowledge gleaned from the quarter century of experience in Europe, Japan, and the United States. The central message conveyed, I believe, was the environmental problems could not be solved by classic “command and control” or “central control” alone, but only through an extensive process of public engagement and public-private cooperation. The message reinforced that when you release the energies of capitalism and economic development across the land, you diminish the ability of the government to impose its will through regulation, which the Chinese have already begun to appreciate. You need
to reinvent your institutions of governance to operate in a more participatory manner.

In a recent email blast from Steve Westly, the former state controller, who is now managing a clean tech fund, notes: “There are 300 skyscrapers in New York, and over 3,000 in Shanghai alone. China presents a stunning paradox as the nation with the third largest economy in the world, yet about to surpass the United States as the world’s biggest polluter.” Working from your platform at CCICED and working with leaders such as Zeng Peiyan, how can China and the United States reduce pollution?

DM: A point well taken. CARB lacks the authority to regulate emitters beyond its borders (and even some within). Absent an international body that can actually regulate across borders, we need to emphasize the things we can do, which is to find ways of sharing our emission reducing technology and investment capital with the Chinese. It is our responsibility, as Dan Dudek just mentioned, to show leadership in sharing and finding win-win strategies between the two of nations if we expect to see a reduction in their emissions. It’s in our interest to be magnanimous. It’s in our interest to invest in new technology. It’s in our interest to bring them into the global community, and we can’t do that without showing leadership.

What CCICED policy recommendations have been the most valuable to Chinese leaders and environmental managers?

DD: The number one thing on the agenda is to have the United States get up off the couch, stop being the global couch potato in relation to dealing with greenhouse gases, and demonstrate a little bit of resolve and courage, as has been done in California. If the richest nation in the world cannot bring itself to actually deal with greenhouse gases, how can we expect the Chinese to do it, whose per capita emissions pale in comparison to those in the United States?

DM: The annual per capita emissions of CO2 is about 24.5 tons per person in the United States and 3.9 tons per person in China. Therefore, while our aggregate national emissions is about the same today, the dramatic difference in individual level emissions places us in very different light.

New research asserts that as much as 25 percent of the pollution over Los Angeles may be coming directly from China; and this pollution is only going to increase. How will CARB implement AB 32 if they can’t regulate or collaborate with China on managing the reach of their pollution?

One of the recommendations that we made is that they need to reform the penalty structure in China so it includes real financial consequences. When we met with the premier last November and gave him that recommendation, he made a long statement about how companies that did not comply must face real consequences. It was subsequently announced this past March in a statement from the chairman of the National People’s Congress Committee on Natural Resources and Environment that there are penalty reform proposals pending in the National People’s Congress.

DD: I talked about the importance of connecting the hip bone to the thigh bone, in relation to how policy functions and operates. One of the things that I had in mind was the financial reality that companies face in relation to complying with laws. If on one hand you have the government saying, “You must do what I say in terms of controlling emissions,” and on the other hand the law says that the maximum penalty for violating the regulations under the Chinese Clean Air Act is the equivalent of $25,000, the real message that you’re sending companies is, “Well, it’s really not all that important, and quite frankly, you don’t have to spend all that much time and attention.” $25,000 is an amazingly modest sum when we are thinking about emission control.

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Feo: RPS Promotes Resource Diversification at State Level

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of generation of electricity through the use of fossil fuels; and 3) The advance of renewable energy technologies such that they are cost-competitive. Those circumstances start to make renewable energy look very attractive as the future of electricity production.

What renewable energy markets are most promising? What will be market opportunities in the near future?

It really depends on the technology. If you look at the wind market in the United States, it’s growing at a 20-plus percent annual rate. But I think the key development in the last 12 months or so is a very significant amount of consolidation. As large European utilities and energy companies like BP, Shell, Iberdrola, and EdP have come into the market, they are turning this from a relatively small- and middle-market company business into a large company business.”

“The best policy for renewable energy has been the renewable portfolio standard (RPS) adopted by, at this point, 24 states, which is creating a customer base for renewable energy projects. The RPS program mandates utilities to buy from renewable sources as they continue to meet growing demand. Although there’s a debate raging over whether there should be a federal program or not, the states that have adopted RPS programs cover a very large percentage of the population. RPS programs in the Northeast, the Midwest, the West, and Texas already cover about 52 percent of the population. A federal RPS program, curiously enough, could actually adversely affect, if it’s done incorrectly, the programs that are already in place, because the federal mandate may not be as aggressive as what the states are pursuing. But a federal program would, if nothing else, make the Southeast, for the first time, subject to an RPS mandate.

The other policies that have been a bit of a double-edged sword are the tax policies. That would principally be the federal Investment Tax Credit and Production Tax Credit. They’re basically tax incentives or subsidies from the federal government through tax credits given to particular investors, which then assist in driving down the cost of power produced by these particular facilities.

The detriment has been that the policies have been applied in a fairly episodic basis, such that there have been, in the past few years, periods where the credits have expired and then been renewed. That has made investment very choppy, because the price differential on energy sales is so much affected by the availability or the lack of availability to credits. Also, when you have a tax program that essentially rolls over every year or two years, then a great deal of development and construction of these projects gets compressed into a short period of time. That, in turn, creates a somewhat artificial demand for labor and for equipment. Wind turbines are the best example. While the overall philosophy of having these policies is to drive more demand for renewable technologies, it should be done in a way that results in a longer-term lowering of costs. If done in the wrong way, it creates short-term shortages, which drive prices up. We’ve seen that with wind.

If you were moderating a global panel of E.U., Middle East, North American, and Asian leaders in energy policy and renewables, what might they learn from each other?

I think what works is a longer-term view on diversifying fuel resources—having RPS programs that facilitate decisions for diversification of a portfolio, not necessarily current short-term price alone. One of the things that we’ve learned over the last 30 years, if not longer, is that any program that results in over-investment in a particular technology or fuel source can result in exposure to commodity price increases. That is what has happened with natural gas generation.

