Thought Leaders of the New Energy Economy

green = [c³] press · carbon constrained communications · www.greenc3.com

After more than two centuries of hydrocarbon use and 150 years of extracting oil, a growing number of executives, entrepreneurs and financiers are prudently trying to transform the fossil-fuel era in real-time.

These are the Thought Leaders of The New Energy Economy.

They are boldly confronting the fact that the way we use energy in our country is having a negative impact on our relationships with the world, the economy and the environment.

They know that if we remain on a carbon-rich diet more greenhouse gas will get belched into the atmosphere, altering the climate further and ultimately strangling the skies; and once we choke the heavens, they realize that we eliminate opportunities for sustained prosperity and well being.

They believe that if we work together, innovate, conserve, and implement some of the energy alternatives that are currently available to us we can make America safer in the world, begin to repair the environmental damage we've created, put the economy on firmer footing by delivering good jobs, and bolster our country with an all-important and much-needed sense of national purpose.

They also grasp the tremendous profit-making possibilities—the sea of green that flows from going green—but generating clean energy matters as much to them as generating handsome returns.

Finally, these Thought Leaders of The New Energy Economy tell the truth, even if it's inconvenient.

What follows are their sharpest ideas, greatest challenges and ultimate goals—all in their own inspiring words.

Sandra O. Archibald

Dean, Daniel J. Evans School of Public Affairs
University of Washington

Challenge

"The biggest challenges we face in the energy marketplace today are the price distortions. Whether it's subsidies, regulations, incentives or misguided political pressures and responses, energy market pricing is not accurately reflecting supply and demand right now. What's going on in terms of pricing is artificial. In fact, energy prices don't reflect current value, let alone future value. This is not helping us get real about curbing our energy use and cleaning up the environment."

Objective

"We need to find effective ways to increase energy efficiency and innovation. This means letting energy prices seek their natural levels. It's crucial, but hard to do."

Success

"The most interesting metric right now for me is energy intensity—how are we using and managing energy? I also like the energy efficiency numbers that the state of California has generated over the past 30 years. California is benefiting from a policy known as ERAM, or the Electric Revenue Adjustment Mechanism. ERAM decouples energy sales and profits for utilities. This encourages efficiency. We need to look at ERAM on a broader, more national, basis."

SANDRA O. ARCHIBALD CHAIRS THE ENVIRONMENTAL STEWARDSHIP ADVISORY COMMITTEE AT THE UNIVERSITY OF WASHINGTON

Michael Butler

Chairman and CEO, Cascadia Capital

Challenge

"The biggest challenge we face in the clean technology marketplace right now is collaboration between public- and private-sector entities. As the clean technology industry emerges and takes shape, it's clear that it will be guided by regulation and public policy initiatives. That's why clean technology investors and government officials have to find ways to work closely together to achieve common goals. The resolution lies in the hands of savvy venture capitalists who see regulation and public policy initiatives as emerging business opportunities that can and should be leveraged. Smart investors recognize that, when it comes to clean technology, the government's legislative agenda is currently out in front of the private markets. One way to move forward is by forming public-private partnerships. These hybrid alliances will allow the private sector to get ahead of the curve in the post-petroleum era and stay there—with as little risk as possible."

Objective

"Our objective at Cascadia Capital is to help make the clean technology marketplace more efficient from a financial and capital formation perspective. Right now, the market is extremely inefficient. The deal flow is extremely strong, and we're seeing a huge number of companies looking for capital. In this regard, clean technology financing is very different than telecommunications or information technology. The bottom line for us is increasing capital efficiency."

Success

"Our favorite metric of success is capital flows in the venture capital segment. It tells us a lot about clean technology innovation and where it's trending."

CASCADIA CAPITAL IS A NATIONAL INVESTMENT BANK BASED IN SEATTLE THAT SERVES EMERGING GROWTH COMPANIES IN CLEAN TECHNOLOGY

Dave Garten

CEO, SeQuential Biofuels

Challenge

"The biggest challenge we face is to recognize the magnitude of the energy and environmental problems that we are creating. Our need for energy as a society is quickly outstripping our supply, not to mention the effect burning fossil fuels has on greenhouse gases and our domestic energy security issues. We have to come to terms with a critical truth – that there isn't just one solution. We need to accept and internalize this fact. Efficiencies, biofuels, wind power, solar and just plain using less energy are all pieces of the puzzle. Part of the challenge is to help get beyond the media's generalizations so that we can have an intelligent debate. In the world of biofuels, the media needs to know that not all biofuels are equal and that better biofuels provide part of the solution."