The other thing is to recognize that, in the implementation of new technologies, there may be a need for some level
of subsidy to get these industries off the ground to advance technology and production to the point where we really drive down costs. But those policies must have two features: one, they have to be longer-term so that there’s a real investment incentive to capture the benefit. Second, the incentives need to be structured in a way that they are self-adjusting to account for differences in traditional energy prices versus renewable energy prices so that the subsidy is neither too large nor too small—the former being good in the short term for developers of these projects, but bad because it turns political and public sentiment against the project; the latter being bad because developers are not making any profits, and therefore they won’t invest at all.

What countries and markets are renewable energy companies prone to pick for incorporation, investment, and production? What are the public policies that give a government a competitive advantage for attracting green tech and renewable energy investment and production?

If you look at Spain and Germany and Europe, for example, there have been very favorable programs for development of renewable energy, and if you look at the period from the ‘90s to the present, there’s been a very substantial amount of investment in solar and wind. It’s an attractive market, largely driven by policies and feed-in tariffs.

In the early ‘90s the United States was perceived as a terrible market because of the end of a tax regime that put the renewable energy industry out of business. It then started up again in the late ‘90s suffering from an unsavory reputation. In the early 2000s it suffered from the on-again, off-again aspect of the Production Tax credits, which really drove manufacturers to look elsewhere. That has evened out over the last couple of years. As a result we are seeing a steady increase in investment in production in the United States, and more and more production coming into the United States.

And then there is Asia—and China specifically—which has huge demand and opportunity—but their policies are still murky. So while there’s development going on, frankly, it’s not as much as it could be given the uncertainty with their incentive programs.

The Latin America market has been discussed for a long time, but they are actually quite far behind in terms of the development of this kind of energy (outside of large hydro). Clear guidelines need to evolve so that investors know that they will, in fact, get a return on their investment.

You have worked globally as a lawyer for renewable energy clients, but you are based in Milbank’s Los Angeles office. Focusing on California’s climate change policies, how significant is AB 32 and its companion climate change laws and regulations for encouraging or discouraging investment in renewables?

The implementation of AB 32 is a fairly complicated process that’s going to take awhile. But we are already seeing moves being made by agricultural industries and the like to deal with investment for greater control of greenhouse gas emissions.

If you had asked me this a couple of years ago, I would have thought that for a state to implement a program with regional or national implications would be very difficult. But having seen what’s happened over the last 12 to 18 months, it’s quite remarkable that 1) the law passed, 2) regulations are being implemented, and 3) people are actually responding, planning their activities and investments in a way to take account for it. From a renewable energy perspective, it’s another way that new life is flowing into biomass and biofuels. And it’s also resulting in projects that are oriented around carbon sequestration, which, frankly, was not thought of seriously 12 months ago.

Lastly, you will participating in the GreenXchange Xpo in December—a global gathering in Los Angeles of executives and leaders from green tech business, environmental organizations, and government. What’s the value of such an event for your clients and for those buyers and sellers intent on having energy portfolios produce less emissions?

There is a real silo effect within technologies; literally, if you went to a wind meeting, you would not meet any solar people, and vice versa.

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There is a real silo effect within technologies; literally, if you went to a wind meeting, you would not meet any solar people, and vice versa. There’s also a sense that there’s a lot of technological development in renewable energy. There are many companies currently developing technologies and trying to move towards commercialization. But frankly, it’s extremely disparate. So I think that the green exchange is an interesting idea—to try to cross those lines that, right now, aren’t crossed very often.
we can’t lose. It’s the challenge of our generation. The environment is something I’ve been passionate about since 1979, when I went to work for Jimmy Carter at the Office of Conservation and Solar at the Department of Energy. So it’s something I’ve spent a lot of my life working on. It’s exciting, and the stakes couldn’t be higher.

$2.9 billion in venture capital has made clean tech a huge growth sector. What niche has the Westly Group carved out for itself in this marketplace?

“The Westly Group is] focused on later-stage clean teach firms—firms that we think will go public in the next 12–24 months, firms with real revenues...”

We’re focused on later-stage clean teach firms—firms that we think will go public in the next 12–24 months, firms with real revenues—so I know I can put my background in marketing and business development (as well as my network of contacts throughout California) to help grow these firms and make them successful.

What is the promise of the green tech firms in your investment portfolio?

Let me choose three of them. One is Tesla Motors, where I sit on the board. This is a company that has the ability to change the auto industry as we know it in America. Tesla produces the first major zero emissions vehicle, which goes from zero to 60 in less than four seconds, has a range of 200 miles, and will be on the streets later this year, so that’s exciting.

We’re involved in two solar companies. One is Akeena Solar, which is one of the largest residential solar installers in the United States. I think everybody understands that if you can get to a point where you don’t have to pay a penny for electric bills because you’ve been smart enough to put solar on your roof, you’ve accomplished an extraordinary thing. If it gets to the point where you don’t pay a penny for gasoline or electricity, because you’ve taken the solar panels home with you when you buy your car—that is a world-changing thing that we’re going to need to do more of.

There’s another firm called E.I. Solutions that’s also a leader in solar. This firm focuses on commercial solar; they just finished installing the largest corporate solar installation in the United States at the Google Complex. Around the country, more and more companies are stepping up. Google put in 1.6 megawatts of solar on their roof. I think they’re really setting the standard for companies that are saying, “Get off the oil addiction.”

We interviewed Robyn Beavers of Google for our May issue at their Mountain View campus before they flipped the switch on that solar project. Does their solar commitment presage other companies in the Silicon Valley and California doing likewise? What stands in the way of scaling-up such pilot efforts?

Nothing stands in the way. I think what people needed is someone to lead. And Robyn and Google have taken that initiative and said, “We’re going to be a leader.” A lot of firms in Silicon Valley and up and down California are looking at what Google has done, and CEOs are asking the question, “Hey, why can’t we do the same?” The state’s utilities—PG&E and Southern California Edison—have aggressive plans and are providing incentives for companies that act now. Some of these subsidies go away over time. Don’t wait—give E.I. Solutions, or whatever solar provider you like, a call, and get with it.

One of the revelations that Robyn shared with verdeXchange is how she had to single-handedly craft the relationship with her utility provider to make the project work. You’ve been a leader in state government, you know the utilities, and you know the promise of solar. What could streamline this process and take advantage of what Google has done for others considering solar?