Objective

"Our mission at SeQuential is to reinvent the retail fuel category and be seen as an innovative consumer brand. We want you to know that there are better biofuels available today that are compatible with your vehicle. Innovative new fuels are already being produced, albeit on a smaller scale, not yet in the billions of gallons. SeQuential is a platform for new fuels to become available to consumers. Better biofuels aren't nameless; they have a story that consumers want to hear. Furthermore, we believe that better biofuels come from a local ecosystem of feedstock, production and consumption. This makes sense from an economic and environmental point of view."

Success

"Our customers are the best measure of success. They provide a glimpse of a broad movement working toward a better energy future. The City of Portland was one of our early adopters. An elected official championed biodiesel in the city fleet and created a substantial demand for locally grown, locally produced, and locally consumed biodiesel. The whole value chain – from the canola farmer to the producer to the consumer – is now behind it. We have already been sourcing biodiesel made from used cooking oil and locally produced ethanol. These are a great first step. We have been approached by several innovative regional players who are working on making available better next generation fuels from a diverse array of sustainable feedstocks. These pioneers see SeQuential as a channel to reach the consumer who wants to make a difference. Most people expect the environmentally conscious consumer in a Prius to fill-up at the SeQuential biofuel station. But did you expect the construction workers in his F350 diesel to fill up with b99 biodiesel to reduce our dependency on foreign oil? Did you expect moms to fill-up their Chevy Suburbans with e85? They're all committed to better fuels. It's extremely gratifying."

Launched in 2002, Portland-based SeQuential Biofuels is a retail biofuels company which operates the nation's first biofuels station, in Eugene, Oregon.

Kevin Klustner

CEO, Verdiem Corporation

Challenge

"The major challenge we face today is building awareness and appreciation for energy efficiency, which is one of the least expensive, most effective and immediately adoptable action items for dealing with the environmental issues we face. If you're generating less energy, you have fewer power plants, fewer pollutants and fewer problems. Energy efficiency costs an average of 2-3 cents per KWH, less than half the cost of new power generation; it also saves consumers and companies money."

Objective

"Our main objective is reducing energy consumption. McKinsey has found that by using existing efficiency technologies we have the potential to cut worldwide energy demand by 64 million barrels of oil per day, or almost 150 percent of the United States' total energy consumption today. This would reduce global energy demand growth by half in 2020. Seizing this opportunity would also contribute up to half the emission abatement required to cap long-term concentrations of greenhouse gas in the atmosphere at 450 to 550 parts per million—a range that would help combat global warming."

Success

"The most fascinating data set for me—and for my company—right now measures and manages the carbon footprint for PCs around the world. If we keep assessing these numbers and acting positively as a result, we'll make progress on climate change issues."

KEVIN KLUSTNER HAS MORE THAN 20 YEARS OF EXPERIENCE IN THE TECHNOLOGY INDUSTRY AND IS CURRENTLY THE CEO OF SEATTLE-BASED VERDIEM CORPORATION, WHICH DEVELOPS AND DISTRIBUTES ENERGY-EFFICIENCY SOFTWARE TO PUBLIC- AND PRIVATE-SECTOR ENTITIES.

Gregg Semler & Brad Zenger

Co-Founders, Pivotal Investments

Challenge

"The sustainable economy is characterized by growing demand for clean energy and water, green buildings, green materials, and healthy food. And while demand is growing, it is not yet at the pace of adoption needed to transform our use of resources. If the world is serious about the consequences related to a petroleum-based economy—consequences such as climate change and energy insecurity—then the pace of adoption for new approaches must increase significantly. The Northwest United States historically has been a bellwether and is well known as a leader in the emerging sustainable economy. Here we have a strong early adopter market, supportive policies and access to large markets including California and China. However, given all of these assets, there is a lack of capital aimed at this opportunity. That is what inspired us to create Sustainability Investment Fund in 2007 and now Pivotal Investments."

Objective

"We see an exciting opportunity that will enable us to build great companies focused on the sustainable economy; our objective in the end is to get strong returns for our investors. We have a large and experienced investment team so that we can actively engage companies and accelerate their growth plans. We also have intentionally developed a very experienced, knowledgeable group of individual investors and advisors that have significant domain experience and, in many cases, relevant operating experience. We can access these people to help us evaluate and advise prospective and portfolio companies."

Success

"We believe that we are really at the beginning of a long market wave in the sustainable economy. At this stage, the majority of the opportunities are seed and in the early stage as entrepreneurs, companies and policy makers increasingly recognize the significant macro trends that are driving this market; some of the trends include: growing demand for almost all resources of importance in the face of increasingly constrained supply; increasing consumer concern with environmental impact and human health; and increasing regulatory action. When combined, these factors create a very strong set of drivers for the sustainable economy. This is even more exciting because history has shown that early investing in significant market waves generates outsized returns for investors."