PG&E, SoCal Edison, and private companies are getting better at making the entire process easier for the customer. What’s really needed is more states to provide incentives like California has done.

“PG&E, SoCal Edison, and private companies are getting better at making the entire [solar installation] process easier for the customer. What’s really needed is more states to provide incentives like California has done.”

provide incentives like California has done. The Governor pushed through his Million Solar Roofs initiative through the Public Utilities Initiative; we now have the most lucrative solar subsidies in the United States. I’m hoping the next four or five governors will step up and take similar actions. Also interesting is that it looks like the Congress is going to pass a solar subsidy; it’ll make it that much more affordable to use solar, along with a number of other areas like biodiesel and ethanol—that is great. But when you get to a zero emission solar, that’s hard to beat.

What is the promise of ethanol, biofuels, and wind as options for investment by the Westly Group? What are some of the firms you find most attractive?

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Crist: Florida Should Lead By Example On Climate Change

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ing to our second largest industry. Currently, more than 270 different crops are grown in our state, making us the tenth largest agricultural state in the nation. During winter months, we are the only state that can supply the country with many types of fresh vegetables.

Many scientists link climate change to violent weather patterns, such as the ones Florida experienced during the unprecedented 2004 and 2005 hurricane seasons. Florida alone was hit by seven hurricanes, with 215 lives lost and a price tag of more than $36 billion.

Drought, endangered agriculture, violent storms, and changing sea level—and their impact on Florida’s economy—these are just a few of the reasons why we must take action. We must search for and then put into practice climate-friendly strategies for our families, our communities and our state. Ultimately, this is as much about conservation as it is about climate change. We must look for ways to be more energy-efficient, to use less fossil fuels and more renewable energies. In these ways, we can reduce greenhouse gases and preserve our state’s natural beauty for generations to come.

We know we must reduce our dependence on foreign oil. Renewable energies such as ethanol and biofuels, solar, wind and nuclear energy can help us be more independent of oil from other countries. This issue is not only an environmental concern, but a matter of national security.

Energy diversification is vital to Florida’s economic development and security. It can reduce Florida’s dependence on foreign oil and reduce greenhouse gas emissions. Florida has the potential to become a leader in the production of alternative fuels. In fact, biofuels experts believe that Florida has the greatest capacity in the nation to produce ethanol.

We have a year-long growing season and robust agricultural lands. We have an existing sugar cane industry and a fertile but suffering citrus industry. I believe that we can turn citrus waste from an industry liability to a statewide asset. For this reason, we must continue to encourage research and development of ways to convert sugarcane and citrus waste into ethanol in an environmentally responsible way. By doing so, we will develop reliable energy supplies and increase economic opportunities.

We know we must ensure that our state’s air quality is the best it can be. We can lessen traffic congestion and improve the quality of life and physical health of our residents and visitors.

To reduce the impact of climate change in Florida and beyond, we must develop and implement real solutions. We must be men and women of action. You are an important part of this process, and your input and expertise is critical. During this summit, we are involving leaders from all levels of government, of business and the environmental community. Our purpose is to explore how we can be both prudent and pro-active in the face of global climate change.

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State government is the largest single enterprise within Florida. It makes sense for us to lead by example, and over the course of this summit, we will begin that leadership. We can make sure that any new state government buildings are energy efficient and include solar panels whenever possible. We can choose energy-efficient buildings when we need to lease office space. We can choose fuel-efficient vehicles—especially those that use ethanol and biodiesel fuels when available.

We can require electric utilities to produce less carbon emissions. We can adopt motor vehicle emission standards, just as California did under the leadership of Governor Schwarzenegger. We can ensure that appliances sold in Florida are more energy efficient. And we can require our energy plants to use more renewable energy such as solar and wind energy.

In just six months and 11 days, we have launched Florida to the forefront of the worldwide movement to reduce greenhouse gases and address global climate change.

As with most innovative policy, the states have taken the lead on addressing global climate change. However, the states must go one step further and build broad-based, regional coalitions. Without them, corporations that do business across state lines are challenged by differences in state standards and expectations.

I thank you for actively engaging in the discussion about global climate change during this summit. Addressing such a complicated issue requires government to work alongside the business, science and community service sectors. No single sector can do it alone. Innovative solutions to Florida’s energy and environmental future can happen only as all of us bring our expertise to the table.

And we must not stop there. We must educate our citizens, businesses and policy makers on this mission. I am pleased to announce our new “Serve to Preserve Florida” partnership. With the help of Volunteer Florida, we will engage volunteers of all ages and from all walks of life in this mission. Children, adults and retirees alike will become an army of conservationists. They will restore and protect our natural environment. They will enhance Florida’s environment and natural beauty. Just as we have precious natural resource, our volunteers are a precious resource of energy, enthusiasm and expertise.

We must be good stewards of the land, air and water. We must not live only for today—only using and not replenishing the resources we use. We cannot thoughtlessly waste what God and nature have so bountifully supplied.

The very nature of our democracy depends on conserving our natural resources. I thank you for your interest and partnership in taking the first steps forward to face this challenge....
SB 375 Focuses on Growth’s Climate Change Impact

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blueprint,” which essentially says that we need to plan as a region, not just as individual cities and counties. Air quality, traffic congestion, and carbon know no artificial boundaries. These issues must be tackled regionally.

The bill provides incentives for regions to consider the impact of land use on climate change. Under the provisions of the bill, the regions must engage in a process to develop scenarios that show a contribution to climate change, and if they do so but are unable to actually achieve the goal, the state is going to require the region to submit reports demonstrating the strategies they may need to meet the goals. If they don’t choose to engage in the process of developing better planning scenarios, then we’re going to tie transportation funding to that refusal. When you author a bill like this, there are always coverages. The political opposition, torn apart by their own infighting, has actually been very constructive thus far. I’m confident that we’re going to be able to work it out.”

At the Florida Climate Conference Summit, occurring at the time of this interview, Nick Bollman claimed that Florida could not reduce its overall emissions by implementing clean car regulations without also becoming more efficient with land use and transportation, citing your bill to make his argument. Is there a sense that you’ve got your hands on something politically potent and powerful in terms of complementing efforts to reduce emissions from stationary and mobile sources?

Absolutely. We’re not going to launch our national campaign until we pass the state law, but the fact of the matter is that this is cutting-edge. It’s cutting-edge because we finally have a context from which to address the issues of land use and regional planning. We haven’t had that context before.

We pled the advocates for this kind of approach, we pled good government, we pled reforming the finance and fiscal system, and there have been numerous reports and study groups that have recommended various changes to the way we fund state and local governments, and it’s all kind of dropped like a lead balloon. Now, everyone is embracing climate change, and there is a consensus that land use has to be part of the mix. As we change to cleaner fuel, we also need to build communities so that people are reducing the number of miles they’re traveling. I’m very heartened to hear that the word has already traveled across the country, because this is a cutting-edge measure, and the fact that it’s controversial is evidence that it’s a cutting-edge measure.

While the bill has passed out of the Assembly Transportation Committee, I’m sure you’re aware that there’s started to already be pushback by the League of Cities and some in the development community. How can any of what you’re hearing be incorporated into your bill?

I have, during the campaigns for my past bills, gone toe-to-toe with the League of Cities. But I want to say that the League, even though they have recommended a formal position of opposition, has actually been very constructive thus far. I’m confident that we’re going to be able to work it out. They want to ensure that cities and counties are not at risk of losing land-use authority, and not only is that not the intent of the bill, the bill does not sacrifice local land-use authority in any way.

I think the building community and the cities are both interested in what we plan to do in the bill to provide incentives for development within the growth scenario. For many years, the development community and local gov-

dernment have sought greater flexibility to gain approval for projects. This bill is another opportunity to reward the projects that are consistent with a preferred growth scenario.”

“For many years, the development community and local government have sought greater flexibility to gain approval for projects. This bill is another opportunity to reward the projects that are consistent with a preferred growth scenario.”

What have you and the Sacramento Area Associations of Government learned about the challenges of enforcing the blueprint plan that can be applied to SB 375?

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to see a political sea change that will be reflected ultimately in Congress and the next administration.

In the May issue of VerdeXChange News, the headline of an interview with Governor Schwarzenegger’s former EPA Secretary, Terry Tamminen, read: “California to Feds: Let States Lead On Climate Change.” Are states and cities pushing the envelope for U.S. climate change policy?

California is to be commended. The response you had to the energy crisis and the Enron debacle was part of a continuing set of policy initiatives where California is the acknowledged state leader. We’ve got ten states in the Northeast that now have their own carbon emissions trading scheme. The West Coast governors have united to follow California’s lead in terms of tailpipe emissions standards. States are not quite in lockstep with California, but a number of them have stepped up with their own initiatives.

Major cities—I would place in that Los Angeles, San Francisco, Chicago, and more recently Mayor Bloomberg’s 127-point plan for New York City—are showing that this can be done. And I would like to also mention that back in 1979, Portland, my home, was the first American city with a comprehensive energy policy.

I am extraordinarily optimistic with the government response by states and localities to this grassroots initiative.

Let’s discuss your leadership and campaign for a Food and Farm “Bill of Rights.” Agriculture is a large piece of Oregon’s economy; it also contributes significantly to California’s economy. What are your goals and objectives for including a Food and Farm Bill of Rights in a reauthorization of the Federal Farm Bill?

I was stunned in 2002 to watch the development of a Farm Bill that was so much at variance with the interests of the typical farmer and rancher around the country. Oregon and California are being dramatically shortchanged. There are a few people who took advantage of massive commodity payments for large-scale agricultural operations, but both California and Oregon are characterized by people who grow food, not just commodities like soybeans, corn, rice, and cotton. They got almost nothing out of the 2002 Farm Bill. The environmental titles were dramatically under-funded, so that three quarters of the applications for conservation funding are rejected for lack of money.

We’ve been working to change that dynamic. We need to make people aware that everybody has a stake in this funding:

“[The Farm Bill] is also going to be the most important environmental bill of the year; it can help us deal with land conservation, water use, prevention of sprawl, and protection of the integrity of farmlands.”

Portland has long been a leader in urban land use planning, and planning is increasingly becoming one of the strategies of urban mayors to green their cities and reduce green house gas emissions. What is the relationship, if any, of present federal facilities and infrastructure funding and the carbon emission target reductions being adopted across America.

The current structure that we have for urban America—which includes sprawl, heavy reliance on single occupancy vehicles, and far too much hard concrete and asphalt—is the result of specific government policies. There has been a deliberate pattern of support by government policies on everything from free parking, to low cost money available for freeway expansion, to refusing to extend the federal government housing subsidies to attached housing (i.e., the mixed-use that is fueling a revitalization of cities around the country). It was not done with a conscious effort to create sprawl, congestion, energy dependence, and environmental problems including air and water pollution, but that is certainly the consequence.

The work that is now before all our metropolitan leaders is to figure out how to reassemble incentives to provide support for the future; giving people more choices for cycling, walking, and transit helps reduce auto dependence. Design characteristics—everything from green roofs, open space, to protecting water features, and planting street trees—make a difference in terms of the carbon footprint, reducing the heat island effect, saving energy, and giving people a higher quality of life. Cities are now looking at ways to convert to 24-hour activity centers, so there is a nightlife not just in the revitalized downtown core, but in activity centers throughout the region, revitalized neighborhood business activities, and mixed-use development along transportation corridors. All these elements respond directly to government planning and municipal subsidy.

The fastest growing areas in the United States, demographically, are in the Southwest, especially in Nevada and Arizona. Housing tracts are being built
Westly: Government Policy Shaping Green Marketplace

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We love biodiesel for a few reasons. First, 50 percent of the vehicles in Europe run on diesel. Mercedes and Honda are coming out with vehicles next year; GM is following. We’ve seen an increase in demand for efficient diesel for America. If you can get rid of the diesel—which is carbon-dependent and oil-dependent—that’s a huge home run. One of the firms we like is a firm call Imperium Biodiesel out of Seattle. It has the advantage of being able to use multiple feed stocks as an input. In other words, it’s not just dependent on soy, or not just dependent on corn; it can use multiple feed stocks. It’s a huge advantage if you can use whatever’s least expensive or in most plentiful supply.