PIVOTAL INVESTMENTS IS A PORTLAND, OREGON-BASED VENTURE CAPITAL FUND SPECIALIZING IN SUSTAINABLE INDUSTRIES

Randy Shefman

Attorney, Hogan & Hartson

Challenge

"We have the ability today to produce meaningful quantities of renewable fuel and clean power that would have a real impact on our environment and the issue of energy security. However, the primary challenges to wide-scale deployment of renewable energy and alternative fuel technologies continue to be economic – the high cost of inputs for fuel and power applications, the need for more commercial conversion technologies, and the need for new infrastructure to bring clean fuel and electricity to market."

Objective

"My objective in working with clean-tech start-ups is to structure meaningful long-term relationships – whether with government, financing sources or strategic partners; these relationships will allow the start ups to span this period of fast-paced development, so that they can grow into the fuel and energy leaders of the next century."

Success

"We'll know we've hit the sweet spot when renewables become cost competitive with conventional sources of fuel and energy without the aid of outside benefits."

Randy Shefman, is an attorney in the Denver, Colorado office of Washington, D.C. based Hogan & Hartson. His practice focuses on domestic and international energy project development and finance, with a concentration on alternative fuels, renewable energy and other clean technologies.

Kirk Washington

Founder, Yaletown Venture Partners

Challenge

"The big challenge we confront today is perspective. The clock is clearly ticking as we confront critical eco issues, but the economic and environmental consequences stemming from our poor energy choices have been building since the Industrial Revolution. So it's unrealistic to think that we can scrub the skies overnight. We can't. And we won't. Most meaningful technology transformations usually take up to 100 years."

Objective

"My main objective is to help people get—and stay—real. I try to lay out what I call "The Five Dirty Truths about Clean Technology" to make sure we all stay grounded. The first truth is that clean tech is a puzzle that is not easily solved. The second truth—that clean technology may reverse rampant globalization—could make the puzzle even more complicated. The third truth is that there probably isn't another generation of Edisons and Hewletts working in garages around America to fix our environmental problems. The fourth truth is that the mammoth incumbent energy companies are going to have to collaborate well with fledgling start-ups. And the fifth truth requires venture start-ups and large established companies to handle the upside and downside together."

Success

"One of the keys to success is a new hybrid model that blends the creative strengths of venture-capital start-ups with the muscle and might of traditional large enterprises. The New Energy Economy will flourish if this melding takes place."

KIRK WASHINGTON IS A FOUNDER OF VANCOUVER-BASED YALETOWN VENTURE PARTNERS, A VENTURE CAPITAL FIRM THAT INVESTS IN SEED AND EARLY-STAGE TECHNOLOGY COMPANIES. A MECHANICAL ENGINEER BY TRAINING, WASHINGTON HAS TWO DECADES OF TECHNICAL AND MANAGEMENT EXPERIENCE IN THE ENERGY AND INFORMATION TECHNOLOGY INDUSTRIES.

Kim Zentz

Executive Director, Sirti

Challenge

"The biggest threat to clean-tech development is the natural human tendency to search for silver bullets or, as Alan Greenspan might say, 'irrational exuberance.' There seems to be a rush to find the solution to a variety of clean-tech problems. But I believe that approaching technology development in an intentional—yet measured—way will yield better results for all involved. It seems that the bigger the claims, the flashier the personalities involved, the more money attracted quickly simply yields the greatest number of disappointments; and none of these setbacks moves the needle toward addressing the pressing issues of the economy or the environment. My advice to investors is to be sure you are extremely thorough on neutral, technical due diligence. There will be game-changing, disruptive technologies, but even those technologies will have to prove their efficacy in the marketplace. The bottom line is that technologies don't win; people managing the deliberate and reasoned development of technology always carry the day."

Objective

"My prime objective is contributing to the sustainability of businesses that are pursuing sustainable technological solutions to our most perplexing problems. My organization, Sirti, is focused on accelerating innovative companies. We are successful if we assist the good ideas so they can thrive and grow. I am passionate about this because I recognize that we have a climate crisis and an energy crisis, as well as a terrorism crisis and a foreign policy crisis. All of them are linked to oil and its consumptive uses."

Success

"My children (and their friends and peers) insist on green, sustainable behaviors and they're not bashful about pointing out waste or wasteful uses of energy and raw materials to anyone they encounter. I see no reason why they wouldn't demand clean and sustainable features from the markets in which they'll participate and the products they'll consume. And I would expect them to raise children who are incrementally more demanding. So meeting these standards is my metric for success."

SIRTI IS A WASHINGTON STATE-FUNDED ECONOMIC DEVELOPMENT AGENCY WHOSE MISSION IS TO ACCELERATE THE DEVELOPMENT AND GROWTH OF TECHNOLOGY COMPANIES IN THE INLAND NORTHWEST, ESPECIALLY IN EASTERN WASHINGTON