“We love biodiesel for a few reasons. First, 50 percent of the vehicles in Europe run on diesel. Mercedes and Honda are coming out with vehicles next year; GM is following.”

As someone in state government when AB 1493 and AB 32 passed, what’s the prospect of California remaining on the cutting edge of clean tech and climate change mitigation? The governor has just appointed a new chair for CARB, Mary Nichols; is this a positive?

I think the rest of the world is looking to California to lead. As I have often said, where Washington has failed, California must lead. Obviously, we’ve moved things ahead with AB 1493 and with AB 32. Now, the question is, are we going to execute? A lot of people learned over the weekend that perhaps the administration wasn’t pushing to execute as quickly as we though; I think that would be a shame if it were true.

I have a lot of respect for Mary Nichols, and I hope that she can move things forward quickly. Now that the governor has gotten so much positive press, I hope he’ll deliver on the promise by making sure California continues to push execution and implementation as fast as we’ve pushed legislation.

What’s the role of unions in the clean tech/environmental movement of California? Most of Silicon Valley avoids dealing with unions; do unions have any role in mitigating climate change?

That’s a great question. I think the labor movement needs to give that some thought. The good news is that you’re going to see a lot of facilities built for biodiesel and for ethanol. I hope that the building trades can work with management investors to make sure there’s as many of the facilities as possible are union-built. I think what’s interesting is, we’re seeing whole industries, like the American auto industry, begin to shrink. That appears to be the reality. The question is can new industries, like the electric car industry, be based in California and work cooperatively with the new realities of the market.

There is a rapidly developing scheme of government incentives and regulations emerging—carbon taxes, cap and trade, outright grants, and incentive programs. What are your thoughts on the role of government involvement in green tech markets globally and in California?

I think the government needs to play a leadership role. The reason that Germany is the number one solar nation in the world is because their president and their parliament pushed through the most substantial solar subsidies on the planet. That was a smart piece of government action; it literally changed the global solar landscape. California has done something similar with AB 32. But it’s up to the private sector to follow up and make it happen. What I’d like to see is a closer relationship between government and entrepreneurs so that we’re moving as quickly as possible to reduce our dependence. One other thing that I learned is that government needs to provide consistent goals and directions for industry to follow and to resist the temptation to change regulations too frequently.

In addition to direct investment by the Westly Group, you provide consulting services for implementers looking to connect the green dots and navigate public policy. What does that involve; who are your clients?

Clean tech is a huge industry; depending on how you look at it, it could be considered the largest in the world. What we’re doing is looking at a lot of spaces, consulting with some of the smaller firms to help them grow quickly, using some of the expertise I had the opportunity to learn at eBay, other high-tech companies, and in government. I’ve been lucky; I’ve been one of the few people that has worked at executive levels in both the public and the private sector. I’m interested in learning about the areas that the marketplace is going to declare as the winners. I think Tesla is one of those: they have already sold $45 million worth of vehicles, and that’s an area we know is going to continue to grow.

Solar is another, and I think Akeena and E.I. are going to be winners in the solar space. So we’re trying to identify firms that are winners and help them grow as quickly as possible. I believe that their success is going to lead more job creation in California.
in what was once open desert. What explains the failure of a smart growth agenda to limit sprawl, given the obvious need to link water, transportation, and land use policies and resources?

When you disconnect water and transportation policy from sound land use, you end up creating dynamics that are not sustainable over the long haul. It’s time for us to try to get our policies right at the federal level with water, with transportation, and with where the federal government locates its own facilities.

But I will tell you that, having worked for years with many of these fast-growing communities, that there has been an adjustment to the mindset. In Phoenix—that quintessential car city with the highest per capita gas consumption and the last major American city without regularly scheduled bus service—they are now working on light rail lines and downtown development.

In Houston, over the objection of Tom DeLay, the voters have approved light rail. Denver and Salt Lake City—places that you don’t normally associate with new urbanism and balanced multi-nodal transportation—are working toward these principles. I think you’re seeing a revolution at the municipal level, a little slower, perhaps, than we would like, but it’s occurring nonetheless. If we can support it with sound federal policies, there’s an opportunity for rapid progress in the immediate future.

You’ve been invited to participate in the GreenXchange Conference in Los Angeles in December and “One Earth, One Event” Expo in October of 2008. What opportunity does GreenXchange offer for bringing together green tech environmental, business, and government global leaders?

We are now witnessing a green business revolution. Whether it’s companies like General Electric, which has a couple of dozen product lines and subsidiary businesses that are involved with conservation, green technologies, and business applications, to little companies that are just sprouting up with people who have an idea, the marketplace is driving innovation. Having an opportunity to meet in a systematic fashion in a location with a vibrant economy like that of Los Angeles, would, I think, have a catalytic effect.

Portland is recognized as a leader in sustainable activities and green enterprise. I routinely meet with business leaders, and every time I have a meeting, I am introduced to new people, new products, and new initiatives. Establishing such a global idea and tech exchange in Southern California would be extraordinarily powerful; it would have a national impact, at minimum.

There is so much that is going on in California that the synergies that could be developed are, I think, extraordinary. Southern California, most especially, is going to hold the key. We have to be able to bring these initiatives to scale, whether it’s municipal planning or transportation or it’s the commercial application of technologies and products. There’s no better laboratory—or host—than Southern California.

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**Related Websites**

For further information on stories in this month’s VerdeXchange News, please visit the following sites:

**Dan Dudek & Dan Mazmanian, China Council for International Cooperation on Environment and Development**
- [www.harbour.sfu.ca/dlam/](http://www.harbour.sfu.ca/dlam/)
- [www.environmentaldefense.org/home.cfm](http://www.environmentaldefense.org/home.cfm)

**Congressman Earl Blumenauer**
- [foodandfarmbillofrights.com](http://foodandfarmbillofrights.com)
- [blumenauer.house.gov/](http://blumenauer.house.gov/)

**Darrell Steinberg**
- [dist06.casen.govoffice.com/](http://dist06.casen.govoffice.com/)
- [www.sacregionblueprint.org/home.cfm](http://www.sacregionblueprint.org/home.cfm)

**Hunter Lovins**
- [www.natcapinc.com/home.htm](http://www.natcapinc.com/home.htm)

**Ed Feo**

**Steve Westly**
- [www.westlygroup.com/](http://www.westlygroup.com/)
- [www.akeena.net/cm/Home.html](http://www.akeena.net/cm/Home.html)
- [www.energyinnovations.com/](http://www.energyinnovations.com/)

**Tom Taylor, Vertegy/Alberici Corp.**
- [alberici.com/index.cfm](http://alberici.com/index.cfm)
- [www.vertegyconsultants.com/](http://www.vertegyconsultants.com/)

**Governor Charlie Crist, Florida Climate Summit**
- [www.myfloridaclimate.com/](http://www.myfloridaclimate.com/)
- [www.charliecrist.com/](http://www.charliecrist.com/)

**GreenXchangeXpo**
- [GreenXchangeXpo.org](http://GreenXchangeXpo.org)
Howard, COO of ARUP America’s design and engineering firm. Commenting on the value of LEED standards, he said, “As a template, it doesn’t fit every single circumstance, so we rarely get the very best in terms of sustainable development if you use it as an approach to design. It is really an evaluation tool as opposed to a design tool.” Do you have a similar view?

No, I don’t. Another thing that makes this building unique is the fact that we dual-certified this building under the U.S. Green Building LEED rating system and the Green Building Initiative’s Green Globes system. We wanted to see the difference between those two rating systems on the same project. We’re the only platinum building that’s currently dual-certified under both of those rating systems in the marketplace right now.

When we work with the LEED or the Green Globes guidelines, either one, it’s just that: a set of guidelines for design. We use them as a communication and focusing tool in early stages of a project in order for an owner and everyone else on the delivery team to understand what it’s going to take to incorporate these strategies into a development. In our capacity at Vertegy, we use it to track accountability while delivering the building. Most of the owners and clients that we help choose to put it to the rigors of certification to validate that the team delivered what they said they were going to deliver.

Alberici’s headquarters uses a lot of recycled materials; it has a sophisticated, energy-saving mechanical system; it has outside features like a windmill for electricity, a park-like setting, and landscaping that encourages sustainability. What energy features do Vertegy clients most commonly wish to replicate?

The cost savings through the total building envelope design, adding up to the energy savings, is probably the biggest thing that our clients like to see. Nobody wants to encourage global warming or damage the environment. But our clients are still typically most interested in getting the biggest possible return on investment.

This is the first time, unless you’re a speculative builder, that people can say, “My building can actually be calculated as a return on investment and not just an expense based on lease rates.”

It’s commonly said that the up-front cost of green building may be higher, but the ROI is in lower life-cycle operational costs. You mentioned this earlier, but have you been able to verify lower operational costs at Alberici’s headquarters?

Yes and no. You can verify it based on the energy models that are created to design the building. You can say, “Had this building been built at a code-minimum standard, this would be our energy consumption, and because we used these other means, validated through the Department of Energy e-quest model, we had this much reduction in energy. And this is how much energy costs, and so this is our reduction in operating expenses.”

In our May issue, we interviewed Andy Howard, COO of ARUP America’s design and engineering firm. Commenting on the value of LEED standards, he...
It’s first important to put the framework and the policy in place, but then you have to implement it. I’m willing to say, and SB 375 is consistent with this, “Let’s give the regions a chance to do it, let’s not get into the ‘stick’ approach.” And SACOG, since the development of blueprint, they’re making great strides. It takes time to bring jurisdictions along, but there is a common vision that did not exist prior to the blueprint, and change takes some time. It doesn’t go as fast as I want it to go, but it’s always better—and I think I’ve learned this through some hard struggles—when the region owns the change, as opposed to having the change imposed on them. Now, SB 375, again, does not impose any particular vision on any region. It says, “We want you to do what SACOG has done so successfully.” But in terms of the implementation, after the planning scenarios have been completed, I’m confident the regions will embrace this.

You’re the chair of the State Senate Natural Resources and Water Committee, and there are a number of water bills pending in the Legislature: SB 178, 276, and 732. Talk a little bit about the water agenda as we draw this interview to a close.

“These are the two years where water policy is going to take center stage....We ought to let the watersheds of California set their priorities, and not mandate the specific projects.”

These are the two years where water policy is going to take center stage. I would categorize the big issues in two ways: first of all, we must deal with the Delta. The issue of conveyance is as important, if not more important, in the short- to medium-term, than the issue of supply, because the Delta is in bad shape, the conveyance capacity is unreliable, and the ecosystem is not helping. We have to address that by making some big decisions. The governor’s Delta Task Force, led by Phil Eisenberg, is going to report to the Legislature and the governor in the fall regarding the pros and cons of those various options. So conveyance in number one.

The second is issue is supply. There are a number of options, and we ought to be thinking about the potential of another bond that gives regions the option to consider a multitude of strategies for better groundwater management, regional water management, conservation, and above-ground storage. We ought to let the watersheds of California set their priorities, and not mandate the specific projects. Where the Democrats, the Republicans, the governor are together, is in recognizing the need to increase our water resources. I’m hopeful that this year, during this year’s session, we can make good strides.

Taylor: Vertegy’s Focus is Strategizing Sustainability

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When you do that, what do you find at the headquarters?

We found that it took us over a year to get it to the point where we were operating as it was designed.

Vertegy is an outgrowth of the Alberici family of companies. What was the opportunity that you all saw after the firm’s completion of its headquarters building in 2004?

At the time, there wasn’t anybody in the marketplace who was 100 percent focused on sustainability. At Vertegy we are not licensed to practice design and construction. We focus on issues of sustainability and the application of sustainable strategies. Doing that job correctly means that you’re doing it at an economical price point, which provides that, at a bare minimum, for every dollar of capital investment put into a project, the owner is returned a dollar value with the end product. In doing our research and interviewing multiple people who had been one-time users of architectural design, construction services, and multi-time users, what we found is that in very few instances were the owners satisfied and felt that they had received a dollar’s worth of value for every dollar of capital expense they put into the project. To us, from an owner’s point of view, after developing our own building, that is an injustice.

The word “Vertegy” is derived from the Latin root for “green” and “strategy.” What has evolved as Vertegy’s business model? Who are your clients, and what services are most in demand?

The services that are probably most in demand are projects looking to do LEED certification. We have grown to be kind of a specialist in LEED documentation, helping the whole team through that process, and acting as a resource. When we first started the business, I thought that we were going to help owners and contractors keep out of harm’s way while bidding on these types of projects. What I found is, while we’re still maintaining that particular client base, we’re having more and more inquiries by developers who want to start on a project and potentially use that as a model to green their portfolios, especially in 2007. We’re working with quite a few development teams, and that allows us to be involved with the projects even more upstream than just with the owner, because now it’s somebody who’s envisioning what a piece of property could be developed into. And we’re being brought in, in some cases, before the architect or the other design entities are being brought on.
Lovins: Chicago Climate Exchange Exceeds 300 Members

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they were absolutely right. What Immelt
did was to badge products he already made
as green products. But hypocrisy is the first
step to real change. A year later, he noticed
something. The products that he badged
as green doubled in sales. The rest of the
products only increased twenty percent.
And so they have now announced an even
larger commitment to Ecomagination. And
in doing this greenwashing, they’re way
ahead of their targets to reduce their carbon
emissions....

....Well, here we are, less than a year
later, and the Western states have signed on.
The governors of the Western states have

signed on to similar measures. The state of
New Mexico even joined Chicago Climate
Exchange. Now, what’s Chicago Climate
Exchange? I think we’re reinventing
institutions when we all know about Kyoto
and haggled and got a bad compromise of
the Kyoto Protocol. We’d done it. We had
an international agreement to limit carbon
emission—until the U.S. Senate said no.

Darnit!

What’s it going to take? Governments
don’t make markets; traders do. I’m a
trader, let’s make the market.

So in December of ’04, Richard Sandor
opened trading in reduction and carbon
emissions with sixteen companies: Dupont,
ST, World Resources Institute, the city of
Chicago, and my little company. Thursday,
the U.S. House of Representatives joined
Chicago Climate Exchange. We now have

over 300 members. 331 trading carbon in
a country where there’s no law that says
that you have to; when you join Chicago
Climate Exchange (CCX), it’s entirely
voluntary. But when you join, you make
a legally binding commitment to reduce
your emissions of carbon two percent a
year over the period of membership. That’s
the price of entry. If you fail, you have to
buy emissions from somebody who has
reduced it even further, and if you reduce
even further, you create Carbon Financial
Instrument, which you can now sell to
people like me.

When public benefit corporations like
mine join, they pledge to become carbon
neutral, and we buy credits from, in my
case, Baxter Health Care. What I’m doing
is paying Baxter to innovate, to reduce their
use of energy and therefore their emissions
of carbon, and therefore become a more
competitive company. This is a free market
approach to reducing carbon. It was thought
to be impossible; it was thought that you
had to have a government mandate, and
nobody would trade. Well, we’ve proved
that wrong.

That said, everybody in CCX agrees,
we need a government mandate— What
[Governor Arnold Schwarzenegger] did
here in California, and indeed some of us
are trying to get California to join Chicago
Climate Exchange, simply to take CCX to
being the national exchange.

This is something each one of you can
do. Write to your representatives, write
to your state representatives, and say,
“Look, why don’t we just join Chicago
Climate Exchange? Why don’t we push
for a national mandate? We have in place a
trading regime; we know the market works.
Let’s put in place the law so it’s true for
everyone.”

My students are doing this....We got
together and created a little business school
in which sustainability is woven throughout
the entire curriculum. So the students
immediately said, “Well, the school
should join CCX,” and went to the board
and argued, and the board said, “Cool,
we’ll join.” But business students make a
business out of this, so the students created
a program called Drive Neutral, which we’ve
seen re-badge as Live Neutral. Here’s
your homework: go on the web tonight
to DriveNeutral.org, calculate the carbon
footprint of your car, pay the equivalent of
two fill-ups of gasoline, and your car will be
carbon neutral for a year. The money will
go to Chicago Climate Exchange to pay
for actual reductions in companies that are
becoming more energy efficient.

And this is important, not only if you
want to be a part of the solution, but for
our national economy. We are, right now,
blowing money. In this country, we spend
at least $300 billion a year buying and
burning energy that we don’t need to deliver
the services we want. I’m not talking about
curtailing, driving less, living in a hotter
building, producing fewer products. I’m
simply talking about energy efficiency. We
could cut $300 billion a year out of our costs.
We know we can do this. After ’79 when we
had the last price run-up, this country cut its
use of oil 15 percent at the same time we
grew our economy 16 percent just through
more efficient vehicle standards....

...Cities are setting goals to reduce their
carbon emissions. Salt Lake has already
achieved 21 percent reduction below a
2001 baseline. You would expect cities
like Portland and Berkeley to be doing
it. They’re writing climate action plans,
and you don’t have to start from scratch.
Go on the web, download these plans,
and simply copy them. There’s a whole
array of best practices, everything from
retrofitting your own buildings and setting
good building standards, to neighborhood
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Lovins: Start With Built Environment

Continued from page 22

solar utilities. Berkeley set out to change its traffic lights from the ordinary traffic light to LED lights. They figured they’d save a little over $50,000 a year. They wound up saving almost $90,000. Scottsdale, Arizona: every new municipal building has to be a LEED gold, and they’re putting in place renewable energy, energy efficiency. San Francisco is going to biodiesel, and it has a huge array, but San Francisco’s Environment Department, run by Jared Blumenthal, is a great resource for what a city can do to implement green program. Radnor Township, Pennsylvania is buying wind power. Flower Mound, Texas has a program to teach the builders how to build energy efficient buildings. Ferndale: if you drive a Prius, you get preferred parking.

These are simple measures that every community can implement, and here’s the sort of benefit that you will get. A megawatt saved increases in the economy over $2 million. Wages up, business income up, and you will create more jobs. We now know a new study out from University of California Berkeley that investment in renewable energy gives you ten times the jobs of investment in any kind of fossil or nuclear plant.

We start with the built environment. If you care about reducing carbon emissions and saving energy, there are two really big places to start: buildings and cars. Buildings are a great place to start, because it’s where we spend most of our time. They waste a lot of energy, two thirds of the electricity, to produce a product that has indoor quality that’s frequently worse than the outdoor air quality that we regulate. And we know how to take any existing building and make it three-to-fourfold more efficient, and even ten times as efficient....

...It’s better if you combine renewable energy with conservation. Up in Sacramento, people voted about 15 years ago to shut down battery operating. It was a big decision. Here’s what happened: the utility lost 1,000 megawatts all at once, but rather than invest in any kind of conventional, coal-fired gas plant, they invested first of all in efficiency, then in every kind of renewable generation they could lay hands on: solar of all sorts, wind, biofuels, hydro, co-generation, fuel cells. Now, more than 15 years later, the econometrics are in; the entire region is economically healthier than had they just kept running the plant. The plant rates were projected to go up 80 percent, with no growth level for over a decade. This kept in place 2,000 jobs the company had said, “If the rates go up, we’re out of here.” They generated 880 new jobs, and the utility paid off its debt....

....This movement of ours is skyrocketing. It’s a who’s who of corporate America. Our job is to keep them honest...

“Managers will start to recognize environmental improvement as an economic and competitive opportunity. It’s time to build on the underlying economic logic that links the environment, resource productivity, innovation, and competitiveness.”

These principles, with what we call natural capitalism, are buying time, pushing off the drivers of change, through efficiency, redesigning every product and process in society using approaches like biomimicry, and then managing all our institutions to be truly restorative of the forms of capital that are in short supply, the human and natural capitals. These are the basis of prosperity. My old boss Dave Brower used to say, “What do we want the earth to be like 50 years from now? Let’s do a little dreaming. Aim high....
Green Movement

‘Hero for the Planet’ Hunter Lovins Demystifies Terms, Key Players in the Global Fight Against Climate Change

Hunter Lovins is founder of Natural Capitalism Solutions Inc., co-creator of Natural Capitalism Concept, co-author of Natural Capitalism, and co-founder of the Rocky Mountain Institute. Ms. Lovins also was named Time magazine’s “Hero for the Planet” in 2000. VerdeXchange News is pleased to present the following excerpts from an appearance made by Ms. Lovins in Los Angeles earlier this month, in which she details some of the businesses who are making extraordinary strides in the fight against global warming, as well as exposing some of the naysayers and myths in the ongoing debate about the proper solutions to this global crisis.

W
hen Royal Dutch Shell goes out to do what it calls “scenario planning,” it looks for what it calls “drivers of change.” These are signs that business as usual will not continue, and at the moment we’re facing a fair handful of them. We’re losing every major ecosystem on the planet. We’re facing a carbon-constrained world and durably high and rising energy prices. There are population and demographics challenges around the planet. Every bit of our infrastructure is vulnerable. Then there’s the advent of China and India entering the world market for potentially all commodities. That’s what I call the “sustainability imperative”....

...Everything that you would do if all you cared about was being a profit-maximizing capitalist is exactly what you would do if you were scared to death about climate change. And that’s why the financial community is jumping in. And the insurance industry: Swiss Re recently said to its major customers, “If you don’t, as a company, take your carbon footprint seriously, maybe we as a company don’t want to insure you or your officers and directors.” Now, imagine doing business without DNO insurance. JP Morgan Chase recently started indexing its bond insurances based on a company’s carbon footprint.

A civil society outfit out of the U.K. had been sending out questionnaires to the Financial Times 500, the 500 biggest companies on earth, and for years the companies had been ignoring it when they say, “What’s your carbon footprint?” Three years ago, 60 percent of the company answered the survey, and last year 70 percent answered. Why the difference? Well, it turns out that the project now represents institutional investors with $41 trillion in assets. If you’re going to go to the capital marketplace, you might want to answer their questions. And under U.S. law, if, as a corporate manager, you fail to disclose to shareholders information that can materially affect the price of the stock, you can be personally criminally liable. What’s your carbon footprint?

Wal-Mart recently hired the project to go into China, and ask companies in China that manufacture for Wal-Mart, “What’s your carbon footprint?” The U.S. argument is, “Well, we’re not going to abide by Kyoto because the Chinese aren’t.” I’ll make you a little bet: the Chinese will get a good handle on their carbon footprint a long time before we will. Because we’re finding out that we can protect the climate at a profit, and companies are doing it.

Dupont was one of the first in. They announced they were going to reduce their global greenhouse gas emissions 65 percent below their 1990 levels by 2010. The U.S. says we cannot possibly afford economically to abide by Kyoto, which would be a seven percent reduction by 2012. Dupont said that over the same time frame, they’re going to get ten percent of their energy and a quarter of their food stocks from renewables, just because they joined Greenpeace. And they just announced that in the name of increasing shareholder value. Here’s what they’ve done: they’ve already hit their target, reducing 67 percent for a savings of $3 billion. They’re not the edge of the envelope.

ST Microelectronics may be. Over the same time frame: zero net CO2 emissions, carbon neutral, with a forty-fold increase in production. Now this is what you might call a BHAG. Jim Collins, the business author of the books Built to Last and Good to Great says, “If you want to be a great company, set a big, hairy, audacious goal.” This would qualify. What ST has found is that, when they made the announcement, they had no clue how to deliver on it, but figuring it out has driven their corporate innovation, taking them from the number 12 chipmaker in the world to the number six. They’re gaining market share. So they set even more ambitious renewables goals. They’re winning awards. They reckon by the time they’re carbon neutral, they will have saved about $1 billion.

This may have been the tipping point, when the company that, had there been a Fortune 500 in 1900 would have been on it, and are still on it today, announced Ecomagination. And interesting, when [GE CEO] Immelt made this announcement, he was joined on the podium by CEOs of major utilities and the World Resources Institute: “We believe we can help improve the environment, and make money doing it.” The enviros immediately jumped up and said, “This is greenwashing!” And

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